In the Matter of

Certain Mobile Devices, Associated Software, and Components Thereof

Investigation No. 337-TA-744

Publication 4384 March 2013

U.S. International Trade Commission

U.S. International Trade Commission

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UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN MOBILE DEVICES, ASSOCIATED SOFTWARE, AND COMPONENTS THEREOF

Investigation No. 337-TA-744

NOTICE OF A COMMISSION FINAL DETERMINATION OF VIOLATION OF SECTION 337; ISSUANCE OF A LIMITED EXCLUSION ORDER; TERMINATION OF INVESTIGATION

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined that there is a violation of section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337) by respondent Motorola Mobility, Inc. of Libertyville, Illinois ("Motorola") in the above-captioned investigation. The Commission has issued a limited exclusion order directed to the infringing products of Motorola and has terminated the investigation.

FOR FURTHER INFORMATION CONTACT: Michael Liberman, Esq., Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 205-3115. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 205-2000. General information concerning the Commission may also be obtained by accessing its Internet server at http://www.usitc.gov. The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at http://edis.usitc.gov. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

SUPPLEMENTARY INFORMATION: The Commission instituted this investigation on November 5, 2010, based on a complaint filed by Microsoft Corporation of Redmond, Washington ("Microsoft"). 75 Fed. Reg. 68379-80 (Nov. 5, 2010). The complaint alleges violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain mobile devices, associated software, and components thereof by reason of infringement of U.S. Patent Nos. 5,579,517 ("the '517 patent"); 5,758,352 ("the '352 patent"); 6,621,746 ("the '746 patent"); 6,826,762 ("the '762 patent"); 6,909,910 ("the '910 patent"); 7,644,376 ("the '376 patent"); 5,664,133 ("the '133 patent"); 6,578,054 ("the '054 patent"); and 6,370,566 ("the '566 patent.") Subsequently, the '517 and the '746 patents were terminated from the investigation.

The notice of investigation, as amended, names Motorola Mobility, Inc. of Libertyville, Illinois and Motorola, Inc. of Schaumburg, Illinois as respondents. Motorola, Inc. n/k/a Motorola Solutions was terminated from the investigation based on withdrawal of infringement allegations on July 12, 2011.

The presiding administrative law judge ("ALJ") issued the final initial determination ("ID") on violation in this investigation on December 20, 2011. He issued his recommended determination on remedy and bonding on the same day. The ALJ found that a violation of section 337 has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain mobile devices, associated software, and components thereof containing same by reason of infringement of one or more of claims 1, 2, 5 and 6 of the '566 patent. Both Complainant and Respondent filed timely petitions for review of various portions of the final ID, as well as timely responses to the petitions.

The Commission determined to review various portions of the final ID and issued a Notice to that effect dated March 2, 2012. 77 Fed. Reg. 14043 (Mar. 8, 2012). In the Notice, the Commission also set a schedule for the filing of written submissions on the issues under review, including certain questions posed by the Commission, and on remedy, the public interest, and bonding. The parties have briefed, with initial and reply submissions, the issues under review and the issues of remedy, the public interest, and bonding. Public interest comments were also received from non-parties Association for Competitive Technology, Inc. and Google Inc.

On review, the Commission has determined as follows.

- (1) To affirm with modifications the ALJ's determination that Microsoft met the economic prong of the domestic industry requirement with respect to all of the presently asserted patents in this investigation, *i.e.*, the '352 patent, the '762 patent, the '910 patent; the '376 patent, the '133 patent, the '054 patent, and the '566 patent;
- (2) With respect to the ID's determination regarding the technical prong of the domestic industry requirement with respect to all of the presently asserted patents:
- (a) to affirm with modifications the ALJ's determination that Microsoft failed to meet the technical prong of the domestic industry requirement with respect to the '054 patent;
- (b) to affirm the ALJ's determination that Microsoft satisfied the technical prong of the domestic industry requirement with respect to the '566, '133, and '910 patents;
- (c) to reverse the ALJ's determination that Microsoft failed to meet the technical prong of the domestic industry requirement with respect to the '352 patent;
- (d) to affirm the ALJ's determination that Microsoft failed to meet the technical prong of the domestic industry requirement with respect to the '762 and '376 patents;

- (3) To affirm with modifications the ALJ's determination that the asserted claims of the '566 patent are not invalid due to anticipation or obviousness;
- (4) To reverse the ALJ's determination that Microsoft failed to carry its burden of showing that Motorola's accused products infringe the asserted claims of the '352 patent and determine that, based on the record, Microsoft proved by a preponderance of the evidence that Motorola's accused products directly infringe the '352 patent;
- (5) To affirm the ALJ's determination that Microsoft failed to prove by a preponderance of the evidence that Motorola induced infringement of each of the '054, '762, '376, '133, and '910 patents, and to affirm with modifications the ALJ's determination that Microsoft failed to prove by a preponderance of the evidence that Motorola induced infringement of each of the '566 and '352 patents.

The Commission has determined that the appropriate form of relief in this investigation is a limited exclusion order prohibiting the unlicensed entry for consumption of mobile devices, associated software and components thereof covered by claims 1, 2, 5, or 6 of the United States Patent No. 6,370,566 and that are manufactured abroad by or on behalf of, or imported by or on behalf of, Motorola. The order provides an exception for service, repair, or replacement articles for use in servicing, repairing, or replacing mobile devices under warranty or insurance contract.

The Commission has further determined that the public interest factors enumerated in section 337(d)(1) (19 U.S.C. § 1337(d)(1)) do not preclude issuance of the limited exclusion order. Finally, the Commission determined that Motorola is required to post a bond set at a reasonable royalty rate in the amount of \$0.33 per device entered for consumption during the period of Presidential review. The Commission's order was delivered to the President and the United States Trade Representative on the day of its issuance.

The Commission has therefore terminated this investigation. The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), and sections 210.41-.42, 210.50 of the Commission's Rules of Practice and Procedure (19 CFR § 210.41-.42, 210.50).

By order of the Commission.

James R. Holbein

Secretary to the Commission

R Helm

Issued: May 18, 2012

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UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN MOBILE DEVICES, ASSOCIATED SOFTWARE, AND COMPONENTS THEREOF

Investigation No. 337-TA-744

LIMITED EXCLUSION ORDER

The Commission has determined that there is a violation of Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, in the unlawful importation, sale for importation, or sale in the United States after importation by Respondent Motorola Mobility, Inc. of certain mobile devices, associated software and components thereof that infringe claims 1, 2, 5, or 6 of United States Patent No. 6,370,566. Having reviewed the record in this investigation, including the written submissions of the parties, the Commission has made a determination on the issues of remedy, the public interest, and bonding. The Commission has determined that the appropriate form of relief is a limited exclusion order prohibiting the unlicensed entry of infringing mobile devices, associated software and components thereof that are manufactured abroad by or on behalf of, or imported by or on behalf of Respondent or any of its affiliated companies, parents, subsidiaries, licensees, or other related business entities, or their successors or assigns.

The Commission has determined that the public interest factors enumerated in 19 U.S.C. § 1337(d) do not preclude the issuance of a limited exclusion order. The bond during the Presidential review shall be a reasonable royalty in the amount of \$0.33 per device entered for consumption.

Accordingly, the Commission hereby **ORDERS** that:

- 1. Mobile devices, associated software and components thereof covered by claims 1, 2, 5, or 6 of United States Patent No. 6,370,566 that are manufactured abroad by or on behalf of, or imported by or on behalf of, Respondent or any of its affiliated companies, parents, subsidiaries, successors, assigns, or other related business entities, are excluded from entry for consumption into the United States, entry for consumption from a foreign trade zone, or withdrawal from a warehouse for consumption, for the remaining term of the patent, except under license of the patent's owner or as provided by law, and except for service, repair, or replacement articles imported for use in servicing, repairing, or replacing mobile devices under warranty or insurance contract for an identical article that was imported prior to the effective date of this Order.
- 2. At the discretion of U.S. Customs and Border Protection ("CBP") and pursuant to procedures it establishes, persons seeking to import mobile devices, associated software and components thereof that are potentially subject to this Order may be required to certify that they are familiar with the terms of this Order, that they have made appropriate inquiry, and thereupon state that, to the best of their knowledge and belief, the products being imported are not excluded from entry under paragraph 1 of this Order. At its discretion, CBP may require persons who have provided the certification described in this paragraph to furnish such records or analyses as are necessary to substantiate the certification.

3. In accordance with 19 U.S.C. § 1337(1), the provisions of this Order shall not

apply to mobile devices, associated software and components thereof that are imported by

and for the use of the United States, or imported for, and to be used for, the United States with

the authorization or consent of the Government.

4. The Commission may modify this Order in accordance with the procedure developed

in Section 210.76 of the Commission's Rules of Practice and Procedure (19 C.F.R. § 210.76).

5. The Secretary shall serve copies of this Order upon each party of record in this.

investigation and upon the Department of Health and Human Services, the Department of

Justice, the Federal Trade Commission, and the Bureau of Customs and Border Protection.

6. Notice of this Order shall be published in the Federal Register.

By Order of the Commission.

James R. Holbein,

Secretary to the Commission

R Helm

Issued: May 18, 2012

CERTAIN MOBILE DEVICES, ASSOCIATED SOFTWARE AND Inv. No. 337-TA-744 COMPONENTS THEREOF

CERTIFICATE OF SERVICE

I, James R. Holbein, hereby certify that the attached Commission Notice has been served in the manner indicated to the following parties on May 18, 2012.

James R. Holbein, Secretary U.S. International Trade Commission 500 E Street, SW, Room 112 Washington, DC 20436

On Behalf of Complainant Microsoft Corporation:

Brian R. Nester, Esq. SIDLEY AUSTIN LLP 1501 K Street, NW Washington, DC 20005	 () Via Hand Delivery (x) Via Overnight Delivery () Via First Class Mail () Other: 			
On Behalf of Motorola Mobility, Inc.:				
Charles F. Schill, Esq. STEPTOE & JOHNSON LLP 1330 Connecticut Avenue, NW Washington, DC 20036	 () Via Hand Delivery (x) Via Overnight Delivery () Via First Class Mail () Other: 			

UNITED STATES INTERNATIONAL TRADE COMMISSION WASHINGTON, D.C.

In the Matter of

CERTAIN MOBILE DEVICES, ASSOCIATED SOFTWARE, AND COMPONENTS THEREOF Investigation No. 337-TA-744

COMMISSION OPINION

On May 18, 2012, the Commission issued notice of its final determination of a violation of section 337 of the Tariff Act of 1930, as amended, (19 U.S.C. § 1337) ("section 337"), entry of a limited exclusion order, and termination of this investigation. This opinion discusses the Commission's determination on the issues it previously determined to review, and on the issues of remedy, the public interest, and bonding.

I. BACKGROUND AND PROCEDURAL HISTORY

On November 5, 2010, the Commission instituted this investigation under section 337, based on a complaint filed by Microsoft Corporation ("Microsoft") of Redmond, Washington, alleging a violation of section 337 in the importation, sale for importation, and sale within the United States after importation of certain mobile devices, associated software, and components thereof, that infringe one or more of claims 1-4, 22, 26, 31, and 36 of U.S. Patent No. 5,579,517 ("the '517 patent"); claims 1, 7, 12, and 20 of U.S. Patent No. 5,758,352 ("the '352 patent"); claims 6, 10, 15, 16, 23 and 24 of U.S. Patent No. 6,621,746 ("the '746 patent"); claims 1-9, 15, and 16 of U.S. Patent No. 6,826,762 ("the '762 patent"); claims 1-3, 5-8 and 10 of U.S. Patent

No. 6,909,910 ("the '910 patent"); claims 10-13 of U.S. Patent No. 7,644,376 ("the '376 patent"); claims 1, 2, 8, 19, 25 and 35-37 of U.S. Patent No. 5,664,133 ("the '133 patent"); claims 11 and 13-15 of U.S. Patent No. 6,578,054 ("the '054 patent"); and claims 1, 2, 5, 6 and 9 of U.S. Patent No. 6,370,566 ("the '566 patent"). 75 Fed. Reg. 68379 (Nov. 5, 2010). The Commission named Motorola, Inc. of Schaumburg, Illinois and Motorola Mobility, Inc. ("MMI" or "Motorola") of Libertyville, Illinois as respondents. *Id.* The Office of Unfair Import Investigations did not participate in this investigation.

On June 27, 2011, the ALJ issued an initial determination ("ID") (Order No. 10) terminating Motorola, Inc., now known as Motorola Solutions, Inc., from the investigation. The Commission determined not to review Order No. 10. (Notice dated July 12, 2011). On August 12, 2011, the ALJ issued an ID (Order No. 22) terminating the '517 and '746 patents from the investigation. The Commission determined not to review Order No. 20. (Notice dated August 26, 2011).

The technology at issue in this investigation includes a number of functionalities and features that are implemented in various embodiments on desktop computers and mobile devices. See ID at 2-13. The '054 and '566 patents cover certain aspects of synchronization technology that powers the efficiency of modern mobile devices. See ID at 2-5. The '352 patent concerns file system technology that provides transparent compatibility between older and simpler devices using short file names and the file naming conventions that allow long and descriptive file names

¹ The JX exhibit numbers for the asserted patents are as follows: the '054 patent – JX-1; the '566 patent – JX-14; the '352 patent – JX-5; the '133 patent – JX-3; the '910 patent – JX-20; the '762 patent – JX-18; the '376 patent – JX-8. See ID.

which are widespread today. See ID at 6; '352 patent, 1:40-49.

In addition to synchronization specific to mobile devices and file system architecture, the technology involved in this investigation relates to basics of human interaction with the computing device. The '910 and '133 patents deal with the operation of the software at the level of the graphical user interface, (*i.e.*, "GUI") — the level at which the user experiences and directly interacts with the software running on the computing device. *See* ID at 6-9; '910 patent, 1:37-48; '133 patent, 1:10-15.

The technology at issue also involves the specifics of how the operating system interacts with the hardware of the device, and how applications running on the device could efficiently interact with that hardware. Specifically, the '762 patent provides a radio interface layer that makes it possible for the mobile operating system to be employed broadly on different device hardware, whereas the '376 patent provides a notification broker setting that allows individual applications on a computing device to be notified of specific state properties and to take appropriate action. *See* ID at 9-13; '762 patent, 1:53-65; '376 patent, 1:32-50.

On December 20, 2011, the ALJ issued his final ID finding a violation of section 337. Specifically, the ALJ found that a violation of section 337 has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain mobile devices, associated software, and components thereof by reason of infringement of one or more of claims 1, 2, 5 and 6 of the '566 patent.

The ALJ also made the following determinations:

• The accused products do not literally infringe the asserted claims of the '054 patent, the '352 patent, the '133 patent, the '910 patent, the '376 patent, and the '762 patent;

- The accused products do literally infringe the asserted claims of the '566 patent;
- Respondents do not induce infringement of any of the asserted claims of the asserted patents;
- The asserted claims of the '054 patent, the '566 patent, the '352 patent, the '133 patent, the '910 patent, the '762 patent, and the '376 patent are not invalid under 35 U.S.C. § 102 for anticipation;
- The asserted claims of the '054 patent and the '566 patent are not invalid under 35 U.S.C. § 103 for obviousness;
- The asserted claims of the '352 patent and the '910 patent are invalid under 35 U.S.C. § 103 for obviousness;
- The '352 patent is not invalid for failing to meet the best mode requirement;
- The domestic industry requirement for the '566 patent, the '133 patent, and the '910 patent has been satisfied;
- The domestic industry requirement for the '054 patent, the '352 patent, the '762 patent and the '376 patent has not been satisfied;
- It has not been established that a violation exists of section 337 for the '054 patent, the '352 patent, the '133 patent, the '910 patent, the '376 patent and the '762 patent.

ID at 212-13.

The Commission determined to review the final ID in part, and issued a notice dated March 2, 2012 ("the Commission Notice"), in which it specified the issues under review and posed questions pertaining to those issues. In particular, the Commission determined to review:

- (1) the ID's determination regarding the economic prong of the domestic industry requirement with respect to all of the presently asserted patents in this investigation, *i.e.*, the '352 patent, the '762 patent, the '910 patent; the '376 patent, the '133 patent, the '054 patent, and the '566 patent;
- (2) the ID's determination regarding the technical prong of the domestic industry requirement with respect to all of the presently asserted patents;
- (3) the ID's anticipation and obviousness determinations with respect to the '566 patent;

- (4) the ID's infringement determination with respect to the '352 patent; and
- (5) the ID's analysis of induced infringement with respect to all of the presently asserted patents.

77 Fed. Reg. 14043-44 (Mar. 8, 2012).2

The Commission determined not to review the remainder of the final ID. *Id.* On review, the Commission requested briefing based on the evidentiary record, and responses by the parties to certain questions pertaining to the issues under review. The Commission also requested briefing on the issues of remedy, the public interest, and bonding from the parties as well as from the public. Both parties to this investigation filed timely written submissions regarding the issues under review and timely reply submissions. In addition, the Association for Competitive Technology, Inc. and Google Inc. filed submissions on the issue of public interest.

II. SUMMARY OF DETERMINATIONS

The Commission has determined as follows with respect to the issues under review and the issues of remedy, the public interest, and bonding. For any of the issues under the review that are not discussed below, we affirm the ID and adopt its reasoning.

A. Issues Under Review

(1) The ID's determination regarding the economic prong of the domestic industry requirement with respect to all of the presently asserted patents in this investigation.

The Commission affirms the ALJ's determination that Microsoft met the economic prong of the domestic industry requirement with regard to all of the presently asserted patents with certain modifications, as detailed below.

² No party petitioned for review of the final ID in regard to the '910 patent.

(2) The ID's determination regarding the technical prong of the domestic industry requirement with respect to all of the presently asserted patents.

The Commission affirms the ALJ's determination that Microsoft satisfied the technical prong of the domestic industry requirement with respect to the '566, '133, and '910 patents. The Commission further affirms the ALJ's determination that Microsoft failed to meet the technical prong of the domestic industry requirement with regard to the '054 patent with certain modifications, as detailed below.

The Commission reverses the ALJ's determination that Microsoft failed to show that it satisfied the technical prong of the domestic industry requirement with respect to the '352 patent based, *inter alia*, on a violation of the Ground Rules. The Commission determines, based on the record, that Microsoft proved by a preponderance of the evidence that it met the technical prong of the domestic industry requirement with respect to the '352 patent.

The Commission affirms the ALJ's determination that Microsoft failed to meet the technical prong of the domestic industry requirement with respect to the '762 and '376 patents.

(3) The ID's anticipation and obviousness determinations with respect to the '566 patent.

The Commission affirms the ALJ's determination that Motorola failed to show by clear and convincing evidence that Apple Newton MessagePad anticipates the asserted claims of the '566 patent with certain modifications, as detailed below.

The Commission affirms the ALJ's determination that Motorola failed to show by clear and convincing evidence that the '566 patent is obvious in light of the prior art of record.

(4) The ID's infringement determination with respect to the '352 patent.

The Commission reverses the ALJ's determination that Microsoft failed to show by a

preponderance of the evidence that Motorola's accused product directly infringes the asserted claims of the '352 patent based, *inter alia*, on a violation of the Ground Rules. The Commission determines, based on the record, that Microsoft proved by a preponderance of the evidence that Motorola's accused products directly infringe the '352 patent.

(5) The ID's analysis of induced infringement with respect to all of the presently asserted patents.

The Commission affirms the ALJ's determination that Microsoft failed to prove by preponderance of the evidence that Motorola induced infringement of each of the '054, '762, '376, '133, and '910 patents. The Commission also affirms the ALJ's determination that Microsoft failed to prove by preponderance of the evidence that Motorola induced infringement of each of the '566 and '352 patents, with certain modifications as detailed below.

B. Remedy, the Public Interest and Bonding

The Commission has determined that:(i) the appropriate remedy is a limited exclusion order directed to Motorola's products that infringe the asserted claims of the '566 patent; (ii) the public interest will not be adversely affected by entry of the proposed exclusion order; and (iii) Motorola should be required to post a bond set at a reasonable royalty in the amount of [[]] per covered device entered for consumption during the period of Presidential review.

III. STANDARD OF REVIEW

Commission review of an initial determination is limited to the issues set forth in the notice of review and all subsidiary issues therein. *Certain Bar Clamps, Bar Clamp Pads, and Related Packaging Display and Other Materials*, Inv. No. 337-TA-429, Comm'n Op. at 3 (January 4, 2001). Once the Commission determines to review an initial determination, its

review is conducted under a de novo standard. Certain Polyethylene Terephthalate Yarn and Products Containing Same, Inv. No. 337-TA-457, Comm'n Op. at 9 (June 18, 2002). Upon review the "Commission has 'all the powers which it would have in making the initial determination,' except where the issues are limited on notice or by rule." Certain Flash Memory Circuits and Products Containing Same, Inv. No. 337-TA-382, Comm'n Op. at 9-10 (June 2, 1997), USITC Pub. 3046 (July 1997) (quoting Certain Acid-Washed Denim Garments and Accessories, Inv. No. 337-TA-324, Comm'n Op. at 5 (Nov. 1992)).

On review, "the Commission may affirm, reverse, modify, set aside or remand for further proceedings, in whole or in part, the initial determination of the administrative law judge. The Commission may also make any findings or conclusions that in its judgment are proper based on the record in the proceeding." 19 C.F.R. § 210.45(c).

IV. DISCUSSION³

A. The ID's determination regarding the economic prong of the domestic industry requirement with respect to all of the presently asserted patents in this investigation.

The ALJ made factual findings, as discussed below, that demonstrate that Microsoft satisfied each alternate domestic industry requirement of Section 337(a)(3).⁴ See ID at 210-211.

³ Our discussion is limited to the issues on which the Commission modified or reversed the ALJ's determinations in the final ID, as well as the issues of remedy, the public interest, and bonding.

⁴Section 337 provides that a domestic industry shall be considered to exist if there is in the United States, with respect to the articles protected by the patent:

⁽A) significant investment in plant and equipment;

⁽B) significant employment of labor or capital, or

⁽C) substantial investment in its exploitation, including engineering, research and development, or licensing.

We affirm and adopt the ALJ's determination based upon those findings, that Microsoft met the economic prong of the domestic industry requirement with regard to all of the asserted patents, with certain modifications to his reasoning.

We note, however, that while the ALJ made the necessary factual findings and reached the correct legal conclusions with respect to the economic prong of the domestic industry requirement, he did not specify which particular subsections of Section 337(a)(3) were satisfied as a result of those findings. Therefore, we modify the ID to specify factual findings that support the conclusion that Microsoft met the requirements of each subsection of Section 337(a)(3).

Thus, we do not adopt the portion of the ID starting at the paragraph break on page 209 and ending on page 211 with "[t]herefore, the ALJ finds that Microsoft has met the economic prong of the domestic industry requirement," and substitute the following analysis:

As detailed below, the evidence shows that Microsoft has made significant and/or substantial investments and expenditures as required by Section 337(a)(3) related to the development of Windows Mobile 6.5 and Windows Phone 7 on mobile devices through the work of its Mobile Group (CX-956C at Q&A 8; 21-158). Based on the record evidence, Microsoft satisfied each of Section 337(a)(3)(A), (B), and (C) as follows:

(1) Section 337(a)(3)(A):

- In fiscal years 2009 and 2010, the Mobile Group occupied approximately [[]] and [[]] square feet of building space in Redmond, Washington, respectively. (CX-960C at Q22.)
- [[]] of teams dedicated to Windows Mobile 6.5 and Windows Phone 7 work in the U.S. (See Tr. 742:23-743:9, 767:23-768:3.)
- Facilities allocation for the Mobile Group was approximately [[]] and

¹⁹ U.S.C. § 1337(a)(3).

]] in fiscal years	2009 and 2010, respectively. (CX-960C at Q24.)
•	Estimated a	nnual U.S. lab ed	quipment expense for the Mobile Group was in excess
	of [[]] and [[]] in fiscal years 2009 and 2010, respectively. (Id.
	at Q26.)		 , , ,
6	Estimated :	nnual IIS comm	outer equipment expense for the Mobile Group was in

• Estimated annual U.S. computer equipment expense for the Mobile Group was in excess of [[]] and [[]] for fiscal years 2009 and 2010, respectively. (*Id.* at Q28.);

(2) Section 337(a)(3)(B):

- The Mobile Group employed an average of [[]] full-time employees and [[]] contingent staff in the U.S. dedicated to the domestic industry products in fiscal year 2009, and an average of [[]] full-time employees and [[]] contingent staff in fiscal year 2010. (*Id.* at Q29.)
- In fiscal year 2009, Microsoft invested approximately [[]] to compensate its full-time U.S. Mobile Group employees and approximately [[]] on contingent staff; and for fiscal year 2010, approximately [[]] on full-time employees and approximately [[]] on contingent staff. (Id. at Q33.)

(3) Section 337(a)(3)(C):

- The Mobile Group spent approximately [[]] and [[]] in the U.S. on the research and development of Mobile OS on non-payroll and payroll tax costs in fiscal years 2009 and 2010. (*Id.* at Q36.)
- For fiscal years 2009 and 2010 respectively, approximately [[]] and [[]] of the Mobile Group was devoted to Windows Mobile 6, and approximately [[]] and [[]] of the Mobile Group was devoted to Windows Phone 7. (*Id.* at Q19.)

Based on the foregoing, we find that Microsoft has met the economic prong of the domestic industry requirement under sections 337(a)(2)(A), (B), and (C).

In rejecting Motorola's argument that Microsoft had improperly analyzed the domestic industry issue by asserting that its operating system satisfied the technical prong of the domestic industry requirement, while its mobile devices satisfied the economic prong of the domestic industry requirement, the ALJ stated: "As set forth supra, the ALJ rejected Motorola's argument that these are, in fact, two different products versus a single product at different stages." ID at

208. This statement is unsupported because there is no evidence that an operating system represents the entire device at an earlier stage of the devices' development. The operating system is a part of the entire mobile device (or computer) whereas the hardware is another part of such a device, irrespective of the "stage" in the device's development (in fact, both the operating system and hardware go through various stages of development before becoming ready to go to the market). Therefore, we modify the ID's analysis by not adopting the phrase "versus a single product at different stages" on page 208 of the ID.

- B. The ID's determination regarding the technical prong of the domestic industry with respect to the '054 and '352 patents.
 - 1. The ALJ's determination that Microsoft failed to meet the technical prong of the domestic industry requirement with regard to the '054 patent.

We affirm the ALJ's determination that Microsoft failed to meet the technical prong of the domestic industry requirement with regard to the '054 patent, with certain modifications to his rationale.

In order to meet the technical prong, the complainant must establish that it practices at least one claim of the asserted patent. *Certain Ground Fault Circuit Interrupters And Products Containing Same*, Inv. No. 337-TA-739, Comm'n Op. at 71 (Apr. 27, 2012). *See also OSRAM GmbH v. Int'l Trade Comm'n*, 505 F.3d 1351, 1359 (Fed. Cir. 2007) ("The domestic product, to meet the technical prong test, Section 337(a)(2), must be covered by the asserted claims; the test 'is essentially the same as that for infringement, *i.e.*, a comparison of domestic products to the asserted claims.") (citations omitted). Therefore, to satisfy the technical prong of the domestic industry requirement, Microsoft must prove by the preponderance of the evidence that the domestic industry products meet each element of at least one of the asserted claims. Microsoft

argued that, with respect to the '054 patent, its Windows Phone 7 (*i.e.*, the product on which it based its domestic industry claim) meets the technical prong of the domestic industry requirement with regard to independent claim 11 and claims 13, 14, and 15 that depend from claim 11. CIB at 7.5

It is undisputed that Motorola's accused products and Microsoft's domestic industry products function in the same way with respect to the asserted claims of the '054 patent. *See*, *e.g.*, Complainant's Petition at 10 ("As the parties agree, MMI's Accused Products and Microsoft's domestic industry products operate in the same way as relates to the '054 patent. ID at 199; CIB at 7. Both implement ActiveSyne's Exchange Protocol, and both employ the Protocol's required Sync Command. Therefore, the analysis below applies equally to the Accused Products and domestic industry products.") *See also* RespResp at 12.

The ALJ found that Motorola's accused products do not meet the "resource state information" limitation of claim 11 and the other asserted claims of the '054 patent that depend from claim 11, and therefore do not infringe the '054 patent. ID at 64. We determined not to review that finding. See Commission Notice. 77 Fed. Reg. 14043 (Mar. 8, 2012). Under the facts of the present investigation, by making his non-infringement finding the ALJ also effectively found that Microsoft's domestic industry products do not meet the same limitation of

⁵ The following abbreviations are used in this Opinion: CIB — Complainant's Initial Post-Hearing Brief; RIB — Respondent's Initial Post-Hearing Brief; RRB — Respondent's Reply Post-Hearing Brief; MSFT PHB — Complainant's Pre-Hearing Brief; ComplOpen — Complainant's Initial Written Submission in Response to Commission Notice; ComplResp — Complainant's Response to Respondent's Written Submission in Response to Commission Notice; RespOpen — Respondent's Opening Brief on Commission Review; RespResp — Respondent's Response to Complainant's Opening Brief on Commission Review.

the asserted claims of the '054 patent because the domestic industry products function in the same way as the accused products. Therefore, applying the "resource state information" limitation of claim 11 and the other asserted claims of the '054 patent that depend from claim 11 to the domestic industry products resulted in the ALJ's finding that Microsoft failed to demonstrate that its products meet the technical prong of the domestic industry requirement. While we affirm this ALJ's finding, we do not agree with the ALJ's statement that "Microsoft's domestic industry products function in nearly the exact same way as Motorola's products." ID at 199. Rather, we determine that, with respect to the asserted claims of the '054 patent, Microsoft's products function in the same way as Motorola's products.

2. The ALJ's determination that Microsoft failed to meet the technical prong of the domestic industry requirement with regard to the '352 patent.

The ALJ found that Microsoft failed to meet the technical prong of the domestic industry requirement with respect to the '352 patent based, *inter alia*, on his finding that complainant Microsoft violated his Ground Rules by reason of an abbreviated discussion in Microsoft's posthearing brief concerning this uncontested issue. ID at 200-201.⁶ The Commission recognizes the importance of the ALJ's Ground Rules for managing the proceedings before him, including the imposition of reasonable page limits for the exposition of the parties' arguments. In this particular circumstance, the evidence and analysis presented by Microsoft in support of its claim regarding the technical prong requirement with respect to the '352 patent was not contested before the ALJ. Upon review of the parties' submissions in response to the notice of review, the

⁶ See ID at 201 ("In the ALJ's view, simply making conclusory statements and citing evidence with no explanation fails to constitute 'a discussion' of the issue in the post-hearing brief as required by the Ground Rules and is insufficient to carry a party's burden of proof.")

briefing of the parties before the ALJ, and the undisputed evidence cited by Microsoft in support of its argument, we find that Microsoft has sustained its burden of showing that the Windows Mobile 6.5 (CPX-24C) running on devices such as HP IPAQ Glisten (CPX-21) practices claims 1 and 12 of the '352 patent. See, e.g., CIB at 60; CX-972C at QQ187-188, QQ190-197, Q201-211, Q214-216; Q218; RIB at 166-189; RRB at 82-92. See also CIB at 63 (citing CX-972C at Q212-213).

C. The ID's anticipation and obviousness determinations with respect to the '566 patent.

After considering the parties' arguments and the evidentiary record, the Commission agrees that Motorola has failed to meet its burden to establish that the asserted claims of the '566 patent are invalid by clear and convincing evidence. In particular, Motorola has failed to prove that the Apple Newton contains a "synchronization component" having all the limitations required by the claims or includes a "synchronization component" that would have been obvious to one skilled in the art. At best, Motorola has shown that the Apple Newton may have a synchronization function -- without further specifying any of the components that provide that synchronization. Thus, we affirm the ALJ's finding that Apple Newton does not meet the "synchronization component" and thus does not anticipate claim 1 of the '566 patent.

Furthermore, because claim 5 depends from claim 1, we find that Motorola likewise failed to prove by clear and convincing evidence that Apple Newton anticipates claim 5. *Minnesota Mining and Manufacturing Co. v. Chemque, Inc.*, 303 F.3d 1294, 1298 (Fed. Cir. 2002).

Accordingly, we do not adopt footnote 20 on page 103 of the ID.⁷ Finally, we affirm the ALJ's determination that Motorola failed to show by clear and convincing evidence that claims 1 and 5 of the '566 patent are obvious in light of prior art. ID at 168, 212.

D. The ID's infringement determination with respect to the '352 patent.

The ALJ found that Microsoft failed to show by a preponderance of the evidence that the Motorola Atrix infringes claims 1 and 12 of the '352 Patent. ID at 66. The ALJ found that Microsoft failed to prove infringement of the '352 patent based, *inter alia*, on his finding that Microsoft violated his Ground Rules. ID at 66. We, however, disagree with this finding. As was the case for the technical prong requirement for this patent, the evidence presented by Microsoft with respect to direct infringement was uncontested and complainant's posthearing brief provided ample citations to the record evidence to support a finding of direct infringement by the Motorola Atrix phone. Based on the record and the parties' arguments, we find that Microsoft proved by preponderance of evidence that Motorola's accused products infringe claims 1 and 12 of the '352 patent. *See*, *e.g.*, CIB at 56 (citing CX-972C at Q59-60; CX-20C at Admission Nos. 9-17, 39-40); CIB at 57 (citing CX-20C at Admission Nos. 59-63, 154-155, 157; CX-972C at Q61-65, Q92-102, Q67-70, Q73-75, Q80-83, Q146, Q149-50, 154, 175; CX-853 at 16:6-8, 11:22-24, 12:12-14, 15:12-15); CX-921C at 87:21-88:4; CX-20C at Admission Nos.

⁷ In that footnote, the ALJ stated as follows: "MMI fails to provide any invalidity analysis for any of the elements of claim 5 in its initial post-hearing brief. (RIB at 47-50.) Pursuant to Ground Rule 11.1, said arguments are deemed waived." ID at 103 n. 20.

⁸ The ALJ stated that in his view, "simply making conclusory statements and citing evidence with no explanation fails to constitute "a discussion" of the issue in the post-hearing brief as required by the Ground Rules and is insufficient to carry a party's burden of proof." ID at 66.

59-63; CX-21C at Admission Nos. 154-55, 157. See also CIB at 58 (citing CX-1102C at Rog. No. 103; CX-972C at Q84-86; CX-233C — CX-241C; CX-972C at Q65-66, Q87-91; Q95; Tr. 641:11-642:14); CX-853 at 160:2-1; CX-9C; CX-20C; CX-21C; CX-1102C; CX-972C at Q149-150, at Q152-153 (citing CX-1073), at Q154-186. CIB at 59; CX-972C at Q154-172; CRX-1C at Q5-12, Q15-26; RX-1358C at Q51. See also CX-972C at Q176-185; RIB at 166-189; RRB at 82-92.9

Based on the foregoing, we find that Microsoft proved by preponderance of evidence that Motorola's products directly infringe claims 1 and 12 of the '352 patent.¹⁰

E. The ID's analysis of induced infringement with respect to all of the presently asserted patents.

We find that the ALJ properly determined that Microsoft failed to show that Motorola induces infringement, but modify his rationale for reaching this determination.

There are only two patents -- the '566 and the '352 patents -- for which induced infringement could possibly be applicable because Microsoft failed to prove direct infringement for the remaining five patents, *i.e.*, the '054, '762, '376, '133, and '910 patents. *See* Commission Notice (determining not to review the ALJ's findings of no direct infringement for these five patents); *see also Novartis Pharm. Corp. v. Eon Labs Mfg.*, 363 F.3d 1306, 1308 (Fed. Cir. 2004) ("When indirect infringement is at issue, it is well settled that there can be no inducement or

⁹ In this subsection we discuss only the issue of direct infringement of the '352 patent. The issue of induced infringement as related to the '352 patent is addressed *infra*.

¹⁰ We determined not to review the ALJ's determination that the '352 patent is invalid as obvious. Therefore, reversing the ALJ's infringement determination will not change the final outcome of the investigation with respect to the '352 patent, *i.e.*, a finding of no violation of section 337.

contributory infringement absent an underlying direct infringement.") (citations omitted).

We affirm the ALJ's determination that Microsoft failed to show that Motorola induces infringement of the '566 patent. In *Global-Tech Appliances v. SEB SA*, 131 S. Ct. 2060 (2011), the Supreme Court held that "induced infringement under § 271(b) requires knowledge that the induced acts constitute patent infringement." 131 S. Ct. at 2068. In our view, the record in this investigation lacks evidence to support a finding that Motorola had knowledge that the induced acts constitute patent infringement.

Microsoft's argument before the ALJ in support of its assertion that Motorola had requisite knowledge sufficient to establish induced infringement was essentially limited to one paragraph, *i.e.*:

MMI induces end users to use the accused products in an infringing manner. Under 35 U.S.C. § 271(b), "[w]hoever actively induces infringement of a patent shall be liable as an infringer." To establish inducement of infringement, the patentee must establish "first that there has been direct infringement, and second that the alleged infringer knowingly induced infringement and possessed specific intent to encourage another's infringement." Broadcom Corp. v. Qualcomm, Inc., 543 F.3d 683, 697 (Fed. Cir. 2008) (citations). The required specific intent is demonstrated where the alleged infringer has knowledge that the induced acts constitute patent infringement. Global-Tech Appliances, Inc. v. SEB SA., 131 S. Ct. 2060, 2068 (2011). Here, the end users of MMI's devices directly infringe the asserted method claims through the routine use of these products. MMI encourages such use by making available manuals instructing users to use the products in an infringement [sic] manner. See Arthrocare Corp. v. Smith & Nephew, Inc., 406 F.3d 1365, 1377 (Fed. Cir. 2005) (manuals can be evidence of inducement). MMI had notice of the asserted patents and Microsoft's infringement theories at least as early as the service of Microsoft's Complaint in this Investigation, yet it continues to import and offer the accused products for sale, and continues to make available manuals that instruct users to use the accused product in an infringing manner.

CIB at 3. Based on this record, the ALJ properly found that "[h]ere, Microsoft has failed to show that MMI had the requisite 'knowledge.'" ID at 94.

We reject Microsoft's argument that "[b]ecause MMI had indisputable actual knowledge of the '566 patent and the operation of the Android system, inducement liability should have been a foregone conclusion." Complainant's Petition at 92. As Motorola points out, "if that type of evidence were sufficient, every defendant accused of infringement would be subject to an inference that they have an intent to induce infringement." Respondent's Response to Complainant's Petition at 97. Under the Federal Circuit precedent, mere knowledge of possible infringement by others does not amount to inducement. Complainant carries the burden to prove specific intent and action to induce infringement. Warner-Lambert Co. v. Apotex Corp., 316 F.3d 1348, 1363 (Fed. Cir. 2003). Furthermore, the Federal Circuit clarified the intent requirement necessary to prove inducement. The Court stated as follows:

In DSU Med. Corp. v. JMS Co., this court clarified en banc that the specific intent necessary to induce infringement "requires more than just intent to cause the acts that produce direct infringement. Beyond that threshold knowledge, the inducer must have an affirmative intent to cause direct infringement."

Kyocera Wireless Corp. v. Int'l Trade Comm'n, 545 F.3d 1340, 1354 (Fed. Cir. 2008) (citations omitted). See also Lucent Techs. Inc. v. Gateway, Inc., 2007 WL 925510, at *2-3 (S.D. Cal. 2007) ("Proof of inducing infringement requires the establishment of a high level of specific intent."). The record in this investigation lacks evidence sufficient to show that Microsoft sustained its burden to demonstrate that Motorola possessed requisite intent to induce direct infringement.

We also reject Microsoft's contention that "in a case where a defendant continues to offer

a product for sale after the filing of a complaint, and especially in an ITC case where the complaint provides a defendant with detailed infringement contentions as part of the complaint, an inference of inducement should apply to the defendant's post-filing activities." ComplOpen at 81. Microsoft cites no Federal Circuit or Commission precedent in support of this contention. In fact, Federal Circuit precedent supports the conclusion that even after a respondent has been served with a complainant's allegations of infringement, the respondent may still lack the requisite intent to induce infringement based upon a reasonable belief that the asserted patent is either not infringed or is invalid. See, e.g., Ecolab, Inc. v. FMC Corp., 569 F.3d 1335, 1351 (Fed. Cir. 2009) ("[E]ven though Ecolab's product was ultimately found to infringe, the jury had substantial evidence from which it could have reasonably concluded that Ecolab did not induce infringement because it lacked the required intent."). See also Kinetic Concepts, Inc. v. Blue Sky Med. Group, Inc., 554 F.3d 1010, 1025 (Fed. Cir. 2009) ("The jury heard Blue Sky's founders explain why they did not believe they were infringing and had the opportunity to assess their credibility. We find no basis to overturn the jury's decision with respect to inducement.")

In the present investigation, the record shows that Microsoft did not produce sufficient evidence to demonstrate that Motorola possessed the requisite specific intent to induce infringement. Further, Microsoft failed to demonstrate that Motorola lacked a reasonable belief that the '566 patent was not infringed or was invalid. Likewise, we find that, based on the record, Microsoft failed to demonstrate that Motorola induces infringement of the '352 patent.

Furthermore, we find that the ALJ's discussion of and reliance on the concept of willful blindness in the Final ID is not necessary to support the conclusion that inducement was not proven by Microsoft. Accordingly, we do not adopt that portion of the Final ID.

F. Remedy, the Public Interest, and Bonding

We determine that:(i) the appropriate remedy is a limited exclusion order directed to Motorola's products found to infringe the asserted claims of the '566 patent; (ii) the public interest will not be adversely affected by entry of the limited exclusion order; and (iii) the bond rate should be set at a reasonable royalty in the amount of [[]] per device entered for consumption into the United States during the period of Presidential review.

1. Remedy

(a) Limited Exclusion Order ("LEO")

In a Section 337 proceeding, the Commission has "broad discretion in selecting the form, scope, and extent of the remedy." *Viscofan, S.A. v. Int'l Trade Comm'n*, 787 F.2d 544, 548 (Fed. Cir. 1986). The ALJ recommended that the Commission issue an LEO directed to the accused products of Motorola that infringe the '566 Patent. ID at 216. We agree with the ALJ's recommendation. Consistent with Commission practice, we determine that an LEO should issue directed to the accused products of "Motorola or any of its affiliated companies, parents, subsidiaries, licensees, or other related business entities, or their successors or assigns." *See* LEO at 1.

Motorola argues that the LEO should include a certification provision permitting Motorola to certify to U.S. Customs and Border Protection (CBP) that its products do not infringe the asserted patents. RespOpen at 52-54. Microsoft contends that such a certification provision is not warranted in this investigation because whether any Motorola mobile device infringes the '566 patent can be easily determined based on visual examination. ComplResp at 51-52. We disagree with Microsoft. As Motorola submits, a certification provision is

particularly necessary in this case where the alleged infringement is based upon the accused devices' inclusion of ActiveSync protocol, and CBP cannot easily determine whether or not Motorola's mobile devices implement the ActiveSync protocol by inspection. RespResp at 48 (citing Certain Semiconductor Chips with Minimized Package Size and Products Containing Same, Inv. No. 337-TA-605, Comm'n Op., 2009 ITC LEXIS 841, at *105 (June 3, 2009) (stating that certification provisions are appropriate where "Customs is unable to easily determine by inspection whether an imported product violates a particular exclusion order.")). Moreover, as Motorola points out, a certification provision will assist CBP to administer the exemption from the scope of the LEO (discussed below) for parts and components used in the maintenance, service, repair, or replacement of Motorola mobile devices previously sold in the United States, or if one or more of the Motorola products are authorized for importation at some future time.

See id. Furthermore, it has been Commission practice for the past several years to include certification provisions in its exclusion orders to aid CBP. Accordingly, the LEO in this investigation includes a certification provision.

Motorola contends that any exclusion order imposed should exempt from its scope all component parts utilized in the service or repair of accused mobile devices previously sold by Motorola. Motorola argues that the availability of alternative devices in the market does not reduce the adverse effect of an exclusion order on customers who have previously contracted for the service and repair of accused Motorola devices that were purchased before issuance of an exclusion order in this investigation. RespResp at 47. Motorola submits that customers of mobile devices generally enter into contracts with Motorola and/or the service carrier that provide for the service, repair, or replacement of damaged mobile devices, and that if the

Commission were to exclude service and repair parts from the U.S. market, these customers may not be able to receive repaired devices as provided for in those contracts. Motorola argues that the Commission has recognized that the public interest weighs in favor of permitting the importation of service, repair, and replacement parts for accused articles that were purchased prior to the issuance of a remedial order, where necessary to prevent disruptions to the domestic business operations of innocent third parties and consumers. RespResp at 48 (citing *Certain Liquid Crystal Display Devices*, Inv. No. 337-TA-631, Comm'n Op. at 27 (July 14, 2009) ("the public interest weighs in favor of an exemption to allow importation of service and replacement parts")); *Certain Hardware Logic Emulation Sys.*, Inv. No. 337-TA-383, Comm'n Op. at 6 (Oct. 15, 1996) (allowing continued importation of repair and replacement parts to "prevent disruption to the business operations of [respondent's] customers")). Accordingly, Motorola argues that even if alternative devices are available, the public interest is served by an exemption from any exclusion order for the importation of parts and components used in the maintenance, service, repair, or replacement of Motorola mobile devices previously sold in the United States. We agree, and determine that the LEO shall provide for the exemption advocated by Motorola.

("Personal Data") (granting four-month transition period before exclusion order takes effect to enable service carriers the opportunity to change to other devices and preserve competitiveness).

We find that a transition period is not warranted as unsupported by the facts and evidence in this investigation. Unlike the facts in *Personal Data*, neither Motorola nor any third party provided any factual basis to justify implementation of a transition period in this investigation. In *Personal Data*, the Commission granted a four-month transition period based on the submission of third-party T-Mobile, which established that T-Mobile would be particularly damaged by the impact of an immediate LEO due to its heavy reliance on the HTC smartphones at issue there (accounting for a majority of its U.S. smartphone sales) and that T-Mobile maintained a unique position as an innovator within the U.S. competitive marketplace. *Personal Data*, Comm'n Op. at 78-81. In this investigation there is no evidence that consumer demand cannot be satisfied by the competing Android devices available on the market, or alternatively by mobile devices equipped with software from Apple, RIM and Microsoft, which are also viable substitutes for Motorola's Android mobile devices. *See* ComplResp at 54; ComplOpen at 87-89. Thus, there is no compelling public interest in this investigation that could justify a transition period to allow Motorola to design-around Microsoft's patents. We therefore decline to provide

¹¹ See also Personal Data, Comm'n Op. at 79 ("The President has determined that the build-out of high-speed wireless coverage is one of several vital infrastructure developments for the nation."). See id. at 80 ("T-Mobile's investment in an advanced high-speed network and its innovations in technology and mobile wireless telecommunications services have provided, and continue to provide, consumers with significant value.")(citations omitted); see also id. ("T-Mobile has also been an innovator in terms of network development and deployment.") (citations omitted).

for a transition period in the LEO.¹²

(b) Cease and Desist Order ("CDO")

The Commission may issue a CDO as a remedy for violation of section 337 in addition to, or in lieu of, the issuance of an exclusion order. See 19 U.S.C. § 1337(f)(l). Such orders are generally issued when there is a "commercially significant" amount of infringing, imported product in the United States that could be sold by an infringing respondent resulting in evasion of the remedy provided by an exclusion order. See Certain Crystalline Cefadroxil Monohydrate, Inv. No. 337-TA-293, USITC Pub. 2391, Comm'n Op. at 37-42 (June 1991); Certain Condensers, Parts Thereof and Products Containing Same, Including Air Conditioners for Automobiles, Inv. No. 337-TA-334, Comm'n Op. at 26-28 (Aug. 27, 1997).

¹² Motorola also argues that any exclusion order should not extend to the accused products' use of Google's servers and Google's synchronization protocol to synchronize calendar objects. RespResp at 46 (*citing* MSFT PHB at 79-114; CX-974C at Q89-155). We decline to consider this issue because it was raised by Motorola for the first time in a responsive brief.

(Doud Dep.) at 35:7-36:4). Microsoft contends that Motorola holds inventory in its [[

Based on the record, we find that Microsoft has not established that there exists a commercially significant amount of infringing imported product held by Motorola in the United States in locations outside of the FTZ. As Motorola points out in its response submission, the deposition testimony cited by Microsoft to support its argument that Motorola maintains commercially significant inventory in warehouse facilities located in [[

]] see ComplOpen at 84, does not specify the amount of inventory held in these locations and does not establish that the amount of inventory is commercially significant. See RespResp at 51(citing CX-884C at 49:25-51:9; CX-887C; CX-291C at 35:7-36:4). It is the complainant's burden to prove that a CDO should issue, see, e.g., Certain Automotive Parts, Inv.

No. 337-TA-557, Comm'n Op. at 20 (July 5, 2007); Certain Baseband Processor Chips, Inv. No. 337-TA-543, Comm'n Op. at 213 (June 19, 2007), and we find that Microsoft has not met that burden in this investigation. See RespResp at 52. Based on the foregoing, we decline to issue a CDO in this investigation.

2. Public Interest

Before issuing a remedy for a violation of Section 337, the Commission must consider the effect of the remedy on certain public interest factors: (1) the public health and welfare, (2) competitive conditions in the U.S. economy, (3) U.S. production of articles that are like or directly competitive with those that are the subject of the investigation, and (4) U.S. consumers. 19 U.S.C. § 1337(d)(1).

Microsoft argues that the issuance of the LEO in this investigation would not be contrary to the public interest. It states that there is no evidence in the record that the U.S. demand for Android-based mobile devices cannot be met by entities other than Motorola, and in any event an adequate supply of these particular mobile devices has not been shown to be necessary to safeguard the public health or welfare in the United States. *See* ComplOpen at 86-91; ComplResp at 58-60.¹³

Motorola makes no argument that public interest factors weigh against any remedy.

¹³ See, e.g., ComplOpen at 86 ("Assuming exclusion of [the infringing] MMI products, a myriad of Android-based mobile devices -- including those manufactured by LG, Samsung, Kyocera and others -- would remain on the market and be available to consumers. In addition, Apple, RIM and Microsoft offer alternative products refuting any claim of a public interest concern that might override the need for the requested relief, as iPhones, Blackberries and Windows Phones serve as viable alternatives to MMI's infringing Android-based mobile devices.")

Rather, it argues that certain provisions should be included in any LEO; these arguments have been addressed previously.

The Commission also received submissions filed by third parties, the Association for Competitive Technology, Inc. ("ACT") (an opening and responsive submissions) and Google Inc. ("Google") (an opening submission only) on the issue of public interest. ACT's submissions advance the argument that public interest factors do not preclude the issuance of a limited exclusion order in this investigation. Google, on the other hand, submits that Motorola's infringing devices should not be excluded on public interest grounds.

ACT states it is "an international grassroots advocacy and education organization that represents over 4,000 small and mid-sized information technology firms from around the world. It is also the leading trade organization for mobile application developers and the only organization of its kind that focuses on the needs of small business innovators." ACT Open at 3. ACT submits that exclusion of Motorola devices that infringe Microsoft's patents in this investigation would not have a negative impact on the public interest. ACT argues that none of the factors the Commission traditionally considers as part of its public interest analysis point to a negative impact that would justify not issuing an exclusion order in this investigation. ACT Open at 4 (citing 19 U.S.C. § 1337(d); Certain Battery- Powered Toy Vehicles, Inv. No. 337-TA-314, Comm'n Op. at 11 (April 10, 1991)). ACT reaches this conclusion for two reasons: (1) that the patents-at-issue are not standard-essential patents; and (2) that competition in the mobile devices market is currently robust. Thus, according to ACT, the production of like or competitive articles and competitive conditions in the United States would be unaffected by an exclusion order in this investigation. ACT argues that many of Motorola's infringing devices

directly compete with Microsoft's mobile devices, and there is no indication that Microsoft, or any of the 32 handset manufacturers competing in the mobile space, would be unable to fill consumer demand if Motorola's infringing devices are excluded. ACT also submits that there is no threat to the public health and welfare. *Id.* at 4. ACT also argues that open source status of the Android platform does not justify ignoring intellectual property rights. ACT Response at 3.

Google submits that the Commission's remedy determination could significantly harm United States consumers as well as competition in the United States economy. Google Submission at 1. Google argues that an exclusion order would significantly harm U.S. consumers through increases in prices, decreases in service, decreases in selection, or decreases in innovation and long-term economic growth. *Id.* at 4. Google contends that without the significant revenue growth associated with the accused Motorola Android devices, competition among network providers would decrease, and network providers would have diminished incentives to invest in critical network infrastructure. *Id.* at 5. Google further argues that the cumulative effect of multiple exclusion orders could harm competition and consumers in a situation where most, if not all, Android mobile computing devices presently sold in the U.S. "currently stand accused in at least one section 337 investigation." *Id.*

Google submits that Section 337 requires the Commission to assess whether "the production of like or directly competitive articles in the United States" will be impacted by any potential exclusion or cease and desist order. *Id.* at 6 (citing 19 U.S.C. § 1337(d)(1)). Google argues that although the accused mobile devices are manufactured outside of the U.S., many of the critical technologies that make such devices possible, including the platforms that control the devices, are developed and sold in the U.S. Thus, an exclusion order has the potential to leave

U.S. consumers without access to innovative technologies resulting from Android, which, Google submits, is the only open mobile computing platform developed and distributed in the U.S. *Id.* Google argues that the public interest in continued access to Android weighs against entry of an exclusion order. *Id.* at 8 (citing *Certain Automatic Crankpin Grinders*, Inv. No. 337-TA-60, USITC Pub. No. 1022, Comm'n Op. at 17-21 (Dec. 1979)).

Microsoft responds that Google's public interest submission fails to raise any compelling arguments warranting any limit on remedial relief. ComplResp at 58. Specifically, Microsoft rejects Google's argument that the exclusion of the infringing Motorola mobile devices will adversely impact competition and lead to loss of U.S. jobs. Microsoft submits that "the overall success of the Android ecosystem undercuts this argument. Even if Motorola's devices were excluded, a myriad of Android-based mobile devices, including those manufactured by Samsung, LG, Kyocera and others — the three largest of which are Microsoft licensees that are properly utilizing Microsoft's patented technology — remain on the market and are available to consumers." *Id.* at 59. Microsoft points out that from 2010 to 2011, Motorola's share of the Android market was cut in half, while Samsung and LG experienced substantial market share gains. *Id.* ¹⁴ Microsoft further points out that mobile devices manufactured by LG and Samsung now account for a greater share of the Android market than the accused Motorola devices. ¹⁵

¹⁴Microsoft cites "The NPD Group: As Android Solidifies Lead, Google Acquisition Has Potential to Revitalize Flagging Motorola: Patent-Rich Handset Pioneer's Second Quarter Share Fell to Gains by Apple, Samsung and LG" (Aug. 22, 2011) (attached as Exhibit E to Complainant's Responsive Submission).

¹⁵Microsoft cites US. Mobile Subscriber Share, ComScore Reports Press Release (June 3, 2011) (attached as Exhibit F to Complainant's Responsive Submission).

Microsoft asserts that there is no evidence that any of these manufacturers would be negatively impacted by the exclusion of the accused Motorola devices. Microsoft further argues that Apple, RIM and Microsoft offer alternative products to Android-based mobile devices such as iPhones, Blackberries and Windows Phones, and therefore there are no public interest concerns that might override the need for the requested relief. Microsoft concludes that the Commission precedent makes clear that the mere narrowing of consumer choice among Android-based smartphones "cannot be a sufficient basis for denying the issuance of an exclusion order." ComplResp at 60 (citing *Personal Data*, Inv. No. 337- TA-710, Comm'n Op. at 69 (Dec. 29, 2011)).

ACT, in its response to Google's submissions, argues that the Android platform is neither as open as Google describes, nor is it the sole open source platform in the mobile market. *See* ACT Response at 4-5 (citations omitted). ACT further argues that even assuming Android was as open as Google claims, nothing about the purportedly open nature of Android justifies patent infringement and protects Motorola's infringing Android devices from an exclusion order. ACT submits that the open source movement exists within the patent law framework, not outside of it. *Id.* at 5. ACT concludes that the exclusion of Motorola infringing articles will not harm the public interest.

We find, based on the facts and evidence submitted on the record, and in particular the evidence discussed by Microsoft and ACT, that excluding the infringing Motorola devices will not have a significant negative impact on competitive conditions in the United States economy or on U.S. consumers. The record shows that there are numerous other sources for Android-based mobile devices, and even more sources for mobile devices based on other operating systems.

With respect to Google's argument regarding other section 337 investigations involving Android

phones, we note, as we did in *Personal Data*, that the present limited exclusion order does not exclude all Android mobile devices, and that if a combination of Commission orders and district court rulings in the future leads to a significant constraint on the availability of mobile devices, the Commission has established procedures for modification or rescission of exclusion orders based on changed facts or public interest considerations. 19 C.F.R. § 210.76(a)(1). Further, there is no evidentiary support in the record for the assertion that U.S. production of like or directly competitive articles will be negatively impacted by reason of the limited exclusion order. Nor is there evidentiary support in the record for the assertion that innovation will be hampered to any significant degree as a result of the limited exclusion order. We also find that exclusion of the infringing Motorola devices will not have a significant adverse impact on the public health, safety, or welfare - there is no argument or evidence that any such concerns are implicated here, and in any event, alternative mobile devices are readily available. Finally, we note that the public interest favors the protection of U.S. intellectual property rights. *See*, e.g., *Certain Two-Handle Centerset Faucets and Escutcheons and Components Thereof*, Inv. No. 337-TA-422, Comm'n Op. at 9 (July 21, 2000).¹⁶

We therefore find that the public interest factors do not preclude the issuance of the LEO in this investigation.

¹⁶Although Commissioner Pinkert concurs in the result of the Commission's public interest analysis because of the likely limited impact of exclusion given the market conditions discussed in ACT's and Microsoft's submissions, he would emphasize the need, where the evidence permits, for careful case-by-case consideration of the likely impact of exclusion on the range of choice available to consumers of a rapidly changing, technologically driven product such as the one at issue in this case. For a more complete discussion, see Additional Views of Commissioner Pinkert on Remedy and the Public Interest, 337-TA-710 (Dec. 29, 2011).

3. Bond During the Period of Presidential Review

The ALJ recommended that the Commission set a bond at a reasonable royalty in the amount of [[]] per covered device entered for consumption. RD at 219.

Microsoft asserts that should Motorola continue to import and sell infringing products during the period of Presidential review, it should be required to post a bond sufficient to protect Microsoft from further injury. ComplOpen at 91 (citing 19 U.S.C. § 1337(j)(3)). Microsoft contends that posting a bond is necessary to avoid inflicting additional competitive harm on Microsoft because the infringing mobile devices directly compete with Motorola's infringing mobile devices. CX-1018C at 75:5-76:1; Tr. 1397:16-24. Microsoft submits that where, as in the present investigation, the record shows that the employment of a quantitative analytical technique such as a price differential analysis is not feasible, a bond may be set in the amount of a reasonable royalty. See, e.g., Certain Dynamic Random Access Memories, Components Thereof and Products Containing Same, 1987 WL 450856, Comm'n Op. at 30 (Sept. 21, 1987) (when a pricing comparison is impossible, appropriate to set the bond based on a reasonable royalty). Accordingly, Microsoft argues that a bond based on a royalty of [[]] per infringing smartphone and [[]] per infringing tablet is reasonable and supported by the record. To support this bond amount, Microsoft relies on a license with [[]] that Microsoft executed in April 2010, pursuant to which [[]] pays Microsoft a [[]] per device royalty for its Android-based smartphones – mobile devices which compete with the Motorola mobile devices at issue in this investigation. 17 Microsoft also cites its Confidential Patent License Agreement with []]]

¹⁷ComplOpen at 92 (citing Confidential Patent Covenant Agreement between Microsoft and [[]], MSMOTOITC-VOL033-0046920 - 00469431 (see Exhibit C to Complainant's

[[]] effective June 28, 2011, which provides that [[]] pay Microsoft a [[]] per device royalty for each Android-based smartphone and a [[]] per device royalty for each Android-based tablet or reader. Microsoft argues that its licenses with [[]] and [[]] for Android-based smartphones and tablets provide a suitable comparison and demonstrate that [[]] per smartphone and [[]] per tablet constitutes a reasonable royalty. *Id.* (citing *Certain Digital Televisions and Certain Products Containing Same and Methods of Using Same*, Inv. No. 337-TA-617, Comm'n Op. at *19 (April 10, 2009) ("We find it equitable to set the bond amount at a reasonable royalty based on [the Complainant's] own licensing agreements.")); *Certain Semiconductor Chips Having Synchronous Dynamic Random Access Memory Controllers and Products Containing Same*, Inv. No. 337-TA-661, Comm'n Op. at 16 (Jul. 26, 2010) (setting bond based on royalty rate consistent with complainant's recent licensing practices regarding asserted patents).

Motorola argues that no bond should be required during the period of Presidential review. RespOpen at 58. Motorola contends that Microsoft did not satisfy its burden to adequately plead or support any bond amount. RespOpen at 62. Motorola further contends that, in the alternative, any bond amount should be kept at a reasonable royalty rate as recommended by the ALJ. *Id*.

We find that a bond should be set during the 60-day period of Presidential review. See 19 U.S.C. § 1337(j)(3). In past investigations, the Commission has relied on industry licensing terms in the determination of bond based on a reasonable royalty, and frequently uses actual

Opening Submission)).

¹⁸See id. (citing MS-MOTO SDFLA 00001792359-MS-MOTO SDFLA 00001792374.

license agreements entered into by the patent holder with respect to the patents-in-suit as the best evidence of such a royalty rate.¹⁹

In light of Commission precedent, a royalty of [[]] per infringing smartphone and [[]] per infringing tablet as Microsoft urges is not supported by the record because the license agreements relied upon by Microsoft do not provide an accurate or comparable royalty rate for the '566 patent, the only patent for which we find a violation of Section 337. As Motorola points out, while Microsoft cites to the April 2010 license agreement with [[]] pursuant to which [[]] pays Microsoft a [[]] per device royalty for its Android-based smartphones, this license does not specifically relate to Microsoft's ActiveSync technology, of which the '566 patent is a part. See RespResp at 58.

The record shows that Microsoft and [[]] have a separate license agreement covering Microsoft's ActiveSync technology.²⁰ Motorola submits that [[]] pays a separate royalty for the use of Microsoft's ActiveSync protocol in addition to the [[]] per phone royalty contained in the April 2010 license agreement. RespResp at 58 (citing Moore Dep. Tr., at 202:13-17 (stating that

¹⁹ See Certain Semiconductor Chips with Minimized Chip Package Size and Products Containing Same, Inv. No. 337-TA-605, Comm'n Op. 74 (May 20, 2009); Certain Acid-Washed Denim Garments and Accessories, Inv. No. 337-TA-324, Comm'n Op., 1992 ITC LEXIS 697 (Nov. 1992) (basing amount of bond on royalty rate complainant had charged several licensees); Certain Semiconductor Chips Having Synchronous Dynamic Random Access Memory Controllers and Products Containing Same, Inv. No. 337-TA-661, Comm'n Op. at 16 (Jul. 26, 2010) ("We conclude that the 2.65-percent bond is consistent with [complainant's] past licensing practice regarding the asserted patents); Certain Digital Televisions and Certain Products Containing Same and Methods of Using Same, Inv. No. 337-TA-617, Comm'n Op. at 18 (April 23, 2009) ("We find it equitable to set the bond amount at a reasonable royalty based on [complainant's] own licensing agreements.").

²⁰See MSMOTOITC-VOL04-00333649-57 (attached to Respondent's Responsive Submission as Exhibit C).

"[t]his is the ActiveSync license that [[]] has with Microsoft. It's separate and apart from the Android license that we talked about")). Therefore, Motorola argues, the most comparable license agreement between Microsoft and [[]] is the Microsoft/[[]] ActiveSync license agreement, under which the royalty rate ranges from [[]] to [[]] per device depending upon the number of units distributed during the year. We note that the same royalty rate range was used in a license entered into between Microsoft and [[]] covering the ActiveSync protocol, 22 and in a similar agreement between Microsoft and [[]], also covering the ActiveSync protocol. 23

We find that Microsoft's license agreements that cover all of its patents for smartphones to Android handset manufacturers do not provide an accurate basis for determining the amount of bond under Section 337, which requires that a bond be set in an amount sufficient to "protect complainant from any injury" during the period of Presidential review. *See, e.g.*, 19 U.S.C. §1337(j)(3); *Certain Automotive Parts*, Inv. No. 337-TA-557, Comm'n Op. at 13 (July 5, 2007). Accordingly, Microsoft's ActiveSync licenses, which are more narrowly tailored to the subject matter of the '566 patent, should form the basis for determining the appropriate bond amount in this investigation. Based on the applicable royalty range of those licenses of [[]] to [[]] per device, we determine that the highest royalty amount of [[]] should be used for the purpose of

²¹See MSMOTOITC-VOL04-00333649-57, at MSMOTOITC-VOL04-00333651 (attached to Respondent's Responsive Submission as Exhibit C). See RespResp at 58.

²²See MSMOTOITC-VOL04-00333487-93 (attached to Respondent's Responsive Submission as Exhibit C).

²³See MSMOTOITC-VOL04-00334546-54, as amended by MSMOTOITC-VOL04-00333842-44 (attached to Respondent's Responsive Submission as Exhibit C).

the bond for entries for consumption during the Presidential review period to provide Microsoft adequate protection from any injury by reason of Motorola's imports that infringe the '566 patent.

V. CONCLUSION

By order of the Commission.

James R. Holbein

Secretary to the Commission

R Helm

Issued: June 5, 2012

CERTAIN MOBILE DEVICES, ASSOCIATED SOFTWARE AND Inv. No. 337-TA-744 COMPONENTS THEREOF

PUBLIC CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **COMMISSION OPINION** has been served in the manner indicated to the following parties on **June 5**, **2012**.

Lisa R. Barton, Acting Secretary U.S. International Trade Commission 500 E Street, SW, Room 112 Washington, DC 20436

On Behalf of Complainant Microsoft Corporation:

Brian R. Nester, Esq. SIDLEY AUSTIN LLP 1501 K Street, NW Washington, DC 20005	 () Via Hand Delivery () Via Overnight Delivery () Via First Class Mail () Other: 		
On Behalf of Motorola Mobility, Inc.:			
Charles F. Schill, Esq. STEPTOE & JOHNSON LLP 1330 Connecticut Avenue, NW Washington, DC 20036	 () Via Hand Delivery () Via Overnight Delivery () Via First Class Mail () Other: 		

	,			

UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN MOBILE DEVICES, ASSOCIATED SOFTWARE, AND COMPONENTS THEREOF

Investigation No. 337-TA-744

NOTICE OF A COMMISSION DETERMINATION TO REVIEW A FINAL INITIAL DETERMINATION IN PART AND SET A SCHEDULE FOR FILING WRITTEN SUBMISSIONS ON THE ISSUES UNDER REVIEW AND ON REMEDY, THE PUBLIC INTEREST, AND BONDING

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined to review in part the final initial determination ("ID") issued by the presiding administrative law judge ("ALJ") on December 20, 2011.

FOR FURTHER INFORMATION CONTACT: Michael Liberman, Esq., Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 205-3115. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 205-2000. General information concerning the Commission may also be obtained by accessing its Internet server at http://www.usitc.gov. The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at http://edis.usitc.gov. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

SUPPLEMENTARY INFORMATION: The Commission instituted this investigation on November 5, 2010, based on a complaint filed by Microsoft Corporation of Redmond, Washington. 75 Fed. Reg. 68379-80 (Nov. 5, 2010). The complaint alleges violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain mobile devices, associated software, and components thereof by reason of infringement of U.S. Patent Nos. 5,579,517 ("the '517 patent"); 5,758,352 ("the '352 patent"); 6,621,746 ("the '746 patent"); 6,826,762 ("the '762 patent"); 6,909,910 ("the '910 patent"); 7,644,376 ("the '376

patent"); 5,664,133 ("the '133 patent"); 6,578,054 ("the '054 patent"); and 6,370,566 ("the '566 patent.") Subsequently, the '517 and the '746 patents were terminated from the investigation. The notice of investigation, as amended, names Motorola Mobility, Inc. of Libertyville, Illinois and Motorola, Inc. of Schaumburg, Illinois as respondents. Motorola, Inc. n/k/a Motorola Solutions was terminated from the investigation based on withdrawal of infringement allegations on July 12, 2011.

The final ID on violation was issued on December 20, 2011. The ALJ issued his recommended determination on remedy and bonding on the same day. The ALJ found that a violation of section 337 has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain mobile devices, associated software, and components thereof containing same by reason of infringement of one or more of claims 1, 2, 5 and 6 of the '566 patent. Both Complainant and Respondent filed timely petitions for review of various portions of the final ID, as well as timely responses to the petitions.

Having examined the record in this investigation, including the ALJ's final ID, the petitions for review, and the responses thereto, the Commission has determined to review the ID in part. In particular, the Commission has determined to review: (1) the ID's determination regarding the economic prong of the domestic industry requirement with respect to all of the presently asserted patents in this investigation, *i.e.*, the '352 patent, the '762 patent, the '910 patent; the '376 patent, the '133 patent, the '054 patent, and the '566 patent; (2) the ID's determination regarding the technical prong of the domestic industry requirement with respect to all of the presently asserted patents; (3) the ID's anticipation and obviousness determinations with respect to the '566 patent; (4) the ID's infringement determination with respect to the '352 patent; and (5) the ID's analysis of induced infringement with respect to all of the presently asserted patents. The Commission has determined not to review the remainder of the final ID.

The parties are requested to brief their positions on only the following issues, with reference to the applicable law and the evidentiary record:

(1) With respect to the domestic industry:

- (a) For all of the presently asserted patents, what statutory provisions, Federal Circuit and Commission precedent, and record evidence support respondent's argument that the ALJ impermissibly analyzed different articles for purposes of the technical and economic prongs of the domestic industry requirement, *see* Respondent's Petition for Review at 28?
- (b) Under Federal Circuit and Commission precedent and section 337 statutory provisions, where an asserted patent covers both hardware and software as one system, is it (i) necessary, and/or (ii) sufficient to demonstrate that the software at issue is implemented and functions on a third party's hardware (e.g., a smartphone) in order to satisfy the

technical prong of domestic industry requirement?

(c) For all of the presently asserted patents, what statutory provisions and Commission precedent specifically support the ID's determination regarding the economic prong of the domestic industry requirement and particular findings made in support of such determination?

(2) With respect to the '566 patent:

- (a) (i) Please identify all the arguments made before the ALJ that rely on factual support from the record and legal support provided by applicable Federal Circuit and Commission precedent demonstrating that the Apple Newton MessagePad prior art reference discloses the "synchronization component" of claim 1; (ii) What, if any, disclosures are missing from the Apple Newton MessagePad reference such that it does not meet the "synchronization component" limitation of claim 1;
- (b) Please identify all the arguments made before the ALJ that rely on factual support from the record and legal support provided by applicable Federal Circuit and Commission precedent demonstrating that respondent met its burden of proof to show that the Apple Newton MessagePad reference anticipates claim 5.
- (c) Please identify all the arguments made before the ALJ that rely on factual support from the record and legal support provided by applicable Federal Circuit and Commission precedent demonstrating that prior art references render the asserted claims of the '566 patent obvious;
- (3) With respect to the '352 patent, please identify all the arguments made before the ALJ that rely on factual support from the record and legal support provided by applicable Federal Circuit and Commission precedent demonstrating that complainant met its burden of proof to show that (a) the accused products infringe the asserted claims of the '352 patent, and (b) complainant satisfied the technical prong of the domestic industry requirement.

In connection with the final disposition of this investigation, the Commission may (1) issue an order that could result in the exclusion of the subject articles from entry into the United States, and/or (2) issue one or more cease and desist orders that could result in the respondent being

required to cease and desist from engaging in unfair acts in the importation and sale of such articles. Accordingly, the Commission is interested in receiving written submissions that address the form of remedy, if any, that should be ordered. If a party seeks exclusion of an article from entry into the United States for purposes other than entry for consumption, the party should so indicate and provide information establishing that activities involving other types of entry either are adversely affecting it or are likely to do so. For background, see *Certain Devices for Connecting Computers via Telephone Lines*, Inv. No. 337-TA-360, USITC Pub. No. 2843, Comm'n Op. at 7-10 (Dec. 1994).

If the Commission contemplates some form of remedy, it must consider the effects of that remedy upon the public interest. The factors the Commission will consider include the effect that an exclusion order and/or cease and desist orders would have on (1) the public health and welfare, (2) competitive conditions in the U.S. economy, (3) U.S. production of articles that are like or directly competitive with those that are subject to investigation, and (4) U.S. consumers. The Commission is therefore interested in receiving written submissions that address the aforementioned public interest factors in the context of this investigation.

If the Commission orders some form of remedy, the President has 60 days to approve or disapprove the Commission's action. During this period, the subject articles would be entitled to enter the United States under bond, in an amount determined by the Commission and prescribed by the Secretary of the Treasury. The Commission is therefore interested in receiving submissions concerning the amount of the bond that should be imposed.

written submissions on the issues under review. The submissions should be concise and thoroughly referenced to the record in this investigation. Parties to the investigation, interested government agencies, and any other interested parties are encouraged to file written submissions on the issues of remedy, the public interest, and bonding. Such submissions should address the recommended determination on remedy and bonding issued on December 20, 2011, by the ALJ. Complainant is also requested to submit proposed remedial orders for the Commission's consideration. Complainant is further requested to provide the expiration date of the '352 patent, the '762 patent, the '910 patent, the '376 patent, the '133 patent, the '054 patent, and the '566 patent, and state the HTSUS numbers under which the accused articles are imported. The written submissions and proposed remedial orders must be filed no later than the close of business on March 19, 2012. Reply submissions must be filed no later than the close of business on March 27, 2012. No further submissions on these issues will be permitted unless otherwise ordered by the Commission.

Persons filing written submissions must do so in accordance with Commission rule 210.4(f), 19 C.F.R. § 210.4(f) which requires electronic filing. The original document and eight true copies thereof must also be filed on or before the deadlines stated above with the Office of the Secretary. Any person desiring to submit a document (or portion thereof) to the Commission in confidence must request confidential treatment unless the information has already been granted such treatment during the proceedings. All such requests should be directed to the Secretary of the Commission and must include a full statement of the reasons why the Commission should grant such treatment. See section 201.6 of the Commission's Rules of Practice and Procedure, 19

C.F.R. § 201.6. Documents for which confidential treatment by the Commission is sought will be treated accordingly. All nonconfidential written submissions will be available for public inspection at the Office of the Secretary.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), and in sections 210.42-.46 of the Commission's Rules of Practice and Procedure (19 C.F.R. §§ 210.42-.46).

By order of the Commission.

James R. Holbein

Secretary to the Commission

Issued: March 2, 2012

CERTAIN MOBILE DEVICES, ASSOCIATED SOFTWARE AND Inv. No. 337-TA-744 COMPONENTS THEREOF

PUBLIC CERTIFICATE OF SERVICE

I, James R. Holbein, hereby certify that the attached **NOTICE** has been served in the manner indicated to the following parties on **March 2, 2012.**

James R. Holbein, Secretary U.S. International Trade Commission 500 E Street, SW, Room 112 Washington, DC 20436

On Behalf	of	Complainant	Microsoft	Corporation	1:

Brian R. Nester, Esq. SIDLEY AUSTIN LLP 1501 K Street, NW Washington, DC 20005	() Via Hand Delivery () Via Overnight Delivery (V) Via First Class Mail () Other:
On Behalf of Motorola Mobility, Inc.:	
Charles F. Schill, Esq. STEPTOE & JOHNSON LLP 1330 Connecticut Avenue, NW Washington, DC 20036	 () Via Hand Delivery () Via Overnight Delivery () Via First Class Mail () Other:

UNITED STATES INTERNATIONAL TRADE COMMISSION Washington, D.C.

In the Matter of

CERTAIN MOBILE DEVICES, ASSOCIATED SOFTWARE, AND COMPONENTS THEREOF

Investigation No. 337-TA-744

INITIAL DETERMINATION ON VIOLATION OF SECTION 337 AND RECOMMENDED DETERMINATION ON REMEDY AND BOND

Administrative Law Judge Theodore R. Essex

(December 20, 2011)

Appearances:

For the Complainant Microsoft Corporation:

David T. Pritikin, Esq., Richard A. Cederoth, Esq., Douglas I. Lewis, Esq., and John W. McBride, Esq. of Sidley Austin LLP of Chicago, Illinois.

Brian R. Nester, Esq. and Brian P. Johnson, Esq. of Sidley Austin LLP of Washington, D.C.

Paul D. Tripodi II, Esq. of Sidley Austin LLP of Los Angeles, California

Teague I. Donahey, Esq. of Sidley Austin LLP of San Francisco, California

For the Respondent Motorola Mobility, Inc.:

Charles F. Schill, Esq. and Jamie B. Beaber, Esq. of Steptoe & Johnson LLP of Washington, D.C.

Charles K. Verhoeven, Esq. and David Bilsker, Esq. of Quinn Emanuel Urquhart & Sullivan LLP of San Francisco, California

Edward J. DeFranco, Esq. of Quinn Emanuel Urguhart & Sullivan LLP of New York, New York

David A. Nelson, Esq. of Quinn Emanuel Urquhart & Sullivan LLP of Chicago, Illinois

Pursuant to the Notice of Investigation, 75 Fed. Reg. 68379-80 (2010), this is the Initial Determination of the in the matter of *Certain Mobile Devices, Associated Software, and Components Thereof*, United States International Trade Commission Investigation No. 337-TA-744. See 19 C.F.R. § 210.42(a).

It is held that a violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain mobile devices, associated software, and components thereof containing same by reason of infringement of one or more of claims 1, 2, 5 and 6 of U.S. Patent No. 6,370,566. It is further held that no violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain mobile devices, associated software, and components thereof containing same by reason of infringement of one or more of claims 1 and 12 of U.S. Patent No. 5,758,352; claims 1-9, 15, and 16 of U.S. Patent No. 6,826,762; claims 1-3, 8 and 10 of U.S. Patent No. 6,909,910; claims 10-13 of U.S. Patent No. 7,644,376; claims 1, 2, 35 and 36 of U.S. Patent No. 5,664,133; and claims 11 and 13-15 of U.S. Patent No. 6,578,054.

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The following abbreviations may be used in this Initial Determination:

CDX	Complainants' demonstrative exhibit
CFF	Complainants' proposed findings of fact
CIB	Complainants' initial post-hearing brief
CORFF	Complainants' objections to Respondents' proposed findings of fact
COSFF	Complainants' objections to Staff's proposed findings of fact
CPX	Complainants' physical exhibit
CRB	Complainants' reply post-hearing brief
CX	Complainants' exhibit
Dep.	Deposition
JSUF	Joint Statement of Undisputed Facts
JX	Joint Exhibit
RDX	Respondents' demonstrative exhibit
RFF	Respondents' proposed findings of fact
RIB	Respondents' initial post-hearing brief
ROCFF	Respondents' objections to Complainants' proposed findings of fact
ROSFF	Respondents' objections to Staff's proposed findings of fact
RPX	Respondents' physical exhibit
RRB	Respondents' reply post-hearing brief
RRX	Respondents' rebuttal exhibit
RX	Respondents' exhibit
SFF	Staff's proposed findings of fact
SIB	Staff's initial post-hearing brief
SOCFF	Staff's objections to Complainants' proposed findings of fact
SORFF	Staff's objections to Respondents' proposed findings of fact
SRB	Staff's reply post-hearing brief
Tr.	Transcript

I. BACKGROUND

A. Institution and Procedural History of This Investigation

By publication of a notice in the *Federal Register* on November 5, 2010, pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, the Commission instituted Investigation No. 337-TA-744 with respect to U.S. Patent Nos. 5,579,517; 5,758,352; 6,621,746; 6,826,762; 6,909,910; 7,644,376; 5,664,133; 6,578,054; and 6,370,566 to determine:

[W]hether there is a violation of subsection (a)(1)(B) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain mobile devices, associated software, and components thereof that infringe one or more of claims 1-4, 22, 26, 31, and 36 of the '517 patent; claims 1, 7, 12, and 20 of the '352 patent; claims 6, 10, 15, 16, 23 and 24 of the '746 patent; claims 1-9, 15, and 16 of the '762 patent; claims 1-3, 5-8 and 10 of the '910 patent; claims 10-13 of the '376 patent; claims 1, 2, 8, 19, 25 and 35-37 of the '133 patent; claims 11 and 13-15 of the '054 patent; and claims 1, 2, 5, 6 and 9 of the '566 patent and whether an industry in the United States exists as required by subsection (a)(2) of section 337.

75 Fed. Reg. 68379 (November 5, 2010).

Microsoft Corporation ("Microsoft") of Redmond, Washington is the complainant. (*Id.*)

The named respondents were Motorola, Inc. of Schaumburg, Illinois and Motorola Mobility, Inc.

("MMI" or "Motorola") of Libertyville, Illinois. (*Id.*)¹

On March 7-8, 2011, the ALJ held a *Markman* hearing. On April 22, 2011, the ALJ issued a *Markman* Order. (Order No. 6.)

On June 27, 2011, the ALJ issued an initial determination terminating Motorola, Inc., now known as Motorola Solutions, Inc., from the investigation. (Order No. 10.) On July 12, 2011, the Commission determined not to review the order. (Commission Determination Not To

¹ On February 15, 2010, the Commission Investigative Staff filed a notice that it would no longer participate in the instant investigation in light of the Commission's Supplement to the Strategic Human Capital Plan 2009-2013. *See* Ltr. dated February 15, 2010 fr. Levine to Essex.

Review An Initial Determination Terminating The Investigation As To Motorola, Inc., Now Known As Motorola Solutions, Inc.) (July 12, 2011).

On June 22, 2011, Motorola filed a Motion to Terminate with Respect to U.S. Patent Nos. 5,579,517 and 5,758,352 Based on Improper Forum. (Motion Docket No. 744-011.) The motion is hereby DENIED.

On August 12, 2011, the ALJ issued an initial determination terminating U.S. Patent Nos. 5,579,517 and 6,621,746. (Order No. 20.) On August 26, 2011, the Commission determined not to review the order. (Commission Determination Not To Review An Initial Determination Terminating The Investigation As To U.S. Patent Nos. 6,621,746 And 5,579,517) (August 26, 2011).

The evidentiary hearing on the question of violation of section 337 commenced on August 22, 2011, and concluded on August 30, 2011. Microsoft and MMI were represented at the hearing. (Tr., 5:10-20.)

B. The Parties

Microsoft Corporation is a Washington corporation with its headquarters located in Redmond, Washington. (Microsoft Pre-hearing Brief at 5.) Microsoft develops computer software, services and solutions for businesses and consumers. (*Id.*)

MMI is a spinoff of Motorola Inc. that was formed in January 2011. (RIB at 14.) Motorola makes products and offers services that have their primary focus in the mobile environment, such as smartphones and tablet computers. (RIB at 14.)

C. The Patents at Issue and Overview of the Technology

1. The '054 Patent

U.S. Patent No. 6,578,054 ("the '054 Patent"), entitled "Method and system for supporting off-line mode of operation and synchronization using resource state information," was filed on October 4, 1999 and issued on June 10, 2003. (See JX-1). Alexander I. Hopmann; Rebecca L. Anderson; and Brian J. Deen are the named inventors of the '054 Patent, and complainant Microsoft is the named assignee. (Id.)

The asserted claims of the '054 Patent are claims 11 and 13-15. These claims read as follows:

- 11. In a client associated with a networked system that includes a server that stores a resource, a method for accessing the resource and then interacting off-line with the resource in a manner such that it appears, from the standpoint of the client, that the client is on-line, comprising the steps of: while the client is on-line with the server, receiving from the server a copy of the resource and resource state information representing the state of the resource stored at the server at a selected moment; storing the copy of the resource in a local store associated with the client; placing the client in an off-line condition with respect to the server; and performing a data operation on the copy of the resource while the client is off-line by accessing the copy of the resource in the local store, the data operation resulting in a modified copy of the resource; and synchronizing the resource stored at the server with the modified copy of the resource while the client is subsequently on-line after the step of performing the data operation, the synchronization being performed at least in part by transmitting to the server the copy or the resource stored at the client, and the resource state information.
- 13. A method as recited in claim 11, wherein the data operation includes a read operation.
- 14. A method as recited in claim 11, wherein the data operation includes a write operation.
- 15. A method as recited in claim 11, wherein the data operation includes a delete operation.
- (JX- 1.) The '054 Patent generally discloses and claims systems and methods that eliminate redundant data transmission and allow multiple copies of data to be synchronized so that incremental changes made to one copy of the data can be identified, transferred, and incorporated

into the other copy of the data, regardless of whether the incremental changes are made on-line or off-line. (*Id.*)

2. The '566 Patent

U.S. Patent No. 6,370,566 ("the '566 Patent"), entitled "Generating meeting requests and group scheduling from a mobile device," was filed on April 10, 1998 and issued on April 9, 2002. (See JX-14.) Anthony Discolo; Scott Skorupa; Salim Alam; Garrett R. Vargas; Dave Whitney; Bryce Ulrich; John I. Ferrell are the named inventors of the '566 Patent, and complainant Microsoft is the named assignee. (Id.)

The asserted claims of the '566 Patent are claims 1, 2, 5 and 6. These claims read as follows:

1. A mobile device, comprising:

an object store;

an application program configured to maintain objects on the object store;

a user input mechanism configured to receive user input information;

a synchronization component configured to synchronize individual objects stored on the object store with remote objects stored on a remote object store;

a communications component configured to communicate with a remote device containing the remote object store; and

wherein the application program is further configured to generate a meeting object and an electronic mail scheduling request object based on the user input information.

- 2. The mobile device of claim 1 wherein the application program is configured to generate the meeting object with a global identifier property uniquely identifying the meeting object among a plurality of other objects.
- 5. The mobile device of claim 1 wherein the application program further comprises:

a contacts application program configured to maintain objects on the object store indicative of contact information wherein the contact information includes address information indicative of a fully qualified electronic mail addresses for individuals identified by the contact information; and

wherein the application program is configured to obtain the fully qualified electronic mail address of potential attendees identified by the contact information by interaction with the contacts application program.

6. The mobile device of claim 1 wherein the application program is configured to generate the meeting object and the electronic mail scheduling request object such that properties of the objects are compatible with at least a second application program associated with the remote object store and different from the application program.

(JX- 14.) The '566 Patent generally discloses and claims a mobile device that provides the user with the ability to schedule a meeting request from the mobile device itself. (*Id.*)

3. The '352 Patent

U.S. Patent No. 5,758,352 ("the '352 Patent"), entitled "Common name space for long and short filenames," was filed on September 5, 1996 and issued on May 26, 1998. (See JX-5.)

Aaron R. Reynolds; Dennis R. Adler; Ralph A. Lipe; Ray D. Pedrizetti; Jeffrey T. Parsons; and Rasipuram V. Arun are the named inventors of the '352 Patent, and complainant Microsoft is the named assignee. (Id.)

The asserted claims of the '352 Patent are claims 1 and 12. These claims read as follows:

- 1. In a computer system having a storage, a directory service for accessing directory entries and a file system that uses the directory entries to access files, a method, comprising the computer-implemented steps of:
- (a) creating a first directory entry for a file wherein the first directory holds a short filename for the file and the location of the file;
- (b) creating a second directory entry for the file wherein the second directory entry holds at least one portion of a long filename having a fixed number of characters and a signature that identifies that the second directory entry holds a first portion of the long filename;

- (c) storing the first directory entry and the second directory entry on the storage among the directory entries used by the directory service; (d) accessing the second directory entry by the directory service to access the file; and (e) creating and storing in the storage a sequence of at least one additional directory entry for holding a next sequential portion of the long filename.
- 12. In a computer system having a storage, a directory service for accessing directory entries and a file system that uses the directory entries to access files, a computer-readable medium holding computer-executable instructions for performing a method comprising computer-implemented steps of:
- (a) creating a first directry entry for a file wherein the first directory holds a short filename for the file and the location of the file;
- (b) creating a second directory entry for the file wherein the second directory entry holds at least one portion of a long filename having a fixed number of characters;
- (c) storing the first directory entry and the second directory entry on the storage among the directory entries used by the directory service; and
- (d) accessing the second directory entry by the directory service to access the file.
- (JX- 5.) The '352 Patent generally discloses and claims an operating system that provides a common name space for both long filenames and short filenames and, in this common namespace, a long filename and a short filename are provided for each file. Each file has a short filename directory entry and may have at least one long filename directory entry associated with it. (*Id.*)

4. The '133 Patent

U.S. Patent No. 5,664,133 ("the '133 Patent"), entitled "Context sensitive menu system/menu behavior," was filed on April 30, 1996 and issued on September 2, 1997. (See JX-

3.) Mark A. Malamud; John E. Elsbree; Laura J. Butler; and David A Barnes, Jr. are the named inventors of the '133 Patent, and complainant Microsoft is the named assignee. (*Id.*)

The asserted claims of the '133 Patent are claims 1, 2, 35 and 36. These claims read as follows:

1. In a computer system having a central processing unit (CPU), a graphical user interface including a display and a user interface selection device communicatively coupled to the CPU, a method for providing, and selecting from, a menu for a selected computer resource, said method comprising the steps of:

generating a set of menu selections for the selected computer resource in response to receiving, by the CPU, a context menu generation signal from the user interface selection device, the generating step comprising the steps of:

retrieving a menu selection relating to a class of objects to which the selected computer resource belongs; and

retrieving a menu selection associated with a container in which the selected computer resource resides; and

displaying upon the display the set of menu selections in a menu positioned in the proximity of a graphical representation of the selected computer resource.

2. The method of claim 1 wherein the step of generating a set of menu selections further comprises the step of:

retrieving a label based menu selection based upon a label contained within the selected computer resource.

35. A computer-readable storage medium for use in a computer system having a display device, a selected object having a visual representation stored in storage, and a container object in which the selected object is contained, said medium holding instructions for:

adding a menu selection, related to the class of objects to which the selected object belongs, to a menu;

adding a menu selection that is associated with the container in which the selected object is stored to the menu; and

displaying the menu with the menu selections on the display device in proximity to the visual representation of the selected object.

36. The computer-readable storage medium of claim 35 wherein the selected object is a document.

(JX-3.) The '133 Patent generally discloses and claims a computer system having a graphical user interface which presents a set of representations corresponding to computer resources including objects. (*Id.*)

5. The '910 Patent

U.S. Patent No. 6,909,910 ("the '910 Patent"), titled "Method and System for Managing Changes to a Contact Database," was filed on February 1, 2002 and issued on June 21, 2005. (See JX-20). Susan Elizabeth Pappalardo, Jason William Fuller, Peter G. Chin, and Jessica Dale Tenebaum are the named inventors of the '910 Patent, and complainant Microsoft is the named assignee. (Id.)

The asserted claims of the '910 Patent are claims 1-3, 8, and 10. These claims read as follows:

1. A computer-readable medium having computer-executable instructions for updating a contact database in a mobile communications device, the instructions comprising:

receiving a request to save call information related to a phone call; determining if the request to save the call information is an update to existing information in a contact card stored in the contact database or a request to create a new contact card in the contact database:

if the request is to update existing information, retrieving a contact list of contact cards stored in the contact database; receiving a selection of a contact card to be updated within the contact list; updating the selected contact card with the call information related to the phone call;

replacing the existing contact card in the contact database with the updated contact card;

else if the request is to create a new contact card, pre-populating a data field of the new contact card with call information;

receiving contact data to be associated with the new contact card;

modifying a data field in the new contact card with the received contact data; and updating the contact database with die modified contact card.

- 2. The computer-readable medium of claim 1, wherein the contact list comprises a list of at least one contact name associated with a contact card stored in the contact database.
- 3. The computer-readable medium of claim 1, wherein the call information comprises a phone number.
- 8. The computer-readable medium of claim 1, wherein the pre-populated data field includes at least one of a home phone number, a work phone number, and a mobile phone number.
- 10. In a computer device having a graphical user interface and a user selection interface mechanism, a method of activating a selection for changing a contact database, comprising the steps of: displaying a list of call entries in a call log of phone calls; displaying a context menu in response to a user selection of an entry in the call log; and displaying a plurality of options in the context menu, one of the options being to update a contact card in the contact database with call information from the selected entry in the call log, wherein an existing contact card is replaced with the updated contact card.

(JX-20.) The '910 Patent generally discloses and claims a system and method that allows a user save contact information directly from the call history of the mobile device. (*Id.* at Abstract.)

6. The '762 Patent

U.S. Patent No. 6,826,762 ("the '762 Patent"), entitled "Radio Interface Layer in a Cell Phone with a Set of APIs Having a Hardware-Independent Proxy Layer and a Hardware-Specific Driver Layer," was filed on February 16, 2001 and issued on November 30, 2004. (See JX-18.) Scott R. Shell, Roman Sherman, and Alan W. Shen are the named inventors of the '762 Patent, and complainant Microsoft is the named assignee. (Id.)

The asserted claims of the '762 Patent are claims 1-9, 15, and 16. These claims read as follows:

1. An abstraction layer for interfacing a computer to a telephony radio, comprising: a set of application programming interfaces (APIs) for abstracting out multiple radio technologies without knowledge of the telephony radio or cellular network, wherein the set of APIs correspond to call control functions, wherein the abstraction layer comprises a proxy layer and a driver layer, wherein when the

proxy layer receives a call at a first interface to one of the set of APIs, the proxy layer transforms the API call to a command understood by the driver layer and sends the command to the driver layer at a second interface, and wherein the driver layer receives the command at the second interface and determines at least one standard telephony radio command corresponding to the called API and sends the telephony radio command to the telephony radio at a third interface, and wherein the proxy layer is hardware independent and the driver is hardware specific.

- 2. The abstraction layer of claim 1 wherein the telephony radio is one of a plurality of telephony radios which operates based on the standard telephony radio commands.
- 3. The abstraction layer of claim 1 wherein the set of APIs further correspond to short messaging system functions.
- 4. The abstraction layer of claim 3 wherein the set of APIs further correspond to network service functions.
- 5. The abstraction layer of claim 4 wherein the set of APIs further correspond to data connection functions.
- 6. The abstraction layer of claim 5 wherein the set of APIs further correspond to interface functions.
- 7. A radio interface layer of a telephone for facilitating communications between an application program module and a radio, comprising: a proxy layer for communicating with the application program module at a first interface and a driver layer at a second interface, wherein the proxy layer provides an API on the first interface for receiving application program calls to perform a particular function and wherein the proxy layer transforms the API calls to an input/output control (IOCTL) code and sends the IOCTL code to the driver layer at the second interface; wherein the driver layer communicates with the proxy layer at the second interface and the radio at a third interface, the driver layer receiving an IOCTL code at the second interface and transforming the IOCTL code into a command understood by the radio to perform the particular function and sending the radio command at the third interfaces; and wherein the proxy layer is hardware independent and the driver layer is hardware specific.
- 8. The radio interface layer of claim 7 wherein the driver layer further receives communications from the radio indicating that the particular function has been performed and wherein the driver layer sends a success code to the proxy layer indicating that the particular function has been performed.
- 9. A method for processing commands in a telephone comprising a proxy layer, a driver layer, an application and a radio, the method comprising the steps of:

causing the application to call a radio interface layer (RIL) API in the proxy layer at a first interface, wherein the RIL API is associated with an action to be performed by the radio; causing the proxy layer to translate the RIL API into IOCTL codes; sending the IOCTL codes to the driver layer at a second interface; translating the IOCTL codes to a command corresponding to the action, wherein the command will be understood by the radio; sending the command to the radio at a third interface; and wherein the proxy layer is hardware independent and the driver layer is hardware specific.

- 15. A method of communicating between a module and a radio comprising: (a) generating a radio interface layer (RIL) API call at one of a plurality of modules to perform a specific action; (b) sending the RIL API call to a proxy at a first interface; (c) at the proxy, converting the RIL API call to a command understood by a radio driver; (d) transmitting the radio driver command from the proxy to the radio driver at a second interface; (e) transmitting a radio command from the radio driver to the radio at a third interface; (f) performing the specific action at the radio; and wherein the proxy is hardware independent and the driver is hardware specific.
- 16. The method of claim further 15 comprising: (g) in response to successfully performing the specific action, sending a success code from the driver to the proxy and from the proxy to the one of the plurality of modules that generated the RIL API.

(JX-18.) The '762 Patent generally discloses and claims systems and methods that relate to a Radio Interface Layer (RIL). (*Id.* at Abstract.) The RIL comprises an API set which provides a level of abstraction between the radio on a cell phone and the software on a cell phone. These APIs allow applications running on an operating system in the cellular telephone to issue commands without knowledge of the underlying radio structure of the cellular telephone and specific knowledge of particular commands. (*Id.*)

7. The '376 Patent

U.S. Patent No. 7,644,376 B2 ("the '376 Patent"), entitled "Flexible Architecture for Notifying Applications of State Change," was filed on June 22, 2004 and issued on January 5, 2010. (See JX-8.). Jan Karachale; Jason William Fuller; Robert Levy; Zeke Koch; Ardan Arac;

Brian Cross and Ori M. Amiga are the named inventors of the '376 Patent, and complainant Microsoft is the named assignee. (*Id.*)

The asserted claims of the '376 Patent in this investigation are claims 10, 11, 12, and 13. The claims read as follows:

10. A system for state management and notifications, comprising:

a data store on a mobile device that is arranged to store information relating to state properties, wherein at least some of the state properties are modified by different components;

an Application Program Interface (API) configured to perform operations relating to the state properties;

client applications on the mobile device that are configured to automatically register notification requests and receive notifications in response to a change in a state property of the mobile device for which they have registered, wherein the notification requests indicate when the clients should receive notifications in response to changes associated with the state properties, and wherein execution of the client applications is dependent upon a received notification; wherein the change in the state property is responsive to an event that originates on the mobile device;

a notification list stored within the data store that is arranged to store the clients that have been registered to receive notification requests;

a notification broker on the mobile device that is coupled to the data store, the notification list, and the clients, wherein the notification broker, includes functionality configured to perform the following actions, including to:

receive a notification request to add at least one client to the notification list;

add the at least one client to the notification list; and

determine when a registered state property changes, and when the state property changes, determine the clients to receive a notification, and notify the determined clients of the state property change.

11. The system of claim 10, wherein the Application Program Interface (API) is further configured to perform at least one of the following actions: registering a state property; querying the state property; and setting the state property.

- 12. The system of claim 11, wherein determining the clients to receive the notification, comprises: applying a conditional expression to the state property and notifying the client of the state property when the condition is met.
- 13. The system of claim 12, wherein the conditional expression includes at least one of the following conditions: all, equal, not equal, greater than, greater or equal than, less than or equal, less than, contains, starts with, and ends with.

(JX-8 at 80:9-55.) The '376 Patent teaches a method and system for notifying clients of various state changes that occur within a mobile device. (*Id.* at Abstract.) As disclosed by the '376 Patent, clients first register with a notification broker and inform the broker of what notifications they are interested in receiving. (*Id.* at 2:12-14.) For example, a client may register to receive notifications when the battery strength or network connectivity changes. (*Id.* at 1:37-41.) The notification broker receives notifications when certain state properties on the mobile device change. (*Id.* at 2:14-21.) After the broker receives a notification, it determines what clients are interested in the state change and notifies those clients of the change. (*Id.* at 2:14-21.)

II. IMPORTATION OR SALE

Section 337 of the Tariff Act prohibits the importation into the United States, the sale for importation, or the sale within the United States after importation by the owner, importer, or consignees of articles that infringe a valid and enforceable United States patent. See 19 U.S.C. § 1337 (a)(1)(B). A complainant "need only prove importation of a single accused product to satisfy the importation element." *Certain Purple Protective Gloves*, 337-TA-500, Order No. 17 (September 23, 2004). The importation requirement can be established through a summary determination motion and irrespective of any finding of infringement of the patents in issue. *See Certain Wireless Communications Equipment, Articles Therein, and Products Containing Same*, 337-TA-577, Order No. 18 (February 22, 2007); *Certain Automated Mechanical Transmission Systems for Medium-Duty and Heavy Duty Trucks and Components Thereof*, 337-TA-503, Order

No. 38 (August 12, 2004); Certain Audio Digital-To-Analog Converters and Products Containing Same, 337-TA-499, Order No. 15 (June 29, 2004), Notice of Commission Not To Review (July 28, 2004).

The ALJ finds that Microsoft has satisfied the importation requirement. Microsoft argues that since the software is loaded onto the mobile devices in the Free Trade Zone ("FTZ") and before those products have cleared customs, then the importation requirement has been satisfied. (CIB at 1-2.) Motorola does not dispute Microsoft's assertion. (See generally Respondents' Initial Post-Hearing Brief.) The undisputed evidence shows that mobile phone hardware items are imported into the FTZ and placed into inventory, (CX-291C at 12:3-15.) Customer software is loaded into the mobile phones on the production line in the FTZ, and the orders are then filled and prepared for shipping. (Id. at 12:13-15; 14:4-19, 23-24.) The inventory that is in the FTZ has not yet cleared customs. (Id. at 12:19-20, 22-23.) Instead, customs duties are owed when the product is shipped and enters U.S. commerce. (Id. at 23:24-25, 24:1-3, 24:6-25.) This occurs after customer software has been loaded into the mobile phones in the FTZ—i.e., after the accused products are infringing Microsoft's patents. While the mobile phones are physically in the United States before the software is loaded onto the phone, they remain in the FTZ and outside the stream of commerce. While physical importation of the product into the geographic United States has already occurred, the ALJ finds that, under these circumstance, finding importation to occur when the product enters the stream of commerce in the United States (and not just when it crosses the physical borders of United States) is consistent with the purpose of Section 337, namely to stop unfair imports.

The undisputed evidence further shows that MMI has engaged in the unlawful "sale . . . after importation" of the infringing products in violation of § 337. The evidence shows that the

MMI products placed into inventory in the Fort Worth FTZ are shipped to MMI's customers after production. (*Id.* at 10:22-25, 11:1-2, 4-15, 12:3-15.) Title passes from MMI to the customer either at the time of pick-up by the customer from the Fort Worth facility or upon delivery to the customer—in either case; title does not pass to the customer until after the product has cleared customs. (*Id.* at 34:5-17.)

Therefore, the ALJ finds that the importation requirement has been satisfied.

III. JURISDICTION

A. Personal and Subject Matter Jurisdiction

In order to have the power to decide a case, a court or agency must have both subject matter jurisdiction and jurisdiction over either the parties or the property involved. *See Certain Steel Rod Treating Apparatus and Components Thereof*, Inv. No. 337-TA-97, Commission Memorandum Opinion, 215 U.S.P.Q. 229, 231 (1981). For the reasons discussed below, the ALJ finds the Commission has jurisdiction over this investigation.

Section 337 declares unlawful the importation, the sale for importation, or the sale after importation into the United States of articles that infringe a valid and enforceable United States patent by the owner, importer, or consignee of the articles, if an industry relating to the articles protected by the patent exists or is in the process of being established in the United States. *Sec* 19 U.S.C. §§ 1337(a)(1)(B)(I) and (a)(2). Pursuant to Section 337, the Commission shall investigate alleged violations of the Section and hear and decide actions involving those alleged violations.

As set forth *supra* in Section II, Microsoft has met the importation requirement. Furthermore, the parties do not dispute that the Commission has *in personam* and *in rem* jurisdiction. (See generally CIB and RIB.) Motorola has fully participated in the investigation,

including participating in discovery, participating in the hearing, and filing pre-hearing and post-hearing briefs. Accordingly, the ALJ finds that Motorola has submitted to the jurisdiction of the Commission. *See Certain Miniature Hacksaws*, Inv. No. 337-TA-237, Pub. No. 1948, Initial Determination at 4, 1986 WL 379287 (U.S.I.T.C., October 15, 1986) (unreviewed by Commission in relevant part).

IV. CLAIM CONSTRUCTION

A. Applicable Law

Pursuant to the Commission's Notice of Investigation, this investigation is a patent-based investigation. See 74 Fed. Reg. 43723 (2009). Accordingly, all of the unfair acts alleged by Microsoft to have occurred are instances of alleged infringement of the asserted patents. A finding of infringement or non-infringement requires a two-step analytical approach. First, the asserted patent claims must be construed as a matter of law to determine their proper scope. Claim interpretation is a question of law. Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), aff d, 517 U.S. 370 (1996); Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1455 (Fed. Cir. 1998). Second, a factual determination must be made as to whether the properly construed claims read on the accused devices. Id. at 976.

In construing claims, the ALJ should first look to intrinsic evidence, which consists of the language of the claims, the patent's specification, and the prosecution history, as such evidence "is the most significant source of the legally operative meaning of disputed claim language." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996); see also Bell Atl.

² Only claim terms in controversy need to be construed, and only to the extent necessary to resolve the controversy. Vanderlande Indus. Nederland BV v. Int'l Trade Comm'n., 366 F.3d 1311, 1323 (Fed. Cir. 2004); Vivid Tech., Inc. v. American Sci. & Eng'g, Inc., 200 F.3d 795, 803 (Fed. Cir. 1999).

Network Servs., Inc. v. Covad Comm'n. Group, Inc., 262 F.3d 1258, 1267 (Fed. Cir. 2001). The words of the claims "define the scope of the patented invention." Id. And, the claims themselves "provide substantial guidance as to the meaning of particular claim terms." Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc), cert. denied, 546 U.S. 1170 (2006). It is essential to consider a claim as a whole when construing each term, because the context in which a term is used in a claim "can be highly instructive." Id. Claim terms are presumed to be used consistently throughout the patent, such that the usage of the term in one claim can often illuminate the meaning of the same term in other claims. Research Plastics, Inc. v. Federal Pkg. Corp., 421 F.3d 1290, 1295 (Fed. Cir. 2005). In addition:

... in clarifying the meaning of claim terms, courts are free to use words that do not appear in the claim so long as the resulting claim interpretation ... accord[s] with the words chosen by the patentee to stake out the boundary of the claimed property.

Pause Tech., Inc. v. TIVO, Inc., 419 F.3d 1326, 1333 (Fed. Cir. 2005).

Some claim terms do not have particular meaning in a field of art, in which case claim construction involves little more than applying the widely accepted meaning of commonly understood words. *Phillips*, 415 F.3d at 1314. Under such circumstances, a general purpose dictionary may be of use.³ The presumption of ordinary meaning, however, will be "rebutted if the inventor has disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1091 (Fed. Cir. 2003).

Sometimes a claim term will have a specialized meaning in a field of art, in which case it is necessary to determine what a person of ordinary skill in that field of art would understand the

³ Use of a dictionary, however, may extend patent protection beyond that to which a patent should properly be afforded. There is also no guarantee that a term is used the same way in a treatise as it would be by a patentee. *Id.* at 1322.

disputed claim language to mean, viewing the claim terms in the context of the entire patent. *Phillips*, 415 F.3d at 1312-14; *Vitronics*, 90 F.3d at 1582. Under such circumstances, the ALJ must conduct an analysis of the words of the claims themselves, the patent specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, as well as the meaning of technical terms and the state of the art. *Id*.

A patentee may deviate from the conventional meaning of claim term by making his or her intended meaning clear (1) in the specification and/or (2) during the patent's prosecution history. Lear Siegler, Inc. v. Aeroquip Corp., 733 F.2d 881, 889 (Fed. Cir. 1984). If a claim term is defined contrary to the meaning given to it by those of ordinary skill in the art, the specification must communicate a deliberate and clear preference for the alternate definition. Kumar v. Ovonic Battery Co., 351 F.3d 1364, 1368 (Fed. Cir. 2003). In other words, the intrinsic evidence must "clearly set forth" or "clearly redefine" a claim term so as to put one reasonably skilled in the art on notice that the patentee intended to so redefine the claim term. Bell Atl., 262 F.3d at 1268.

When the meaning of a claim term is uncertain, the specification is usually the first and best place to look, aside from the claim itself, in order to find that meaning. *Phillips*, 415 F.3d at 1315. The specification of a patent "acts as a dictionary" both "when it expressly defines terms used in the claims" and "when it defines terms by implication." *Vitronics*, 90 F.3d at 1582. For example, the specification "may define claim terms by implication such that the meaning may be found in or ascertained by a reading of the patent documents." *Phillips*, 415 F.3d at 1323. "The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Id.* at 1316. However,

as a general rule, particular examples or embodiments discussed in the specification are not to be read into the claims as limitations. *Markman*, 52 F.3d at 979.

The prosecution history "provides evidence of how the inventor and the PTO understood the patent." *Phillips*, 415 F.3d at 1317. For example, the prosecution history may inform the meaning of the claim language by demonstrating how an inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it otherwise would be. *Vitronics*, 90 F.3d at 1582-83; *see also Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005) (stating, "The purpose of consulting the prosecution history in construing a claim is to exclude any interpretation that was disclaimed during prosecution."); *Microsoft Corp. v. Multi-tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004) (stating, "We have held that a statement made by the patentee during prosecution history of a patent in the same family as the patent-in-suit can operate as a disclaimer."). The prosecution history includes the prior art cited, *Phillips*, 415 F.3d at 1317, as well as any reexamination of the patent. *E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.* 849 F.2d 1430, 1440 (Fed. Cir. 1988) ("Statements made during reissue are relevant prosecution history when interpreting claims.") (internal citations omitted).

Differences between claims may be helpful in understanding the meaning of claim terms. *Phillips*, 415 F.3d at 1314. A claim construction that gives meaning to all the terms of a claim is preferred over one that does not do so. *Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir.), *cert. denied*, 546 U.S. 972 (2005); *Alza Corp. v. Mylan Labs. Inc.*, 391 F.3d 1365, 1370 (Fed. Cir. 2004). In addition, the presence of a specific limitation in a dependent claim raises a presumption that the limitation is not present in the independent claim. *Phillips*, 415 F.3d at 1315. This presumption of claim differentiation is especially strong when the only

difference between the independent and dependent claim is the limitation in dispute. *SunRace Roots Enter. Co., v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003). "[C]laim differentiation takes on relevance in the context of a claim construction that would render additional, or different, language in another independent claim superfluous." *AllVoice Computing PLC v. Nuance Comm'ns, Inc.*, 504 F.3d 1236, 1247 (Fed. Cir. 2007).

The preamble of a claim may also be significant in interpreting that claim. The preamble is generally not construed to be a limitation on a claim. *Bell Commc'ns Research, Inc. v. Vitalink Commc'ns Corp.*, 55 F.3d 615, 620 (Fed. Cir. 1995). However, the Federal Circuit has stated that:

[A] claim preamble has the import that the claim as a whole suggests for it. In other words, when the claim drafter chooses to use both the preamble and the body to define the subject matter of the claimed invention, the invention so defined, and not some other, is the one the patent protects.

Eaton Corp. v. Rockwell Int'l Corp., 323 F.3d 1332, 1339 (Fed. Cir. 2003). If the preamble, when read in the context of an entire claim, recites limitations of the claim, or if the claim preamble is "necessary to give life, meaning, and vitality" to the claim, then the claim preamble should be construed as if in the balance of the claim. Kropa v. Robie, 187 F.2d 150, 152 (CCPA 1951); see also Rowe v. Dror, 112 F.3d 473, 478 (Fed. Cir. 1997); Corning Glass Works v. Sumitomo Elec. U.S.A., Inc., 868 F.2d 1251, 1257 (Fed. Cir. 1989). In addition:

[W]hen discussing the "claim" in such a circumstance, there is no meaningful distinction to be drawn between the claim preamble and the rest of the claim, for only together do they comprise the "claim." If, however, the body of the claim fully and intrinsically sets forth the complete invention, including all of its limitations, and the preamble offers no distinct definition of any of the claimed invention's limitations, but rather merely states the purpose or intended use of the invention, then the preamble may have no significance to claim construction because it cannot be said to constitute or explain a claim limitation.

Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305 (Fed. Cir. 1999). In Pitney Bowes, the claim preamble stated that the patent claimed a method of, or apparatus for, "producing on a photoreceptor an image of generated shapes made up of spots." Id. at 1306. The Federal Circuit found that this was not merely a statement describing the invention's intended field of use, but rather that said statement was intimately meshed with the ensuing language in the claim. Id. For example, both of the patent's independent claims concluded with the clause, "whereby the appearance of smoothed edges are given to the generated shapes." Id. Because this was the first appearance in the claim body of the term "generated shapes," the Court found that it could only be understood in the context of the preamble statement "producing on a photoreceptor an image of generated shapes made up of spots." Id. The Court concluded that it was essential that the preamble and the remainder of the claim be construed as one unified and internally consistent recitation of the claimed invention. Id.

Finally, when the intrinsic evidence does not establish the meaning of a claim, the ALJ may consider extrinsic evidence, *i.e.*, all evidence external to the patent and the prosecution history, including inventor testimony, expert testimony and learned treatises. *Phillips*, 415 F.3d at 1317. Extrinsic evidence may be helpful in explaining scientific principles, the meaning of technical terms, and terms of art. *Vitronics*, 90 F.3d at 1583; *Markman*, 52 F.3d at 980. However, the Federal Circuit has generally viewed extrinsic evidence as less reliable than the patent itself and its prosecution history in determining how to define claim terms. *Phillips*, 415 F.3d at 1318. With respect to expert witnesses, any testimony that is clearly at odds with the claim construction mandated by the claims themselves, the patent specification, and the prosecution history should be discounted. *Id.* at 1318.

If the meaning of a claim term remains ambiguous after a review of the intrinsic and extrinsic evidence, then the patent claims should be construed so as to maintain their validity. *Id.* at 1327. However, if the only reasonable interpretation renders a claim invalid, then the claim should be found invalid. *See Rhine v. Casio, Inc.*, 183 F.3d 1342, 1345 (Fed. Cir. 1999).

Section 112, paragraph 6 of the Patent Act states that:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112, ¶ 6 (2009).

"Section 112, paragraph 6 was intended to allow the use of means expressions in patent claims without requiring the patentee to recite in the claims all possible structures that could be used as means in the claimed apparatus." *Med. Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1211 (Fed. Cir. 2003). The process of construing a means-plus-function term differs from the process of construing other claim language. "The first step in the construction of a means-plus-function claim element is to identify the particular claimed function. The second step in the analysis is to look to the specification and identify the corresponding structure for that function." *Id.* at 1210 (citations omitted).

The construction of a means-plus-function term is thus limited by the disclosure of the corresponding structure in the specification. As explained by the Federal Circuit, "[t]he literal scope of a properly construed means-plus-function limitation does not extend to all means for performing a certain function. Rather, the scope of such claim language is sharply limited to the structure disclosed in the specification and its equivalents." J & M Corp. v. Harley-Davidson, Inc., 269 F.3d 1360, 1367 (Fed. Cir. 2001). Section 112, paragraph 6 has been described as representing "a quid pro quo by permitting inventors to use a generic means expression for a

claim limitation provided that the specification indicates what structure(s) constitute(s) the means." Atmel Corp. v. Info. Storage Devices, Inc., 198 F.3d 1374, 1381 (Fed. Cir. 1999).

B. Markman Order

On April 22, 2011, the ALJ issued Order No. 6: Construing the Terms of the Asserted Claims of the Patent at Issue. Order No. 6 is incorporated herein in its entirety.

C. The '762 Patent

1. "hardware independent"

At the time of the ALJ's *Markman* hearing, the parties actually had agreed on a definition of this term – "without regard to a specific hardware implementation." Microsoft argues that Motorola is now improperly attempting to read three limitations into "hardware independent." Specifically, Microsoft argues that Motorola wishes to import the following three limitations: (1) that no alterations can be made to the proxy layer if the hardware changes; (2) that the proxy layer can have no knowledge whatsoever of the underlying hardware; and (3) "network independence." (CIB 124-127.)

Motorola argues that the patent specification requires that the proxy layer operate without any consideration of the underlying hardware at all. (RIB at 91-92.) In addition, Motorola argues that Microsoft is trying to carve out an exception into "hardware independent" that would, in effect, modify the agreed construction to "without regard to a specific hardware implementation, except for those characteristics of the hardware that are specific to a given network." (RIB at 90-96.)

The ALJ finds that neither party's position is entirely correct. Motorola is correct that Microsoft is attempting to read an exception into the ordinary meaning of "hardware

independent" for the network characteristics of the hardware. But, Microsoft is also correct that Motorola's arguments go too far in requiring complete isolation of the proxy layer. Accordingly, the ALJ finds that "hardware independent" does not require a complete lack of knowledge of the underlying hardware or prohibit any changes to the proxy layer based on hardware, but that "hardware independent" does not exclude the network-specific characteristics of the hardware. The ALJ will now consider each of the points of disagreement.

Motorola argues that "hardware independent" requires that the proxy layer operate without consideration of the underlying hardware at all. (RIB at 91-93.) Motorola argues that under Microsoft's interpretation of the agreed-upon construction, a proxy layer is "hardware independent" if it is "agnostic to a single piece of hardware." (RIB at 91.) Motorola argues that under the plain meaning of the agreed-upon construction a proxy layer cannot be hardware independent if it works with only one other piece of hardware and is incompatible with all others. (RIB at 91.) In addition, Motorola points to statements made in the prosecution history where the applicants stated that "the proxy layer does not need to have any knowledge or understanding as to the underlying hardware." (RRB at 40 (quoting JX-19 at 693).)

Microsoft responds that such a view is "entirely divorced from the teachings of the patent," which allow for consideration of hardware characteristics. (CIB at 127.)

The plain meaning of "hardware independent" would not necessarily forbid *any* knowledge of the underlying hardware. *See AllVoice Computing PLC v. Nuance Comm'cs, Inc.*, 504 F.3d 1236, 1242 (Fed. Cir. 2007) (rejecting district court construction of "independent of" to mean "isolated"). The specification supports this understanding. In particular, the specification contains indications that the proxy layer can be changed slightly to accommodate certain

hardware implementations. (See, e.g., JX-18, 22:36-23:27 (explaining the changes that must be made to the API set if the device does not have a radio or if the radio can be removed)).

As for the prosecution history, Motorola relies heavily on a statement by the applicants in response to one of the examiner's rejections where the applicants said:

One advantage of the proxy layer recited by the present application is that the proxy layer is hardware independent. The proxy layer of claim 1 'transforms the API call to a command understood by the driver layer' so that the proxy layer does not need to have any knowledge or understanding as to the underlying hardware.

(JX-19 at 693) (emphasis added). While this is a strong statement, this single statement in the prosecution history is not clear enough to establish a disclaimer of the plain meaning and require that the proxy layer not have any knowledge at all of the underlying hardware. *See Omega Eng'g, Inc. v. Raytech Corp.*, 334 F.3d 1314, 1322 (Fed. Cir. 2003) (requiring a disclaimer to be unambiguous).

Motorola does not discuss the second point that Microsoft raises – whether "hardware independent" forecloses any changes to the proxy layer in light of the hardware. As discussed above, the plain meaning of the claims does not require the absolute isolation of the proxy layer. Moreover, there is nothing in the claim language or prosecution history that suggests such a limited understanding of the term. Accordingly, "hardware independent" does not forbid some modifications to the proxy layer in light of different hardware implementations.

This brings us to the final dispute between the parties – the extent to which the "network characteristics" of the radio are part of the proxy layer being "hardware independent." Microsoft attempts to characterize this as Motorola attempting to read in a "network independence"

limitation.⁴ (CIB at 125-26.) Motorola characterizes this as Microsoft's attempt to carve out the characteristics of the hardware that are specific to a given network from the "hardware independent" limitation. (RIB at 93-95.) The ALJ agrees with Motorola that this dispute is better characterized as Microsoft seeking to carve out an exception into the plain meaning of "hardware independent." Moreover, the intrinsic and extrinsic evidence demonstrates that such an exception is not justified. Accordingly, the ALJ finds that the network characteristics of the hardware are part of the proxy layer being "hardware independent."

Beginning with term itself, there is nothing in the plain and ordinary meaning of the term "hardware independent" that indicates that certain characteristics of the hardware are included and others are ignored in determining independence. Indeed, the ALJ finds it particularly hard to draw such a distinction from the term itself (or imagine that a person of ordinary skill could either) where, as here, the key piece of hardware in question is the radio. This is because one of the essential characteristics of a radio in a cellular telephone is the network (or networks) on which it operates. (See RX-1376C at Q15; CRX-973C at Q365.)

Looking at the rest of the language in the claim and the context in which "hardware independent" appears, there is no support for the exception Microsoft seeks. Microsoft focuses on the clause near the beginning of Claim 1 where it states: "An abstraction layer for interfacing a computer to a telephony radio, comprising: a set of application programming interfaces (APIs) for abstracting out multiple radio technologies without knowledge of the telephony radio or cellular network." (CIB at 125-26; CRB at 62-63.) Microsoft argues that, in particular, the last phrase of this clause "without knowledge of the telephony radio or cellular network" demonstrates that the applicants recognized a distinction between knowledge of the hardware

⁴ Microsoft is unclear exactly what qualifies as a "network characteristic" and what does not. The ALJ accepts the parties' terminology of "network characteristics" for the sake of this discussion. The ALJ notes that there is no dispute that these characteristics are part of the radio.

("the telephony radio") and the network ("cellular network"). Therefore, Microsoft argues that when the applicants used the term "hardware" in the claims they did not mean to include the network characteristics.

However, Microsoft's argument regarding the claim language is not persuasive. Fundamentally, Microsoft's argument is that because this clause ("without knowledge of the telephony radio or cellular network") uses the both the terms "telephony radio" and "cellular network," the terms "telephony radio" and "cellular network" are distinct, and therefore "telephony radio" must not include network characteristics.⁵

The problem with this reasoning is that this clause is not evidence that the applicants used the terms "cellular network" and "telephony radio" to segregate "network characteristics" out of the term "hardware" as Microsoft argues. In fact, when you look at the clause "without knowledge of the telephony radio or cellular network" in context it is clear that the clause was written this way because both of these terms involve "network characteristics." The terms were not used, as Microsoft contends, to indicate completely different subsets of characteristics.

To better understand this, we look at the clause in context. The clause "without knowledge of the telephony radio or cellular network" is not separated as its own limitation; instead, it modifies another clause – "for abstracting out multiple radio technologies." Thus, the whole clause "without knowledge of the telephony radio or cellular network" and in turn both "telephony radio" and "cellular network" are included for their relationship to the goal of "abstracting out multiple radio technologies." The reason for this is obvious: the "radio technolog[y]" used by a wireless device does not reside in the "cellular network" alone; it also

⁵ Microsoft argues that the ALJ adopted this distinction between hardware and network independence in the *Markman* ruling. However, a review of that ruling demonstrates that not only was this argument not before the ALJ at that time, but that no such distinction was drawn in the opinion. It merely discussed the arguments that were before the ALJ at that time.

resides in the "telephony radio." Instead of segregating the "network characteristics" into the "cellular network" as Microsoft contends, the claim language reinforces the idea that these characteristics are part of the radio as well. Thus, contrary to Microsoft's argument, this clause provides no support for its argument that "hardware independent" does not include the network characteristics of the radio. Indeed, it demonstrates the applicants understood that "network characteristics" were a part of the radio as well.

The specification also does not support the exception that Microsoft seeks to write into "hardware independent." Consistent with its argument regarding the claim language, Microsoft argues that the specification draws a distinction between hardware and the cellular network such that the hardware excludes the network characteristics. (CIB at 125-26.) However, the distinction Microsoft seeks to draw is far from clear from the specification. Instead, as Motorola points out, the examples in the specification are consistent with its interpretation.

The examples used in the specification repeatedly emphasize the ability of the proxy layer to switch between different network technologies. See JX-18 at 21:26-33 ("For example, changing from a GSM to a CDMA network would only require replacing the RIL driver layer and the rest of the phone would work as it did in the GSM network."). Microsoft attempts to argue that these statements only apply to the application layer of the phone (CRB at 63), but the passage unambiguously says "changing from a GSM to a CDMA network would only require replacing the RIL driver layer and the rest of the phone would work as it did in the GSM network. (JX-18 at 21:26-33 (emphasis added).) Thus, the passage makes clear only the driver layer changes and the proxy layer remains unchanged, contrary to Microsoft's assertion. (CRB at 63.)

As for Microsoft's reliance on the reference of some of the APIs to functions (e.g., SIM Tookkit) that are allegedly specific to one type of network (GSM), the specification is clear that the function set described in the specification was based on the GSM AT command set and so it is unsurprising that some of the functions refer to GSM features. (JX-18 at 4:2-4.) But in discussing this API set, the Abstract indicates that it can work with either GSM or CDMA phones. (See JX-18 at Abstract ("The API set of RIL is roughly based on the GSM AT interface . . . [t]he API set provides access to functionality contain within a cellular such as a GSM or CDMA compatible telephone.") (emphasis added).) Moreover, this is consistent with the ALJ's finding above that "hardware independence" does not preclude knowledge of certain network specific characteristics.

The prosecution history also supports this reading of the term. During the prosecution, the examiner repeatedly rejected the claims of the application that became the '762 Patent as anticipated by U.S. Patent No. 6,269,254 to Mathis *et al.* (See JX-19.) The claims were only allowed as patentable over Mathis after the examiner filed an examiner amendment adding the "hardware independent" limitation to all of the independent claims. (See JX-19 at 710-11.) This was after the applicants repeatedly argued that the claims were patentable over Mathis and the applicants had already amended the claims twice.

A review of Mathis shows how unlikely it is that "hardware independent" would include the exception for "network characteristics" that Microsoft now seeks. Mathis discloses APIs that are "portable across various computer platforms and telephone systems." ('254 Patent, 1:61-63; JX-19 at 595-96.) Thus, there can be little question that Mathis discloses a platform that can be, at least, used across multiple hardware vendors. "Hardware independent" was the key limitation that placed the claims in condition for allowance of Mathis. It is difficult to imagine that

"hardware independent" can be as narrow as Microsoft now alleges in light of the disclosure of Mathis. If we turn to the applicants' comments during the prosecution, it appears that they viewed Mathis in much the same way.

Moreover, in response to the first rejection by the examiner in light of Mathis, applicants characterized the Mathis reference as follows:

Mathis was designed to address "a number of problems [that] lie in the way of using JTAPI as a telephony API for a Global System for Mobile (GSM) radio telephone." Mathis, column 2, lines 26-29. Therefore, Mathis teaches only using the GSM standard. Further support for Mathis' exclusive teaching of using a GSM telephone can be found, inter alia, in column 3, lines 57-59; column 4, lines 54-58; column 5, lines 16-18; column 5, line 57 -column 6, line 2; and column 7, lines 2-3. Since Mathis teaches adaptation of JT API for use with a GSM radio telephone, Mathis does not teach, suggest, or describe "abstracting out multiple radio technologies without knowledge of the telephony radio or cellular network" as recited in claim 1.

(JX-19 at 654-55) (emphasis added). But, this argument and the amendments to the claims that accompanied it were insufficient and examiner again rejected the claims. (See JX-19 at 674-85.) The applicants again amended the claims. In arguing for the patentability of the claims over Mathis, applicants argued:

One advantage of the proxy layer recited by the present application is that the proxy layer is hardware independent. The proxy layer of claim 1 "transforms the API call to a command understood by the driver layer" so that the proxy layer does not need to have any knowledge or understanding as to the underlying hardware.

(JX-19 at 693-94) (emphasis added). However, this was still not enough to obtain allowance of the claims. (JX-19 at 710-11.) The examiner and the applicants had an interview. (JX-19 at 710-11.) There is no record of what exactly was discussed at that interview, but following the interview the examiner amended all of the independent claims to include the limitation "hardware independent." (JX-19 at 706-11.)

While this record is not definitive, it does not support Microsoft's construction of the term "hardware independent." On the contrary, it is consistent with the plain meaning of "hardware independent" as encompassing all of the characteristics of the hardware not just some subset of them. Applicants characterized the Mathis reference as limited to only one type of network technology. (JX-19 at 654-55.) Moreover, Applicants later described the hardware independence of the proxy layer in broad terms – "the proxy layer does not need to have any knowledge or understanding as to the underlying hardware." (JX-19 at 694.) This history in no way evidences an intent to limit hardware independent to only certain characteristics of the hardware as Microsoft contends.

Thus, the intrinsic evidence is consistent with the agreed upon construction and the plain meaning of the term "hardware independent" and does not exclude certain characteristics of the hardware – namely, the network characteristics of the hardware.⁶

2. "standard telephony radio command"

Microsoft and Motorola now also dispute the construction of the term "standard telephony radio command," which is found in Claims 1-6 of the '762 Patent. Specifically, Claim 1 recites "wherein the driver layer receives the command at the second interface and determines at least one *standard telephony radio command* corresponding to the called API and sends the telephony radio command to the telephony radio..."

⁶ The parties offered no real extrinsic evidence besides expert testimony regarding how a person of ordinary skill would view this term. The ALJ notes that Microsoft never cross examined Motorola's expert on this point. However, Motorola challenged Microsoft's expert, and cast doubts on his interpretation. Thus, the ALJ finds that the extrinsic evidence (to which the ALJ gives very little weight) also supports this construction.

Microsoft contends that the term means "a command that can be used by more than one modem." (CIB at 128.) Motorola contends that the term means a command that is supported by multiple vendors.

In support of its construction of the term, Microsoft relies on two sections of the specification:

In a preferred embodiment, the Radio Interface Layer (RIL) driver layer is used to implement and roughly correspond to the commands, such as AT commands, specified by ETS 300 585, Digital cellular telecommunications system (Phase 2); Use of Data Terminal Equipment-Data Circuit terminating Equipment (DTE-DCE) interface for Short Messaging Service (SMS) and Cell Broadcast Service (CBS) (GSM 07.05), Fifth Edition, April 1997, and ETS 300 642, Digital cellular telecommunications system (Phase 2); AT command set for GSM Mobile Equipment (ME) (GSM 07.07 version 4.4.1), Fourth Edition, March 1999. The GSM specifications 07.05 and 07.07 are hereby incorporated by reference. Of course, the RIL driver may be used to implement and correspond to other command sets, such as CDMA commands, or a combination of several command sets.

OEMs may use the RIL driver of the preferred embodiment or tweak it if they would rather talk with their radio over private APIs instead of via AT commands (most likely for performance reasons).

(JX-18 at 4:26-44)

At step 320, input/output control (IOCTL) codes are used to send the appropriate information for the RIL API to the RIL driver running in a separate process space. At step 325, the RIL driver informs the radio to take the action specified by the command of the RIL API. In a preferred embodiment, the RIL driver informs the radio to take action using an AT command interface, as defined in GSM specs (most prominently 07.05 and 07.07). However, sending AT commands may not be ideal for a given radio--perhaps an OEM has a separate private API set that they can use to perform the same functionality as a given AT command. If this is the case, the OEM may change the RIL driver to suit their needs. However, in a preferred embodiment, because the core architecture of the phone has been built on top of a set of RIL APIs that may be implemented via AT commands, it is not necessary for the OEM to substantially modify the RIL driver so long as the radio understands AT commands. However, due to different implementations of the AT interface, some minor modifications may be necessary.

(JX-18 at 6:38-56,)

Microsoft argues that portions of these two sections show that the patent necessarily includes the use of private API commands. (See CIB at 128-29 (citing JX-18 at 4:40-44 ("OEMs may use the RIL driver of the preferred embodiment or tweak it if they would rather talk with their radio over private APIs instead of via AT commands (most likely for performance reasons)."); JX-18 at 6:45-49 ("However, sending AT commands may not be ideal for a given radio--perhaps an OEM has a separate private API set that they can use to perform the same functionality as a given AT command. If this is the case, the OEM may change the RIL driver to suit their needs.").) Microsoft argues that Motorola's construction is "directly contradicted by the '762 Patent's teaching that a driver layer can send commands via private APIs." (CIB at 128.) Therefore, Microsoft argues that "a person having ordinary skill in the art would understand 'standard telephony radio commands' to include proprietary OEM telephony commands, as long as those commands that [sic.] can be used by more than one modem." (CIB at 129.)

Motorola argues that "[a] person of ordinary skill would not interpret proprietary binary commands developed by a manufacturer to work only with specific radios to constitute 'standard telephony radio commands." (RIB at 97.) Motorola argues that "the specification makes clear that the commands at issue should work on hardware provided by a variety of OEMs." (RIB at 97 (citing '762 Patent at 1:24-28 ("[A]dapting or developing software for use on one OEM's cellular telephone does not necessarily guarantee that the software application will function on another OEM's cellular telephone due to the different radio implementations of different OEMs and due to the differences in different cellular environments."). Motorola responds to Microsoft's contention that Motorola's construction reads out a preferred embodiment by arguing that "private APIs are not part of the preferred embodiment but instead represent an alternate implementation." (RRB at 45.) Motorola argues that the '762 Patent specification

states that "private APIs are not part of the preferred embodiment but instead represent an alternative implementation...." (RRB at 45 (quoting '762 Patent at 4:41-45 ("OEMs may use the RIL driver of the preferred embodiment or tweak it if they would rather talk with their radio over private APIs instead of via AT commands (most likely for performance reasons).")).) Motorola further argues that the excerpts from the specification actually undercut Microsoft's argument because "the specification draws a distinction between commands that are standard across manufacturers, *i.e.*, AT commands and those that are private to OEMs...." (RRB at 45 (quoting '762 Patent at 6:46-49 ("[S]ending AT commands may not be ideal for a given radio—perhaps an OEM has a separate private API set that they can use to perform the same functionality as a given AT command.")).) Motorola argues that this is consistent with its construction of "standard" requiring support by multiple vendors. (RRB at 45.)

The ALJ finds that "standard telephony radio command" has its plain and ordinary meaning of a telephony command in common use at the time of the patent's filing. Microsoft's construction that includes proprietary commands within the scope of "standard telephony radio command," so long as they are used with more than one modem is inconsistent with the intrinsic evidence and the plain meaning of the term "standard." *See PC Connector Solutions LLC v. SmartDisk Corp.*, 406 F.3d 1359, 1364 (Fed. Cir. 2005) (construing "standard input/output port" to mean one "that was common use at the time of filing"). Motorola's construction that requires a "standard telephony radio command," be one that is used across multiple manufacturers while much closer to the intrinsic evidence, is vague and does not add anything to the plain and ordinary meaning.

Beginning with words of the claims, the word "standard" that modifies telephony radio command implies the commands in question are in common use. Looking to the language in the

other claims, there is some additional assistance. For example, the three other independent claims all include language that is on its face, broader than "standard telephony radio command":

- Claim 7 "a command understood by the radio to perform a particular function."
- Claim 9 "a command corresponding to the action, wherein the command will be understood by the radio."
- Claim 15 "a radio command,"

None of these claims limits the "command" to a "standard telephony radio command." Indeed, in claims 7 and 9, the only limitation is that the command be understood by the radio to which it is sent. The relative narrowness of "standard telephony radio command" is further supported by Claims 10 and 11 which both depend on independent Claim 9. In Claim 10, the "command" is limited to "an AT command." In Claim 11, the "command" is limited to "a private API defined by the radio manufacturer." This demonstrates that the patent uses the word "command" broadly, and that the term "standard telephony radio command" implies something narrower. See Tandon Corp. v. U.S. Int'l Trade Comm'n, 831 F.2d 1017, 1023 (Fed. Cir. 1987) ("There is presumed to be a difference in meaning and scope when different words or phrases are used in separate claims. To the extent that the absence of such difference in meaning and scope would make a claim superfluous, the doctrine of claim differentiation states the presumption that the difference between claims is significant.")

The remainder of the intrinsic evidence also supports this construction. Specifically, the specification states:

In a preferred embodiment, the Radio Interface Layer (RIL) driver layer is used to implement and roughly correspond to the commands, such as AT commands, specified by ETS 300 585, Digital cellular telecommunications system (Phase 2); Use of Data Terminal Equipment-Data Circuit terminating Equipment (DTE-DCE) interface for Short Messaging Service (SMS) and Cell Broadcast Service (CBS) (GSM 07.05), Fifth Edition, April 1997, and ETS 300 642, Digital

cellular telecommunications system (Phase 2); AT command set for GSM Mobile Equipment (ME) (GSM 07.07 version 4.4.1), Fourth Edition, March 1999. The GSM specifications 07.05 and 07.07 are hereby incorporated by reference. Of course, the RIL driver may be used to implement and correspond to other command sets, such as CDMA commands, or a combination of several command sets.

(JX-18 at 4:26-39 (emphasis added).)

This section of the specification explains that in a preferred embodiment of the invention the Radio Interface Layer driver layer is "used to implement and roughly correspond to the commands, such as the AT commands specified by [various GSM specifications]." (JX-18 at 1:56-58.) Moreover, the specification explicitly discloses using a command set based commands in common use at the time – *i.e.*, the AT commands contained in the GSM standard. (JX-18 at 1:56-58, 4:26-39, 6:43-46.) Indeed, the specification incorporates GSM 07.05 and 07.07 by reference. (JX-18 at 4:37-39.) But the specification does not limit the commands to the just the GSM specification, and explains "the RIL driver may be used to implement and correspond to other command sets, such as CDMA commands, or a combination of several command sets." (JX-18 at 4:39-41.) All of these command sets explicitly referred to are based in whole or in part on telephony standards that were in common use at that time.

The specification then goes on to distinguish these commands derived from telephony standards and used in this preferred embodiment from other commands that can be used with the disclosed invention. The specification states that "OEMs may use the RIL driver of the preferred embodiment or tweak it if they would rather talk with their radio over private APIs instead of via AT commands (most likely for performance reasons)." (JX-18 at 41-44.) Thus, the specification again distinguishes the commands derived from standards from those used privately by a particular manufacturer.

The specification contains additional support for this construction:

In a preferred embodiment, the RIL driver informs the radio to take action using an AT command interface, as defined in GSM specs (most prominently 07.05 and 07.07). However, sending AT commands may not be ideal for a given radioperhaps an OEM has a separate private API set that they can use to perform the same functionality as a given AT command. If this is the case, the OEM may change the RIL driver to suit their needs. However, in a preferred embodiment, because the core architecture of the phone has been built on top of a set of RIL APIs that may be implemented via AT commands, it is not necessary for the OEM to substantially modify the RIL driver so long as the radio understands AT commands. However, due to different implementations of the AT interface, some minor modifications may be necessary. (JX-18 at 6:42-45.)

In this section, the specification again describes a command interface based upon the GSM specifications and contrasts that to a private API set that an OEM may create. There are additional references to RIL APIs based on GSM AT commands and distinguishing those GSM standard-based commands from proprietary commands in the specification. *See, e.g.*, JX-18 at 7:13-15, 57-64 ("This API is modeled after the+CPWD AT command, defined in section 7.5 of GSM 07.07. . . . The RIL driver will then take these constants and generate an AT command string as specified in GSM 07.07: AT+CPWD=SC,1234,5678. Note that if an OEM were to change the RIL driver to call a private API to their radio instead of using an AT command, they would make their change at this point."). The ALJ's interpretation of "standard telephony radio command" is further supported by the extensive appendix which includes a column in the "Function Listing" section listing some of the RIL functions and the corresponding GSM AT commands. (JX-18 at 13-22.)

In none of these sections, does the specification suggest that private API commands are necessarily "standard telephony radio commands" or that any command that is used by more than one modern is such a command. In contrast, the specification distinguishes widely-used, common commands, such as those found in the GSM specifications with private APIs. Thus, the

ALJ finds that the specification supports a plain and ordinary construction of "standard telephony radio commands."

As for Microsoft's argument that a construction that excludes private proprietary commands would violate the rule that a claim construction should not read out the preferred embodiments, this is not a cause for concern. "The mere fact that there is an alternative embodiment disclosed in the asserted patent that is not encompassed by our claim construction does not outweigh the language of the claim, especially when the court's construction is supported by the intrinsic evidence." August Tech. Corp. v. Camtek, Ltd., 655 F.3d 1278, 1285 (Fed. Cir. 2011) (alternations and quotation marks omitted) (quoting TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc., 529 F.3d 1364, 1373 (Fed. Cir. 2008)). "This is especially true where, as here, other unasserted claims in the parent patent cover the excluded embodiments." August Tech, 655 F.3d at 1285 (citing PSN Ill., LLC v. Ivoclar Vivadent, Inc., 525 F.3d 1159, 1166 (Fed. Cir. 2008) ("[C]ourts must recognize that disclosed embodiments may be within the scope of other allowed but unasserted claims.")). Specifically, unasserted dependent Claim 11 claims a command that "is one of a private API set defined by the radio manufacturer." (JX-18 at 24:42-43.) Moreover, as discussed above, asserted independent claims 7, 9, and 15 all include claim language for commands that are broader than independent Claim 1's "standard telephony radio command" language. (See Claim 7 ("a command understood by the radio to perform a particular function"); Claim 9 ("a command corresponding to the action, wherein the command will be understood by the radio"); Claim 15 ("a radio command")).)

Accordingly, the ALJ's construction for "standard telephony radio command" as its plain and ordinary meaning is most consistent with the claim language and specification. Moreover,

because other claims capture the features Microsoft claims that would be excluded by such a construction, this construction is consistent with the rules governing claim construction.

D. The '376 Patent

1. "notification broker"

As set forth in the *Markman* order, the ALJ construed the term "notification broker" to mean "an underlying driver responsible for, at least, adding, updating, and removing data from a data store." (Order No. 6 at 64.) In construing the term, the ALJ rejected Microsoft's proposed construction of "software that manages notifications." (Order No. 6 at 62-64.) The parties now dispute the term "underlying driver." Microsoft argues that an "underlying driver" does not need to communicate directly with hardware. (CRB at 78.) Microsoft argues that an "underlying driver" may allow access to either "a particular device *or* specialized *piece of software*." (CRB at 78 (internal quotation marks omitted).) Motorola argues that an "underlying driver" must communicate with hardware. (RIB at 63-64.) Motorola argues that Microsoft is improperly attempting to "revive the construction that it lost at the *Markman* hearing" by equating "driver" with "a general piece of software." (RIB at 62-63.)

The ALJ finds that neither party's position is entirely correct. In light of the ALJ's rejection of Microsoft's proposed construction of "software that manages notifications," Motorola is correct that "underlying driver" cannot be a "general piece of software" that ultimately writes data to or reads data from a data store by instantiating variables. (RIB at 63.) But Microsoft is also correct that a "driver" is not necessarily required to access hardware because a "driver" may also access specialized software. (CRB at 78.)

The ALJ finds that "underlying driver" should be given its plain and ordinary meaning, namely, functionality that allows the driver to directly access and manage the hardware or

specialized software it is responsible for. (RX-1376C at Q21.) The ALJ agrees with Motorola's expert that a driver "serves as an interface that *allows access* to a particular device or specialized piece of software." (RX-1376C at Q21 (emphasis added).) "Generally speaking, we indulge a 'heavy presumption' that a claim term carries its ordinary and customary meaning." *CCS Fitness v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) (citations omitted). Therefore, an "underlying driver" that constitutes the "notification broker" is required to allow access to the component identified as the data store, which may be hardware (such as RAM) or specialized software (such as the Windows registry). The specification supports this understanding. In particular, the specification does not refer to or describe any intermediary components between the "notification broker" and "data store" that are necessary for the broker to communicate with and perform actions on the data store. Instead, the embodiments described in the specification indicate that the notification broker interfaces with the data store directly. (*See, e.g., JX-8, 7:1-10* (the "data store communicates the change to notification broker" and the "notification broker updates the state in data store.").)

Thus, the ALJ construes the term "underlying driver" to require that the identified driver must, at least, directly add, update, and remove data from the identified data store, which may be either hardware or specialized software.

E. The '054 Patent

1. "Resource State Information"

While in the *Markman* hearing the parties agreed that the phrase "the synchronization being performed at least in part by transmitting to the server the copy of the resource stored at the client and the resource state information" would be construed according to its plain and ordinary meaning, it is now apparent to the ALJ that the term "resource state information" is in

dispute and must be construed. See O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1362 (Fed. Cir. 2008). Microsoft offers no discernible construction. Motorola contends that there are three aspects to "resource state information": (1) it must represent the version of the resource stored at the server at a selected moment; (2) the same resource state information is sent back from the client that was originally downloaded from the server; and (3) the resource state information provides an efficiency benefit by avoiding the duplicative transfer of the same resources. (RIB at 17-20.)

The language of the claims provides substantial guidance as to the meaning of "resource state information." It is a limitation of all of the asserted claims. The claims require that the "resource state information represent[] the state of the resource stored at the server at a selected moment." The claim further requires that the synchronization occur "in part by transmitting to the server the copy [of] the resource stored at the client, and *the* resource state information." (JX-1 at 16:51-54; 17:1-3 (emphasis added).) Thus, there can be no question that the claims at least require that the "resource state information" represent the state of the resource stored at the server at a selected moment. This also suggests that Motorola is correct that the resource state information must represent the version of the resource. What is a more difficult question is whether, as Motorola argues, the resource state information used in synchronization must be the same resource state information that is transmitted to the client. The antecedent basis "the" used before "resource state information" in the synchronizing limitation suggests that they should be the same "resource state information." The ALJ now looks to the remainder of the intrinsic evidence to see if there is additional guidance in the specification.

The specification of the '054 Patent provides additional substantial guidance as to what the inventors meant by "resource state information." The '054 Patent identifies a number of problems with the prior art that the invention seeks to solve:

It would therefore be desirable to ensure current and accurate information through a model that would synchronize all copies of a data object. It would also be desirable for a synchronization model to be able to identify which copy of a data object is more current and accurate. It would be desirable for none of the changes to be lost or overwritten when multiple copies of a data object are used to update the copy on the server. There is also a need in the art for any such synchronization model to allow multiple users to access and edit the data object simultaneously. Furthermore, it would be desirable if the synchronization mode could eliminate the creation of redundant copies of the data object. It would also be advantageous to eliminate redundant transmissions of data object between clients and servers. Any synchronization model that could exhibit such capabilities would be particularly useful if it could support changes made to local copies of data objects regardless of whether a client was on-line or off-line with the server. (JX-1 at 2:24-41.)

The summary of the invention of the '054 Patent tells us:

As part of the present invention, a client, while connected to a server, identifies to the server the <u>current state of data</u> located at the client and issues a request for the server to evaluate the state of the client's data. The server responds to the request by returning an identification of server data that is not included in the client's data and an identification of the client's data that has been changed on the server. The client is then able to download from or upload to the server new or modified data. (JX-1 at 3:9-17 (emphasis added).)

The principal discussion related to resource state information takes place in the context the method described in Figure 3:

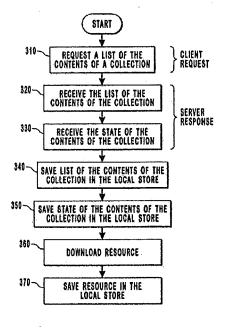


FIG. 3

The specification explains that the method begins by requesting the contents of a group of resources stored at the server. The server transmits back a list of the resources and "information that specifies the state of the resources. . . .":

In step 310 a client requests a list of the contents of a collection located at a server. The server then responds by transmitting a list of the resources contained in the collection and information that specifies the state of the resources contained in the collection, as respectively illustrated by steps 320 and 330. In step 320 the client receives the list of the contents of the collection. In one embodiment, the list includes identifiers representing each of the resources of the collection. Although not necessary, the identifiers can be compressed prior to transmission to optimize network bandwidth and time. The identifiers can include, for example, a Uniform Resource Identifier (URI) or other information that uniquely identifies the resources. (JX-1 at 9:5-17 (emphasis added).)

The specification then goes on to define what is meant by "state" – "the identity of the current version of resource stored at a server." The specification goes to further explain that "[t]he state of any particular copy of a resource refers to the version of the resource when it was stored at the server." The specification finally notes that resources state

"information" does not necessarily include "idnetifiers" of the resource. Also, every single update version of a resource on the server represents an individual "state."

In step 330 the client receives the information specifying the state of the contents of the collection. The "state" of the contents of a collection stored at a server refers to the identity of the current version of a resource stored at a server. The state of any particular copy of a resource refers to the version of the resource when it was stored at the server. As a particular resource stored at one or more servers undergoes a series of successive updates, the resource is considered to have passed through a corresponding series of states, each or which represents a single update version of the resource. In one embodiment, information specifying the state of the contents of the resources includes an identifiers, which can be termed resource state identifiers. Although not necessary, these identifiers can also be compressed to optimize network bandwidth and time.

(JX-1 at 9:18-28) (emphasis added). The specification further associates state with a version of the document:

In summary, steps 310, 320, and 330 result in the client being given at least two pieces or sets of information associated with the collection specified in the request of step 310. First, the client is given information representing the identity of the various resources that are contained in a collection stored at the server in step 320. Second, the client is given information that essentially represents or is associated with the current update version of the various resources that are contained in the collection in step 330. These two pieces or sets of information can be subsequently used by the methods and systems of the invention to manage synchronization of the copies of the resources contained in the collection and to eliminate repetitive transmission of resources or portions of resources between the client and the server as will be further described herein below.

(JX-1 at 9:34-47.) The specification repeatedly identifies the "state information" as identifying the version of the document.

In decision block 606, the server then performs conflict detection as disclosed previously in reference to step 455 of FIG. 4. If no conflict is detected or, in other words, if the copy of the resource to be overwritten at the server has not changed since the time it was downloaded to the client in step 360 of FIG. 3, the server updates the resource in step 608 and generates a new state identifier, which specifies that a new updated version of the resource has been stored at the server. In step 610, the client receives and caches the new state identifier. It is noted that the server does not need to transmit the updated copy of the resource in this embodiment, since the client has already cached this version of the resource in step 602.

(JX-1 at 14:1-13) (emphasis added).

The '054 Patent specification goes on to describe how information concerning the "state" of the resources is received and dealt after the initial synchronization reinforcing that state refers to a version of the document:

In step 415 the client receives a new state of the contents of the collection. In a similar manner, the new state can be identical to the state previously received in step 330 of FIG. 3 or can be an updated version. For example, if an existing word processing document has been modified and stored at the server (perhaps by a different client) since the time of the previous request (i.e., step 310), the state of the modified word processing document will be different, reflecting the updated version of the document. Similarly, if a word processing document has been created or deleted at the server since the time of step 310, the state of the contents of the collection will also be different. In contrast, if no updated versions have been stored and no resources have been created or deleted, the state received in step 415 will be identical to the list received in step 330. (JX-1 at 10:56-11:3 (emphasis added).)

(JX-1 at 10:56-11:3) (emphasis added). The specification then explains how the method uses the information regarding the state of the resource, which the specification again describes as separate from the identifier of the resource, to eliminate unneeded downloading:

Assuming that the new list and the new state are differ from the previous list and state, steps 420 and 425 cache the new list and new state, respectively, in local storage. Decision block 430 then inquires as to whether the client desires to obtain a resource from the server. If the client does, the method advances to step 435. Otherwise, the method proceeds to decision block 475.

In step 435 the client requests a resource and the identifiers corresponding to the resource. In this step and others that follow, unless otherwise indicated, the "identifiers" refer to at least information that uniquely identifies the resource and information that specifies the update version of the resource. If the resource has never been cached in local storage, the resource and corresponding identifiers are downloaded from the server in step 435. In this manner, repetitive downloading of the same resource to a particular client is eliminated. (JX-1 at 11:4-20.)

The specification goes on to describe at length different scenarios where information related to the state of the resource on the local client is compared with the state of the resource on the

server and depending on which is more recent, the computer taking different actions. (JX-1 at 11:21-12:31; 13:27-35.) The specification also emphasizes that one benefit of the invention is reducing unnecessary network traffic. (JX-1 at 15:23-33.)

The ALJ finds that based on the specification "resource state information" as it is used in the asserted claim must provide version information about the resource. This is based on the explicit definitions of "state" provided in the specification and the specification's repeated and consistent use of the term. *See Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1380 (Fed. Cir. 2009) ("When a patentee explicitly defines a claim term in the patent specification, the patentee's definition controls."); *see also Martek Biosciences*, 579 F.3d at 1383 (Lourie, J., dissenting) ("It is fundamental that we must read claim term in a manner that comports with the written description of the patent as a whole . . . and not simply with a single sentence, even one purporting to be a definition, that is inconsistent with the remainder of the specification." (citation omitted)). The ALJ does not find that there is any requirement in the claims that the "resource state information" reduce network traffic as Motorola alleges. That is a benefit of the invention if it is practiced as claimed. It is not a separate element of the method.

Finally, the ALJ finds that any remaining ambiguity regarding "resource state information" is resolved by U.S. Patent Nos. 6,578,069 and 6,694,335.⁷ The '054 Patent explicitly incorporates the '069 Patent⁸ by reference and tells the person of ordinary skill that "[i]n order to obtain a more detailed description of the processes and mechanisms whereby steps

⁷ While neither party discusses these related patents, they are incorporated into the intrinsic evidence and the ALJ will consider them. *See Exxon Chem. Patents, Inc. v. Lubrizol Corp.*, 64 F.3d 1553, 1555 (Fed. Cir. 1995). ("[T]he trial judge has an independent obligation to determine the meaning of the claims, notwithstanding the views asserted by the adversary parties.").

⁸ The ALJ notes that the claims of '069 Patent and claims of the '054 Patent were rejected for obviousness type double patenting because they were not patentably distinct. Microsoft filed a terminal disclaimer to overcome that rejection. (JX-14 at MSMMOTOITC-VOL53-00567111-12; MSMMOTOITC-VOL53-00567142-45.)

310, 320, and 330 can be performed reference is made to . . . [the '335 Patent and the '069 Patent] . . . which [are] incorporated herein by reference." (JX-1 at 9:48-61.) As discussed above, step 330 is the step where "the client receives information specifying the state of the contents of the collection." (JX-1 at 9:18-19.) Thus, the ALJ turns, as the skilled artisan would, to these patents for additional information regarding "resource state information." *See Zenon Envir.*, *Inc. v. U.S. Filter Corp.*, 506 F.3d 1370, 1376, 1379 (Fed. Cir. 2007) ("[T]he plain language indicates that the subject matter that is being incorporated by reference pertains to the details relating to the construction and deployment of a vertical skein. Thus, we must look, as one reasonably skilled in the art would, to the grandparent patents to determine what the patentees meant by the details relating to the construction and deployment of the vertical skein.").

The '069 Patent explains the claimed invention uses XML and related protocols to send information between the server and client. ('069 Patent at 1:32-65 ("WebDAV allows clients to perform remote web content authoring . . . [t]he WebDAV specifications are proposed to be written in eXtensible Mark-up Language (XML). . . .").) The '069 Patent explains why information that can provide state information is important to improve XML/HTTP/WebDAV systems:

Various weakness [sic.] of network servers running the WebDAV protocol exist in its current interoperable standard. One such weakness is the server's inability to identify a specific version of a specific resource. This disability is particularly problematic when a user alters a resource after disconnecting its respective client from the network. When the client is again connected to the network, the network is often unable to identify the resource that the client. [sic.] A further weakness presents itself when a resource is changes on a server when a client is disconnected from the network. After reconnecting the client to a server in the network, the server is unable to identify the client's uploaded resource.

What is needed is a method and data structure that allows for identification of a specific version of a specific resource, even though a user creates, alters, or removes the resource after disconnecting its respective client from the network and then reconnecting the client for the purpose of uploading the changed

version of the resource. What is also needed is a method and data structure that provides a static and unique identifier for a network resource that does not change even when a resource at a server has its file name changed, or the resource is deleted from the server and its file name is re-used for another resource. ('069 Patent at 1:53-2:9.)

The '069 Patent describes a "resource tag" that represents "a specific version of a specific resource." ('069 Patent at 2:21-22.) The '069 Patent describes how the existing WebDAV protocol can send information with an address to and from a client. (See '069 Patent at 10:25-11:25.) The '069 Patent explains how various commands in the WebDAV protocol (GET, PUT, POST, MKCOL, PROPATCH, and DELETE) can be supplemented using the resource tag to overcome the problems with the protocol.

In the inventive implementation the client must be able to download the resource tag as a property on the resource. It must be possible for the client to include the resource tag as a condition in a request header of any DAV request. The server must return the resource tag of the resource as a response header in every one of the following method requests: GET, PUT, POST, MKCOL, PROPPATCH, and DELETE. . . . A DAV client that wants to avail itself of the server-side conflict detection and resolution mechanism should send its previously obtained resource tag held in local cache in the request headers of the WebDAV method requests GET, PUT, POST, PROPFIND, PROPPATCH, MOVE, COPY, DELETE and MKCOL. A DAV client can use the resource tag property on a resource to detect if it has already obtained the latest version of a specific resource. A DAV client can use resource tag property on a resource to ensure consistency when it uploads or downloads data. ('069 Patent at 15:44-63,)

Thus, in this example, the information that describes the state of the resource is the "reference tag" is sent along with command when the client wants the server to perform a data operation on the resource. (*See also* Figure 6 (showing prior art etag and resource tag to identify specific version of the resource); '069 Patent at 14:9-24 (describing use of identifier and resource tag that identifies a specific version of the resource identified by the identifier to overcome the problem of when the resource is deleted from the server while the client is off-line)).

The specification of the '069 Patent then goes to describe how the resource tag and the state information it provides allows version checking on the existing WebDAV commands.

('069 Patent at 15-20.) The '335 Patent (also incorporated by reference into the '054 Patent) also includes state information that identify the version of the resource at the server and at the client. (See '335 Patent at 13:19-35; 14:12-24.)

Based on this review of the entirety of the intrinsic evidence, it is clear that Motorola is correct that the resource state information must reflect the version of the resource. The ALJ notes that this is not necessarily a version number, but some information to indicate the version of the resource. The specification is not clear whether the resource state information sent back to the server when synchronization takes must be the same information. Without greater clarity the ALJ is reluctant to read that limitation into the claims. However, from the language of the claims and the specification, it is clear the resource state information must also represent the version of the resources stored on the server at a particular moment. The ALJ also notes that the resource state information that is sent back must allow the server to determine whether the resource has changed.

Accordingly, for purposes of this case, the ALJ defines resource state information as information that is associated with a resource that allows the server, client computer or both to determine the version of the resource stored on the server at a particular moment, and if there has been a change in the resource, and to take appropriate action to synchronize the documents if there has been a change.

2. The Preamble

The parties also appear to dispute the proper construction of one additional claim term – the claim preamble. Microsoft contends that the preamble of Claim 11 is limiting. Microsoft argues that "the preamble of claim 11 breathes life into the claim invention by articulating a novel attribute of the '054 patent, i.e., providing a seamless on-line/off-line experience by

appearing on-line, even when a client is using a resource off-line." (CIB at 7.) Microsoft argues that "[i]ndeed, the background of the patent describes the '054 invention's ability to overcome the limited functionality previously available in off-line mode (JX-1 at 1:41-51) by generating a system that can synchronize, 'regardless of whether a client was on-line or off-line with the server." (CIB at 7.) Microsoft does not offer any official construction of this term, but argues that the accused products satisfy the preamble because "whether the client is online or offline, both the Accused Product and the user of the Accused Product, can interact with the resource whether online or offline, and seamlessly synchronize when back online." (CIB at 7-8.) Microsoft reiterates this argument stating that "the client receives resources (such as a calendar resource) from the server while online, stores them locally, and then whether the client is online or offline, the Accused Products can interact with the resource, and seamlessly synchronize when back online." (CRB at 10.) Microsoft further argues that "[h]aving the resources cached locally allows the [Motorola] device) or the user operating the client) to modify the resources regardless of whether being on or offline." (CRB at 10.) Microsoft argues that Motorola seeks to read in a "knowledge" limitation and that this is inconsistent with the claim language and specification. (CRB at 11-12.)

Motorola argues that the preamble is not a limitation. (RIB at 32.) Motorola argues that the preamble here merely describes the intended result of the method. (RIB at 32.) In the alternative, Motorola argues that the proper construction is that the user is able to perform data operations on a locally-cached copy of the resource. (RIB at 32-33.) Motorola also argues that there are problems with Microsoft's construction. (RIB at 26-27.) Motorola notes that Microsoft's expert interprets the term "client" in the preamble in a completely different way – as the user's experience – than the rest of the claim – where the claim is the computer. (RIB at 26.)

Motorola argues that even Microsoft's expert admits that this renders the claim "inexact." (RIB at 26-27 (quoting Tr. at 380:16-382:7.) Motorola argues that this is inconsistent with the canon of claim construction that a term should be interpreted consistently across the claims. (RIB at 27 (citing *Digital Biometrics, Inc. v. Identix, Inc.*, 149 F.3d 1335, 1345 (Fed. Cir. 1998); *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1342 (Fed. Cir. 2001).) Motorola also argues that Microsoft's construction is inconsistent with the intrinsic evidence that consistently uses the term "client" to refer to the client computer, not the user. (JX-1 at 2:1-2, 5-9.)

The ALJ finds that the preamble is not a limitation of claim 11 of the '054 Patent. Whether to treat a preamble term as a claim limitation is "determined on the facts of each case in light of the claim as a whole and the invention described in the patent." Storage Tech. Corp. v. Cisco Sys., Inc., 329 F.3d 823, 831 (Fed. Cir. 2003). The preamble generally does not limit the claims. See Allen Eng'g Corp. v. Bartell Indus., Inc., 299 F.3d 1336, 1346 (Fed. Cir. 2002). Nonetheless, the preamble may be construed as limiting "if it recites essential structure or steps, or if it is 'necessary to give life, meaning, and vitality' to the claim." Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed. Cir. 2002) (quoting Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305 (Fed. Cir. 1999).) "A preamble is not regarded as limiting, however, 'when the claim body describes a structurally complete invention such that deletion of the preamble phrase does not affect the structure or steps of the claimed invention," Am. Med. Sys., Inc. v. Biolitec, Inc., 618 F.3d 1354, 1358-59 (Fed. Cir. 2010) (quoting Catalina Mktg., 289 F.3d at 809). If the preamble "is reasonably susceptible to being construed to be merely duplicative of the limitations in the body of the claim (and was not clearly added to overcome a [prior art] rejection), we do not construe it to be a separate limitation." Symantec Corp. v. Computer Assocs. Int'l, Inc., 522 F.3d 1279, 1288-89 (Fed. Cir. 2008). The preamble

has no separate limiting effect if, for example, "the preamble merely gives a descriptive name to the set of limitations in the body of the claim that completely set forth the invention." *IMS Tech.*, *Inc. v. Haas Automation, Inc.*, 206 F.3d 1422, 1434-35 (Fed. Cir. 2000).

The ALJ notes that as discussed at the hearing, the phrase "in a manner such that it appears, from the standpoint of the client, that the client is on-line" presents a number of problems in construction. No matter how client is construed, this phrase makes little sense and adds little to the complete method outlined in the body of the claim. If "client" is construed as a computer, we are confronted with the philosophical question of how can a computer have a point of view and believe itself on-line when it is off-line. On the other hand, if client is interpreted as the user, it is, as we shall see, completely inconsistent with the rest of the claim and the specification. Then, we are confronted with the question of how that appearance is to be judged. Microsoft attempts to solve both problems by rewriting the limitation in several different possible ways to address these problems. (CIB at 7; CRB at 7-10.) However, the ALJ believes that these proposed constructions (as the ALJ reads the Microsoft's brief, because Microsoft does not come out and endorse one single construction) simply restate the rest of the claim elements -"whether the client is online or offline, both the Accused Product and the user of the Accused Product, can interact with the resource whether online or offline, and seamlessly synchronize when back online" (CIB at 7-8) or "the client receives resources (such as a calendar resource) from the server while online, stores them locally, and then whether the client is online or offline, the Accused Products can interact with the resource, and seamlessly synchronize when back online." (CIB at 8.) In addition, to restating the steps that are found in the body of the claim, Microsoft's construction adds a new limitation that synchronization must be "seamless." The ALJ does not believe that such constructions add much in the way of clarity to the claims.

In determining whether the preamble is limiting, one of the tests is whether it "breathes life, meaning, and vitality into the claim." In this case, however, finding this phrase in the preamble limiting will merely breathe ambiguity, uncertainty, and inconsistencies into the claim. This suggests to the ALJ that this phrase cannot be a limitation.

Moreover, looking at the disputed claim limitation, the ALJ does not see how the phrase "accessing the resource and then interacting off-line with the resource in a manner such that it appears from the standpoint of the client, that the client is on-line" adds anything to the claim. Deleting this disputed phrase "accessing the resource and then interacting off-line with the resource in a manner such that it appears from the standpoint of the client, that the client is on-line" from the claim in no way compromises the integrity of the claim.

In light of the discussion above, the ALJ finds that Microsoft and Motorola have failed to overcome the general rule that the preamble is not a limitation.

The ALJ is not called upon to determine whether the entire preamble is a limitation, but only whether this disputed phrase is. While other parts of the preamble do provide antecedent basis for other limitations within the claim, this phrase does not. Moreover, neither party suggests that during the prosecution history the applicants relied on this phrase explicitly to obtain allowance of the claims. This phrase is a classic statement of what the claimed method is intended to accomplish. As such, it is precisely the sort of statement in the preamble that should be construed as non-limiting.

Accordingly, the ALJ finds that the proper construction of this term is that it is not a limitation of the claims.

V. INFRINGEMENT DETERMINATION

A. Applicable Law

In a Section 337 investigation, the complainant bears the burden of proving infringement of the asserted patent claims by a preponderance of the evidence. *Certain Flooring Products*, Inv. No. 337-TA-443, Commission Notice of Final Determination of No Violation of Section 337, 2002 WL 448690 at 59, (March 22, 2002); *Enercon GmbH v. Int'l Trade Comm'n*, 151 F.3d 1376 (Fed. Cir. 1998).

Each patent claim element or limitation is considered material and essential. *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1538 (Fed. Cir. 1991). Literal infringement of a claim occurs when every limitation recited in the claim appears in the accused device, *i.e.*, when the properly construed claim reads on the accused device exactly. *Amhil Enters., Ltd. v. Wawa, Inc.*, 81 F.3d 1554, 1562 (Fed. Cir. 1996); *Southwall Tech. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed Cir. 1995).

If the accused product does not literally infringe the patent claim, infringement might be found under the doctrine of equivalents. The Supreme Court has described the essential inquiry of the doctrine of equivalents analysis in terms of whether the accused product or process contains elements identical or equivalent to each claimed element of the patented invention. Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co., 520 U.S. 17, 40 (1997).

Under the doctrine of equivalents, infringement may be found if the accused product or process performs substantially the same function in substantially the same way to obtain substantially the same result. *Valmont Indus., Inc. v. Reinke Mfg. Co.*, 983 F.2d 1039, 1043 (Fed. Cir. 1993). The doctrine of equivalents does not allow claim limitations to be ignored. Evidence must be presented on a limitation-by-limitation basis, and not for the invention as a whole.

Warner-Jenkinson, 520 U.S. at 29; Hughes Aircraft Co. v. U.S., 86 F.3d 1566 (Fed. Cir. 1996). Thus, if an element is missing or not satisfied, infringement cannot be found under the doctrine of equivalents as a matter of law. See, e.g., Wright Medical, 122 F.3d 1440, 1444 (Fed. Cir. 1997); Dolly, Inc. v. Spalding & Evenflo Cos., Inc., 16 F.3d 394, 398 (Fed. Cir. 1994); London v. Carson Pirie Scott & Co., 946 F.2d 1534, 1538-39 (Fed. Cir. 1991); Becton Dickinson and Co. v. C.R. Bard, Inc., 922 F.2d 792, 798 (Fed. Cir. 1990).

The concept of equivalency cannot embrace a structure that is specifically excluded from the scope of the claims. *Athletic Alternatives v. Prince Mfg., Inc.*, 73 F.3d 1573, 1581 (Fed. Cir. 1996). In applying the doctrine of equivalents, the Commission must be informed by the fundamental principle that a patent's claims define the limits of its protection. *See Charles Greiner & Co. v. Mari-Med. Mfg., Inc.*, 92 F.2d 1031, 1036 (Fed. Cir. 1992). As the Supreme Court has affirmed:

Each element contained in a patent claim is deemed material to defining the scope of the patented invention, and thus the doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole. It is important to ensure that the application of the doctrine, even as to an individual element, is not allowed such broad play as to effectively eliminate that element in its entirety.

Warner-Jenkinson, 520 U.S. at 29.

Prosecution history estoppel may bar the patentee from asserting equivalents if the scope of the claims has been narrowed by amendment during prosecution. A narrowing amendment may occur when either a preexisting claim limitation is narrowed by amendment, or a new claim limitation is added by amendment. These decisions make no distinction between the narrowing of a preexisting limitation and the addition of a new limitation. Either amendment will give rise to a presumptive estoppel if made for a reason related to patentability. *Honeywell Int'l Inc. v. Hamilton Sundstrand Corp.*, 370 F.3d 1131, 1139-41 (Fed. Cir. 2004), *cert. denied*, 545 U.S.

1127 (2005)(citing Warner-Jenkinson, 520 U.S. at 22, 33-34; and Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 733-34, 741 (2002)). The presumption of estoppel may be rebutted if the patentee can demonstrate that: (1) the alleged equivalent would have been unforeseeable at the time the narrowing amendment was made; (2) the rationale underlying the narrowing amendment bore no more than a tangential relation to the equivalent at issue; or (3) there was some other reason suggesting that the patentee could not reasonably have been expected to have described the alleged equivalent. Honeywell, 370 F.3d at 1140 (citing, interalia, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 344 F.3d 1359 (Fed. Cir. 2003)(enbanc)). "Generalized testimony as to the overall similarity between the claims and the accused infringer's product or process will not suffice [to prove infringement under the doctrine of equivalents]." Tex. Instruments, Inc. v. Cypress Semiconductor Corp., 90 F.3d 1558, 1567 (Fed. Cir. 1996).

Section 271(b) of the Patent Act prohibits inducement: "[w]hoever actively induces infringement of a patent shall be liable as an infringer." 35 U.S.C. § 271(b) (2008). As the Federal Circuit stated:

To establish liability under section 271(b), a patent holder must prove that once the defendants knew of the patent, they "actively and knowingly aid[ed] and abett[ed] another's direct infringement." However, "knowledge of the acts alleged to constitute infringement" is not enough. The "mere knowledge of possible infringement by others does not amount to inducement; specific intent and action to induce infringement must be proven."

DSU Med. Corp. v. JMS Co., 471 F.3d 1293, 1305 (Fed. Cir. 2006) (en banc) (citations omitted); See also Cross Medical Products, Inc. v. Medtronic Sofamor Danek, Inc., 424 F.3d 1293, 1312 (Fed. Cir. 2005) ("In order to succeed on a claim inducement, the patentee must show, first that there has been direct infringement, and second, that the alleged infringer knowingly induced

infringement and possessed specific intent to encourage another's infringement."). Mere knowledge of possible infringement by others does not amount to inducement. Specific intent and action to induce infringement must be proven. *Warner-Lambert Co. v. Apotex Corp.*, 316 F.3d 1348, 1363 (Fed. Cir. 2003). In *DSU*, the Federal Circuit clarified the intent requirement necessary to prove inducement. As the court recently explained:

In DSU Med. Corp. v. JMS Co., this court clarified en banc that the specific intent necessary to induce infringement "requires more than just intent to cause the acts that produce direct infringement. Beyond that threshold knowledge, the inducer must have an affirmative intent to cause direct infringement."

Kyocera Wireless Corp. v. Int'l Trade Comm'n, 545 F.3d 1340, 1354, (Fed. Cir. 2008) (citation omitted). "Proof of inducing infringement requires the establishment of a high level of specific intent." Lucent Techs. Inc. v. Gateway, Inc., 2007 WL 925510, at *2-3 (S.D. Cal. 2007)

Under 35 U.S.C. § 271(c), "[w]hoever offers to sell or sells within the United States or imports into the Unites States a component of a patented machine, manufacture, combination, or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be specifically made to or specially adapted for use in the infringement of the patent, and not a staple article or commodity suitable for substantial non-infringing use, shall be liable as a contributory infringer."

A seller of a component of an infringing product can also be held liable for contributory infringement if: (1) there is an act of direct infringement by another person; (2) the accused contributory infringer knows its component is included in a combination that is both patented and infringing; and (3) there are no substantial non-infringing uses for the accused component, *i.e.*, the component is not a staple article of commerce. *Carborundum Co. v. Molten Equip. Innovations, Inc.*, 72 F.3d 872, 876 (Fed. Cir. 1995).

To prove direct infringement, Microsoft must prove by a preponderance of the evidence that the accused products either literally infringe or infringe under the doctrine of equivalents the method of asserted claims of the asserted patents. *Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc.*, 261 F.3d 1329, 1336 (Fed. Cir. 2001). Notably, method claims are only infringed when the claimed process is performed. *Ormco Corp. v. Align Technology, Inc.*, 463 F.3d 1299, 1311 (Fed. Cir. 2006).

In order to determine whether an accused structure literally meets a 35 U.S.C. §112, ¶ 6 means-plus-function limitation, the accused structure must either be the same as the disclosed structure or be a 35 U.S.C. §112, ¶ 6 "equivalent," *i.e.*, (1) perform the identical function and (2) be insubstantially different with respect to structure. Two structures may be "equivalent" for purposes of 35 U.S.C. §112, ¶ 6 if they perform the identical function, in substantially the same way, with substantially the same result. *Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 1364 (Fed. Cir. 2000) (internal citations omitted). In other words, once identity of function has been established, the test for infringement is whether the structure of the accused product performs in substantially the same way to achieve substantially the same result as the structure disclosed in the specification. *Minks v. Polaris Industries, Inc.*, 546 F.3d 1364, 1379 (Fed. Cir. 2008

However, if an accused structure is not a 35 U.S.C. §112, ¶ 6 equivalent of the disclosed structure because it does not perform the identical function of that disclosed structure, it may still be an "equivalent" under the doctrine of equivalents. Applying the traditional function-way-result test, the accused structure must perform substantially the same function, in substantially the same way, to achieve substantially the same result, as the disclosed structure. A key feature that distinguishes "equivalents" under 35 U.S.C. §112, ¶ 6 and "equivalents" under the doctrine

of equivalents is that equivalents under 35 U.S.C. §112, ¶ 6 must perform the identical function of the disclosed structure, while equivalents under the doctrine of equivalents need only perform a substantially similar function. *Kemco Sales*, 208 F.3d at 1364 (internal citations omitted). Furthermore, a structure failing to meet either the "way" and/or "result" prong under the 35 U.S.C. §112, ¶ 6 test must fail the doctrine of equivalents test for the same reason(s). *Id*.

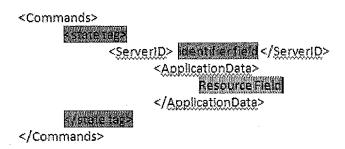
B. The '054 Patent

Microsoft asserts that at least Motorola's Atrix, Backflip, Bravo, Charm, Citrus, Cliq, CliqXT, Cliq2, Defy, Devour, Droid, Droid Pro, Droid X, Droid 2, Droid 2 Global, Droid X2, Flipside, Flipout, and Spice, and the Google Experience Devices including the Xoom infringe claims 11, 13, 14, and 15 of the '054 Patent. (CX-974C at Q24-Q57.) Microsoft's main infringement allegation is that the accused devices infringe the asserted claims of the '054 Patent in synchronizing with an Exchange Server using the ActiveSync Exchange Protocol. (CIB at 6 (citing CX-312C at 18:1-7; CX-974C at Q52).) The primary dispute between the parties regarding the '054 Patent centers on whether the Accused Products contain "resource state information" and whether the accused products operate "in a manner such that it appears from the standpoint of the client, that the client is on-line." (RIB at 17; CIB at 5-13.)

1. "resource state information"

Microsoft's infringement theory is based on Motorola's devices use the ActiveSync protocol to handle synchronization of data between the phones and Microsoft Exchange servers. The Active Sync protocol uses a language called XML (eXtensible Markup Language) and specifically so-called "Sync Commands." (Tr. 360:8-361:17.) Microsoft argues that these Sync Commands, "which includes the state tag (add change, or delete) and the ServerID infringes the claimed 'resource state information' ('RSI') limitation." (CIB at 9-10; CRB at 5.) Microsoft

argues that the identifier field "indicates the unique identifier of the resource that is assigned by the server" and the "state tag" (in green below) or "state field" indicates "whether the state of the resource is add, change, or delete, thereby representing the update version of the resource." (CIB at 9; CRB at 5.) Microsoft argues that "[t]he change state tag indicates that the resource was modified at the client, vis-à-vis the copy stored at the server when the Sync Command was originally sent from server to the client." (CRB at 5.)



(CIB at 9; RIB at 21; CRX-2C at Q98.)

Microsoft argues that "Dr. Smith opines, Sync Command information uniquely identifies the resource ([CX-974C] at Q132 (ServerID)) and provides the update version of the resource ([CX-974C] at Q179 (Add/Change/Delete))." (CIB at 10.) Microsoft argues that "[t]his information allows the client to understand the state of the resource (whether it was added, deleted, or changed) for synchronization purposes so that the server and client can mirror each others [sic.] resources." (CIB at 10.)

Microsoft argues that "[t]o achieve true synchronization, the '054 patent requires that the resource state information be sent in both directions." (CIB at 13.) Microsoft asserts that the accused Exchange Protocol "provides mirrored resource state information through the Sync Commands sent from the client to the server." (CIB at 13-14 (citing (CX-974C at Q222-Q234.) Microsoft relies heavily on the testimony of Motorola's corporate representative, Peter Cockerell, who Microsoft asserts "concurred with Dr. Smith" in his deposition testimony that "the Sync

Command represents the state of the resource." (CIB at 10, 14.) Microsoft argues that "[t]hat the data is a command simply does not mean that it does not represent the state or version of the resource; add indicates a [sic.] that the resource was added at the server, delete shows the state of the resource at the server as no longer present, and change that the resource has been modified." (CIB at 10 (citing CX-974C at Q179-Q182.)

Microsoft argues that Motorola's "argument that the state tag does not contain the same data (i.e., change) when uploading and downloading a copy of the resource to the server [is incorrect]." Microsoft argues that Motorola's argument that such state tags are "unworkable" and inefficient is incorrect. (CRB at 8-10.)

Motorola argues that "[t]he patent unequivocally states that resource state information must represent the version of the resource stored at the server at a selected moment. (RIB at 17; 20-22.) Motorola argues that they are "merely commands that do not, by themselves, communicate information regarding the state of the resource." (RRB at 22.) Motorola argues they are "[i]nstead . . . directions for the system to take a particular action." (RIB at 22.) Motorola argues that "[a]s such, the accused Add/Change/Delete commands do not have one of the essential, defining characteristics of the resource state information as described in the '054 patent."

Motorola points the specification and claim language that it argues supports this interpretation of the claims. (RIB at 18 (citing JX-1 at 9:18-21; 9:38-42; 10:5-8; 10:56-66.) Motorola also argues that the specification and language of the claims requires that the resource

⁹ Microsoft claims that Motorola's argument is "demonstrably false" because the "the ServerID will have the same value when the copy of the resource is sent to and from the client." However, as discussed below, whether the ServerID was part of Microsoft's contention for what resource state information, was unclear from Microsoft's opening brief or Dr. Smith's testimony, so Motorola can be forgiven if it did not know what Microsoft was claiming was "resource state information."

state information must be same as the resource state information sent by the server to the client. (RIB at 18; RRB at 22-23; *see also* RX-1360C at Q222.) Motorola also argues that the specification of the '054 Patent's states that a goal of the invention is improving efficiency and this would not be met if the Sync commands were read to be resource state information. (RIB at 19-20.) Motorola argues that the accused Sync commands have none of these features of "resource state information."

The ALJ finds that Microsoft has failed to prove that the Sync Commands are "resource state information" as claimed in the '054 Patent. Microsoft's infringement argument is incoherent. Dr. Smith and Microsoft provide no consistent methodology for determining what resource state information is. (Compare CRB at 5-10 (standard XML protocol command tags with a resource name are state information) with CIB at 21 (unique version number not resource state information because it is not used for synchronization); CRB at 15 (customized information based on timestamp document was transferred cannot give state information)). Neither Microsoft nor Dr. Smith cites or discusses the specification's teaching regarding resource state information in discussing infringement. Nor does Microsoft or Dr. Smith cite to the U.S. Patent Nos. 6,578,069 and 6,694,335. Both of these patents that are by the same inventors, filed the same day, and were incorporated by reference into the specification of the '054 Patent provide detailed information regarding use of XML (and related WebDAV) commands and elements and information for determining the state of a resource.

In the end, Microsoft's argument appears to be based on nothing more than the fact that the name of a particular field includes the word "state" and on some sound bites pulled out of context from a Motorola witness. But infringement must be based on more than getting an

¹⁰ Such approaches appear common lately. *Cf. Gonzalez-Sarvin v. Ford Motor Co.*, --- F.3d ---, 2011 WL 5924441 (7th Cir. Nov. 23, 2011).

opponents' witness to say a word that is in the claim. It must be based on comparing the scope of the claims as properly construed to the actual device. Mr. Cockerell was not an expert; he was a fact witness. He was not asked to opine on whether the Sync commands were resource state information as claimed in the patent; he simply used the word "state" in his testimony. Moreover, as Motorola demonstrated, that Mr. Cockerell's answers were more nuanced than the excerpts that Microsoft provides in its briefs. Accordingly, the ALJ gives little weight to this evidence.

As for Dr. Smith's testimony, the ALJ finds it incredible and unreliable. infringement, he engaged in an almost a metaphysical analysis of the claims - one completely divorced from the specification or prosecution history – where "resource state information" was a fuzzy concept based only on his opinion. Moreover, Dr. Smith never gave a clear answer as to what the "resource state information" was. His testimony seems to say that the item that is conveying the state information is the command, but then he refers to the ServerID and later he refers only to the command again. (See CX-974C at Q179-Q181.) Microsoft never answers why, if the command completely conveys the state of the resource as they contend, there is a need to include the server ID at all. Indeed, as Motorola points out, in at least one part, the specification describes how resource state information can be independent of the information that identifies the resource. (See JX-1 at 11:11-15 ("the 'identifiers' refer to at least information that uniquely identifies the resource and information that specifies the update version of the resource" (emphasis added).) Dr. Smith's analysis is conclusory and fails to consider the patent and its claims in any way. The ALJ has no confidence in his interpretation. See Kim v. ConAgra Foods, Inc., 465 F.3d 1312, 1320 (Fed. Cir. 2006) (dismissing conclusory expert testimony of infringement). This contrasts strongly with Dr. Smith's validity testimony where he offered a far

more nuanced and Scrooge-like consideration of what was and was not resource state information. Moreover, on cross examination, Dr. Smith exhibited only the most tenuous grasp of the patent. (Tr. 356:13-357:11.) Considered as a whole, the ALJ gives no weight to his testimony. With only this as its evidence, Microsoft has failed to meet its burden for proving infringement. Therefore, the ALJ finds that none of the asserted claims of the '054 Patent are infringed.

But even if the ALJ found Dr. Smith's testimony to be credible and worthy of consideration, the ALJ finds that Motorola is correct that the accused Sync commands are not resource state information. The ALJ agrees with Motorola's expert, Dr. Locke, that the standard Sync commands (even including the ServerID), in no way, identify the version of the resource at a given time (let alone the version of the resource on the server at the time). (RX-1360C at Q218.) The ALJ agrees with Motorola's expert that the ActiveSync protocol uses XML to define rules for sending specific information about meetings (start time, end time, and location etc.) and these commands are instructions to the client or server about what to do with this information. (RX-1360C at Q221.) A standardized XML command does not provide any information that can identify the version of a resource a resource.¹¹ (RX-1360C at Q222.) The commands identified (even when considered with the ServerID) solely acts to command the client or server to perform an action. (RX-1360C at Q222.) It is entirely inconsistent the ALJ's construction of the term resource state information.

¹¹ The ALJ notes (but does not rely on, because it was not addressed by either party) that the specification clearly discloses that XML commands that can add a new resource (the PUT or POST methods), add part of a resource (the MKCOL method), move a resource (MOVE or COPY methods), or delete a resource (DELETE method) and that include a resource address existed in the prior art. ('069 Patent at 10-11, 15-20; *see also* JX-15 at MSMMOTOITC-VOL53-00567484 (WebDAV spec describing DELETE command).) Moreover, it appears the specification does not in any way consider such commands resource state information and notes the need for resource state information because these commands cannot provide version information that is needed. (*See supra*, at IV.E.)

The ALJ finds that the overwhelming evidence shows that the accused functionality – the combination of the Sync Commands and the ServerID is not "resource state information" within the meaning of the patent.

As for Microsoft's contention that certain arguments with regard to "resource state information" are waived (CRB at 7), the ALJ finds that those arguments were not considered and so Microsoft's arguments are irrelevant.

2. The Preamble is Not A Limitation

Motorola argues that the Accused Products do not meet this limitation in the preamble. (RIB at 25-31.) Because the ALJ has determined that the preamble is not a limitation, this argument is mooted. (See supra at IV.E.2.)

Therefore, the ALJ finds that Microsoft has failed to show by a preponderance of the evidence that the Accused Products infringe claims 11, 13, 14, and 15 of the '054 Patent.

C. The '566 Patent

Microsoft asserts that all of the Motorola Blur Devices, including the Atrix, Backflip, Bravo, Charm, Cliq, Cliq 2, Cliq XT, Defy, Devour, Droid 2, Droid 2 Global, Droid Pro, Droid X, Droid X2, Flipout, Flipside, and Spice; the Google Experience Devices, including at least the Xoom; and any alternative designs infringe claims 1, 2, 5 and 6 of the '566 Patent. (CIB at 35.) MMI has stated that it will not dispute infringement for the '566 Patent. (Tr. 1438:7-24.)

Therefore, the ALJ finds that Microsoft has shown by a preponderance of the evidence that the Motorola Blur Devices and the Google Experience Devices infringe claims 1, 2, 5 and 6 of the '566 Patent. (CX-0974C at Q&A 74-155, CX-1081-2C; CX-1085-6C.)

D. The '352 Patent

Microsoft argues that Motorola's Atrix phone infringes claims 1 and 12 of the '352 Patent. (CIB at 56.) Microsoft argues that the Atrix phone runs Android software, which uses the Linux operating system kernel, which in turn implements a FAT file system that Microsoft alleges infringes the '352 Patent. (CIB at 56-57.) Motorola does not address infringement in its briefs. (See RIB at 166-189; RRB at 82-92.) However, regardless of Motorola's lack of response, Microsoft still must show infringement by a preponderance of the evidence. In its briefs, Microsoft fails to show how the accused products meet every limitation of claims 1 and 12 of the '352 Patent. Rather, Microsoft's entire direct infringement analysis consists of three conclusory sentences:

MMI directly infringes claims 1 and 12 of the '352 patent. MMI directly infringes the '352 patent when it tests all user facing features of the accused products in the U.S. The asserted claims are necessarily infringed when Motorola's built-in and preinstalled user facing applications, including its camera, video, and ringtone applications, save long filenames to FAT-formatted volumes.

(CIB at 57) (citations omitted). Rather than setting forth a full element by element analysis in its brief, Microsoft simply makes conclusory statements and simply cites evidence with no further explanation. This is, quite simply, nothing more than an improper attempt to circumvent the page limitations set by the ALJ for post-hearing briefs. In the ALJ's view, simply making conclusory statements and citing evidence with no explanation fails to constitute "a discussion" of the issue in the post-hearing brief as required by the Ground Rules and is insufficient to carry a party's burden of proof. Therefore, the ALJ finds that Microsoft has failed to show by a preponderance of the evidence that the Motorola Atrix infringes claims 1 and 12 of the '352 Patent.

¹² Allowing Microsoft to simply make conclusory statements and cite to evidence without explanation would render the page limitations, and to a certain extent post-hearing briefing, set by the ALJ meaningless since the parties could simply cite to the evidence rather then make any arguments.

E. The '133 Patent

Microsoft argues that the Motorola Atrix, Backflip, Bravo, Charm, Citrus, Cliq, CliqXT, Cliq2, Defy, Devour A555, Droid, Droid 2, Droid X, Droid 2 Global, Droid Pro, Flipout, Flipside and i1 (the "'133 Accused Products") directly and indirectly infringe claims 1 and 35 of the '133 Patent. (CIB at 80; CX-975C at Q&A 63.) Microsoft argues that these products contain applications that feature context menus that infringe the '133 Patent. (CIB at 80.) Specifically, Microsoft argues that applications providing the context menus include the Contact Manager, Recent Calls list, Text Messaging application and File Manager application. (CIB at 80.)

Motorola argues that the '133 Accused Products do not infringe because they fail to satisfy the retrieving steps, *i.e.*, "retrieving a menu selection relating to a class of object to which the selected computer resource belongs" and "retrieving a menu selection associated with a container in which the selected computer resource resides," and the "displaying upon the display the set of menu selections in a menu positioned in the proximity of a graphical representation of the selected computer resource" elements. (RIB at 160-165.) Motorola further argues that its alternate design also fails to meet the last element of displaying the menu in proximity to the computer resource. (RIB at 166.) MMI does not dispute any other limitation. (*See* RIB at 160-166.)

1. "a menu selection relating to a class of object to which the selected computer resource belongs" and "a menu selection associated with a container in which the selected computer resource resides" (claim 1)

"a menu selection, related to the class of objects to which the selected object belongs" and "a menu selection that is associated with the container in which the selected object is stored to the menu" (claim 35)

The ALJ construed "a menu selection relating to a class of object to which the selected computer resource belongs" and "a menu selection, related to the class of objects to which the

selected object belongs" to mean "a choice or option in a menu based upon or determined by the class of objects to which the selected computer resource belongs." (Order No. 6 at 78.) Similarly, the ALJ construed "a menu selection associated with a container in which the selected computer resource resides" and "a menu selection that is associated with the container in which the selected object is stored to the menu" to mean "a choice or option in a menu based upon or determined by the environment or context in which the selected computer resource resides." (Order No. 6 at 81.)

Microsoft argues that the '133 Accused Products meet these limitations because the menu selections in the identified applications "will manipulate" the data or data structure that forms the object or container, respectively. (CIB at 83-84.) Microsoft argues that the identified source code shows this manipulation and, therefore, is a "sufficient basis" for concluding that the selection is 'based' on the object or container. (CIB at 83-84.) MMI argues that that the '133 Accused Products do meet the retrieving steps and that Microsoft's theory of infringement is divorced from the claim construction and the ALJ's interpretation. (RIB at 160-165.) MMI further argues that the context menus on the '133 Accused Products are not positioned in the proximity of the selected menu item. (RIB at 165.)

The ALJ finds that Microsoft has failed to show by a preponderance of the evidence that the '133 Accused Products meet the retrieving limitations of claims 1 and 35. Microsoft's infringement theory rises and falls based on whether the class or container is "manipulated." (See CIB at 82-84.) However, it is not clear from Microsoft's briefs and arguments therein, how "manipulation" provides a "sufficient basis" for showing infringement under the ALJ's claim construction. First, it is not clear in its brief what Microsoft means by the term "manipulation."

Microsoft never explains the meaning of this term in either its initial or post-hearing brief and instead uses it in conclusory sentences that provide no insight:

Each of these menu selections will manipulate the data that forms the object itself. Microsoft has identified the specific source code for each menu selection that manipulates the object as a particular class of object. Because the menu selection manipulates the object as a particular class of object, this is plainly a sufficient basis for concluding that the selection is "based" on the class of the object.

(CIB at 83; see also CIB at 84 using the exact same language for the claim terms "a menu selection associated with a container in which the selected computer resource resides") (internal citations omitted). Microsoft makes a similar conclusory assertion in its reply brief:

In order to determine whether the accused context menus contain menu selections related to the class of the object or to the container in which it resides, Dr. Stevenson analyzed source code to determine how the specific menu selections are implemented. One way that a menu selection is "based upon or determined by" the class of the object is when the selection manipulates the data of the object, using this data as a particular class of object. Similarly, one way that a menu selection is "based upon or determined by" the container is when it manipulates the container of the object to perform its operation. In other words, this distinction is consistent with the ALJ's claim construction and logically used to determine whether a particular menu selection is related to the class of the object or the container.

(CRB at 43.) It is not clear from these arguments how "manipulation" of the object or the container means that the menu selection is "based upon or determined by" the object or container. Furthermore, Microsoft fails to cite where or how this term is used in the '133 Patent. (See generally the '133 Patent.) The rest of Microsoft's argument merely describes the content of the context menu for a specific application in the '133 Accused Products. (Id.) Thus, it is not clear to the ALJ how the ability of "the menu selection [to] manipulate[] the object as a particular class of object [or container]" means that the menu selection is "based upon or determined by" the object or container. Indeed, the ALJ finds that the ability of the menu selection to

"manipulate the data that forms the object itself" or "manipulate[] the data structure which forms the container" has no bearing on how the context menu is generated "based upon or determined by" the class of object or the container. As noted by MMI, such an analysis is flawed since it focuses on what happens *after* the menu selections are retrieved while the claims of the '133 Patent and the ALJ's construction are directed to generating the context menu that is "based upon or determined by" the class of objects or the environment or context of the selected computer resource, which logically must occur *before* the menu selection is retrieved. ('133 Patent at claim 1; Order No. 6 at 73-81; RX-1358C at Q&A 218.)

While the ALJ may have been able to glean the meaning of the term "manipulate" by culling through the record to find out exactly what Microsoft meant, this is no different from incorporating arguments by reference or simply citing testimony with no explanation. The ALJ declines to engage in such an exercise since it would eviscerate the need for any post-hearing briefing if the ALJ were required to "figure out" the parties' argument from the record.

Regardless of the lack of clarity of Microsoft's infringement argument, the ALJ finds that the evidence shows that the '133 Accused Products do not meet the retrieving limitations as construed by the ALJ. The evidence shows that the applications in the '133 Accused Products only operate on a single class of objects. (RX-1358C at Q&A 207.) The application in the '133 Accused Products provides the set of menu selections without regard to the class of objects (since it only operates on a single class of objects) and only changes selections in the context menu based on the container. (RX-1358C at Q&A 207.) The menu selections are "static" and will appear regardless of what object or container has been selected. (RX-1358C at Q&A 17; 211.) Thus, they are not "based upon or determined by" the class of the object or the container

as required by the '133 Patent. Therefore, the ALJ finds that Microsoft has failed to show by a preponderance of the evidence that the '133 Accused Products meet these limitations.

2. "displaying upon the display the set of menu selections in a menu positioned in the proximity of a graphical [visual] representation of the selected computer resource [object]"

Even assuming that the '133 Accused Products meets the retrieving limitations, the ALJ finds that the '133 Accused Products fail to satisfy the "displaying upon the display the set of menu selections in a menu positioned in the proximity of a graphical [visual] representation of the selected computer resource [object]" limitation of claims 1 and 35. Microsoft argues that the '133 Accused Products satisfy this limitation because the menu floats right on top of the selected list item and is therefore in the proximity of the selected list item. (CIB at 84.) Microsoft further argues that the alternate design, where the entire screen is designed to be black with the menu imposed on top of the black screen, still infringes the asserted claims because "the location of the selected computer resource, as it was on the screen, has not changed." (CIB at 88-89.) MMI argues that the menu will appear in the same location regardless of the selection and that proximity by mere happenstance does not satisfy this limitation. (RIB at 165.) Regarding the alternate design, MMI argues that the menu cannot be displayed in proximity to the selected object because the selected object is no longer on the screen. (RIB at 166.)

The ALJ finds that the evidence shows that the context menu in the '133 Accused Products is not "positioned in the proximity" of the selected computer resource since the context menu is always centered on the screen. (RX-1358C at Q&A 225.) Similarly, for MMI's alternate design, the context menu is

[RX-1358C at Q&A 232-233.] The claim language requires

that the menu be "positioned in proximity" of the selected computer resource. For the Accused

'133 Products, the mere chance that the context menu may be close to the selected computer resource is insufficient — indeed, the use of the word "positiong" in light of the specification indicates that the positioning of the context menu to the selected resource is deliberate since it was, according to Microsoft, intended to allow the "user [to access] the context menu without having to move a large distance." (CRB at 44.) A context menu that is always centered, regardless of the location of the selected computer resource would fail to meet this limitation.

require that the context menu be "positioned in the proximity of a graphical representation of selected computer resource" and not that the context menu be "positioned in the proximity" of where a selected computer resource used to be located.

Therefore, the ALJ finds that Microsoft has failed to show by a preponderance of the evidence that the '133 Accused Products infringe claims 1 and 35 of the '133 Patent.

3. Dependent claims 2 and 36

Claims 2 and 36 depend on independent claims 1 and 35, respectively. Inasmuch as each claim limitation must be present in an accused device in order for infringement to be found (either literally or under the doctrine of equivalents), a device cannot infringe a dependent claim if it does not practice every limitation of the independent claim from which it depends. *See Warner-Jenkinson Co.*, 520 U.S. at 40; *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1359 (Fed. Cir. 2007). Furthermore, the Federal Circuit explained that:

One may infringe an independent claim and not infringe a claim dependent on that claim. The reverse is not true. One who does not infringe an independent claim cannot infringe a claim dependent on (and thus containing all the limitations of) that claim.

Wahpelton Canvas Co., Inc. v. Frontier, Inc., 870 F.2d 1546, 1552 (Fed. Cir. 1989).

As set forth above, the Accused Products do not infringe claims 1 and 35. Therefore, because the Accused Products do not infringe independent claims 1 and 36, they cannot infringe dependent claims 2 and 36.

F. The '910 Patent

Microsoft asserts that at least Motorola's Atrix, Backflip, Bravo, Charm, Citrus, Cliq, CliqXT, Cliq2, Defy, Devour, A555, Droid, Droid Pro, Droid X, Droid 2, Droid 2 Global, Flipside, Flipout, and i1 infringe claims 1-3, 8 and 10 of the '910 Patent ("the '910 Accused Products).¹³ (CX-975C at Q63.)

The main point of contention regarding infringement for this patent centers on whether the Accused Products meet the "replacing" limitation. (*See* RIB at 117-21; CIB at 107-08; CRB at 50-52; RRB at 55-56.) The parties also dispute whether some of the accused products meet the element of claim 8 of "wherein the pre-populated data-field includes at least one of a home phone number, a work phone number, and mobile phone number." (RIB at 122-23; CRB at 52-53.) The parties also dispute whether the accused products meet the element of claim 10 that requires "displaying a context menu" having an "option[] . . . to update a contact card in the contact database." (RIB at 121-22.) Finally, the parties dispute whether the Droid X Build infringes any of the asserted claims of the '910 Patent. The parties do not dispute that the '910 Accused Products meet the other limitations of the asserted claims and Motorola did not address any of these other limitation in its briefs. (RIB at 115-124; CIB at 102-111; RRB at 54-56; CRB at 50-53.)

¹⁴ The parties do not dispute that the Backflip, Cliq, and CliqXT meet this limitation. (RIB at 122 n.27.)

¹³ Microsoft did not identify the products it was accusing of infringement of the '910 Patent in its brief. This list is based on the testimony of Dr. Stevenson, Microsoft's expert. (CX-975C at Q63.)

1. Replacing

Motorola disputes whether the "replacing" limitation found in all of the asserted claims is met by the '910 Accused Products. Motorola argues that "[r]eplacing an existing contact card in a contact database requires more than updating a particular field of the existing contact card in the contact database." (RIB at 117.) Motorola argues that the ALJ previously rejected Microsoft's efforts to "equate mere updating of a contact card or changing information in a contact card with replacing the contact card." (RIB at 117 (citing Order No. 6 at 70); RRB at 55.) Motorola argues that Microsoft's infringement argument is in essence based on Microsoft's rejected constructions for "replacing the existing contact card in the contact card database," and "an existing contact card is replaced with the updated contact card." (RIB at 117.) Motorola argues that claim 1 recites separate "updating" and "replacing" steps and Microsoft is "attempt[ing] to conflate 'updating' information in an existing card with 'replacing' an existing contact card, which are separate claim elements." (RRB at 55.) Motorola also argues that the ALJ previously held that "changing information in an existing contact card is not sufficient to meet the 'replacing'/'replaced' limitations because it 'would effectively eliminate the phrases replacing the existing contact card and an existing contact card is replaced from the claims." (RRB at 55.) Motorola further argues that the Microsoft's infringement theory would re-write the claims. (RRB at 56.)

Motorola argues that its expert and the named inventor (at his deposition) agreed that "updating" can either be done by updating only the particular fields that were changed or by replacing all of the fields of the existing contact card. (RIB at 118.) Motorola argues that Microsoft does not dispute that the accused products only update a particular field of the existing contact card in the contact database. (RIB at 119-120.)

Microsoft argues that Motorola's software meets this limitation. Microsoft argues that once the user clicks save, the software compares the fields of the updated card that is shown on the screen to the existing card that is stored in the database. (CIB at 106 (citing CPX-263C; CX-975C at Q432, 459-464).) Microsoft argues that if the software determines that the card contains a new phone number, it uses that information to update the existing card, thereby replacing the existing card with an updated card. (CIB at 106-107.) Microsoft argues that its expert, Dr. Stevenson, showed that the plain and ordinary meaning of "replacing" (the ALJ's construction of the term) is such that, after the replacement, the contact database includes the updated contact card but does not include the old contact card. (CIB at 107.) Microsoft argues that the inventor Jason Fuller's testimony is consistent with this understanding. (CIB at 107 (citing Tr. 668:21-23).)

Microsoft agrees with Motorola that the accused devices merely "modifies fields of the existing card to include updated information." (CIB at 107 (citing CX-975C at Q432; RX-1356C at Q252).) Microsoft argues that "the existing card is replaced because it is no longer present in the database." (CIB at 107.) Microsoft argues that Motorola's "distinction between overwriting every field of an existing contact card... and updating fields of an existing contact card with new information... is not supportable." (CIB at 107.) Microsoft argues that "[i]n both situations, the exact same updated card can be found in the database after the 'replace' operation and the original card is no longer present." (CIB at 107-108.) Microsoft cites testimony of one of the named inventors, Jason Fuller (at the hearing), where he asserts that Motorola's situation is "replacing." (CIB at 108 (citing Tr. 692:9-693:9).)

The ALJ finds that Microsoft has failed to prove that Motorola's accused products meet the "replacing" limitations of the claims. Microsoft's argument is essentially old wine in new

bottles. Microsoft argued at claim construction that "replacing" included updating fields in the "contact card." The ALJ rejected that argument and Microsoft's constructions. Microsoft now argues that somehow a new card is created because data is added or updated and the exact version (with the old information) of the old card no longer exists. But the ALJ does not agree. The claims require replacing the "contact card" not updating particular fields in the card. The parties agree that Motorola's program merely saves new information to an existing contact card. (CIB at 107; RRB at 55.) It does not "replace" the old card in the database with a new card.; (RX-1356 at Q&A 50-51, 54.) Microsoft's argument that a "new" card is created just by adding information to an existing card is inconsistent with the plain meaning of "replacing." For example, one would not say that you replaced a card in the Rolodex® when you merely added a notation to an existing card. However, if you typed an entirely new card and added it to the Rolodex®, then you would say it is replaced. As the ALJ previously held, this does not require also deleting the old card, no additional step is required. This is consistent with the limited disclosure of "replacing" in the specification which provides that the "the previous contact card is deleted and replaced by the updated contact card." This does not describe updating fields on the existing card as replacing, but creating an entirely new card to "replace" the old card. Accordingly, the ALJ finds that the '910 Accused Products do not meet the "replacing"/"replaced" limitation present in all of the claims and finds that the '910 Accused Products do not infringe any of the asserted claims of the '910 Patent for that reason.

2. "Wherein the Pre-Populated Data-Field Includes at Least One of a Home Phone Number, a Work Phone Number, and a Mobile Phone Number"

Motorola argues that the '910 Accused Products (with the exceptions of the Backflip, Cliq, CliqXT) do not meet the limitation of claim 8 that for a new contact, "the pre-populated

data-field includes at least one of a home phone number, a work phone number, and a mobile phone number." (RIB at 122.) Motorola argues that the accused products do not pre-populate in a field for home, work, or mobile number. Rather, when a user selects a "New" contact, the number is pre-populated into an "Other" data-field. (RIB at 122 (citing RX-1356C at Q256; CX-975C at Figs. 8-1, 8-2).)

Microsoft does not dispute Motorola's point that the "Other" field is populated in the accused devices (with the exceptions of the Backflip, Cliq, CliqXT). Microsoft argues that "[t]he list of labels associated with the data field, however, includes "home," "work," and "mobile." (CIB at 110.) Microsoft argues that "[t]he user can select one of those choices by tapping on the label." (CIB at 110.) Microsoft argues that, therefore, "if the user makes a request to save a home phone number from the call log as a new contact, the Accused Devices will pre-populate the home phone number into a data field." (CIB at 110.) Microsoft argues that "[t]his ["Other"] data field then includes a home phone number and the user can update the label associated with the data field to reflect the fact that the phone number is a 'home' phone number." (CIB at 110.) Microsoft further argues that "[i]t is uncontroverted . . . that what goes into the field is a home, work, or mobile number and that the limitation is met." (CRB at 52.) Microsoft argues that "[w]hen the name is assigned, the phone number is not moved to another field, but rather it remains in exactly the same field, albeit with a new designation." (CRB at 52.53.)

The ALJ finds that the '910 Accused Products (with the exception of the Backflip, Cliq, CliqXT) do not infringe claim 8 because the pre-populated data field is not one of a home phone number, a work phone number, or a mobile phone number. Microsoft's first argument is that because the information that is populated into the data field is a home phone number, a work

phone number, or a mobile phone number this limitation is met. However, such a reading would directly contradict the language of the claims. The claim is describing the "data field" not the information that is populated into it. (See JX-20 at 10:14-17 ("the pre-populated data field includes..." (emphasis added)).) This is consistent with claim 1. Claim 1 provides "pre-populating a data field . . . with call information." Thus, the claim inherently distinguishes between the "call information" and the data field that it populates. Microsoft cannot blur the line between the "call information" and the "data field."

As for Microsoft's second argument that the user can re-define the data field as either the "home phone number, work phone number, or mobile phone number." This is inconsistent with the claim language. As for the claim language, the claim requires that the field be either the home phone number, work phone number, or mobile phone number, not that it be possible for the user to re-define the field as one of those. Claim 1 claims pre-populating data fields with call information, which offers significant time savings over entering the data manually. Claim 8 takes those time savings a step further by pre-populating the phone number into the proper field. Indeed, the specification explains the number of different data fields that are possible: "These data fields may include several phone numbers, e-mail addresses, pager number, contact name, and other call information related to the contact." (JX-20 at 5:41-44.) In Motorola's phones (with the exception of the Backflip, Cliq, CliqXT) the user is presented with a number of options that include almost all of the possible fields identified by the patent (plus several others (home fax number, work fax number) that are not). The ALJ notes that the accused configuration would still easily meet the requirement of claim 1 of prepopulating the data filed of the new contact card. Accordingly, the ALJ finds that the '910 Accused Products that pre-populate the "Other" field that the user can redefine a number of other fields including home, work, and

mobile number, does not meet claim 8's requirement that the pre-populated data field includes at least one of a home phone number, a work phone number, and a mobile phone number.

3. "Displaying a context menu" having an "option[] . . . to update a contact card in the contact database"

Claim 10 requires displaying a "context menu" "in response to a user selection of an entry in the call log" and that this menu include an "option[]... to update a contact card in the contact database with call information from the selected entry in the call log." Motorola argues that this requires that "when the user selects the phone number in the call log, the context menu displayed in response must include an 'option[]... to update a contact card in the contact database." (RIB at 121.) Motorola argues that the Droid 2 does not function in this manner. Motorola argues that "[w]hen a number is selected in the call log, the user is not given the option to update a contact." (RIB at 121.) Motorola argues that the menu in the Droid 2 simply gives the user the option to "Add to contacts." Thus, "Menu 1 is displayed 'in response to a user selection of an entry in the call log,' but the menu does *not* contain an option 'to update a contact card in the contact card database with call information from the selected entry in the call log." (RIB at 121-22.)

Microsoft responds that "[t]he fact that the Accused Devices present additional options such as "New" after selecting "Add to contacts" does not change the fact that "Add to contacts" is the option a user would select to update an existing contact card." (CIB at 111.) Microsoft further argues that because "Claim 10 includes the open transitional phrase 'comprising' that permits inclusion of additional steps . . . [t]herefore, the ALJ should reject [Motorola's] noninfringement argument directed at claim 10." (CRB at 53 (citation omitted)).

The ALJ finds that the '910 Accused Products do not infringe claim 10 of the '910 Patent.

Microsoft has identified a menu that has an option to "Add to contacts" and then offers

additional options. (See CIB at 111.) For most of the '910 Accused Products, those options consist of adding a new card and updating an existing card. In the case of the Droid and i1, the phone presents the entire contact list with an entry at the top for a new contact and the entirety of the existing contacts if the contact information is meant to be saved to an existing contact.

The patentees were extremely specific in claim 10 as to what was required in the context menu. It must have a plurality of options. And one of those must be to "update" a contact card. The accused context menu simply does not offer an "update" option to the user. It offers one option that includes both saving a new contact and updating existing contacts. Microsoft argues that this is irrelevant because the claim uses the term "comprising" in the preamble, which allows the inclusion of additional steps in the method. See Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 1271 (Fed Cir. 1986) ("comprising" opens a method claim to the inclusion of steps in addition to those stated in the claim). However, "[t]he presumption raised by the term 'comprising' does not reach into each of the \(\Pi\) steps to render every word and phrase therein open-ended – especially where . . . the patentee has narrowly defined the claim term it now seeks to have broadened." Dippin' Dots, Inc. v. Mosey, 476 F.3d 1337, 1343 (Fed Cir. 2007); see also Spectrum Int'l, Inc. v. Sterilite Corp., 164 F.3d 1372, 1380 (Fed. Cir. 1998) ("Comprising' is not a weasel word with which to abrogate claim limitations."). Here, in claim 10, the patentees chose to define the option as "updating." In contrast, in claim 1, the patentees chose a much broader option "receiving a request to save call information related to a phone call." Thus, the patentees knew how to define the option much more broadly, but the patentees chose just to define the option as "update a contact card." In effect, Microsoft seeks to rewrite claim 10 to state "one of the options being to [enable] update[ing]. . . ." However, "comprising" will not get Microsoft there. This reading is consistent with the specification. The specification

distinguishes between a context menu option that allows updating a card and one that simply allows saving of the contact information. (Compare 7:25-29 ("In one embodiment of the present invention, when the user selects an entry in the call log a context menu is displayed to the user. The context menu is configured to provide a user selectable choice to create a new contact, or to update an existing contact in the contact database.") with 7:42-45 ("In yet another embodiment of the present invention, a request to save call information may be initiated through a user selection of a SAVE command, such as during a current incoming or outgoing call."). The literal scope of the claim requires one of the options to be "updat[ing] a contact card." The menu identified by Microsoft does not include that option. Accordingly, claim 10 is not infringed by the '910 Accused Products.

4. New Droid X Build

Motorola argues that the new Droid X	X build does not infringe any of the claims because
this version of the software	
	. (RIB at 123.) Motorola argues that the
new Droid X build	
	. (RIB at 123 (citing RX-1356C at
Q259-64).) Motorola points to screen shots sh	howing how the new Droid X build implements this
design. (RIB at 123-24.) Motorola argues th	at

(RX-1356C at Q263.)
Microsoft offers no counter arguments in its briefs. Accordingly, this issue was waived.
Even assuming that Microsoft had not waived any arguments against Motorola's
noninfringement arguments for the New Droid X Build (which the ALJ finds it has), Microsoft
has failed to carry its burden of proof. Dr. Stevenson's testimony is unpersuasive because his
testimony lacks any support or citation to the record to establish his assertions about
The ALJ did review the rebuttal witness
statement of Dr. Stevenson, which does contain testimony about the Droid X New Build. (See
CRX-3C at Q213-214.) Dr. Stevenson testified that

(CRX-3C at Q214.) But Dr. Stevenson fails to cite any evidence in support of this assertion. Because of this failure, the ALJ finds that it cannot rebut the unimpeached testimony of Dr. Alexander. Therefore, Microsoft has not shown by a preponderance of the evidence that the new Droid X build meets the "replacing" limitation that is present in all of the asserted claims of the '910 Patent. and Motorola's products using the new Droid X build do not infringe the '910 Patent.

5. Dependent claims 2 and 3

Claims 2 and 3 depend on independent claim 1. Inasmuch as each claim limitation must be present in an accused device in order for infringement to be found (either literally or under the doctrine of equivalents), a device cannot infringe a dependent claim if it does not practice every limitation of the independent claim from which it depends. *See Warner-Jenkinson Co.*, 520 U.S. at 40; *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1359 (Fed. Cir. 2007). Furthermore, the Federal Circuit explained that:

One may infringe an independent claim and not infringe a claim dependent on that claim. The reverse is not true. One who does not infringe an independent claim cannot infringe a claim dependent on (and thus containing all the limitations of) that claim.

Wahpelton Canvas Co., Inc. v. Frontier, Inc., 870 F.2d 1546, 1552 (Fed. Cir. 1989).

As set forth above, the Accused Products do not infringe claim 1. Therefore, because the Accused Products do not infringe independent claim 1, they cannot infringe dependent claims 2 and 3.

G. The '762 Patent

Microsoft asserts that at least Motorola's Atrix, Citrus, Droid, Droid Pro, Droid X2, Droid X, Droid 2, Droid 2 Global, Droid Bionic, Droid 2 R2-D2, Spice, Bravo, Charm, Cliq 2, Defy, Flipside, Flipout, and 3G Xoom infringe claims 1-9, 15 and 16 of the '762 Patent. (CIB at 129.)

The main point of contention regarding infringement for this patent centers on whether the Accused Products meet the "hardware independent" limitation. (See RIB at 90-96; CIB at 130-135; CRB at 59-64; RRB at 40-44.) The parties also dispute whether the Category 2

¹⁵ Dr. Olivier divided the products accused of infringing the '762 Patent into two categories: Category 1 (which have a driver architecture that is generally used on Motorola's Android products with a Qualcomm modem) and Category 2 (which have a driver architecture that is generally used on Motorola's Android products that do not use a Qualcomm modem). See CDX-31 (which provides a list of the accused products assigned to the appropriate category).

products meet the "standard telephony radio commands" limitation of claims 1-6. The parties do not dispute that the Accused Products meet the other limitations of the asserted claims and did not address any of these other limitation in their respective briefs. (RIB at 95-98; CIB at 138; RRB at 45; CRB at 64-65.)

1. Hardware Independent

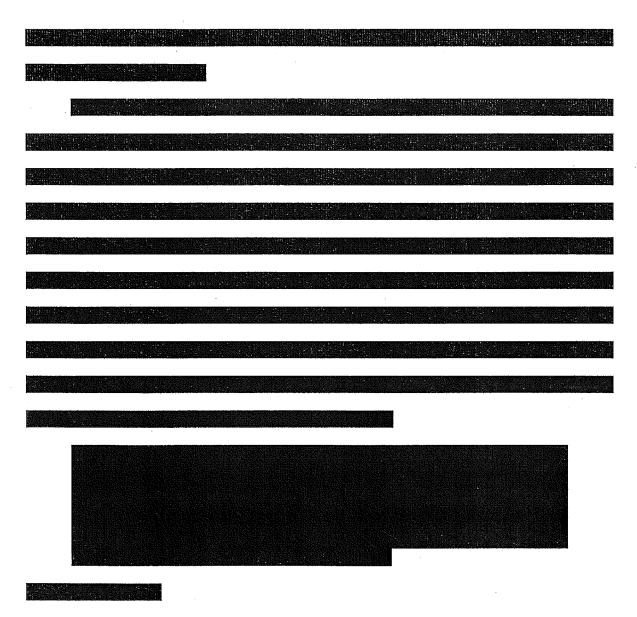
In order to prove infringement, Microsoft must prove by a preponderance of the evidence that the Accused Products have a proxy layer that is hardware independent. (CIB at 129-38; CRB at 57-64.) Motorola argues that none of the accused products infringe the '762 Patent because none of the proxy layers in these products are "hardware independent" as required by all of the asserted claims. (RIB at 95-96; RRB at 40-45.)

The ALJ finds that Microsoft has failed to show that the accused products meet this limitation of the claims. The parties have agreed that "hardware independent" means "without regard to a specific hardware implementation." (CIB at 124; RIB at 91.) As the ALJ discussed above, this does not mean that the proxy layer is completely isolated from the hardware and there can be modifications of the proxy layer for different hardware, but it does mean that the proxy layer is independent of the network characteristics of the hardware.

Microsoft's expert, Dr. Olivier, has various contentions for what in the accused Motorola products constitutes the "proxy layer" or "proxy" depending on the precise claim at issue (CX-973C at Q88; Q178.) Microsoft argues that these accused features can satisfy the requirement that the "proxy layer" or "proxy" be "hardware independent" because

¹⁶ The parties raised no arguments regarding the implication of this difference for the different claims in the '762 Patent in any of the briefs. In fact, their analysis in their briefs does not draw any distinctions for the different claims. Accordingly, the ALJ does not address such distinctions and considers only the arguments raised in the parties' briefs.

(CIB at 133.) Microsoft also argues that
Motorola's argument that changing the PreferredNetworkMode requires making changes to the
proxy layer is incorrect because
. (CIB at 132-33; CRB at 60-
62.)
Motorola argues that simply because source code exists does not mean that it is
necessarily compiled and available for use by the device. (RIB at 95-96.) Motorola's expert, Dr.
Alexander, explained that the components Dr. Olivier identified are part of the "Android
Telephony Framework." (RX-1355C at Q111.) Dr. Alexander testified that



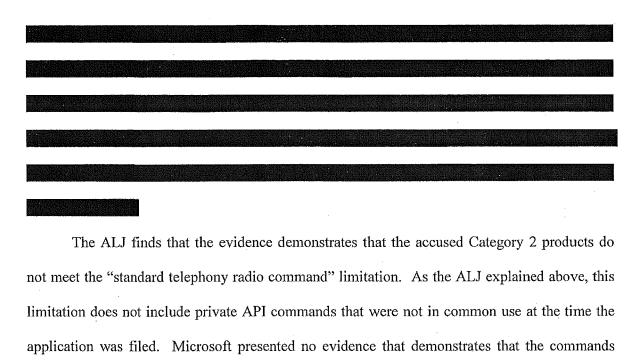
The ALJ finds that Microsoft's arguments are unpersuasive. The evidence clearly shows that Android uses (RX-1355C at Q113-Q115.) Motorola presented specific evidence that the stack that is built and used by the device varies depending on the "PreferredNetworkMode" that is selected. (RX-1355C at Q113-Q115.) Setting aside whether the changes that are necessary to alter the "PreferredNetworkMode" are significant or

not, the ALJ finds that the evidence shows that the changes required in re-compiling and re-

building the code are significant. Moreover, the evidence demonstrates that The ALJ finds that the evidence presented does not support Microsoft's argument that there is infringement simply because The presence of software code does not mean it is actually used to create the claimed "abstraction layer" or "proxy" or "proxy layer." (See RX-1355C at Q115-20.) Microsoft's expert acknowledged as much by admitting the only disagreement was that "the changes Dr. Alexander describes . . . relate to network independence, not hardware independence." (CX-973C at 134.) As the ALJ explained above, Microsoft's efforts to create a distinction between so-called "network independent" and "hardware independent" has no support Even considering the flexibility that the ALJ allowed for in hardware in the patent. independence, the Motorola accused devices fall far outside the hardware independent limitation. Instead, the Android architecture, with its epitome of hardware dependent software. Accordingly, Microsoft has failed to show that this limitation is met and has failed to prove infringement of the '762 Patent.

2. Standard Telephony Radio Command

As discussed above, the ALJ finds that "standard telephony radio command" is accorded its plain and ordinary meaning of a "telephony command in common use at the time of the filing of the patent. Motorola argues that the accused non-Qualcomm (Category 2) products do not include a driver that generates a "standard telephony radio command." Microsoft argues that the Category 2 products meet this claim limitation because



Accordingly, the Category 2 products also do not infringe for this reason.

Instead, the evidence shows that these commands are

3. Dependent claims 2 through 6, 8 and 16

were in common use at the time.

Claims 2 through 6, 8 and 16 are dependent claims. Inasmuch as each claim limitation must be present in an accused device in order for infringement to be found (either literally or under the doctrine of equivalents), a device cannot infringe a dependent claim if it does not practice every limitation of the independent claim from which it depends. *See Warner-Jenkinson Co.*, 520 U.S. at 40; *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1359 (Fed. Cir. 2007). Furthermore, the Federal Circuit explained that:

One may infringe an independent claim and not infringe a claim dependent on that claim. The reverse is not true. One who does not infringe an independent claim cannot infringe a claim dependent on (and thus containing all the limitations of) that claim.

Wahpelton Canvas Co., Inc. v. Frontier, Inc., 870 F.2d 1546, 1552 (Fed. Cir. 1989).

As set forth above, the Accused Products do not infringe any of the independent claims 1, 7 and 15. Therefore, because the Accused Products do not infringe independent claims 1, 7 and 15, they cannot infringe dependent claims 2 through 6, 8 and 16.

H. The '376 Patent

Microsoft has accused various Motorola mobile devices of infringing claims 10, 11, 12, and 13 of the '376 Patent. These devices include: Atrix, Backflip, Bravo, Charm, Citrus, Cliq 2, Cliq XT, Cliq, Defy, Devour, Droid 2 Global, Droid 2, Droid Pro, Droid 2 R2-D2, Droid X2, Droid X, Droid, Flipout, Flipside, i1, Spice, Droid Bionic, i886, and Xoom (collectively, "'376 Accused Products"). (CIB at 171-72.)

Microsoft and Motorola dispute whether the '376 Accused Products meet each and every limitation of the asserted claims of the '376 Patent. Specifically, they dispute whether the '376 Accused Products contain the following limitations required by the asserted claims: (1) a "notification broker"; (2) "state properties" that are modified by different components; and (3) client applications that register with the notification broker. (See RIB at 59-67; CRB at 77-80.)

Microsoft asserts that the '376 Accused Products meet each and every limitation of the asserted claims and, as such, literally infringe the '376 Patent. (CIB at 171-72.) The ALJ finds that Microsoft has failed to show by a preponderance of the evidence the '376 Accused Products meet each and every limitation of independent claim 10. Therefore, the '376 Accused Products do not literally infringe the '376 Patent. Specifically, Microsoft has failed to show that the '376 Accused Products contain a "notification broker" or "client applications" as required by claim 10.

1. "notification broker"

The '376 Accused Products fail to practice this limitation of claim 10 requiring "a notification broker on the mobile device that is coupled to the data store, the notification list, and the clients, wherein the notification broker, includes functionality configured to perform the following actions" The ALJ construed the term "notification broker" to mean "an underlying driver responsible for, at least, adding, updating, and removing data from a data store." (Order No. 6 at 57.) As discussed above, an "underlying driver" must access the identified data store directly to perform the required actions. (Supra IV.D.)

Microsoft's expert, Dr. Olivier, points to the RAM memory within the '376 Accused Products as the "data store" (CX-973C at Q289) and "the ActivityManagerService, PackagerManagerService, and their related services" as the "notification broker" (CX-973C at Q314-15). Microsoft does not make any argument in its post-hearing briefing that the identified services access any data store other than the identified RAM memory. Instead, Microsoft argues that the identified services are an underlying driver because they access the RAM directly. (CRB at 78.) Motorola argues that the accused notification broker is not an underlying driver because the identified services constitute "higher level software" that can only write to or read from the RAM through "many other software layers, including the operating system kernel." (RIB at 62-63.)

The ALJ finds that the identified services are not an "underlying driver" because they do not access and perform the required actions directly on the only identified data store, the RAM memory. The ALJ finds Microsoft's argument that the identified services "access[] the data

¹⁷ Microsoft argues that this argument was not disclosed prior to trial and should be stricken. (CRB at 77.) Microsoft did not object during the hearing when Motorola's attorney cross-examined Microsoft's expert on the issue of whether or not the accused notification broker was an "underlying driver" for RAM. (*See* Tr. 1291:7-1293:25.) Accordingly, the ALJ finds that Motorola's arguments may be properly considered.

store 'directly'" unpersuasive. (CRB at 78.) Microsoft relies on Dr. Olivier's testimony that "when you're writing a variable, you're writing it to – to RAM directly" to support its argument. (CIB at 175; Tr. 1289:25-1290:8.) Dr. Olivier, however, subsequently testified that the Linux kernel and "different individual drivers below" the identified services exist to communicate with RAM. (Tr. 1293:17-20.) Dr. Olivier also admitted that to access the RAM, the identified services must go through various software layers that have not been identified as part of the notification broker. (Tr. 1293:8-25.) The ALJ finds that the identified services do not write to RAM directly if they depend on other intermediary software to access and communicate with RAM. Thus, the ALJ finds Microsoft's contention that the identified services access the data store "directly" unpersuasive.

The ALJ finds that none of the '376 Accused Products meet the notification broker limitation because the identified services are not an underlying driver capable of accessing or managing the identified data store. Microsoft has failed to show by a preponderance of the evidence that the identified services are an underlying driver rather than high-level software that can only manage and access the RAM through additional underlying components. Microsoft's expert has not identified any components capable of managing or accessing the RAM directly to, at least, add, update, and remove data as part of the notification broker. (Tr. 1289:25.) Accordingly, Microsoft has failed to show that the '376 Accused Products include a "notification broker" as required by claim 10.

2. "client applications on the mobile device"

The ALJ finds that the Accused '376 Products do not meet this claim limitation because the client applications identified by Dr. Olivier's infringement analysis "can be the same thing as

the broker, notification broker." ¹⁸ (Tr. 1377:1-5.) For example, the battery service Dr. Olivier identified as a client application is later identified as a component of the notification broker. (CX-973C at Q315; Tr. 1376:15-20.) Dr. Olivier himself indicates that clients are not the same thing as the notification broker. (Tr. 1299:4-12.) Dr. Olivier testified that "[t]he clients register with the notification broker. They're two different things." (Tr. 1301:7-12.)

The intrinsic evidence supports this understanding. Different words used in patent claims presumably have different meanings. *E.g.*, *Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 807 (Fed. Cir. 2007). The patent claims here require that the notification broker be "coupled to . . . the clients." (JX-8, 80:31-35.) The specification makes clear that "clients register with a notification broker" and "the notification broker determines which clients to notify of the state change and provides the client with a notification regarding the change." (JX-8 at 2:13-17.) Thus, an identified client application cannot also be the "notification broker."

Microsoft argues that a single component may have functionality related to both a "notification broker" as well as a "client application." (CRB at 78.) The ALJ finds this argument unpersuasive. The ALJ construed "notification broker" to be an "underlying driver." A component cannot simultaneously be both a higher-level client application as well as an underlying driver in the system. As such, the ALJ finds that Microsoft has failed to show that the '376 Accused Products meet this limitation.

3. Dependent claims 11, 12 and 13

Claims 11, 12, and 13 depend on independent claim 10. Inasmuch as each claim limitation must be present in an accused device in order for infringement to be found (either

¹⁸ Microsoft contends that their infringement theory is not contingent on the services that made up the notification broker being client applications. (CRB at 78.) Microsoft's conclusory statement that various client applications "are never characterized as components of the identified notification broker" is insufficient to meet Microsoft's burden in proving infringement, especially in light of Microsoft's expert's testimony that under his infringement analysis, client applications can also constitute the notification broker.

literally or under the doctrine of equivalents), a device cannot infringe a dependent claim if it does not practice every limitation of the independent claim from which it depends. *See Warner-Jenkinson Co.*, 520 U.S. at 40; *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1359 (Fed. Cir. 2007). Furthermore, the Federal Circuit explained that:

One may infringe an independent claim and not infringe a claim dependent on that claim. The reverse is not true. One who does not infringe an independent claim cannot infringe a claim dependent on (and thus containing all the limitations of) that claim.

Wahpelton Canvas Co., Inc. v. Frontier, Inc., 870 F.2d 1546, 1552 (Fed. Cir. 1989).

As set forth above, the Accused Products do not infringe independent claim 10. Therefore, because the Accused Products do not infringe independent claim 10, they cannot infringe dependent claims 11, 12, and 13.

I. Induced Infringement

Microsoft argues that in addition to MMI's direct infringement of the asserted patents, MMI also induces infringement of the asserted claims. (CIB at 3.) Microsoft argues that MMI encourages direct infringement of Microsoft's patents through its user manuals that instruct end users to use the products in an infringing manner. (CIB at 3.) Microsoft further argues that MMI had knowledge and notice of the asserted patents as early as the service of the Complaint. (CIB at 3.)

MMI argues that Microsoft has failed to show that MMI has the requisite intent to induce infringement. (RRB at 95.) MMI argues that in light of the Supreme Court's decision in *Global-Tech Appliances v. SEB SA*, MMI's knowledge of the contentions in this investigation does not rise to the level of knowledge as set forth by the Supreme Court. (RRB at 96.)

The ALJ found that MMI directly infringed the '566 Patent. The ALJ finds, however, that Microsoft has failed to show that MMI induces infringement of the '566 Patent under the

Supreme Court's new standard in *Global-Tech Appliances v. SEB SA*, 131 S. Ct. 2060 (2011). In *Global-Tech*, the Supreme Court held that "induced infringement under § 271(b) requires knowledge that the induced acts constitute patent infringement." *Id.* at 2068. The Supreme Court further held that such "knowledge" can be inferred under the doctrine of willful blindness, which requires (1) that the defendant subjectively believe that there is a high probability that a fact exists and (2) the defendant took deliberate actions to avoid learning of that fact. (*Id.* at 2069-2070.) Here, Microsoft has failed to show that MMI had the requisite "knowledge". Microsoft argues that MMI's "knowledge" stems from being on notice of the asserted patents and Microsoft's infringement theories "at least as early of [sic] the service of Microsoft's Complaint in this Investigation," yet continues to induce its customers to infringe through its user manuals. (CIB at 3.) The ALJ finds that this fails to rise to the willful blindness standard set by the Supreme Court. While MMI was likely aware of Microsoft's patents, Microsoft fails to present any evidence that MMI "deliberately took actions to avoid learning of that fact." Thus, the ALJ finds that Microsoft has failed to show that MMI had "knowledge" that the induced act constitutes patent infringement.

The ALJ found that Respondents did not infringe claims 10, 11, 12 and 13 of the '376 Patent; claims 1 and 12 of the '352 Patent; claims 1 and 35 of the '133 Patent; claims 1-9, 15 and 16 of the '762 Patent; claims 1-3, 8, and 10 of the '910 Patent; and claims 11 and 13-15 of the '054 Patent. Consequently, as a matter of law, MMI cannot indirectly infringe claims 10, 11, 12 and 13 of the '376 Patent; claims 1 and 35 of the '133 Patent; claims 1-9, 15 and 16 of the '762 Patent; claims 1-3, 8, and 10 of the '910 Patent; and claims 11 and 13-15 of the '054 Patent without a finding of direct infringement. *See Broadcom Corp. v. Qualcomm, Inc.*, 543 F.3d 683, 697 (Fed. Cir. 2008) ("In order to prevail on an inducement claim, the patentee must establish

'first that there has been direct infringement, and second that the alleged infringer knowingly induced infringement and possessed specific intent to encourage another's infringement." (citing ACCO Brands, Inc. v. ABA Locks Mfr. Co., 501 F.3d 1307, 1312 (Fed. Cir. 2007) (quoting Minn. Mining & Mfg. Co. v. Chemque, Inc., 303 F.3d 1294, 1304-05 (Fed. Cir. 2002); see also Dynacore Holdings Corp. v. U.S. Philips Corp., 363 F.3d 1263, 1272 (Fed.Cir.2004) ("Indirect infringement, whether inducement to infringe or contributory infringement, can only arise in the presence of direct infringement.").

Having made the foregoing findings on whether the accused products infringe the asserted patents, the ALJ finds that the disposition of this material issue, *i.e.*, infringement, satisfies Commission Rule 210.42(d).¹⁹ The ALJ's failure to discuss any matter raised by the parties, or any portion of the record, does not indicate that it has not been considered. Rather, any such matter(s) or portion(s) of the record has/have been deemed immaterial.

VI. VALIDITY

A. Background

One cannot be held liable for practicing an invalid patent claim. *See Pandrol USA, LP v. AirBoss Railway Prods., Inc.*, 320 F.3d 1354, 1365 (Fed. Cir. 2003). However, the claims of a patent are presumed to be valid. 35 U.S.C. § 282; *DMI Inc. v. Deere & Co.*, 802 F.2d 421 (Fed. Cir. 1986). Although a complainant has the burden of proving a violation of section 337, it can rely on this presumption of validity.

¹⁹ Commission Rule 210.42(d) states:

⁽d) Contents. The initial determination shall include: an opinion stating findings (with specific page references to principal supporting items of evidence in the record) and conclusions and the reasons or bases therefor necessary for the disposition of all material issues of fact, law, or discretion presented in the record; and a statement that, pursuant to §210.42(h), the initial determination shall become the determination of the Commission unless a party files a petition for review of the initial determination pursuant to §210.43(a) or the Commission, pursuant to §210.44, orders on its own motion a review of the initial determination or certain issues therein. (emphasis added).

Motorola has the burden of overcoming the presumption that the asserted patents are valid and must prove invalidity by clear and convincing evidence in order to do so. *Technology Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1327 (Fed. Cir. 2008) (stating, "When an alleged infringer attacks the validity of an issued patent, [the] well-established law places the burden of persuasion on the attacker to *prove invalidity by clear and convincing evidence.*" (emphasis added)); *see also Checkpoint Systems, Inc. v. United States Int'l Trade Comm'n*, 54 F.3d 756, 761 (Fed. Cir. 1995). Motorola's burden of persuasion *never shifts* to Microsoft; the risk of "decisional uncertainty" remains on the respondent. *Id.*; *see also PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1303, 1305 (Fed. Cir. 2008); *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1360 (Fed. Cir. 2007). Thus, it is Motorola's burden to prove by clear and convincing evidence that any of the alleged prior art references anticipate or render obvious the asserted claims of the patents in suit. Failure to do so means that Motorola loses on this point. *Id.* (stating, "[I]f the fact trier of the issue is left uncertain, the party with the burden [of persuasion] loses.").

Motorola also bears the burden of going forward with evidence, *i.e.*, the burden of production. *Id.* This is "a shifting burden the allocation of which depends on where in the process of a trial the issue arises." *Id.* However, this burden does not shift until a respondent presents "evidence that might lead to a conclusion of invalidity." *Pfizer*, 480 F.3d at 1360. Once a respondent "has presented a prima facie case of invalidity, the patentee has the burden of going forward with rebuttal evidence." *Id.*

B. Anticipation

A patent may be found invalid as anticipated under 35 U.S.C. § 102(a) if "the invention was known or used by others in this country, or patented or described in a printed publication in

this country, or patented or described in a printed publication in a foreign country, before the invention thereof by the applicant for patent." 35 U.S.C. § 102(a). A patent may be found invalid as anticipated under 35 U.S.C. § 102(b) if "the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States." 35 U.S.C. § 102(b). Under 35 U.S.C. § 102(e), a patent is invalid as anticipated if "the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent." 35 U.S.C. § 102(e). Anticipation is a question of fact. Texas Instruments, Inc. v. U.S. Int'l Trade Comm'n, 988 F.2d 1165, 1177 (Fed. Cir. 1993) ("Texas Instruments II"). Anticipation is a two-step inquiry: first, the claims of the asserted patent must be properly construed, and then the construed claims must be compared to the alleged prior art reference. See, e.g., Medichem, S.A. v. Rolabo, S.L., 353 F.3d 928, 933 (Fed. Cir. 2003). It is axiomatic that claims are construed the same way for both invalidity and infringement. W.L. Gore v. Garlock, Inc., 842 F.2d 1275, 1279 (Fed. Cir. 2008.)

"Claimed subject matter is 'anticipated' when it is not new; that is, when it was previously known. Invalidation on this ground requires that every element and limitation of the claim was previously described in a single prior art reference, either expressly or inherently, so as to place a person of ordinary skill in possession of the invention." Sanofi-Synthelabo v. Apotex, Inc., 550 F.3d 1075, 1082 (Fed. Cir. 2008) (emphasis added) (citing Schering Corp. v. Geneva Pharms., Inc., 339 F.3d 1373, 1379 (Fed. Cir. 2003) and Continental Can Co. USA v. Monsanto Co., 948 F.2d 1264, 1267-69 (Fed. Cir. 1991)).

To anticipate, a single prior art reference must be enabling and it must describe the claimed invention, *i.e.*, a person of ordinary skill in the field of the invention must be able to

practice the subject matter of the patent based on the prior art reference without undue experimentation. *Sanofi*, 550 F.3d at 1082. The presence in said reference of *both* a specific description and enablement of the subject matter at issue are required. *Id.* at 1083.

To anticipate, a prior art reference also must disclose all elements of the claim within the four corners of said reference. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008) ("*NMP*"); *see also Abbott Labs. v. Sandoz, Inc.*, 544 F.3d 1341, 1345 (Fed. Cir. 2007) (stating, "Anticipation is established by documentary evidence, and requires that every claim element and limitation is set forth in a single prior art reference, in the same form and order as in the claim."). Further, "[b]ecause the hallmark of anticipation is prior invention, the prior art reference—in order to anticipate under 35 U.S.C. § 102—must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements 'arranged as in the claim." *Id.* (quoting *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983)). The Federal Circuit explained this requirement as follows:

The meaning of the expression 'arranged as in the claim' is readily understood in relation to claims drawn to things such as ingredients mixed in some claimed order. In such instances, a reference that discloses all of the claimed ingredients, but not in the order claimed, would not anticipate, because the reference would be missing any disclosure of the limitations of the claimed invention 'arranged as in the claim.' But the 'arranged as in the claim' requirement is not limited to such a narrow set of 'order of limitations' claims. Rather, our precedent informs that the 'arranged as in the claim' requirement applies to all claims and refers to the need for an anticipatory reference to show all of the limitations of the claims arranged or combined in the same way as recited in the claims, not merely in a particular order. The test is thus more accurately understood to mean 'arranged or combined in the same way as in the claim.'

Id. at 1370 (emphasis added). Therefore, it is not enough for anticipation that a prior art reference simply contains all of the separate elements of the claimed invention. Id. at 1370-71 (stating that "it is not enough [for anticipation] that the prior art reference discloses part of the

claimed invention, which an ordinary artisan might supplement to make the whole, or that it includes multiple, distinct teachings that the artisan might somehow combine to achieve the claimed invention." (emphasis added)). Those elements must be arranged or combined in said reference in the same way as they are in the patent claim.

If a prior art reference does not expressly set forth a particular claim element, it still may anticipate the claim if the missing element is inherently disclosed by said reference. *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295 (Fed. Cir. 2002); *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999). Inherent anticipation occurs when "the missing descriptive material is 'necessarily present,' not merely probably or possibly present, in the prior art." (*Id.*); see also Rhino Assocs. v. Berg Mfg. & Sales Corp., 482 F. Supp.2d 537, 551 (M.D. Pa. 2007). In other words, inherency may not be established by probabilities or possibilities. See Continental Can, 948 F.2d at 1268. Thus, "[t]he mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Id.*

If there are "slight differences" between separate elements disclosed in a prior art reference and the claimed invention, those differences "invoke the question of obviousness, not anticipation." *NMI*, 545 F.3d at 1071; *see also Trintec*, 295 F.3d at 1296 (finding no anticipation and stating that "the difference between a printer and a photocopier may be minimal and obvious to those of skill in this art. Nevertheless, obviousness is not inherent anticipation."). Statements such as "one of ordinary skill may, in reliance on the prior art, complete the work required for the invention," and that "it is sufficient for an anticipation if the general aspects are the same and the differences in minor matters is only such as would suggest itself to one of ordinary skill in the art," *actually relate to obviousness*, not anticipation. *Connell*, 722 F.2d at 1548; *see infra*.

The issues of anticipation and obviousness have been raised in this matter with regard to a number of the asserted patents and claims.

1. The '054 Patent

a) Concurrent Versions System (CVS)

The Concurrent Versions System (CVS) is a system for maintaining information shared across a network by a number of concurrent users. (RX-119.) CVS acts as a system that tracks changes to resources on both the client and the server. (RX-119; RX-1360C at Q26.)

Microsoft argues that CVS does not meet the preamble, disclose synchronizing, and does not disclose resource state information.

The ALJ finds that Motorola has failed to carry its burden of proving by clear and convincing evidence that the CVS anticipates the asserted claims of the '054 Patent. The ALJ admits that this is a compelling reference, but Dr. Locke's testimony lacks sufficient citations to the record to provide adequate support for a determination by clear and convincing evidence. Accordingly, because the ALJ finds that Motorola has failed to present clear and convincing evidence of anticipation, the ALJ finds that CVS does not anticipate the '054 Patent.

b) CODA

CODA was a distributed file system that was developed by Carnegie Mellon University in Pittsburgh, Pennsylvania. It was described in two printed publications – M. Satyanarayanan, Scalable, Secure, and Highly Available Distributed File Access, IEEE Computer Magazine (1990) (RX-115) and James Jay Kistler, Disconnected Operation in a Distributed File System, Dissertation (Carnegie Mellon University, Pittsburgh, PA 1993) (RX-953). CODA is a system for maintaining information shared across a network by a number of concurrent users. (RX-1360C at Q53.) In CODA, directories and file appear as though they are contained on a single

computer system, even if they are physically located on numerous networked computers. (RX-1360C at Q54.) CODA is an extension of an earlier distributed file system called the Andrew File System. (RX-1360C at Q54.)

Microsoft only disputes whether CODA discloses "resource state information." Motorola argues that Dr. Locke testified that CODA associates something called a vnode with each of the file. (RX-1360C at Q55.) Motorola argues that this vnode contains status descriptors — including the last change date and time — for every file and directory. (RX-1360C at Q55.) Motorola argues that Dr. Locke testified that CODA includes log files that contain the original vnode information that was downloaded from the server. (RRB at 10.) Motorola also argues that as the user makes changes to the resource, an entry is made into the log regarding each modification. (RRB at 10.) Motorola argues that Microsoft ignores the testimony of both experts on the issue of the use of vnode for synchronization. (RRB a 10.) Motorola argues that Dr. Locke specifically explained how CODA relies on the vnode information during synchronization. (RRB at 10 (citing RX-1360C at Q55-61, Appendix B).) Motorola also argues that Dr. Smith confirmed that the vnodes on CODA disclose date and time stamp information. (RRB at 10 (citing Tr. at 402:16-21; 403:9-14). Motorola also argues that Dr. Smith admitted that such information could be used for synchronization. (RRB at 10 (citing Tr. at 408:2-12).)

Motorola also argues that it introduced substantial portions of a number of witnesses' deposition testimony describing how CODA works and Motorola argues that testimony confirms the conclusion that CODA anticipates the asserted '054 claims. (RRB at 11.)

Microsoft argues that "[t]he parties appear to agree that resource state information must be used for synchronization and represent the state of the resource as required by claim 11." (CRB at 16.) Microsoft agrees that vnode shows the time stamp of the last modification, but

argues that "vnode says nothing about what modifications were made or even whether the resource has been modified since the client/server has last seen it" and therefore cannot represent the state of a resource. (CRB at 16.) Microsoft argues that Dr. Locke only makes vague statements about how vnode reaches the server and how vnode is used in synchronization. (CRB at 16.) Microsoft also complains that he cites no documents and that his vague, unsupported testimony cannot satisfy clear and convincing evidence. Microsoft also argues that vnode is insufficient to allow the synchronization of multiple users. (CIB at 24-25.)

The ALJ agrees with Microsoft that Motorola has failed to meet the burden of proving by clear and convincing evidence that CODA anticipates the asserted claims of the '054 Patent. Motorola cites no evidence in its briefs besides Dr. Locke's testimony. The critical portion of Dr. Locke's testimony is bereft of citations to the evidentiary record. In its reply brief, Motorola cites vaguely to several deposition transcripts without providing any context, page citations, or directions as to how this is significant to the issue. The ALJ declines Motorola's invitation to sift through the record for it. Dr. Locke's conclusory testimony by itself simply cannot satisfy the clear and convincing standard. Accordingly, the ALJ finds that Motorola failed to prove that CODA anticipates the asserted claims of the '054 Patent by clear and convincing evidence. See NTP, Inc. v. Research In Motion, Inc., 418 F.3d 1282, 1324 (Fed. Cir. 2005).

c) U.S. Patent No. 4,853,843

The '843 Patent was filed December 18, 1987 and issued August 1, 1989. It is prior art under 35 U.S.C. § 102(b). The title of the patent is "System for Merging Virtual Partitions of a Distributed Database." The '843 Patent discloses an object-oriented distributed database system that separates into a plurality of virtual partitions following a communication failure between sites accessing the data base. (RX-162 at Abstract.) Each virtual partition maintains a copy of

all previous versions of the data objects and also maintains a change list describing all group updates that it executes. (RX-162 at Abstract.)

The parties dispute whether the '843 Patent meets four limitations of the asserted claims:

(1) whether the '843 Patent discloses resource state information; (2) whether the '843 Patent discloses a client; (3) whether the '843 Patent discloses "storing the copy of the resource in a local store associated with the client;" and (4) whether the '843 Patent discloses "wherein the data operation includes a delete operation." With respect to whether the '843 Patent discloses a client, Motorola argues that "servers will often act as clients, and clients as servers depending on the circumstances." (RRB at 41.) The ALJ finds that this is insufficient to establish as a matter of clear and convincing evidence that the '843 Patent anticipates the asserted claims of the '054 Patent.

2. The '566 Patent

a) Apple Newton MessagePad

MMI argues that claims 1, 2, 5 and 6 are anticipated by the Apple Newton MessagePad.²⁰ (RIB at 47-50.) MMI argues that the Apple Newton MessagePad discloses each and every element of the asserted claims. (RIB at 48.) Microsoft disputes that the Apple Newton MessagePad discloses an "electronic mail scheduling request object," a "synchronization component," a "global identifier property," and an electronic mail scheduling request object that is "compatible with at least a second application program." (CIB 35-41.) Microsoft does not dispute that the Apple Newton MessagePad discloses the other elements of the asserted claims. (CIB 35-41; CRB at 19-21.)

²⁰ MMI fails to provide any invalidity analysis for any of the elements of claim 5 in its initial post-hearing brief. (RIB at 47-50.) Pursuant to Ground Rule 11.1, said arguments are deemed waived.

The Apple Newton is a handheld Personal Digital Assistant from Apple, Inc. that included a calendar application and was available on or before March 1996. (RIB at 47.)

(1) "electronic mail scheduling request"

The ALJ finds that the evidence shows that the Apple Newton MessagePad discloses an electronic mail scheduling request object. Specifically, the Apple Newton MessagePad creates an electronic mail object that is comprised of user input information relating to the details of the meeting. (RX-0135 at 113-149; RX-1360C at Q&A 141.)

Microsoft argues that the Apple Newton MessagePad fails to disclose an "electronic mail scheduling request" because the email object does not "request" the invitee to attend the meeting nor does it "schedule" the event. (CIB at 35-36.) Microsoft argues that the "electronic mail scheduling request" must be "responded to" and capable of being used to "schedule" and event; provide an opportunity for the invitee to accept or decline the request; and must provide for scheduling on both mobile devices. (CIB at 36.) The ALJ finds Microsoft's interpretation of "electronic mail scheduling request" to be too narrow. Specifically, the evidence cited by Microsoft in support of its proposed limitations are either disclosed as a preferred embodiment or are descriptive of the prior art. (See JX-14 at 2:64-3:10; 4:31-37 (describing prior art in the "Background of Invention") and 19:34-20:23 (describing a preferred embodiment in Figure 8). Indeed, the patent states that the "electronic mail scheduling request" is simply "indicative of the meeting request." (JX-14 at 2:45-48.) There is nothing in the specification or the claim language that would properly impose the additional limitations on the claim as Microsoft asserts. The language of the claims does not include the additional requirements argued by Microsoft. (JX-14 at claim 1.)

Therefore, the ALJ finds that the Apple Newton MessagePad discloses this element of claim 1.

(2) "global identifier property"

The ALJ finds that MMI has failed to show that the Apple Newton MessagePad discloses this element. Claim 2 requires "[t]he mobile device of claim 1 wherein the application program is configured to generate ... a global identifier property uniquely identifying the meeting object among a plurality of other objects." MMI argues that the UniqueID in the Apple Newton Connections Tool meets this limitation. However, the Apple Newton Connections Tool was likely implemented on a desktop computer and not a mobile device as required by the claims. See Joint Stipulation Regarding Documents Relating to the Apple Newton (August 24, 2011).

MMI argues that the Apple Newton Connections Tool is specifically designed to assist in communication between the Apple Newton and desktop computers and is used during synchronization. (RRB at 17-18.) As such, it satisfies claim 2 since "the UniqueID identifies meeting objects from among a plurality of other objects, exactly as claim 2 describes." (RRB at 18.) The ALJ finds MMI's arguments unpersuasive. As set forth *supra*, the claim specifically states that the application is implemented on "[t]he mobile device of claim 1." MMI has failed to present any evidence that the Apple Newton Connections Tool was implemented on the Apple Newton or any other mobile device. Rather, the evidence shows that the software was implemented on a desktop computer. *See* Joint Stipulation Regarding Documents Relating to the Apple Newton (August 24, 2011).

Therefore, the ALJ finds that MMI has failed to show by clear and convincing evidence that the Apple Newton discloses each and every limitation of claim 2.

(3) "compatible with at least a second application program"

The ALJ finds that the Apple Newton meets this claim limitation. Microsoft argues that the Apple Newton fails to disclose an electronic email scheduling request object as set forth in claim 1 and, further, said object is compatible with a second program associated with the remote object store. (CIB at 40-41.) Microsoft argues that the Apple Newton email cannot schedule an event in another application nor is there any evidence that the email is compatible with another application actually associated with the object store. (CIB at 40-41.)

The ALJ finds Microsoft's arguments unpersuasive. First, as set forth *supra*, the ALJ declines to adopt the additional limitations proposed by Microsoft for the electronic mail scheduling request object, including the requirement that the electronic mail scheduling request object actually "schedule" an event in another application. Furthermore, the evidence shows that Apple Newton generates a meeting object and an electronic mail scheduling request object that were compatible with application programs on a desktop Mac. (RX-0135 at 113-149; RX-182 at 55; RX-1360C at Q&A 147-150.)

Therefore, the ALJ finds that the Apple Newton discloses this element.

(4) "synchronization component"

As an initial matter, MMI argues that Microsoft's arguments should be excluded pursuant to Ground Rule 8(f) since Microsoft failed to raise this argument in its pre-hearing brief. (RRB at 14.) However, while not specifically discussed in the context of claim 1, Microsoft discussed the fact that the Newton Connection Utilities software was not on the Apple Newton, but on a desktop Mac in its pre-hearing brief in discussing claim 2. As such, MMI was on notice that Microsoft was asserting this argument, namely that the Newton Connection Utilities software was implemented on the desktop and not the Apple Newton.

MMI argues that the Newton Connection Utilities software enabled synchronization between the Apple Newton and a desktop Mac. (RRB at 15-16.) Microsoft argues that the Apple Newton fails to disclose the synchronization component of claim 1 because the Newton Connection Utilities software that MMI relies upon to meet this limitation is on the desktop Mac and not the Apple Newton. (CIB at 38-39.) MMI argues that "the disclosure of synchronization capabilities in the Newton Connection Utilities *necessarily requires* that there be a corresponding synchronization component on the mobile device." (RRB at 16.) In other words, MMI argues that this element is inherently disclosed.

While the ALJ finds MMI's arguments plausible, he finds that it does not rise to the level of clear and convincing evidence necessary to invalidate the claim. Specifically, MMI points to nothing in the Apple Newton or in the Apple Newton manual itself that addresses the issue of synchronization. Indeed, given the breadth of the manual and the many functions it describes, it is reasonable to expect that the Apple Newton's ability to synchronize with other devices would be disclosed. It is certainly possible to infer that the Apple Newton contains a synchronization component as set forth by MMI, however, the inference of a possibility does not rise to the level of clear and convincing evidence. Therefore, the ALJ finds that MMI has failed to show by clear and convincing evidence that the Apple Newton discloses this element.

Based on the foregoing analysis, the ALJ finds that MMI has failed to show by clear and convincing evidence that the Apple Newton discloses each and every element of claims 1, 2 and 6. Carnegie Mellon Univ. v. Marvell Tech. Group, Ltd., 2011 U.S. Dist. LEXIS 110629 (W.D. Pa. Sept. 28, 2011) ("Therefore, if a dependent claim depends upon an independent claim that is held valid, the dependent claim must also be valid as at least one of its elements necessarily is not anticipated by the prior art.") (citations omitted).

b) Motorola Envoy

MMI argues that claims 1 and 5 are anticipated by the Motorola Envoy. (RIB at 50.) Microsoft argues that the Motorola Envoy fails to disclose a "synchronization component" as required by claim 1. (CIB at 41-42.) Microsoft further argues that MMI failed to analyze the Envoy under the asserted claims and, as such, is "no longer considered pertinent" under Ground Rule 8(h). (CIB at 41.)

The Motorola Envoy is a portable device for personal communications using wired and wireless interfaces and includes calendar and contacts applications and email capabilities and was commercialized in the United States in 1994. (RIB at 50.) MMI argues that the Motorola Envoy discloses each and every limitation of claims 1 and 5. (RIB at 50.) Motorola argues that under the plain and ordinary meaning of "synchronization," the Motorola Envoy synchronizes meeting objects when an invitee accepts a meeting request, which is added to their calendar thereby "synchronizing" the calendar even between the requestor and the invitee. (RIB at 51-52.)

The ALJ finds that the Motorola Envoy fails to disclose the synchronization component of claim 1 of the '566 Patent. The ALJ finds that the Motorola Envoy's ability to schedule a meeting object on the requesting device and the remote device fails to meet the synchronization component as defined by the '566 Patent. The '566 Patent describes synchronization as "integrating information stored by the PIMs on the mobile device and the desktop computer such that the two contain the same updated information is referred to as synchronization." ('566 Patent at 2:2-5.) In another part of the specification, synchronization is described in a similar manner:

In the illustrative embodiment, each object stored in object store 8 is also stored in object store 6. However there are actually two instances of each object (one in object store 6 and one in object store 8). Thus, when a user changes one instance of the object stored in either store 6 or store 8, the second instance of that object in the other of stores 6 and 8 is preferably updated the next time mobile device 3

is connected to desktop computer 4 so that both instances of the same object contain up-to-date data. This is referred to as synchronization.

('566 Patent at 7:41-50.) While the ALJ does not agree that such synchronization is limited to between a mobile device and a desktop, ²¹ there is no evidence that the Motorola Envoy performs such "synchronization" when it merely communicates the meeting information from one device to another – there is no "integration" or "updating" as set forth in the '566 Patent. Therefore, the ALJ finds that MMI has failed to show by clear and convincing evidence that the Motorola Envoy discloses each and every element of claims 1 and 5.

c) ADMS

MMI argues that claims 1 and 2 are anticipated by the Automated Distributed Meeting Scheduler ("ADMS"). (RIB at 52.) Microsoft argues that MMI has waived its right to assert that ADMS is prior art under 35 U.S.C. §102(a) because it only asserted that ADMS was prior art under 35 U.S.C. §102(b) in its pre-hearing brief. (CRB at 24.) Microsoft further argues that, assuming that ADMS is prior art, it fails to disclose a "mobile device," "synchronization," and a "remote object store." (CIB at 44.)

The ALJ finds that pursuant to Ground Rules 8(f) and 11.1 MMI has waived the right to assert that ADMS is a prior art reference under 35 U.S.C. §102(a). MMI's pre-hearing brief clearly states that ADMS is "102(b) prior art to the '566 Patent." Similarly, MMI's expert testified that ADMS is prior art pursuant to 35 U.S.C. §102(b). (RX-1360C at Q&A 156.) MMI never asserted that ADMS is prior art under 35 U.S.C. §102(a) in either its pre-hearing brief or its direct testimony. The first instance of MMI asserting that ADMS is a prior art reference to the '566 Patent pursuant to 35 U.S.C. §102(a) appears in its initial post hearing and reply briefs.

²¹ The '566 Patent specifically states that "mobile device 3 can optionally be separately coupled to another mobile device 10 or another desktop computer 13." ('566 Patent at 6:28-30.) Thus, synchronization is not limited to only a mobile device and a desktop computer.

(See RIB at 52-53; RRB at 21.) Furthermore, MMI never discusses or cites any of the publications disclosing ADMS in its initial post-hearing brief and, therefore, fails to address whether ADMS is a prior art reference pursuant to 35 U.S.C. §102(b). (See RIB at 52-53; RRB at 21-22.) As such, the ALJ finds that MMI has failed to show by clear and convincing evidence that ADMS is a prior art reference.

d) vCalendar Specification

MMI argues that claims 1, 2, and 6 are anticipated by the vCalendar Specification. (RIB at 54.) Microsoft argues that the vCalendar specification fails to disclose a "mobile device," "synchronization component," and "compatible with at least a second application program." (CIB at 44-45.) Microsoft further argues that vCalendar is not an enabling reference. (CIB at 44.)

(1) "mobile device"

Microsoft argues that vCalendar fails to disclose a "mobile device." (CIB at 44.) However, the evidence shows that vCalendar could have been implemented on Personal Digital Assistants and/or cellular telephones. (RX-0181 at 7; RX-1360C at 187-188.) Microsoft further argues that the vCalendar is simply a specification and that one of ordinary skill in the art would not have been enabled to actually implement it on a mobile device because MMI has failed to provide an actual implementation. (CIB at 44.) The ALJ finds this argument misleading as there is no requirement that there be an actual implementation of the specification in order for it to be a prior art reference. *Bristol-Myers Squibb Co. v. Ben Venue Labs, Inc.*, 246 F.3d 1368, 1379 (Fed. Cir. 2001). Rather, it is sufficient that the specification itself would enable one of ordinary skill

in the art to do so. The evidence shows that one of ordinary skill in the art would have be able to implement the vCalendar protocol on a mobile device. (RX-0181 at 7; RX-1360C at 187-188.)

(2) "synchronization component"

The vCalendar is a specification that describes a format an electronic calendaring and scheduling format. (RX-0181 at 6.) The parties arguments relating the "synchronization component" are the same as those for the same component in the Motorola Envoy, *i.e.*, Motorola argues that synchronization occurs when "the meeting event generated by the user [is] reflected in each of your invitees' calendars, and reflected in the user's calendar..." (RX-1360C at Q&A 191) while Microsoft argues that this is not the synchronization required by the patent (CRX-2C at Q&A 134-41).

For the same reasons set forth above for the Motorola Envoy, the ALJ finds that the vCalendar fails to disclose the synchronization component. The group scheduling application of the vCalendar simply reflects the meeting event on the invitees' and the user's calendars. It does not "integrat[e] information" between the two calendars such that the two contain the same updated information as set forth in the '566 Patent. (See supra; '566 Patent at 2:2-5; 7:41-50.) There is no evidence that the vCalendar performs such "synchronization" when it reflects the same meeting event on the invitees' and the user's calendar.

(3) "compatible with at least a second application program"

Microsoft argues that MMI fails to show that the vCalendar discloses both a meeting object and electronic mail scheduling request object that is compatible with at least a second application program and only focuses on compatibility. (CRB at 26.) The ALJ agrees. MMI's arguments focus on the "interoperability of vCalendar with different group scheduling applications" and fails to point to what in the vCalendar application is the meeting object and the

electronic mail scheduling request object that is compatible with a second application program. (RIB at 55-56.) Therefore, the ALJ finds that MMI has failed to show that vCalendar meets this limitation.

Therefore, the ALJ finds that MMI has failed to show by clear and convincing evidence that the vCalendar discloses each and every element of claims 1, 2 and 6.

3. The '352 Patent

a) Natuerlich!

"Natuerlich!" refers to a prior art reference that was a March 23, 1992 posting on the comp.sys.atari.st.tech on line newsgroup forum entitled "Getting longer filenames out of GEMDOS." (RX-0675; RX-0911 at 31:12-33:11.) Natuerlich! described a way to create long filenames in a way that would be consistent with the existing directory structure of the GEMDOS operating system, an operating system that had the same directory structure as MS-DOS. (See RX-0675.) MMI argues that Natuerlich! discloses each and every element of the '352 Patent either explicitly or inherently. (RIB at 174-181.) However, in its analysis, MMI concedes that Natuerlich! fails to explicitly or inherently disclose certain elements of the '352 Patent and argues that such elements would have been obvious to one of ordinary skill in the art. (RIB at 178-181.)

The ALJ finds that MMI has failed to show by clear and convincing evidence that Natuerlich! discloses each and every element of the '352 Patent such that the '352 Patent is invalid under 35 U.S.C. § 102. Specifically, as admitted by MMI, Natuerlich! fails to disclose "a signature that identifies that the second directory entry holds a first portion of the long filename" (claim element 1(b)); "creating [and storing in the storage] a sequence of at least one additional directory entry for holding a next sequential portion of the long filename" (claim elements 1(e)

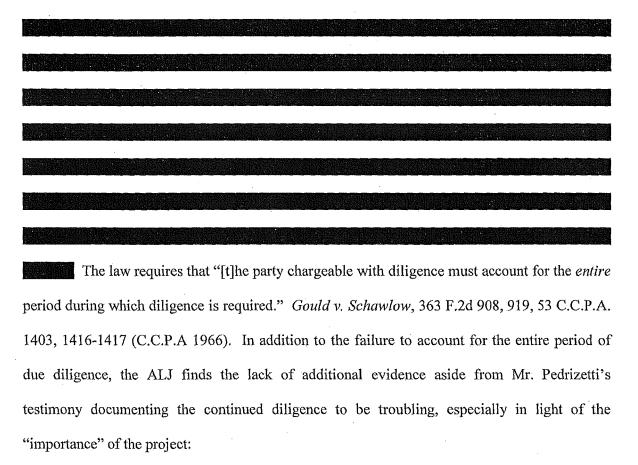
and 12(c); and "having a fixed number of characters" (claim elements 1(b) and 12(b)). (See RX-1358C at Q&A 105-110.)

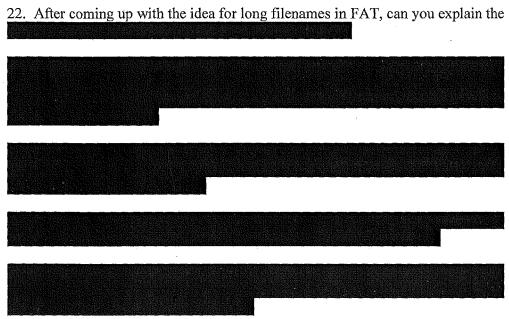
b) Torvalds

(1) Torvalds is prior art

"Torvalds" refers to a message thread entitled "Long filenames," which was posted to the comp.os.minix newsgroup forum on December 23, 1992. (RX-677; RX-1152C at 14:13-24.) The message thread discusses how to implement long filenames for Minix (Minix was a simplified operating system in the Unix family). (RX-677 at 1.) Programmer Linus Torvalds responded to the post by suggesting that he could "do the long filenames by fooling around in several consecutive minix-type directory entries." (*Id.* at 2; Nutt Tr. at 613:13-17.) Microsoft argues that Torvalds is not a prior art reference to the '352 Patent because the '352 Patent is entitled to an invention date of the '352 Patent, testimony is corroborated by a document entitled as well as contemporaneous notebooks that contain numerous entries that describe work on the long filename support. (CIB at 61-62.)

The ALJ finds that MMI has shown by clear and convincing evidence that Torvalds is prior art. *Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1578 (Fed. Cir. 1996) ("Bard bears the burden of persuasion on the status of the Cook catalog as prior art. Bard must persuade the trier of fact by clear and convincing evidence that the Cook catalog was published prior to Dr. Mahurkar's invention date.") The evidence shows, and there is no dispute, that Torvalds was published on December 23, 1992. (RX-0677)





 $^{^{22}}$ Microsoft claims priority back to Application No. 41,497. $\it See$ JX-5.

CX-958C at Q&A 22. "Merely asserting diligence is not enough; a party must 'account for the entire period during which diligence is required." *Creative Compounds, LLC v. Starmark Labs.*, 651 F.3d 1303, 1312-1313 (Fed. Cir. 2011) (citing *Gould v. Schawlow*, 363 F.2d 908, 919, 53 C.C.P.A. 1403 (CCPA 1966)). Given the importance of the project, the ALJ finds the lack of documentation describing the work schedules and work items, especially in a company familiar with the patent process such as Microsoft, significant. Mr. Pedrizetti's testimony appears to be exactly what the Federal Circuit sought to avoid – testimony that was favorable to the patentee's case. *Bard*, 79 F.3d at 1577 ("inventors testifying in patent infringement cases would be tempted to remember facts favorable to their case by the lure of protecting their patent or defeating another's patent.") (citations omitted).

Therefore, the ALJ finds that the evidence fails to show that Microsoft is entitled to an earlier date of invention for the '352 Patent and, consequently, Torvalds is prior art.

(2) Torvalds does not anticipate the '352 Patent

MMI argues that Torvalds discloses each and every element of the '352 Patent either explicitly or inherently. (RIB at 184-187.) However, in its analysis, MMI concedes that Torvalds fails to explicitly or inherently disclose certain elements of the '352 Patent and argues that such elements would have been obvious to one of ordinary skill in the art. (RIB at 184-187.)

The ALJ finds that MMI has failed to show by clear and convincing evidence that Torvalds discloses each and every element of the '352 Patent such that the '352 Patent is invalid under 35 U.S.C. § 102. Specifically, as admitted by MMI, Torvalds fails to disclose "a signature that identifies that the second directory entry holds a first portion of the long filename" (claim element 1(b)); and "accessing the second directory entry [and the at least one additional directory entry" (claim elements 1(b) and 12(b)). (See RX-1058C at Q&A 123-126.)

4. The '133 Patent

a) CUA Guidelines

MMI argues that the IBM CUA Guidelines anticipates and renders obvious the subject matter of claims 1 and 35 of the '133 Patent. (RIB at 145.) MMI argues that the only dispute between the parties is whether these references disclose class-based and container-based menu selections. (RIB at 145.) MMI argues that the CUA Guidelines disclose context menus that have menu selections based on the object's context, content and container. (RIB at 145.) MMI argues that both the CUA Guidelines and the '133 Patent teach class and container based menu selections by examples of three classes of objects on a menu. (RIB at 146.) Specifically, MMI argues that the CUA Guidelines disclose a content menu that is based on the "object's container" and the "object's context." (RIB at 147.) Similarly, the CUA Guidelines teach a menu that is based on the type of object, *i.e.*, the class of object. (RIB at 148-149.) The CUA Guidelines also disclose an example of a context menu that contains selections based on the class and the container. (RIB at 149-150.)

Microsoft argues that MMI has failed to show that the CUA Guidelines include every element of the asserted claims. (CRB at 45.) With regard to the class and container menu selection limitations, Microsoft argues that the single sentence upon which MMI bases its argument does not teach a combination of different types of menu selections in a single context menu as required by the asserted claims. (CRB at 45.)

The ALJ finds that MMI has failed to show by clear and convincing evidence that the CUA Guidelines anticipate or render obvious the asserted claims of the '133 Patent. As for obviousness, MMI makes a conclusory assertion that the CUA Guidelines render the asserted claims of the '133 Patent obvious without making any further analyses or arguments in its initial

post-hearing brief.²³ (See RIB at 145.) As with the '352 Patent (infra), the ALJ finds that a mere conclusory statement in its initial post-hearing brief to be insufficient to meet the clear and convincing evidence standard and, therefore, MMI has failed to show that the '133 Patent is obvious in light of the CUA Guidelines.

The ALJ further finds that MMI has failed to show by clear and convincing evidence that the CUA guidelines disclose each and every limitation of claims 1 and 35 of the '133 Patent. As an initial matter, MMI's analysis fails to address each and every limitation of the '133 Patent in its initial post-hearing brief (compare this to the invalidity section of the '352 Patent where each and every limitation was set forth and discussed). Rather, MMI cites to its expert's testimony for a detailed claim by claim analysis. This is, quite simply, nothing more than an improper attempt to circumvent the page limitations set by the ALJ for post-hearing briefs. ²⁴ In the ALJ's view, simply referencing the testimony of a party's expert and incorporating that testimony/analysis by reference not only fails to constitute "a discussion" of the issue in the post-hearing brief as required by the Ground Rules, but is insufficient to carry a party's burden of proof. The ALJ therefore finds that MMI has failed to show by clear and convincing evidence that the CUA Guidelines practice each and every limitation of any of the asserted claims, and therefore, the CUA Guidelines do not anticipate the asserted claims of the '133 Patent.

Even assuming that MMI had properly analyzed each and every limitation in light of the CUA Guidelines, the ALJ finds that MMI has failed to show by clear and convincing evidence that the CUA Guidelines disclose the retrieving steps of the claims 1 and 35. At a minimum, the menu selection that MMI relies upon for showing that the CUA Guidelines disclose a container

²³ MMI's arguments relating to the CUA Guidelines in combination with IBM's OS/2 2.0 Application Design Guide will be addressed in the next section.

²⁴ As with Microsoft's lack of analysis on infringement of the '352 patent, allowing MMI to simply reference its expert's testimony would render the page limitations, and to a certain extent post-hearing briefing, set by the ALJ meaningless since the parties could simply cite to the evidence rather then make any arguments,

based menu selection (the "Clear to Delete Folder") specifically states that it is an "object-based" selection (and not container based). (RX-43 at 19, Figure 19.) In light of such an explicit disclosure from the prior art, the ALJ finds that MMI's arguments to the contrary, which do not even address this issue, fail to rise to the level of clear and convincing evidence. Therefore, the ALJ finds that MMI has failed to show by clear and convincing evidence that the CUA Guidelines render the asserted claims of the '133 Patent invalid.

b) OS/2 2.0 Application Design Guide

MMI argues that IBM's OS/2 2.0 Application Design Guide anticipates and renders obvious claims 1 and 35 of the '133 Patent. (RIB at 152.) The ALJ notes that MMI did not raise these arguments in its pre-hearing brief, *i.e.* that IBM's OS/2 2.0 is prior art and, further, that it anticipates and renders the '133 Patent obvious. Pursuant to Ground Rule 8(f), such an argument is deemed waived as MMI has failed to show good cause as to why it did not raise this argument in its pre-hearing brief. (*See generally* MMI's Pre-hearing Brief at 507-524.)

c) U.S Patent No. 5,204,947

MMI argues that U.S. Patent No. 5,204,947 ("the '947 Patent") anticipates and renders obvious claims 1 and 35 of the '133 Patent. (RIB at 156.) The '947 Patent was considered by the PTO during prosecution of the '133 Patent. (See '133 Patent.) MMI must meet a heightened burden of proving invalidity, which the ALJ finds they have failed to do. See McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1353 (Fed. Cir. 2001) ("When no prior art other than that which was considered by the PTO examiner is relied on by the attacker, he has the added burden of overcoming the deference that is due to a qualified government agency presumed to have properly done its job, which includes one or more examiners who are assumed to have some expertise in interpreting the references and to be familiar from their work with the level of skill

in the art and whose duty it is to issue only valid patents.") (citing American Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350, 1359, (Fed. Cir. 1984)); Hewlett-Packard Co. v. Bausch & Lomb, Inc., 909 F. 2d 1464, 1467 (Fed. Cir. 1990) (particularly heavy burden in establishing invalidity on the same prior art that was examined in the PTO).

The ALJ finds that MMI has failed to meet this heavy burden and has failed to show by clear and convincing evidence that the '947 Patent anticipates or renders obvious claims 1 and 35. For the same reasons set forth *supra* in the discussion on the CUA Guidelines, the ALJ finds that MMI's conclusory statement regarding obviousness fails to meet the clear and convincing evidence standard to show that the '133 Patent is rendered obvious by the '947 Patent. As with the CUA Guidelines, MMI fails to show that each and every element is disclosed in the '947 Patent and, instead, references its expert's testimony. As set forth above, such an approach fails to meet the clear and convincing evidence standard, let alone the heavier burden in this instance with the '947 Patent.

Furthermore, the evidence MMI cites in support of its argument that the '947 Patent discloses both class and container based menu selection in a single context menu is the exact same evidence that was already considered by the patent examiner during prosecution who found that it did not disclose a single menu that displayed menu selections based on class and associated with a container, *i.e.*, Figure 10 of the '947 Patent. (JX-4 at MSMOTOITC-VOL53-00566919-20, 00566954.) Finally, while the '947 Patent certainly describes a context menus as "dynamic" and "context sensitive," it is not clear that the '947 Patent discloses a context menu that contains menu selections based upon or determined by the environment or context in which the selected computer resource resides. Indeed, the evidence cited by MMI, namely Figure 17 and its accompanying text, describes how the "state of the object" determines whether certain

items in the menu should be removed – there is no discussion or mention of the context or environment of the object, let alone a container. (RX-44 at 14:37-40.)

Therefore, the ALJ finds that MMI has failed to show by clear and convincing evidence that the '947 Patent anticipates the asserted claims of the '133 Patent.

5. The '910 Patent

Motorola contends that four prior art mobile phones invalidate the '910 Patent. Specifically, Motorola argues that the '910 Patent is invalidated by: (1) the Sanyo SCP-5000 (RPX-11); (2) the Qualcomm pdQ (RPX-10); (3) Kyocera QCP 6035 (RPX-7); and (4) the Sprint Touchpoint (RPX-12).

a) Date of Invention

Microsoft contends that a number of the references are not prior art because they became public knowledge after the date of the invention of the subject matter of the '910 Patent. Microsoft contends that it is entitled to a date of invention of the subject matter of the '910 Patent. As evidence of its conception, Microsoft presents the following:

- (CX-98C, CX-99C, CX-100C; CX-764C, CX-768C)
- The testimony of named inventor Susan Pappalardo (CX-759C); and
- The testimony of named inventor Jason Fuller (CX-965C).

argues that this evidence also shows "diligence to reduction to practice." (CIB at 113 (citing
CX-965C at Q64, Q67, and
In addition to pointing out elements missing in the (RIB at 135-136),
Motorola argues that Microsoft offers no evidence of when the actual reduction to practice
occurred or diligence in reducing to practice. (RIB at 135-136.) Specifically, Motorola argues
that "
(RRB at 66.) Motorola argues that Microsoft's
evidence is inadequate. (RRB at 66.) Motorola points to a number of flaws in Microsoft's
evidence of conception and argues that Microsoft has failed to show that the invention of the
'910 Patent was ever reduced to practice. (RRB at 67.) Motorola argues that

		(RRB at	67.) Motorola argues
that this is insuffici	ent.		

The ALJ agrees with Motorola that Microsoft has failed to show that it reduced to practice the invention before the patent was filed. Even assuming that Microsoft has shown that it conceived of the invention, Microsoft has failed to offer any concrete, corroborated evidence of actual reduction to practice at any time before the filing of the '910 Patent. Moreover, Microsoft has offered no evidence to show diligence after

"In order to establish an actual reduction to practice, [a party] must establish three things:
'(1) construct[ion of] an embodiment or perform[ance of] a process that met all the limitations of the interference count; [](2) . . . determin[ation] that the invention would work for its intended purpose,' and (3) the existence of sufficient evidence to corroborate inventor testimony regarding these events." *Medichem, SA v. Rolabo, SL*, 437 F.3d 1157, 1169 (Fed. Cir. 2006) (quoting *Cooper v. Goldfarb*, 154 F.3d 1321, 1327, 1330 (Fed. Cir. 1998) (internal citations omitted) (alternations in original).

Assuming that Microsoft has shown that it conceived of the invention in , it has utterly failed to offer any evidence sufficient to find that Microsoft reduced the invention to practice before any of the disputed prior art was available or even before the filing of its patent application. The ALJ would like to note that Microsoft has been cagey in its brief on this issue. Microsoft's brief is not clear about what exactly it claims is the reduction to practice.

Microsoft's brief
It is not clear if this is the reduction to practice Microsoft is claiming
because Microsoft's brief goes on to mention other possibilities, which will be addressed infra.
However, assuming it is, the evidence Microsoft points to directly contradicts any assertion of a
reduction to practice. Microsoft cites two questions and answers from Jason Fuller direct
witness statement and two emails discussed in those questions and answers. (CX-965C at Q63
and Q64 (discussing CX-98C and CX-768C respectively).)
It is
unclear from CX-98C what precisely is being tested and Mr. Fuller's direct testimony does not
shed much light on this.
This certainly does not establish that
there had been a reduction to practice by this time.
Thus,

As for the second possibility,
See Cooper, 154 F.3d at 1327. Moreover,
(Tr. 680:4-10.)
Finally, However, the record is almost completely
devoid of evidence about when this occurred and what work was done.
However, this assertion by Microsoft significantly misrepresents Mr. Fuller's testimony when he
repeatedly testified he had no idea precisely when this was completed. (Tr. 680:19-24; Tr.
681:24-682:11.)
(Tr. 679:23-680:3.)
(CIB at 114.)
Microsoft cites no evidence other than inventor testimony for when and
if an actual reduction to practice occurred. Even if the inventor testimony was sufficient, which
it plainly is not as Mr. Fuller could not provide any dates, it would be further insufficient because
there is no corroboration of that testimony. See Price v. Symsek, 988 F.2d 1187, 1195 (Fed. Cir.
1993) ("Only the inventor's testimony requires corroboration before it can be considered.").
Accordingly, Microsoft has failed to show by any evidence that it is entitled to a date of
invention of Therefore, the ALJ finds that Microsoft's date of invention is
February 1, 2002.

b) The Qualcomm pdQ

(1) Qualcomm pdQ is Prior Art

Motorola argues that the Qualcomm pdQ is prior art under 35 U.S.C. § 102(b) because this device was on sale and in public use in the United States before the critical date of February 1, 2001, specifically at least by late-1999. At the very least, Motorola contends the Qualcomm pdQ and its features were public knowledge and its manual printed publications before the date of the invention under 35 U.S.C. § 102(a).

Motorola argues that the Qualcomm pdQ is prior art under 35 U.S.C. § 102(b) because this device was on sale and in public use in the United States before the critical date of February 1, 2001, specifically at least by late-1999. At the very least, Motorola contends the Qualcomm pdQ and its features were public knowledge and its manual a printed publication before the date of the invention under 35 U.S.C. § 102(a).

Motorola points to the Qualcomm pdQ manuals bearing a 1999 copyright date, one of which provides detailed instructions on how a user may save a phone number from a call log to the address book as a new or existing contact. (RX-164; RX-165.) Motorola cites an actual physical specimen of the phone they submitted (RPX-10), and screenshots demonstrating the functionality (RX-1321 & RX-1322). Motorola also points to the screenshot of the pdQ menu that indicates it is running a software version from June 1999. (RX-1323 (showing dates of June 28, 1999 and June 18, 1999).) Motorola also points to a Sprint press release dated July 1999 indicating Sprint had entered into an agreement with Qualcomm to purchase and sell pdQ phones (RX-589), and actual purchase invoices obtained from Qualcomm's successor (in its handset business), Kyocera, showing sales of the pdQ devices in early 2000. (RX-1011C.) Finally, Motorola submits testimony of Mr. Brian Finnerty of Sprint and Mr. Seth Danielson of Kyocera

that Motorola argues corroborates this physical documentation that the Qualcomm pdQ with the relevant features (discussed below) was available in late-1999 early 2000.

Microsoft argues that "MMI has failed to establish that the user manuals were distributed to the public prior to the invention date or more than one year before the filing date of the '910 Patent, and is unable to point to any purchase order, receipt, invoice or other document establishing when the pdQ was first on sale." (CIB at 118.) Microsoft further argues that Motorola "has failed to establish that the pdQ was known or used by others prior to the invention date or in public use or on sale prior to the critical date." (CIB at 118.) Microsoft also complains that Motorola's expert offered no evidence that the pdQ was prior art, and that Motorola relies on uncorroborated testimony of Mr. Finnerty and Mr. Danielson. (CIB at 115.)

The ALJ finds that Motorola has easily met its burden of establishing by clear and convincing evidence that the Qualcomm pdQ was on sale before the critical date. The pdQ manuals bear a 1999 copyright. (RX-164; RX-165.) The software running on the physical specimen of the pdQ device submitted bears a June 1999 copyright date. (RX-1323.) Sprint produced press releases from July 1999 stating that Sprint had entered into an agreement to purchase the pdQ. (RX-589.) Motorola produced sales information from Kyocera (Qualcomm's successor in its handset business) showing sales of the pdQ device in early 2000. (RX-1011C.) Motorola also provided the testimony of corporate representatives of Sprint and Kyocera confirming that the product was on sale at that time. (RX-1277C at 93:5-94:13; RX-1320C at 94:10-95:7.) Given this testimony and evidence, Microsoft is incorrect to assert that Motorola must "point to any purchase order, receipt, invoice or other document establishing when the pdQ was first on sale." (CIB at 118). Of course, if Microsoft's point is that Motorola cannot pinpoint

the date on which the very first sale of the pdQ device took place, that is irrelevant, because Motorola has clearly established that it was on sale well before the critical date of the '910 Patent.

The ALJ further finds that Microsoft's corroboration arguments fail. As the Federal Circuit has explained (in one of the cases Microsoft cites): "Corroboration is required of any witness whose testimony *alone* is asserted to invalidate a patent, regardless of his or her level of interest." Finnegan Corp. v. Int'l Trade Comm'n, 180 F.3d 1354, 1369 (Fed. Cir. 1999) (emphasis added). Motorola is not attempting to invalidate the '910 Patent through the pdQ device by testimony alone. Just as in Adenta GmbH v. Orthoarm, Inc., "this is not a case where one person makes a naked, unsupported assertion years after the fact that he made an invention before a patentee." 501 F.3d 1364, 1371 (Fed. Cir. 2007). Motorola has offered the testimony of two witnesses from two different companies, physical samples, press releases, sales invoices, and user manuals. Thus, Microsoft is incorrect that there is no corroboration. It appears that Microsoft is making an argument regarding the sufficiency of the corroborating evidence. "Assessing the sufficiency of evidence which corroborates a witness's testimony concerning invalidity has been analyzed under the 'rule of reason' test. . . " Adenta, 501 F.3d at 1372. "A 'rule of reason' analysis involves an assessment of the totality of the circumstances including an evaluation of all pertinent evidence." Id. Microsoft fails to point to any deficiencies in evidence that Motorola offers aside from the statement that "Dr. Alexander provided absolutely no facts or evidence to support his statement that the devices are prior art." (CRB at 54.) Motorola's brief cites the copious documentary evidence establishing that the Qualcomm pdQ is prior art, Weighing the evidence that Motorola has presented, the ALJ finds that Motorola has established by clear and convincing evidence that the Qualcomm pdQ, as described, was on sale before the critical date in the United States and is prior art against the '910 Patent. In particular, the ALJ

finds the uninterested testimony of Mr. Finnerty and Mr. Danielson, together with the copyright dates on the manuals and computer software on the actual device submitted, to be extremely persuasive and dispositive.

As for this Microsoft's arguments that Dr. Alexander relied only on the user manual, the ALJ finds that it is inconsequential because the ALJ finds that the user guide is also prior art. See Intermec Tech. Corp. v. Palm Inc., No. 07-272-SLR, 2011 WL 4103021, at *21 (D. Del. Sept. 15, 2011). The testimony of Mr. Finnerty and Mr. Danielson together with the copyright notices on user guides establish by clear and convincing evidence that these documents were publicly available well before Microsoft's claimed date of invention and are printed publications within the meaning of Section 102(b) and 102(a). (See RX-1277C at 105:17-111:14; RX-1320C at 56:4-58:16; RX-164; RX-165.) Moreover, Motorola presented evidence that the information contained in the manual accurately represent how the actual device operated. (RX-1277C at 111:17-133;7; RX-1320C at 67:18-95;7.) Microsoft offers no evidence that Motorola's evidence is incorrect and that the actual pdQ device operates in any way that is different from the manuals. Thus, even if the manuals are not prior art, they are evidence of how the prior art operated and Dr. Alexander was correct to rely on them. Indeed, Microsoft's argument is particularly disingenuous because Microsoft knows that the pdQ is an earlier version of the QCP 6035 for which screenshots were offered. (See CIB at 118-19 ("The pdQ is a mobile device based on the same operating system as the QCP 6035 and operates in a similar manner.").) Accordingly, Microsoft's arguments regarding the use of the manual are without merit.

(2) pdQ Does Not Anticipate

The Qualcomm pdQ was a cellular phone and personal digital assistant (PDA) with a call log and address book functionalities. The Qualcomm pdQ was sold by Sprint in 1999 and 2000.

(a) Claim 1

Microsoft raises three arguments whether the pdQ device anticipates claim 1: (1) Motorola has failed to establish the pdQ contains instructions for replacing an existing contact card as required by claim 1 (CIB at 117); (2) Motorola has failed to establish that the pdQ includes instructions for "updating the selected contact card with call information related to the phone call" (CIB at 117-18); and (3) Motorola is unable to show "pre-population and modification of a *new* contact card" (CIB at 118).

The parties' principal dispute as to whether claim 1 of the '910 Patent is anticipated by the Qualcomm pdQ is with respect to the limitation of "replacing the existing contact card in the contact database with the updated contact card." (CIB at 117.) Microsoft's brief contains little on this point. A review of Dr. Stevenson's direct testimony about the pdQ or QCP 6035 also provides little insight. Instead, Dr. Stevenson sends the reader through several references and landing at his analysis of the SCP-5000. (See CRX-3C at Q153-Q162, Q171, Q175, Q181.) Having reviewed his testimony, the ALJ finds that Dr. Stevenson's reading of this limitation is strained to say the least. It is not clear to the ALJ how, based on his extremely broad reading of "replaced" (which creatively includes the situation where contact fields are merely updated), the pdQ device cannot necessarily meet this limitation. While it is true Dr. Alexander did not present a detailed line-by-line analysis of what the pdQ software does, Dr. Stevenson's construction would necessarily include almost any imaginable situation where a contact database (such as the contact database in the pdQ) is updated. Dr. Stevenson never addresses this even though he spills a lot of ink defending his infringement theory. (See CRX-3 at Q153-Q158.) The ALJ, however, rejected Dr. Stevenson's extremely broad infringement theory that updating or adding fields to a contact card "replaces" the contact card. As discussed above, the theory that updating a field was "replacing" a contact card was explicitly rejected in the ALJ's Markman

ruling. Dr. Stevenson's efforts to obscure the fact that his theory was already rejected through verbose responses cannot overcome that.

However, Dr. Alexander effectively admits that his analysis of the replacing step being met for anticipation purposes is based on Dr. Stevenson's construction. (See RX-1356C at Q142-Q148.) In that event, the ALJ agrees with Dr. Stevenson's conclusion that in the absence of a more detailed analysis of the source code, it is impossible to say by clear and convincing evidence that the "replaced"/"replacing" step is necessarily met. (CRX-3C at Q159.)

Accordingly, Motorola has not proved by clear and convincing evidence that the pdQ device anticipates claim 1 of the '910 Patent because Motorola has not shown that the pdQ meets the limitation of "wherein the existing contact card is replaced with the updated contact card."

With respect to the updating limitation, Microsoft's brief contains almost no detail.

Microsoft simply states

Similarly, MMI has failed to establish that the QCP 6035 includes instructions for "updating the selected contact card with call information related to the phone call." MMI has provided an analysis based on screen shots that shows at most that the QCP 6035 allows a user to add a phone number to a clip board.

(CIB at 117-118) (citations omitted). Motorola disagrees with Microsoft's assessment as to the updating limitation. Motorola argues that "the selected contact card is updated with the phone number from the call log . . . after the user executes the paste operation into a field of the existing contact." (RIB at 131.) Motorola also argues that "Microsoft offers no explanation for why pasting a new phone number to an existing contact card is insufficient to meet the limitation of 'updating the selected call information related to the phone call." (RIB at 131.) Motorola further argues that "[c]laim 1 does not require 'pre-populating the selected contact card with call information for updating an existing contact card." Motorola concludes that "[a] user's selection of a field to update and execution of paste operation is sufficient to meet the limitation of

'updating the selected contact card with the call information related to the phone call." (RIB at 131 (citing RX-1356C at Q89-Q92). Motorola's expert testified that Dr. Stevenson "does not explain why pasting the phone number from the call log into a data field of an existing contact card does not constitute 'updating' the existing contact card." (RX-1356C at Q141.) Dr. Alexander notes that "the selected contact card is updated with the phone number from the call log after the user executes the paste operation." (RX-1356C at Q141.) Dr. Alexander further notes that "claim 1 does not require 'pre-populating' the selected contact card with call information." (RX-1356C at Q141.) In contrast, Dr. Alexander notes that "[c]laim 1 requires pre-population of a contact card with call information only in the context of creating a new contact card." (RX-1356C at Q141.) Dr. Alexander testified "[a] user selection of a field to update and execution of a paste operation is sufficient to meet this limitation." (RX-1356C at Q141.)

The ALJ finds that Motorola has met its burden and has shown by clear and convincing evidence that the pdQ device teaches this limitation. There is no dispute as to the operation of the pdQ device. Neither party has contended that this dispute is an issue of claim construction, nor does the ALJ detect any ambiguity that a claim construction would resolve. The sole dispute is between the experts' opinions as to whether this limitation is present in the device. The ALJ finds that Motorola's evidence is far more persuasive. Simply having additional steps does not mean that it does not perform the method, particularly where the transitional phrase "comprising" is used in the claim. *See Moleculon Research*, 793 F.2d at 1271. The ALJ finds Dr. Alexander's testimony quoted above persuasive that claim 1 does not impose a "prepopulating" limitation when updating an existing contact card, while claim 1 does require such a limitation for creating a new contact card. (RX-1356C at Q141.) Microsoft declined to cross

examine Dr. Alexander at all on any of his testimony. Weighing all these factors, as well as the ALJ's own observations of Dr. Stevenson on the stand, the ALJ finds that Motorola's expert's testimony is more persuasive. Therefore, the ALJ finds that Motorola has proved that the pdQ device meets this limitation.

Microsoft also argues that that claim 1 "also requires pre-population and modification of a *new* contact card, which [Motorola] is unable to show." (CIB at 118.) Microsoft also argues that "the [pdQ] saves an empty phonebook entry with just a phone number in the phone book when the user chooses create new from the call log." (CRB at 56.) Microsoft argues that "[t]he phone number places a phone number into a new contact card that the user can edit before placing it in the contact database." (CRB at 56.) Microsoft's expert sheds a little light on this sparse argument by explaining that his understanding of the term "pre-populating a data field of the new contact card with call information" means that "call information is placed into a contact card that is an editable mode." (CRX-3C at Q173.) Microsoft's expert continues that "[t]he software instructions must allow a user to perform additional requirements of claim 1 for 'receiving contact data to be associated with the new contact card; modifying a data field in the new contact card with the received contact data; and updating the contact database with [the] modified contact card." (CRX-3C at Q173.) Microsoft's expert claims that "[t]he receiving step and modifying step must occur before the new contact card is added to the contact database." (CRX-3C at Q173.)

Motorola explains (and it is not disputed) that when a user selects the "Create Address Book Entry," (shown below) the pdQ and QCP both display a screen stating that "This entry has been copied to the address book. You will now be transferred to the Address Book so that you may edit the new record." (RIB at 131-32 (citing RX-1322, Fig. pdQ-13, RX-1325, Fig. pdQ-13.)

To copy information from Call History to the Address Book:

 Tap the entry you want to add to (or modify) in the Address Book. The Call Detail dialog appears.



- 2. Do one of the following:
 - To add a new entry, tap Create Address Book Entry. Tap OK in the confirmation dialog. The pdQ smartphone opens the Address Edit screen where you can verify or change the entry.
 - To change an existing entry, tap Update Address Book Entry. In the confirmation message, tap OK. The pdQ smartphone opens the Address Book where you can verify or change the entry.

(RX-165 at 19.)

Motorola argues that "Dr. Stevenson opines that because the new contact card is added to the contact database at this point any modifications made to the contact card (e.g., pre-populating the contact card, modifying it with additional contact information such a [sic.] name) are made not to a new contact card but to an existing contact card." Motorola argues that this is flawed because "[t]he save operation does not transform the new contact card into an existing contact card." (RIB at 132.) Motorola continues that "[t]he very screen Dr. Stevenson points to in support of his opinion that the new contact card is saved to the database clearly refers to the record as a 'new record." (RIB at 132 (emphasis in the original).) Motorola argues "[t]he contact card is a new 'new contact card' because it corresponds to a contact card that the user did not previously have in his address book." (RIB at 132.) Motorola continues that "[s]aving the contact information for this new contact to the contact database does not make it any less new." (RIB at 132.) Motorola argues that "even if the 'new record' is saved to the contact database right after the user selects the 'Create Address Book Entry' option, the new contact card is still pre-populated with the new phone number, modified with additional contact information and

saved to the contact database when the user selects the Done option on the new contact card." (RIB at 132.) Motorola concludes that "[t]hose steps are what claim 1 requires." (RIB at 132 (citing RX-1356C at Q102-10, 149-57).)

The ALJ finds that the Qualcomm pdQ teaches the "pre-populating" limitation of claim 1.²⁵ There is no dispute as to how the device operates. Microsoft and its expert appear to argue that because the pdQ device saves the new contact and then allows the user to edit it then this means that it cannot meet the pre-populating limitation. But Microsoft does not dispute that after the save occurs the pdQ device allows the user to edit the contact entry and that the telephone number is pre-populated in one of the fields and that the user can modify the entry and save it.

Ultimately, the ALJ finds Motorola's arguments persuasive. The pdQ device continues to identify the contact as "new," and it allows the user to edit the contact and the pdQ prepopulates the new contact. (RX-1356C at Q102-Q110, Q149-Q157.) The ALJ notes that, after the edit operations, the pdQ allows the user to save the contact. (RX-1356C at Q102-Q110, Q149-Q157.) Thus, Dr. Stevenson's argument is that, in effect, there cannot be an extra "save" before the operations are performed. However, nothing in the claim language of claim 1 prohibits the device from saving the information immediately before allowing the editing. Moreover, the claim using the transitional word "comprising," which allows for additional steps in the method. See Moleculon Research, 793 F.2d at 1271. Dr. Stevenson's argument that the card is, in effect, no longer a "new contact card" because of the save operation before editing, makes no sense. The pdQ continues to identify and treat the card as a new card, it does not treat

²⁵ The ALJ notes that Microsoft has conceded that the pdQ and QCP 6035 operate identically in the relevant aspects and so considers the evidence offered by Motorola for both of them. To the extent there are slight differences in the evidence offered, Microsoft has not relied on them and has not raised them in its Post-Hearing briefing. Indeed, Microsoft relied on its analysis with respect to the QCP 6035 in its brief and did not offer any independent analysis of the pdQ in its Post-Hearing briefs. Accordingly, the ALJ considers only arguments raised by Microsoft in its Post-Hearing briefs and considers all other arguments waived.

it as an existing card. Because there is no justification for the limitations that Dr. Stevenson seeks to read into the claims with regard to the "pre-populating" limitation, the ALJ finds them to be without merit. The ALJ finds that Motorola has established by clear and convincing evidence that the pdQ teaches the remaining limitations of claim 1. (RX-1356C at Q102-Q110, Q149-Q157.) However, because the ALJ has held the pdQ does not teach the "replacing" limitation, the pdQ does not anticipate the claim.

(b) Claim 2, 3, and 8

Claims 2, 3, and 8 are dependent on claim 1. Therefore, the Qualcomm pdQ fails to anticipate these claims for the same reason as claim 1 – Motorola has not shown by clear and convincing evidence that the pdQ teaches the "replacing" limitation. The ALJ finds, however, that Motorola has established by clear and convincing evidence that the pdQ teaches the remaining limitations of claims 2, 3, and 8. (See RX-1356C at Q158, Q160, Q161.)

(c) Claim 10

The parties principal dispute as to whether claim 10 of the '910 Patent is anticipated is with respect to the limitation of "wherein an existing contact card is replaced with the updated contact card." Microsoft's analysis for this limitation is identical to "replacing" limitation of claim 1 discussed *supra*. Because Dr. Alexander effectively admits that his analysis of the replacing step necessarily being met for anticipation purposes is based on Dr. Stevenson's construction. (*See* RX-1356C at Q142-Q148.) In that event, the ALJ finds that in the absence of a more detailed analysis of the source code, it is impossible to say by clear and convincing evidence that the "replaced"/"replacing" step is necessarily met. (CRX-3C at Q159.)

Accordingly, as stated above with regard to the replacing limitation of claim 1, Motorola has not proved by clear and convincing evidence that the pdQ device anticipates claim 10 of the

'910 Patent because Motorola has not shown that the pdQ meets the limitation of "wherein the existing contact card is replaced with the updated contact card."

As for the remaining limitations, the ALJ agrees with Motorola's arguments that these limitations are met by clear and convincing evidence. As shown in the figure below:

To copy information from Call History to the Address Book:

 Tap the entry you want to add to (or modify) in the Address Book, The Call Detail dialog appears.



- 2. Do one of the following:
 - To add a new entry, tap Create Address Book Entry. Tap OK in the confirmation dialog. The pdQ smartphone opens the Address Edit screen where you can verify or change the entry.
 - To change an existing entry, tap Update Address Book Entry. In the confirmation message, tap OK. The pdQ smartphone opens the Address Book where you can verify or change the entry.

(RX-165 at 19; see also RX-1356C at Q164-164; RX-165 at 19

c) Kyocera Wireless QCP 6035

The Kyocera Wireless QCP 6035 was a cellular phone and personal digital assistant (PDA) with a call log and address book functionalities. It was the successor to the Qualcomm pdQ. The Kyocera Wireless QCP 6035 was sold by Sprint in 2001.

(1) The Kyocera Wireless QCP 6035 Is Prior Art

Motorola argues that the QCP 6035 is prior art under 35 U.S.C. § 102(b) because this device was on sale and in public use in the United States before the critical date of February 1, 2001, specifically at least by November 2000. (RX-171; RX-1019C at 4; RX-1320C at 161:5-164:10; RX-1277C at 150:25-153:25.) At the very least, Motorola contends the Qualcomm pdQ and its features were public knowledge and its manual printed publications before the date of the

invention under 35 U.S.C. § 102(a). Motorola argues that Microsoft concedes that the QCP 6035 was released to the public by April 2001. (RRB at 63; CIB at 117; RX-1013C; RX-1277C at 140:16-141:1; 147:14-148:3; RX-1320 at 147:1-13.) Accordingly, the ALJ finds that Motorola has established that the QCP 6035 is prior art at least under § 102(a).

As for this Microsoft's arguments that Dr. Alexander relied on the user manual, the ALJ finds that it is inconsequential because the ALJ finds that the user guide is also prior art. See Intermec Tech. Corp. v. Palm Inc., No. 07-272-SLR, 2011 WL 4103021, at *21 (D. Del. Sept. 15, 2011). The testimony of Mr. Finnerty and Mr. Danielson together with the copyright notices on user guides establish by clear and convincing evidence that these documents were publicly available well before Microsoft's claimed date of invention and are printed publications within the meaning of § 102(a). (See RX-1277C at 141:9-142:24; RX-1320C at 133:3-135:22; RX-1012 at 6.) Moreover, Motorola presented evidence showing how the QCP 6035 actually worked and this evidence was consistent with what was contained in the user manual, so even if the user manual was not prior art, it would be further evidence of how the prior art device actually worked. Thus, even if the manuals are not prior art, they are evidence of how the prior art operated and Dr. Alexander was correct to rely on them. Accordingly, Microsoft's arguments regarding the use of the manual are without merit.

(2) QCP 6035 does not anticipate

Microsoft makes identical arguments for the QCP 6035 as it did for the Qualcomm pdQ for why these references do not anticipate the asserted claims of the '910 Patent. (CIB at 118-19.) The ALJ has considered those arguments in great detail above and has found most of them to be without merit and will not discuss them further here. However, the ALJ did find that Motorola has not proved that the pdQ met the replacing/replaced limitations of the independent claims.

The ALJ notes that Motorola was allowed to offer screenshots showing the actual operation of the QCP 6035 and that this further strengthens the conclusions of the ALJ, even beyond the evidence offered for the pdQ device, that the QCP 6035 meets the remaining limitations of the '910 Patent. For the same reasons set forth above with respect to the Qualcomm pdQ, the ALJ finds that the QCP 6035 does not anticipate the asserted claims for the sole reason that it does not teach the "replaced"/"replacing limitation, but the ALJ does find that the QCP 6035 teaches the remaining limitations of the asserted claims of the '910 Patent. (RX-1356C at Q&A 89-92, 102-10, 149-57; RX-165 at 19; RX-1012 at 112; RX-1322, Fig. pdQ-13; RX-1325, Fig. pdQ-13; RX-1277C at 151:5-152:11; RX-171; RX-1019C.)

d) Sprint Touchpoint

The Sprint Touchpoint was a mobile device offered by Sprint that allowed users to save contact information from the call log into the device's address book.

(1) Touchpoint is Prior Art

Microsoft argues that Motorola has offered only uncorroborated testimony that the Touchpoint device is prior art. (CIB at 119.) Motorola offers the testimony of the Sprint corporate representative, Mr. Finnerty, to establish that the Touchpoint was on sale in late 1999 and early 2000. (RX-1277C at 24:1-25:19.) Motorola also offers a user guide with the copyright of 1999, software release documents bearing release dates of July 1, 1999 and February 4, 2000 (for software version "FPC03.01.02"), and screen shots from a Touchpoint phone showing it is running software FPC03.01.02 with a release date of "Jan. 12, 2000." (RX-1031C; RX-1032C; RX-178.) As discussed above with respect to the Qualcomm pdQ, the ALJ finds this evidence is more than sufficient to establish that the Sprint Touchpoint was in public use and on sale before the critical date of February 1, 2001. The ALJ finds that the uninterested testimony of Mr.

Finnerty and the supporting documentary evidence listed above supports a finding that Motorola has shown by clear and convincing evidence that the Sprint Touchpoint is prior art under § 102(b).

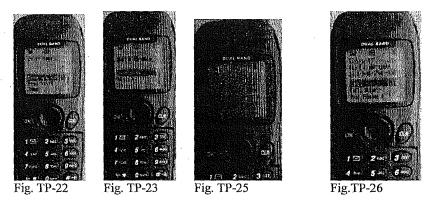
As for this Microsoft's arguments that Dr. Alexander relied on the user manual, the ALJ finds that it is inconsequential because the ALJ finds that the user guide is also prior art. See Intermec Tech. Corp. v. Palm Inc., No. 07-272-SLR, 2011 WL 4103021, at *21 (D. Del. Sept. 15, 2011). The copyright notices on the user guide together with the other consistent documentary evidence establishes by clear and convincing evidence that these documents were publicly available well before Microsoft's claimed date of invention and the critical date and are printed publications within the meaning of § 102(a) and § 102(b). (RX-1277C at 24:1-25:19; RX-1031C; RX-1032C; RX-178) Moreover, Motorola presented evidence showing how the Sprint Touchpoint actually worked and this evidence was consistent with what was contained in the user manual, so even if the user manual was not prior art, it would be further evidence of how the prior art device actually worked. Thus, even if the manuals are not prior art, they are evidence of how the prior art operated and Dr. Alexander was correct to rely on them. Accordingly, Microsoft's arguments regarding the use of the manual are without merit.

(2) Touchpoint does not anticipate

Microsoft only disputes whether Touchpoint meets: (1) the "replacing"/"replaced" limitations of claims 1 and 10; (2) the "pre-populating" limitation of claim 1; and (3) Touchpoint lacks a "context menu." (CIB at 119.) Motorola responds that under Dr. Stevenson's reading of the "replacing" claim, Touchpoint certainly teaches that limitation. (RIB at 128-130.) As for pre-populating, Motorola argues that "Touchpoint does not require that a user manually enter a number from the call log to a new contact card." (RIB at 134.) Motorola continues that

"Touchpoint automatically adds the call log number to the new contact card. . . ." (RIB at 134.)

Motorola points to the following screen shots from the phone as illustrating this process:



Microsoft's expert relies on the same analysis for why Touchpoint does not meet the "replacing/"replaced" limitation as he does for the other references. For the reasons set forth in the other references, the ALJ finds that Motorola has failed to prove that Touchpoint meets the "replacing"/ "replaced" limitations.

As for the pre-populating limitation, Microsoft attempts to read in a "displaying" limitation into claim 1. In effect, Microsoft's argument is that because the Touchpoint does not display a contact card with the number pre-populated, the card is not "pre-populated." But the claim contains no such limitation that the contact card be displayed at any time. Touchpoint "pre-populates" the contact card by saving the number into the contact card without requiring the user to enter the number. Accordingly, the ALJ finds that it meets this limitation.

As for whether Touchpoint has a "context menu" as required by claim 10, the ALJ finds that Motorola has shown that the Touchpoint device has a context menu. (See RX-1214 at TP-11.)

Accordingly, Motorola has failed to show that the Sprint Touchpoint anticipates the asserted claims of the '910 Patent because it does not teach the replacing limitation contained in all of the claims. However, the ALJ finds that Motorola has shown by clear and convincing evidence that it does meet the remaining limitations. (See RX-1356C at Q169-Q214.)

e) SCP-5000

(1) The SCP-5000 is Prior Art

Microsoft does not dispute that the SCP-5000 and the software described in Motorola's evidence was available by March 2001. (CIB at 116; CRB at 55; RX-1277C at 52:11-54:12, 55:4-61:11; RX-146 (2001 copyright); RX-1027C (March 2001 release date); RX-1030C (ship date of March 15, 2001).) Mr. Finnerty testified that thousands of these devices were sold to the public by Sprint all across the United States before the date of the invention. (RX-1277C at 52:11-54:12, 55:4-61:11.) Because the ALJ has determined that Microsoft is not entitled to an earlier date of invention, the SCP-5000 is prior art under § 102(a) as it was undisputedly publicly known by March 2001.

As for this Microsoft's arguments that Dr. Alexander relied on the user manual, the ALJ finds that it is inconsequential because the ALJ finds that the user guide is also prior art. *See Intermec Tech. Corp. v. Palm Inc.*, No. 07-272-SLR, 2011 WL 4103021, at *21 (D. Del. Sept. 15, 2011). The copyright notices on the user guide together with the testimony of Mr. Finnerty, and other consistent documentary evidence establishes by clear and convincing evidence that these documents were publicly available well before Microsoft's claimed date of invention and the critical date and are printed publications within the meaning of § 102(a). (RX-1277C at 88:12-91:9; RX-146 (2001 copyright); RX-1027C (March 2001 release date); RX-1030C (ship date of March 15, 2001).) Moreover, Motorola presented evidence showing how the Sanyo SCP-5000 actually worked and this evidence was consistent with what was contained in the user manual, so even if the user manual was not prior art, it would be further evidence of how the prior art device actually worked. Thus, even if the manuals are not prior art, they are evidence of how the prior art operated and Dr. Alexander was correct to rely on them. Accordingly, Microsoft's arguments regarding the use of the manual are without merit.

(2) The SCP-5000 Does Not Anticipate the Claims

Microsoft briefs only dispute whether the SCP-5000 meets two limitations of the asserted claims of the '910 Patent: (1) the "replacing"/"replaced" limitations discussed at length above and (2) that Motorola has failed to establish that the SCP-5000 has contact cards or a contact card database.²⁶

(a) Claim 1

Microsoft's expert relies on the same analysis for why the SCP-5000 does not meet the "replacing/"replaced" limitation as he does for the other references. For the reasons set forth in the other references, the ALJ finds that Motorola has failed to prove that SCP-5000 meets the "replacing"/ "replaced" limitations. (See RX-1356C at Q48-Q51, Q53-Q57; CRX-3C at Q159.)

Accordingly, Motorola has not proved by clear and convincing evidence that the SCP-5000 device anticipates claim 1 of the '910 Patent because Motorola has not shown that the SCP-5000 device meets the limitation of "wherein the existing contact card is replaced with the updated contact card."

The ALJ finds that Motorola has offered compelling clear and convincing evidence that establishes that the other claim limitations of claim 1 have been met based on the unimpeached testimony of Dr. Alexander and numerous exhibits cited in his testimony. (*See* RX-1356C at O31-O35, O38, O40-O47, O58-O61; RX-146; RPX-11; RX-1027C; RX-1029C.)

(b) Claims 2, 3, and 8

Microsoft does not dispute that, besides the "replacing" limitation found in independent claim 1, the SCP-5000 meets the other limitations of those claims. (CIB at 116-117.) Any other arguments are waived. *See* Ground Rule 11.1. Motorola has presented ample

²⁶ The ALJ finds that Dr. Stevenson's cryptic testimony and his evasive manner at hearing, which the ALJ found to be less then credible, leads the ALJ to give no weight to Dr. Stevenson's testimony on this point. As such, the ALJ finds this argument, which is based on his testimony, to be meritless.

evidence to find that these additional limitations are met. (See RX-1356C at Q62, Q64-Q65.) However, because the SCP-5000 does not meet the "replacing" limitation of claim 1 it cannot anticipate the dependent claims that necessarily include that limitation. See Carnegie Mellon Univ., 2011 U.S. Dist. LEXIS 110629 ("Therefore, if a dependent claim depends upon an independent claim that is held valid, the dependent claim must also be valid as at least one of its elements necessarily is not anticipated by the prior art.") (citations omitted).

(c) Claim 10

The parties principal dispute as to whether claim 10 of the '910 Patent is anticipated by the SCP-5000 is with respect to the limitation of "wherein an existing contact card is replaced with the updated contact card." Microsoft's brief contains little on this point. Having reviewed Dr. Stevenson's and Dr. Alexander's testimony, the ALJ finds, as was found above with respect to claim 1, that Dr. Alexander effectively admits that his analysis of the replacing step necessarily being met for anticipation purposes is based on Dr. Stevenson's construction. (See RX-1356C at Q48-Q51, Q54-Q57, Q70-Q71.) In that event, the ALJ finds that in the absence of a more detailed analysis of the source code, it is impossible to say by clear and convincing evidence that the "replaced"/"replacing" step is necessarily met. (CRX-3C at Q159.)

Accordingly, Motorola has not proved by clear and convincing evidence that the SCP-5000 device anticipates claim 10 of the '910 Patent because Motorola has not shown that the SCP-5000 meets the limitation of "wherein the existing contact card is replaced with the updated contact card."

With respect to claim 10 of the '910 Patent, neither Microsoft nor its expert disputes that the SCP-5000 meets all of the other limitations. Moreover, to the extent that Microsoft did not dispute a particular limitation, the ALJ finds that argument waived. See Ground Rule 8(f) and

11.1. Based on the testimony of Dr. Alexander and the ALJ's review of the evidence cited therein, the ALJ finds that Motorola has established those elements by clear and convincing evidence.²⁷ (See RX-1356C at Q66-Q72; RX-146; RPX-11; RX-1027C; RX-1029C.)

6. The '762 Patent

Motorola contends that two pieces of prior art invalidate the '762 Patent. The first is a master thesis titled "Software Interface for a Multi Technology System Phone" by Christian Herrero Verón, Marta Sacchina, and Irene Yera Pemán from the Department of Communication System at the Lund Institute of Technology, in Lund, Sweden (the "Lund Thesis"). The second is U.S. Patent No. 5,490,275 to Sandvos et al.

a) The Lund Thesis

(1) The Deposition of Per Runeson Is Admissible

On September 6, 2011, Microsoft moved to exclude the deposition testimony of Per Runeson, a Professor at the Lund Institute of Technology in Lund, Sweden, and who is listed as one of the advisors on the Lund Thesis. (EDIS DOCUMENT ID 458648.) Motorola also filed its brief on the issue on September 6, 2011.

Microsoft argues that Motorola should be precluded from relying on the deposition of Professor Runeson because it was taken over Microsoft's objection. (Microsoft Br. at 6-8.) Microsoft argues that it believed, based on some commentary it found on State Department's website, that the voluntary deposition of Professor Runeson in Sweden violated Swedish law because Motorola had not obtained permission of the Swedish Foreign Ministry. (Microsoft Br.

²⁷ The ALJ notes that there is some tension between this finding and Motorola's non-infringement argument of Claim 10 for certain of its products. However, the ALJ notes that Microsoft was aware of Motorola's non-infringement arguments and did not raise any issues they might create with respect to validity in its brief or in the testimony of its witnesses. Accordingly, the ALJ finds them waived and will not consider them.

at 3.) Microsoft further argues that Motorola unfairly delayed in notifying Microsoft that Professor Runeson's deposition would go forward, which prevented it from being able to properly investigate the legality of the deposition. (Microsoft Br. at 4.)

Motorola responds that Swedish law has no such requirement that permission of the Swedish Foreign Ministry be obtained before a voluntary deposition is taken. (Motorola Br. at 6-7.) It offers the declaration of a Swedish lawyer confirming this. (Motorola Br. Ex. 9: Declaration of Christoffer Gramming dated August 29, 2011 ("Gramming Decl.") ¶¶ 5-9. Motorola also points out that the State Department website is offered for informational purposes only and that the website expressly disclaims that it is offering legal advice. (Motorola Br. at 6-7.)

In addition, Motorola argues that it noticed the deposition on June 1, 2011 – more than three weeks before the deposition took place. (Motorola Br. at 4-5.) Motorola also argues that Microsoft never raised this objection before the hearing and, further, that Microsoft actually designated parts of Professor Runeson's testimony. (Motorola Br. at 4-5.)

The ALJ denies Microsoft's motion to exclude the testimony. Microsoft's motion cites no Swedish law or relevant U.S. law in support of its arguments. While the State Department's website is informative, it is not law and expressly disclaims giving legal advice. (*See* Motorola Br. Ex. 8: U.S. State Department Website, Judicial Assistance – Sweden.) Moreover, the Commission and U.S. cases Microsoft cites all involve countries other than Sweden, and stand for the (hopefully) uncontroversial proposition that attorneys should comply with the laws of foreign countries when conducting discovery within their borders and not that Sweden prohibits depositions such as this one.

While declarations of foreign lawyers regarding foreign can be controversial ²⁸, Motorola's attorney declaration is the only evidence of Swedish law offered by the parties. This declaration states that Sweden has no laws that prohibit voluntary depositions such as this one. (See Gramming Decl. ¶¶ 5-9.) This is not to downplay the dangers or concerns with taking evidence abroad ²⁹, but Microsoft completely fails in satisfying its burden why this relevant evidence should be excluded. Microsoft's other objections are meritless. Motorola provided ample notice of the deposition. It was not Motorola's obligation to remind Microsoft of depositions Motorola had fairly noticed. Indeed, it appears that if Motorola had not mentioned the deposition to Microsoft, Microsoft would never have asked. Finally, if Microsoft had legitimate concerns, it could have raised them in an emergency request to the ALJ. It was not Motorola's obligation, in this instance, to seek judicial approval for this timely noticed, voluntary deposition of a third party that, according to Swedish counsel, did not violate Swedish law. Moreover, Microsoft waived its objections by failing to bring them to the ALJ's attention earlier. Accordingly, Microsoft's motion is denied.

²⁸ Compare Bodum USA, Inc. v. La Cafetiere, Inc., 621 F.3d 624, 632-33 (7th Cir. 2010) (Posner, J., concurring) (rejecting use of expert declarations) with id. at 638-40 (Wood, J., concurring) (emphasizing usefulness in some situations of expert declarations on foreign law).

For example, under France's Statute No. 80-538 (July 16, 1980) ("1980 Blocking Statute"), unauthorized discovery can result in substantial monetary penalties. See Bates C. Toms III, The French Response to the Extraterritorial Application of United States Antitrust Laws, 15 Int'l L. 585, 611 (1981) (providing a translation of the original version of the 1980 Blocking Statute). Indeed, the Cour de Cassition (France's Supreme Court) has upheld convictions (and a 10,000 Euro fine) of a lawyer who took voluntary depositions in France without permission of French authorities. See In re Christopher X, Cour de Cassation [Cass. Crim.], Paris, Dec. 12, 2007, Juris-Data No. 2007-83228 (Fr.). In other countries, such as Switzerland, unauthorized evidence gathering can result in imprisonment. See Swiss Penal Code Article 271(1) (imposing imprisonment on persons involved in the unauthorized collecting evidence in Switzerland). In contrast to this clearly established law in France and Switzerland, Microsoft offers no Swedish legal authority to support its position.

(2) Motorola Has Failed to Prove That The Lund Thesis Is Prior Art

Microsoft disputes whether the Lund Thesis is a printed publication under 35 U.S.C. § 102(a). "Whether an asserted anticipatory document qualifies as a 'printed publication' under § 102 is a legal conclusion based on underlying factual determinations." Cooper Cameron Corp. v. Kvaerner Oilfield Products, Inc., 291 F.3d 1317, 1321 (Fed. Cir. 2002). "Whether a given reference is a 'printed publication' depends on whether it was 'publicly accessible' during the prior period." Bruckelmyer v. Ground Heaters, Inc., 445 F.3d 1374, 1378 (Fed. Cir. 2006). "Whether a reference is publicly accessible is determined on a case-by-case basis based on the 'facts and circumstances surrounding the reference's disclosure to members of the public." In re Lister, 583 F.3d 1307, 1311 (Fed. Cir. 2009) (quoting In re Klopfenstein, 380 F.3d 1345, 1350 (Fed. Cir. 2004)). A reference is considered publicly accessible if it was "disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it." Kyocera Wireless Corp. v. Int'l Trade Comm'n, 545 F.3d 1340, 1350 (Fed. Cir. 2008) (quotation marks omitted).

Motorola has failed to show by clear and convincing evidence that the Lund Thesis was publicly available before the date of invention as required by § 102(a). Professor Runeson's testimony establishes that the Lund Thesis was likely logged on a paper list maintained in a binder by the "department secretary." (RX-903 at 13-14.) Professor Runeson also testified that the department would freely provide copies of a thesis on request and that Swedish law requires that such publications be made available to the public on demand. (RX-903, at 13; RX-904.) Professor Runeson also testified that the list maintained by the department could not be searched for key terms, author names, or titles. (RX-903, at 14-15.) However, no further evidence regarding this list was provided.

Professor Runeson also testified that the document identity on the first page – CODEN:LUTEDX (TETS-5392)/1-1154/(2000)&local 10 – means that the thesis was a formal publication in a series from the Lund Institute of Technology. (RX-903 at 14; RX-904.) However, Professor Runeson stated that he did not know what library functions the University performs or about the procedures for how such publications are handled. (RX-903 at 14-15.) Nor could Professor Runeson confirm the exact publication date. (RX-904.)

The ALJ finds that this evidence cannot satisfy Motorola's burden that the Lund Thesis was publicly available before the date of invention. Professor Runeson only offered testimony about the practices in the department. His testimony that the only way to access the Lund Thesis in the department was through inspecting a binder kept by a secretary in the department is insufficient to establish publication. Motorola offered little evidence regarding what information was contained in this binder. And the evidence that it does offer is that the list could not be searched by author, title or subject. As for formal publication by Lund Institute of Technology, there is absolutely no evidence regarding the university library and even if the Lund Thesis is available there. The scant evidence that was presented of the availability of the Lund Thesis in computer science department is insufficient to establish public availability. See Lister, 583 F.3d at 1312-13 (no printed publication where manuscript was filed with the Copyright Office and could only be accessed by the author's name); In re Cronyn, 890 F.2d 1158 (Fed. Cir. 1989) (finding thesis stored in chemistry department where the only index was a collection of index cards bearing only the students' names insufficient).

Motorola also argues that the public presentation of the thesis by the students as part of the defense of their thesis amounted to a publication of thesis. *See Mass. Instit. of Tech. v. AB Fortia*, 774 F.2d 1104 (Fed. Cir. 1985). Professor Runeson testified that the presentation took

place between late March and early April 2000.³⁰ (RX-903 at 9.) Professor Runeson could not recall much about this particular presentation, but he testified that the general procedures in the computer science department at the Lund Institute of Technology regarding thesis presentations include an email announcement of the presentation, an oral presentation by the students open to the public, and a report that is either handed out at the presentation or announced that it is available on request. (RX-903 at 10.) He also testified that there would be no restrictions on someone obtaining a public version of the report (as is at issue here). (RX-903 at 11.) Professor Runeson also testified that generally the email announcement would have gone out to a "network of company partners." (RX-903 at 11.) However, he could not remember if anyone attended the presentation or even if an email actually went out on this occasion. (RX-903 at 11.)

The ALJ finds that this evidence Motorola presented does not establish this is a printed publication for purposes of § 102. The mere presentation of thesis to a faculty commission is insufficient to establish a printed publication. *See In re Bayer*, 568 F.2d 1357, 1362 (C.C.P.A. 1978).

The cases that have found such presentations are printed publications have involved evidence of much wider distributions than the evidence supports in this case. See AB Fortia, 774 F.2d at 1108-10 (paper presented at international conference with 500 possible attendees and six copies of the paper distributed); Klopfenstein, 380 F.3d 1345 (poster displayed at national conference for two and half days and at university research facility for half a day). While it appears that the presentation was open to the public, there is no evidence anyone actually attended or obtained a copy of the thesis. Moreover, although there is some evidence that this

³⁰ While Microsoft complains about the failure to identify the exact date, the ALJ does not see how that is relevant. Microsoft points to no evidence that would call this period into question. In addition, any date in that period would be well before the date of invention that Microsoft is claiming.

presentation might have been publicized through the email list Professor Runeson discussed, there is no evidence it actually was, what information the notice actually contained, or to whom the notice was actually sent. The mere possibility that someone could have attended the presentation or that the presentation might have been publicized to an unknown group of one or more persons by email is not sufficient to meet the clear and convincing standard of proof that the Lund Thesis is prior art. *See SRI Int'l Inc. v. Internet Sec. Sys.*, 511 F.3d 1186, 1197-98 (Fed. Cir. 2008) (vacating grant of summary judgment for a paper posted a public FTP site with no evidence of publicity or index or other information because there may not be sufficient evidence to find a printed publication).

(3) Motorola Has Not Proven That The Lund Thesis Anticipates the '762 Patent

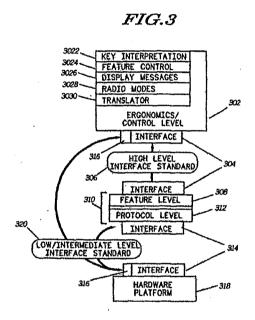
Indeed, even if the Lund Thesis were proved to be prior art, it would not invalidate the claims of the '762 Patent. Specifically, the ALJ finds that Motorola did not show by clear and convincing evidence that the Lund Thesis discloses the claimed driver layer. (CRB at 66-67.) As Microsoft points out, there is some ambiguity, at least based on the evidence presented, as to whether the disclosed "Technology Handler" ("TH") layer communicates directly with the hardware in question. This limitation is found in all of the asserted claims. Because Motorola has not shown by clear and convincing evidence that the Lund Thesis contains this limitation, it has not proved that this reference invalidates the '762 Patent.

b) U.S. Patent No. 5,490,275

U.S. Patent 5,490,275 to Sandvos ("the Sandvos patent") (RX-0638) describes a Virtual Radio Interface Standard ("VRIS") in a communication device that includes three levels: a high level (or user ergonomics/control level); a common level (or feature/protocol level); and a low level (or hardware platform level). Tr. 1141:15-1142:8. The Sandvos patent was filed on

February 1, 1995, issued on February 6, 1996, and is a continuation of U.S. Patent App. No. 07/906,969, filed June 30, 1992. The Sandvos patent is therefore prior art to the '762 patent under 35 U.S.C. § 102(b).

Figure 3 of the Sandvos patent shows the general architecture of the layered radio communication system.



The feature/protocol level controls at least one feature and at least one protocol of the communications device. Tr. 1142:9-16. The user ergonomics level includes an interface coupled to the feature/protocol level that allows the user ergonomics level to change without affecting the feature/protocol level. Tr. 1142:20-1143:5. In addition, the low level (or hardware platform) includes another interface coupled to the feature/protocol level for allowing the hardware platform to change without affecting the feature/protocol level or the user ergonomics level. Tr. 1143:6-13. Microsoft raises a number of disputes regarding whether the Sandovos Patent invalidates the '762 Patent.

Microsoft argues that Sandvos does not teach: (1) a hardware independent proxy layer; (2) the use of APIs that abstract out multiple radio technologies; (3) APIs corresponding to call control functions; (4) transforming API calls; (5) the use of standard telephony radio commands; (6) the use of IOCTL codes; (7) the proxy layer and driver layer. (CIB at 146-55; CRB at 72-76.)

Motorola responds that Sandvos does teach these things. (RRB at 50-54.) Moreover, Motorola points out that some of the definitions and distinctions that Microsoft draws here are inconsistent with the positions taken by its infringement expert, Dr. Olivier. (RRB at 52-53.)

The ALJ finds that Motorola has not shown by clear and convincing evidence that the Sandvos patent invalidates the '762 Patent. Specifically, the ALJ finds that the Sandvos patent does not teach a "hardware independent" "proxy layer" as required by all of the asserted claims. (CIB at 146.) Microsoft has argued that "[t]he 'common' layer (also called the 'feature/protocol' layer) that sits below the high level layer in Sandvos is also not hardware independent, because it contains 'tasks' that are both 'radio independent' as well as those that are not radio independent but instead are merely 'historically stable.'" (CIB at 146.) Motorola argues that "radio independent" and "historically stable" tasks are both radio independent. (RRB at 51-52.) Moreover, Motorola argues that Microsoft's expert admits that "historically stable" refers to functions that have been used in radios "over a period of time" and that are common to many radios. (RIB at 111.) Motorola argues that this "comports with the definition of radio independence used by Dr. Oliver in his infringement analysis." (RIB at 112.)

The ALJ finds that Motorola has failed to show by clear and convincing evidence that Sandvos has a proxy layer that is hardware independent. Motorola's showing is undermined by the inclusion of "historically stable" tasks in the "common layer." As Microsoft's expert

plausibly points out, historically stable might refer to a set of commands common to a series of radios. (CRX-17C at Q96-Q99.) Accordingly, Motorola has failed to show by clear and convincing evidence that Sandvos teaches a hardware independent proxy layer and Motorola has failed to show that Sandvos invalidates the '762 Patent.

7. The '376 Patent

a) Szymanski Patent

U.S. Patent No. 5,566,337 ("the Szymanski Patent") was filed on May 13, 1994 and issued on October 15, 1996. (RX-642.) The Szymanski Patent is related to U.S. Patent App. No. 08/245,141, filed May 13, 1994. (RX-642.) The Szymanski Patent is therefore prior art to the '376 Patent under 35 U.S.C. § 102(b). The named inventors of the Szymanski Patent are Steven J. Szymanski, Thomas E. Saulpaugh, and William J. Keenan. (RX-642.) The Szymanski Patent discloses a system and method for generating events, detecting events, and distributing the events to various "event consumers." (RX-642 at Abstract.)

Motorola argues that the asserted claims of the '376 Patent are anticipated under 35 U.S.C. § 102 by the Szymanski Patent. (See RIB at 68-69.) According to Motorola, the Szymanski Patent contains each and every limitation of the asserted claims of the '376 Patent. (RIB at 69.) It is Motorola's burden to prove by clear and convincing evidence that the '376 Patent is invalid. See Tech. Licensing, 545 F.3d at 1327.

Microsoft argues that the Szymanski Patent does not anticipate the '376 Patent. (See CIB at 181.) Microsoft argues that the Szymanski Patent does not disclose a "data store on a mobile device that is arranged to store information relating to state properties." (CIB at 181.) Microsoft also contends that the Szymanski Patent does not disclose operation on a mobile device. (CIB at 181.) Microsoft further argues that the Szymanski Patent does not disclose the limitation

"wherein execution of the client applications is dependent upon a received notification." (CIB at 182-83.)

The ALJ finds that Motorola has failed to meet its burden of proving by clear and convincing evidence that the '376 Patent is anticipated by the Szymanski Patent. Based on the evidence before the ALJ, the ALJ finds that the Szymanski Patent fails to disclose two required limitations of the '376 Patent. Specifically, the Szymanski Patent discloses neither a "notification broker" nor the "state properties" as required by claim 10 of the '376 Patent.

With respect to the notification broker limitation, the ALJ has construed notification broker to mean an "underlying driver responsible for, at least, adding, updating, and removing data from a data store." (Order No. 6 at 64.) The ALJ has further construed "underlying driver" to be a component that accesses the identified data store directly to perform the required actions. (Supra IV.D.) There is no evidence that the Szymanski Patent discloses an underlying driver as construed by the ALJ. Motorola points to an "event manager" as the notification broker. (RX-1355C at Q269.) In describing the functionality of said "event manager," Motorola's expert testified that the event manager is "notified about events," and subsequently "sends the event to an event distributor for broadcast to interested consumers." (RX-1355C at Q265; RX-1355C at Q269.) Motorola's expert did not analyze how the "event manager" accesses and performs actions on a data store. Motorola has not provided any argument or analysis in its post-hearing briefing demonstrating that the identified notification broker – the event manager – is responsible for, or even capable of, "at least adding, updating, and removing data from a data store." Therefore, Motorola has not proven by clear and convincing evidence that the event manager meets the "notification broker" limitation of Claim 10.

With respect to the "state properties" limitation, the parties dispute whether or not the Szymanski Patent discloses "state properties" stored on the data store as required by the '376 Patent. As defined by the '376 Patent's specification, a "state property" refers to a "status" variable registered and stored with the notification system for maintenance and change-notifications. (JX-9, 2:32-34.)

Motorola's expert, Dr. Alexander, testified that the examples provided in the Szymanski Patent specification of events relating to low battery and disk insertion, "must by necessity maintain a status variable that tracks, for instance the battery level, in order to detect changes to that level." (RX-1355C at Q250.) Dr. Alexander testified that events such as a battery level change, window movement, or mouse click "must inherently correspond to changes in state properties." (RX-1355C at Q255.) Thus, Motorola argues that the events disclosed by the Szymanski Patent inherently disclose the required "state properties." Microsoft's expert, Dr. Stevenson, testified that a status variable is not necessarily disclosed by the Szymanski Patent. (CRX-17C at Q341-43.) When asked whether an event inherently discloses state properties, Dr. Stevenson answered that "you can have one without the other." (CRX-17C at Q342-43.)

If a prior art reference does not expressly set forth a particular claim element, it may still anticipate the claim if the missing element is inherently disclosed by said reference. *Trintec Indus.*, *Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295 (Fed. Cir. 2002); *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999). Inherent anticipation occurs when "the missing descriptive material is necessarily present, not merely probably or possibly present, in the prior art." *Id.* (internal quotation marks omitted). In other words, inherency may not be established by probabilities or possibilities. *See Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268

(Fed. Cir. 1991). Thus, "[t]he mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Id.*

The ALJ finds that the evidence does not demonstrate that state properties are necessarily present by the Szymanski Patent's disclosure of events. Although Dr. Alexander has provided examples of events such as a battery level change that may inherently disclose a state property variable (RX-1355C at Q255), Dr. Stevenson has also provided an example where such an event does not necessarily disclose a state property variable (RCX-17C at Q342). The ALJ finds that Motorola has not persuasively rebutted Dr. Stevenson's testimony. The ALJ finds that Motorola has only demonstrated that state properties *may* result from a given set of circumstances, not that state properties are necessarily present in the Szymanski Patent. Therefore, state properties are not inherently disclosed by the events described by the Szymanski Patent. Accordingly, the ALJ finds that Motorola has not met its burden in showing, by clear and convincing evidence, that the Szymanski Patent anticipates the '376 Patent.

b) EO Personal Communicator

The EO Personal Communicator is an early tablet computer that operates on the PenPoint OS operating system platform ("PenPoint OS"). (RX-1355C at Q143; RIB at 83.) The EO Personal Communicator was available for sale to the public in the United States as of 1993. (RX-1355C at Q158.) Therefore, the EO Personal Communicator is prior art to the '376 Patent under 35 U.S.C. § 102(b).

Motorola argues that the asserted claims of the '376 Patent are anticipated by the EO Personal Communicator. (RIB at 83-84.) Motorola argues that the EO Personal Communicator's operating system, PenPoint OS, implements a system to notify various clients of state changes in the same way that the '376 Patent discloses. (See RIB at 83-84.) Specifically,

Motorola argues that the EO Personal Communicator operates on an "object-oriented operating system that uses functional units called objects to represent various aspects of the system." (RIB at 84.) Motorola argues that the EO Personal Communicator detects when objects change state and alerts other objects of the state changes. (RIB at 84.)

Microsoft argues that the EO Personal Communicator does not anticipate the '376 Patent because it fails to disclose certain limitations of claims 10, 11, 12, and 13. Microsoft contends that (1) the EO Personal Communicator does not contain state properties; (2) the EO Personal Communicator does not include client applications that register to receive notifications; and (3) the EO Personal Communicator does not disclose executing client applications upon receiving a notification. (CIB at 185-87.) Microsoft also argues that Motorola has not made any argument that the identified notification broker is a "RAM driver" or directly communicates with hardware. (CRB at 82-83.)

The ALJ finds that Motorola has failed to present clear and convincing evidence that the EO Personal Communicator anticipates claim 10 of the '376 Patent. Specifically, the ALJ finds that the EO Personal Communicator does not disclose a notification broker consistent with the ALJ's construction of the term, *i.e.*, an "underlying driver responsible for, at least, adding, updating, and removing data from a data store." (*See* Order No. 6 at 664.) Motorola's expert, Dr. Alexander, points to the Class Manager as an example of a notification broker disclosed by the EO Personal Communicator. (RX-1355C.000211.) Dr. Alexander also identified the RAM memory as the data store. (RX-1355C.000207.) Dr. Alexander, however, provides no analysis on whether the Class Manager, or any other component on the EO Personal Communicator, can, at least, add, remove, and update data directly from the RAM memory. Dr. Alexander only

asserts that the Class Manager "generates, adds applications to, and accesses the observer list." (RX-1355C.000211.)³¹

The ALJ finds Dr. Alexander's analysis of the actions that the Class Manager perform on the observer list insufficient to show that the Class Manager is a notification broker. Motorola treats the data store and notification list as the same thing. Different words used in patent claims presumably have different meanings. *E.g., Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 807 (Fed. Cir. 2007). Here, the claim language uses two different terms in reference to a data store and a notification list. (*See* JX-8, 80:31-35 (claim 10 refers to both a "data store" as well as a "notification list").) Thus, "data store" and "notification list" refer to different things. As construed by the ALJ, the notification broker is an "underlying driver" that performs various actions on the *data store*. (Order No. 6 at 64.) Dr. Alexander, however, has only argued that the identified notification broker performs various actions on the *notification list* (RX-1355C.000211). Motorola has provided no analysis on how the identified broker accesses a data store directly to perform the actions required by the ALJ's construction. Therefore, the ALJ finds that the EO Personal Communicator does not anticipate the '376 Patent.

c) The Palm OS Reference

Motorola argues that the asserted claims of the '376 Patent are anticipated under 35 U.S.C. § 102 by the Palm OS API Programmer's Reference (RX-0067) and the Palm OS Programmer's Companion (RX-0068) (collectively, the "Palm OS References"). Motorola argues that the Palm OS References constitute a single document for purposes of anticipation because "the API guide incorporates the Companion document by reference." (RIB at 79 (citing Callaway Golf Co. v. Acushnet Co., 576 F.3d 1331, 1346 (Fed. Cir. 2009).) According to

³¹ Motorola has identified the "observer list" as the component meeting the "notification list" limitation.

Motorola, the Palm OS References contain each and every limitation of the asserted claims of the '376 Patent. The Palm OS API Programmer's Reference was available as of May 13, 2002, and the Palm OS Programmer's Companion reference was available as of May 12, 2002. (CX-1355C at Q198.) Thus, both documents constitute prior art under 35 U.S.C. § 102(b).

Microsoft argues that the Palm OS References do not anticipate the asserted claims of the '376 Patent. Microsoft argues that the Palm OS References do not disclose either "notification broker" or "wherein at least some of the state properties are modified by different components" as required by claim 10. (CIB at 179-80.) Microsoft also argues that Motorola has pointed to no discussion of whether the identified notification broker is an underlying driver or how the broker adds, updates, and removes data from the identified data store. (CRB at 88.)

The ALJ finds that Motorola has failed to meet its burden of proving by clear and convincing evidence that the '376 Patent is anticipated by the Palm OS References. The ALJ agrees with Microsoft that Motorola's post-hearing briefing contains no discussion or argument on whether the Palm notification system is an underlying driver that can add, update, and remove data from a data store. (CRB at 88-89.) Motorola's post-hearing briefing only asserts that the "Notification Manager adds the client to a *subscription list*" that resides in the data store. (RRB at 39.) However, Motorola provides no analysis or argument that the Notification Manager performs, or is even capable of performing, actions directly on the *data store* itself. As discussed above, accessing and performing actions on the notification list does not satisfy the requirement that the notification broker be an "underlying driver" capable of accessing and managing the data store directly.

The ALJ also finds that the Palm OS references do not disclose "state properties" that are "modified by different components." Motorola argues that various APIs update state properties.

(RIB at 82.) The ALJ agrees with Microsoft that there is no teaching in the Palm OS References indicating that the identified API's are implemented by different components. Motorola argues, in the alternative, that it would have been obvious to use different components to modify the state properties. (RIB at 82.) A conclusory statement that "[i]t would have been obvious to a person of ordinary skill" to modify state properties with different components is insufficient for Motorola to prove obviousness, for which it carries a clear and convincing evidence burden. Accordingly, the ALJ finds that the Palm OS References do not anticipate the '376 Patent.

C. Obviousness

Included within the presumption of validity is a presumption of non-obviousness. Structural Rubber Prods. Co. v. Park Rubber Co., 749 F.2d 707, 714 (Fed. Cir. 1984). Obviousness is grounded in 35 U.S.C. § 103, which provide, inter alia, that:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negative by the manner in which the invention was made.

35 U.S.C. § 103(a). Under 35 U.S.C. § 103(a), a patent is valid unless "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103(a). The ultimate question of obviousness is a question of law, but "it is well understood that there are factual issues underlying the ultimate obviousness decision." *Richardson-Vicks Inc.*, 122 F.3d at 1479; *Wang Lab., Inc. v. Toshiba Corp.*, 993 F.2d 858, 863 (Fed. Cir. 1993).

Once claims have been properly construed, "[t]he second step in an obviousness inquiry is to determine whether the claimed invention would have been obvious as a legal matter, based on underlying factual inquiries including: (1) the scope and content of the prior art, (2) the level of ordinary skill in the art, (3) the differences between the claimed invention and the prior art; and (4) secondary considerations of non-obviousness" (also known as "objective evidence"). Smiths Indus. Med. Sys., Inc. v. Vital Signs, Inc., 183 F.3d 1347, 1354 (Fed. Cir. 1999), citing Graham v. John Deere Co., 383 U.S. 1, 17 (1966). The ultimate determination of whether an invention would have been obvious is a legal conclusion based on underlying findings of fact. In re Dembiczak, 175 F.3d 994, 998 (Fed. Cir. 1999).

Obviousness may be based on any of the alleged prior art references or a combination of the same, and what a person of ordinary skill in the art would understand based on his knowledge and said references. If all of the elements of an invention are found, then:

a proper analysis under § 103 requires, inter alia, consideration of two factors: (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition or device, or carry out the claimed process; and (2) whether the prior art would also have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success. Both the suggestion and the reasonable expectation of success must be founded in the prior art, not in the applicant's disclosure.

Velander v. Garner, 348 F.3d 1359, 1363 (Fed. Cir. 2003) (emphasis added) (internal citations omitted).

The critical inquiry in determining the differences between the claimed invention and the prior art is whether there is a reason to combine the prior art references. *See C.R. Bard v. M3*Sys., 157 F.3d 1340, 1352 (Fed. Cir. 1998). For example:

[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent

application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.

KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398, 418-19 (2007) (emphasis added). The Federal Circuit case law previously required that, in order to prove obviousness, the patent challenger must demonstrate, by clear and convincing evidence, that there is a "teaching, suggestion, or motivation to combine. The Supreme Court has rejected this "rigid approach" employed by the Federal Circuit in KSR Int'l Co. v. Teleflex Inc., 500 U.S. 398 (2007), 127 S.Ct. 1727, 1739. The Supreme Court stated:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. Sakraida and Anderson's-Black Rock are illustrative—a court must ask whether the improvement is more than the predictable use of prior art elements according to their established function.

Following these principles may be more difficult in other cases than it is here because the claimed subject matter may involve more than the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement. Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicitly. See *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusions of obviousness"). As our precedents make clear, however, the analysis need not seek out precise

teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.

 $[\ldots]$

The obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents. The diversity of inventive pursuits and of modern technology counsels against limiting the analysis in this way. In many fields it may be that there is little discussion of obvious techniques or combinations, and it often may be the case that market demand, rather than scientific literature, will drive design trends. Granting patent protection to advance that would occur in the ordinary course without real innovation retards progress and may, in the case of patents combining previously known elements, deprive prior inventions of their value or utility.

KSR, 550 U.S. at 417-419; 127 S.Ct. at 1740-41. The Federal Circuit has harmonized the KSR opinion with many prior circuit court opinions by holding that when a patent challenger contends that a patent is invalid for obviousness based on a combination of prior art references, "the burden falls on the patent challenger to show by clear and convincing evidence that a person of ordinary skill in the art would have had reason to attempt to make the composition or device, or carry out the claimed process, and would have had a reasonable expectation of success in doing PharmaStem Therapeutics, Inc. v. ViaCell, Inc., 491 F.3d 1342, 1360 (Fed. Cir. so." 2007)(citing Medichem S.A. v. Rolabo S.L., 437 F.3d 1175, 1164 (Fed. Cir. 2006)); Noelle v. Lederman, 355 F.3d 1343, 1351-52 (Fed. Cir. 2004); Brown & Williamson Tobacco Corp. v. Philip Morris, Inc., 229 F.3d 1120, 1121 (Fed .Cir. 2000) and KSR, 127 S.Ct. at 1740 ("a combination of elements 'must do more than yield a predictable result'; combining elements that work together 'in an unexpected and fruitful manner' would not have been obvious"). Further, a suggestion to combine need not be express and may come from the prior art, as filtered through the knowledge of one skilled in the art. See Certain Lens-Fitted Film Pkgs., Inv. No. 337-TA-406, Order No. 141 at 6 (May 24, 2005).

"Secondary considerations," also referred to as "objective evidence of non-obviousness," must be considered in evaluating the obviousness of a claimed invention, but the existence of such evidence does not control the obviousness determination. Graham, 383 U.S. at 17-18. A court must consider all of the evidence under the Graham factors before reaching a decision on Richardson-Vicks Inc., 122 F.3d at 1483-84. Objective evidence of nonobviousness. obviousness may include evidence of the commercial success of the invention, long felt but unsolved needs, failure of others, copying by others, teaching away, and professional acclaim. See Perkin-Elmer Corp. v. Computervision Corp., 732 F.2d 888, 894 (Fed. Cir. 1984), cert. denied, 469 U.S. 857 (1984); Avia Group Int'l, Inc. v. L.A. Gear California, 853 F.2d 1557, 1564 (Fed. Cir. 1988); In re Hedges, 783 F.2d 1038, 1041 (Fed. Cir. 1986); Kloster Speedsteel AB v. Crucible Inc., 793 F.2d 1565 (Fed. Cir. 1986), cert. denied, 479 U.S. 1034 (1987). The burden of showing secondary considerations is on the patentee and, in order to accord objective evidence substantial weight, a patentee must establish a nexus between the evidence and the merits of the claimed invention; a prima facie case is generally set forth "when the patentee shows both that there is commercial success, and that the thing (product or method) that is commercially successful is the invention disclosed and claimed in the patent." In re GPAC Inc., 57 F.3d 1573, 1580 (Fed. Cir. 1995); Demaco Corp. v. F. Von Langsdorff Licensing Ltd., 851 F.2d 1387, 1392 (Fed. Cir. 1988), cert. denied, 488 U.S. 956 (1988); Certain Crystalline Cefadroxil Monohydrate, Inv. No. 337-TA-293, Comm'n Op. (March 15, 1990). Once a patentee establishes nexus, the burden shifts back to the challenger to show that, e.g., commercial success was caused by "extraneous factors other than the patented invention, such as advertising, superior workmanship, etc." (Id.) at 1393.

Generally, a prior art reference that teaches away from the claimed invention does not create prima facie case of obviousness. In re Gurley, 27 551, 553 (Fed. Cir. 1994); see also Andersen Corp. v. Pella Corp., No. 2007-1536, 2008 U.S. App. LEXIS 24087, *13-18 (Fed. Cir. Nov. 19, 2008); Certain Rubber Antidegradants, Inv. No. 337-TA-533 (Remand), Final ID (Dec. 3, 2008) (stating, "KSR reaffirms that obviousness is negated when the prior art teaches away from the invention.")). However, the nature of the teaching is highly relevant. Id. "A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." Id. (emphasis added). For example, "a reference will teach away if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant." Id.

"A person of ordinary skill at the time of the invention interprets the prior art using common sense and appropriate perspective." *Unigene Labs., Inc. v. Apotex, Inc.*, 655 F.3d 1352, 1361 (Fed. Cir. 2011) (citing *KSR*, 550 U.S. at 421). In *KSR*, the Supreme Court observed:

When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.

KSR, 550 U.S. at 421. "Accordingly, when design need and market pressure may dictate a commonsensical path using a finite number of identified predictable solutions to one of ordinary skill, deviations from that path are likely products of innovation." Unigene Labs., 655 F.3d at 1361. But the Supreme Court: "Common sense teaches . . . that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle." KSR, 550 U.S. at 420-21.

1. The '566 Patent

MMI argues that the '566 Patent the asserted claims would have been "obvious in light of the prior art calendar applications for desktop and laptop computers, which were readily adapted for use on mobile devices, such as the Newton MessagePad and Motorola Envoy." (RIB at 56.) MMI further argues that the only distinction between the prior art calendar applications and the '566 Patent is that the claimed system is implemented on a "mobile device" and that "a person of ordinary skill in the art would have been motivated to implement the claimed combinations on a mobile device in light of the prior art systems for use on desktop and laptop computers." (RIB at 56.) MMI then goes into detail as to how any technical or conceptual obstacles alleged by Microsoft were easily overcome with passing references to prior art in only a couple of instances. (RIB at 57-58.)

Microsoft argues that MMI's obviousness arguments fail because MMI fails to provide an element by element analysis or any motivation to combine the prior art references; Dr. Locke's testimony fails to rise to the clear and convincing evidence standard as it is merely conclusory in nature; and the prior art fails to show how calendar applications could be reduced to practice on a mobile device. (CIB at 47-52.) Microsoft further argues that the long felt need of others and commercial success show that the '566 Patent is not obvious. (CIB at 50-51.)

At no point in its initial post-hearing brief (or even its reply post-hearing brief) does MMI describe which prior art combinations it is combining, the manner of combination of those prior art references and/or which claims those combinations render obvious. Furthermore, even assuming that the anticipatory references it cited would also render the asserted claims obvious on their own and not in combination with any other references, such an argument is also missing from their initial post-hearing brief. In other words, it is not clear as to what is the exact the scope and content of the prior art that MMI is asserting. See Smiths Indus. Med. Sys., Inc., 183

F.3d at 1354 (Fed. Cir. 1999) ("[f]he second step in an obviousness inquiry is to determine whether the claimed invention would have been obvious as a legal matter, based on underlying factual inquiries including: (1) the *scope and content of the prior art...*") (emphasis added). Indeed, MMI cites prior art references for which there has been no previous discussion, *e.g.*, Schedule+ and Outlook. (RIB at 46, 58.) The ALJ is left to guess which elements of the prior art references MMI seeks to combine (Should the Newton MessagePad be combined with vCalendar? ADMS? Another prior art reference?), or, rather, if MMI argues that it is the prior art reference in its entirety that renders the '566 Patent obvious. There is not even a cursory attempt at analyses with the references that were already discussed in the anticipation section. (See Ground Rule 8(h).) The ALJ will not guess at which prior art combinations MMI would have put forth in its post-hearing briefs or how those prior art references render the claims of the '566 patent obvious (or which claims it renders obvious). (See Ground Rule 11.1 (stating, in relevant part, that the post-hearing brief shall "discuss the issues and evidence tried").)

MMI argues in a footnote in its post-hearing reply brief that its expert provided direct testimony on obviousness and that this should be sufficient to overcome Microsoft's objection. (RRB at 25, note 8.) The fact that MMI's expert testified on obviousness does not overcome MMI's lack of any description or analysis of obviousness in its initial post-hearing brief for which it carries a clear and convincing evidence burden. MMI makes no actual argument that certain prior art references render a specific claim obvious. At best, MMI is simply incorporating by reference its own expert's testimony. However, the ALJ finds that a simple

³² MMI argues that Schedule+ and Outlook would "provide a roadmap leading a person of ordinary skill directly to the combinations recited in the asserted claims of the '566 patent," but MMI never describes that roadmap. (RIB at 46.) The only other discussion of Schedule+ and Outlook falls under MMI's arguments on compatibility of different scheduling applications. (RIB at 57-58.) There is nothing further in the briefing under the '566 Patent, however, that describes these two prior art references.

³³ MMI provided a description of the prior art and discussed how those prior art references allegedly disclosed elements of the '566 Patent. While their analysis was only limited to the elements in dispute, MMI nevertheless provided an actual analysis. There is no similar such effort with regard to obviousness.

reference to their own expert's testimony is insufficient to constitute a discussion of the issue in the post-hearing brief.³⁴ It is not even clear that MMI relies on its own expert's testimony until the post-hearing reply brief, which itself is only a footnote.³⁵

Here, MMI fails to provide an obviousness analysis except to provide conclusory and generalized sentences. (RIB at 56.) The ALJ finds that MMI has failed to show by clear and convincing evidence that the '566 Patent is obvious in light of the prior art.

2. The '054 Patent

Motorola offers three combinations in support of its arguments the asserted claims of the '054 Patent are obvious – CVS combined with CODA, CVS combined with the '843 Patent, and CODA combined with the '843 Patent. (RIB at 43; RRB at 12.) However, as with the '566 Patent, Motorola does not explain what elements are lacking from what reference and what aspect of a reference would meet those elements. Instead, Motorola argues, for example, for the combination of CVS and CODA that "[v]arious combinations of these features would have been straightforward to implement in view of CVS and CODA." (CIB at 43.) Motorola also argues that "[t]o the extent that a limitation is not anticipated by the '843 patent, it would have been obvious to a person of ordinary skill in the art to look to either CVS or CODA." This argument is vague and conclusory. It provides none of the detail necessary to even begin to combine these references. See Smiths Indus. Med. Sys., Inc., 183 F.3d at 1354 (Fed. Cir. 1999) ("[t]he second step in an obviousness inquiry is to determine whether the claimed invention would have been

³⁴ Indeed, simply allowing such incorporation by reference is tantamount to allowing the parties to circumvent the page limitation for the post-hearing briefs set by the ALJ.

³⁵ In its initial post-hearing brief and its reply post-hearing brief, MMI relies on the testimony of Microsoft's expert Dr. Smith under cross-examination. (See RIB at 56-59; RRB at 24-27.) Dr. Smith's "admissions" however are insufficient, on their own, to carry MMI's burden of proving invalidity. While they certainly could have been used to support MMI's contentions, the fact remains that what MMI's obviousness contentions actually are are missing from its post-hearing briefs.

obvious as a legal matter, based on underlying factual inquiries including: (1) the scope and content of the prior art...") (emphasis added). Motorola's arguments fail for the same reasons set forth above for the '566 Patent. (See RIB at 128-130.) Accordingly, the ALJ finds that Motorola has failed to carry its burden to show that the '054 Patent is invalid based on obviousness.

3. The '352 Patent

In contrast to its analysis for the '566 Patent and the '054 Patent, MMI argues that the '352 Patent is invalid for obviousness based on a prior combination of specific references, namely the Natuerlich! and Torvalds prior art references as well as a combination of these references as well as a combination of these references with other references. (RIB at 174-187.) MMI describes element by element how the '352 Patent is obvious in light of these prior art references. (RIB at 174-187.)

Microsoft argues that Natuerlich! and Torvalds fail to disclose the following elements: (1) the "directory service" (preamble); (2) the "first directory entry for a file wherein the first directory entry holds a short filename for the file" (claim elements 1(a) and 12(a)); (3) "location of the file" (claim elements 1(a) and 12(a)); (4) "the second directory entry holds. . .a signature" (claim element 1(b)); (5) "the second directory entry holds a first portion of the long filename" (claim element 1(b)); (6) "additional directory entry for holding a next sequential portion of the long filename" (claim elements 1(e), 12(c)) and "second directory entry holds at least one portion of a long filename having a fixed number of characters" (claim elements 1(b) and 12(b)); (7) and "accessing the second directory entry" and "accessing. . .at least one additional directory entry" (claim elements 1(d) and 12(e)). (CRB at 33-35.)

The ALJ finds that MMI has shown by clear and convincing evidence that claims 1 and 12 of the '352 Patent would have been obvious in view of Torvalds and Natuerlich! in combination with Torvalds and these references in combinations with other references.

a) "In a computer system having storage, a directory service for accessing directory entries and a file system that uses the directory entries to access files" (Claims 1 and 12 preamble)

MMI argues that Natuerlich! and Torvalds disclose this element. (RIB at 176, 184.) Microsoft argues that these references do not disclose a "directory service" and that neither reference inherently discloses this element.³⁶ (CRB at 33, 36.)

The ALJ finds that Natuerlich! and Torvalds inherently discloses all the elements of the preamble, including a directory service. (RX-1358C at Q&A 99, 116.) The evidence shows that one of ordinary skill in the art would understand that both the GEMDOS system of Natuerlich and the Minix operating system of Torvalds would each have a directory service since both references disclose creating and storing directory entries which hold filenames. (RX-1358C at Q&A 99, 116.) Indeed, Microsoft's own expert admitted such:

- Q. And the previous posting, we were talking about GEMDOS and MS-DOS?
- A. Yes.
- Q. One of ordinary skill in the art would understand at that time, that time being 1992, that those operating systems use a directory service in order to manage the files in storage; is that correct?
- A. They included a directory service.

(Tr. at 611:18-612:1; see also RX-1358C at 116 (discussing Dr. Nutt's deposition testimony). Arthrocare Corp. v. Smith & Nephew, Inc., 406 F.3d 1365, 1373-1374 (Fed. Cir. 2005) ("even if a piece of prior art does not expressly disclose a limitation, it anticipates if a person of ordinary skill in the art would understand the prior art to disclose the limitation and could combine the

³⁶ The ALJ follows the parties' briefs and addresses only those limitations that are in dispute. Those limitations that are not disputed are not discussed as they are deemed to have been disclosed in the prior art references by Microsoft.

prior art description with his own knowledge to make the claimed invention") (citing *Helifix Ltd.* v. *Blok-Lok, Ltd.*, 208 F.3d 1339, 1347 (Fed. Cir. 2000)).

Microsoft argues that the references do not *necessarily* disclose a directory service. The ALJ disagrees, especially in light of the fact that both references are directed to creating and storing directory entries. (RX-0675; RX-0677.) Furthermore, the evidence that Microsoft relies upon appears to simply addresses the issue of accessing files generally – the testimony is not specifically related to the operation of GEMDOS in the context of Natuerlich!.

Therefore, the ALJ finds that Natuerlich! and Torvalds disclose all the elements of the preamble, including a "directory service."

b) "creating a first directory entry for a file wherein the first directory entry holds a short filename for the file and the location of the file" (Claims 1(a) and 12(a))

MMI argues that Natuerlich! discloses this limitation in the struct_baz structure where the first 32 bytes holds the short filename and the 20 character "otherstuff" field holds the location of the file. (RIB at 176-177.) MMI argues that Torvalds discloses this limitation in the first portion of the long filename that is held in the first portion of the directory entry since that first portion would be understood as a complete short filename from the perspective of older programs and systems and the first directory entry also contains an inode number that points to the actual data file. (RIB at 185; RRB at 91.)

Microsoft argues that these references fail to disclose these elements because the long filename cannot be part of the short filename and these references clearly use part of the long filename as the short filename. (CIB at 64-66; CRB at 33-37.) Microsoft argues that these references also fail to disclose the location elements because the Natuerlich! fails to explicitly

disclose this limitation and because the inode number in Torvalds merely points to disk blocks that contain the file and not the actual file data. (CIB at 68; CRB at 34.)

The ALJ finds that the Natuerlich! and Torvalds each disclose a these elements. Microsoft argues that the short filename and long filename are separate and distinct. (CIB at 65; CRX-1C at Q&A 82.) However, the '352 Patent states that a short filename can be the same as the long filename:

[I]f a file is created with a long filename API, it will initially have a long filename and if a file is created with a short filename API, it will initially have a short filename, which may also be the long filename for the file

('352 Patent at 6:55-59) (emphasis added). Thus, the '352 Patent can include a short filename and long filename that overlap and Microsoft's argument fails. The evidence shows that Natuerlich! and Torvalds each disclose a short filename that overlaps with the long filename but can be understood by older programs. Specifically, Natuerlich! discloses a short filename in the first 32 bytes of the struct_baz structure. (RX-1358C at Q&A 93, RZ-0675.) These first 32 bytes mirror the MS-DOS FAT-DIR described in the '352 Patent. (RX-1358C; RX-0675; the '352 Patent, Figure 3a.) Similarly, Torvalds discloses a short filename as evidenced in the example of the short filename "really_long_" from the long filename "really_long_filename." (RX-1358C at Q&A 111-112; RX-0677; RX-1152C at 22:5-23:8.) The "really_long_" can be read by older programs that only read short filenames. (RX-1358C at Q&A 111-112; RX-0677; RX-1152C at 22:5-23:8.) Thus, the evidence shows that both Natuerlich! and Torvalds disclose a first directory entry that holds a short filename.

The evidence also shows that Natuerlich! and Torvalds disclose a first directory entry that holds the location of the file. One of ordinary skill in the art would know that Natuerlich! discloses a first directory entry that holds the location of the file in the "otherstuff" field of the

struct_baz in a manner similar to that of the standard FAT-DIR entry. (RX-1358C at Q&A 101); Arthrocare Corp., 406 F.3d at 1373-1374 (holding that prior art anticipates if a person of ordinary skill in the art would understand the prior art to disclose the limitation and could combine the prior art description with his own knowledge to make the claimed invention). Torvalds discloses an "inode number" in the first directory entry that points to the file. (RX-0677 at 2; RX-1358C at Q&A 118.) The ALJ construed "location of the file" to mean a pointer to the beginning of the data contained in the file. (Order No. 6 at 23-26.) Here, the evidence shows that the "inode number" is a pointer to the data of the file. (RX-1358C at Q&A 118; RX-1152C at 18:15-18.) Microsoft argues that Torvalds fails to disclose this element because the inode does not directly point to the data. However, nothing in the '352 Patent claims, specification or the ALJ's construction requires a direct pointer to the data. The only requirement is that the first directory entry contain a pointer to the beginning of the data contained in the file. Torvalds discloses such a pointer. Therefore, the ALJ finds that Natuerlich! and Torvalds disclose a first directory entry that holds the location of the file.

c) "creating a second directory entry for the file wherein the second directory entry holds at least one portion of a long filename" (claims 1(b) and 12(b))

MMI argues that Natuerlich! and Torvalds disclose this element. The second 32 bytes of struct_baz holds a portion of the long filename in Natuerlich!. (RIB at 177.) In Torvalds, the subsequent Minix directory entries hold the subsequent portions of the long filename. (RIB at 186.) Microsoft groups its argument regarding this claim element with the "additional directory entry for holding a next sequential portion of the long filename" of claims 1(e) and 12(c) and argues that MMI has failed to provide any motivation by one of ordinary skill in the art to add

additional 32 byte directory entries to the end of struct_baz and that neither Torvalds alone or in combination with other prior art references discloses this limitation.

The ALJ finds that Natuerlich and Torvalds disclose this element. The evidence shows that Natuerlich! discloses a second directory entry in the second 32 bytes of struct_baz that holds a portion of the long filename: "one might consider allocating two successive entries in the directory table. So that the full filename would be constructed from this struct baz...":

```
struct_baz
{
    char filename[8],
    exi[3],
    filetype,
    otherstuff[20];
    unused = 0xE5;
    longfilename[31];
}
```

(RX-0675 at 1-2; RX-1358C at Q&A 92.) Microsoft's arguments "disputing" this do not actually dispute this, but rather seem to be more focused on the claim elements 1(e) and 12(c). Regarding Torvalds, the ALJ finds that Torvalds discloses a second directory entry that holds at least one portion of the filename: "do the long filenames by fooling around in several consecutive minix-type directories." (RX-0677 at 2.) Torvalds further explains

The directory entries in (b) could be made to work by using a magic cookie at the end of a filename to mean that the filename continues in the next entry (which has a loode nr of 0 to make old programs ignore it). It could look something like this:

file "really_long_name", use '\000\377' as continuation marker:

```
.word inode_number
.byte 'really_long_\000\377' /* first 12 chars */
.word 0x0000 /* next entry is a continuation */
.byte 'filename\0' /* rest of the filename */
```

(RX-677 at 2; RX-1358C at Q&A 111.) In Torvalds, the "filename" of the directory entry "really_long_filename" is the second directory entry containing a long portion of the long filename.

Therefore, the ALJ finds that Natuerlich! and Torvalds disclose this claim element.

d) "a signature that identifies that the second directory entry holds a first portion of the long filename" (claim 1(b))

MMI argues that while neither Natuerlich! nor Torvalds explicitly disclose this limitation, it would have been obvious to one of ordinary skill in the art to add this limitation to both references since the signature is "nothing more than a sequence number." (RIB at 178, 186.) MMI argues that it was well known in the prior art to use sequence numbers to order multiple pieces of and it would have been obvious to combine Natuerlich! and Torvalds with a prior art reference such as U.S. Patent No. 4, 058,672 to Crager ("Crager") to order the directory entries. (RIB at 178, 186.) MMI further argues that Torvalds discloses a "continuation character" could be deemed a "signature" or a "marker for something's somewhat special." (RIB at 186.)

Microsoft argues that Natuerlich! does not have additional directory entries that would require a sequence number and does not suggest that directory entries could be rearranged. (CRB at 34.) Microsoft argues that the "continuation character" does not perform an ordering function and, as such, is not a signature. (CRB at 37.)

The ALJ finds that MMI has shown by clear and convincing evidence that it would have been obvious to add a signature that would order the directory entries in Natuerlich! and Torvalds. Torvalds itself indicates that it contemplated such an event when it disclosed a "continuation character":

file "really_long_name", use \000\377' as continuation marker:

(RX-677 at 2.) Microsoft argues that this is insufficient to disclose a "signature" as set forth in the '352 Patent because it is a marker for something that is "somewhat special." (CRB at 37.) The evidence shows that Mr. Torvalds further explained that the continuation character was a "signature" and a "special sequence that implies something":

Q. All right. So the following line says ".byte 'really_long_/000/377" and then it has a comment. Do you see that?

A. I see that.

Q. Okay. And what does that line do, or the functionality of that line?

A. So it's admittedly a fairly technical way of specifying a string of bytes, where the apostrophes are supposed to imply to anybody who's used to seeing code, that this is the string; and the bytes are the really long – the "really long_" plus then two special bytes: The 000 is a traditional way of specifying the byte 0; the 377 is the traditional way of specifying the byte 255, which just is the biggest number that can fit in a byte. And the reason it's 377 and not 255, is that actually what octal code. That's –

(Reporter request.)

THE WITNESS: Octal. O-C-T-A-L.code, octal. So. it's in Base 8, not decimal like normal people talk, where--I'm a geek; I'm—I'm sorry.

Q. BY MR. LEWIS: So the 377 is all 1's. Each bit is equal to 1; right?

A. So, again, this was an example, and the reason I picked all 1's was just – The zero is usually used, or universally used, as the end of a string; and then there's 256 different numbers you can pick. If you already picked zero, the other obvious one to pick is 1 or 255 or one of those things that computer people recognize. The 255 is not important. The important is that it's kind of an unusual string 0.255 is kind of the – It's a signature. I think I call it a signature there.

- Q. Well, you call it a continuation marker—
- A. Continuation marker, yeah.
- Q. –I believe, at the bottom?
- A. Yeah. It's just a marker for something's somewhat special. But there's nothing magical about the 377; it's it just happens to be the one I picked.

- Q. Okay. And, in fact, is that what you're referring to when you refer, at the beginning of the paragraph before, as a "magic cookie"?
- A. Correct.
- Q. Okay.
- A. So magic cookie or continuation marker; it's just another way of saying, okay, this is a special sequence that implies something.

(RX-1152C at 19:15-21:12.) Thus, taking into consideration his entire testimony on the matter, Mr. Torvalds was quite specific in describing the "continuation character" as playing a role in the continuation of the filename. This is further evidenced by the Torvalds disclosure itself as it discusses the continuation marker. (RX-0677 at 2.)

In addition, the evidence shows that one of ordinary skill in the art would be motivated to combine Crager with either Natuerlich or Torvalds in order to maintain the proper order of directory entries should they ever fall out of order. (RX-1853C at Q&A 110, 126.) Crager discloses a packet sequence identifier that permits an electronic message that has been broken up into numerous packets to be reassembled in the proper sequence based on the unique sequence identifier assigned to the individual packet. (RX-0672.) Thus, Crager, with its disclosure of a sequence identifier, in combination with either Natuerlich or Torvalds discloses the signature element of the '352 Patent.

Therefore, the ALJ finds that it would have been obvious to one of ordinary skill in the art to add a signature to Natuerlich! or Torvalds.

Microsoft further argues that Natuerlich! and Torvalds fails to disclose a "second directory entry that holds a first portion of the long filename." Microsoft argues that the first portion of the long filename is held in the first directory. (CIB at 63-64;CRB at 34, 37.) MMI argues that the claim language only requires that the second directory entry hold a first portion of

the long filename, and not the first sequential portion as asserted by Microsoft. (RIB at 63-63.) The ALJ agrees that the claim language does not require a first sequential portion as argued by Microsoft. The claims themselves shows that when the inventors intended to specify the sequential portion of the long filename, they did as evidenced in claims 1(e) and 12(c) - "at least one additional directory entry for holding a next sequential portion of the long filename." ('352 Patent at claim 1(e); 12(c)) (emphasis added). Microsoft argues that Figure 2 of the '352 Patent show that the long filename must be filled in sequence. (CRB at 29-30.) However, Figure 2 only shows a first portion of the long filename and a last portion of the long filename – it does not disclose a first sequential portion nor does the specification describing Figure 2 disclose such a requirement. ('352 Patent at Figure 2, 4:47-5:7.) Furthermore, the use of the term "first" in claim 1 does not mean "first sequential" as evidenced by the use of "first" is describing a "first directory entry," which is not the first sequential directory entry as it is placed after the second directory entry. (Nutt, Tr. At 609:13-21.) Therefore, the ALJ finds that the "first portion of the long filename" does not require the first sequential portion of the long filename. Consequently, Natuerlich! and Torvalds still disclose this limitation of the '352 Patent, i.e., a second directory entry that contains a first portion of the long filename.

e) "creating [and storing in the storage] a sequence of at least one additional directory entry for holding a next sequential portion of the long filename" (claima 1(e) and 12(c))

MMI argues that it would have been obvious to one of ordinary skill in the art to simply duplicate the last 32 byte sequence of struct_baz in order to store a long filename that exceeded the 42 characters of struct_baz. (RIB at 179-180.) MMI further argues that Torvalds and other prior art references disclose splitting a long filename into more than two pieces and storing each piece of the filename in different locations. (RIB at 180.) Microsoft argues that this would be

hindsight and that MMI has identified nothing in Natuerlich! that would motivate one of ordinary skill in the art to do this.

MMI argues that Torvalds explicitly discloses this element when it describes "fooling around with several consecutive minix-type directory entries" to store a long filename. (RIB at 186.) Microsoft argues that such a disclosure is "too speculative" and that Torvalds fails to disclose how to create such consecutive minix-type entries. (CRB at 37-38.)

The ALJ finds that the Torvalds disclosure is not so speculative that one of ordinary skill in the art could not combine several consecutive minix-type directory entries to accommodate a longer filename. The evidence shows that Torvalds specifically states that the method disclosed therein could "be extended to any filename length." (RX-0677 at 2.) Furthermore, while Torvalds does not explicitly disclose how to add additional directory entries, the evidence shows that one of ordinary skill in the art would have been able to add these directory entries without much effort. Indeed, Torvalds itself evidences this through not only the topic that prompted Mr. Torvalds response:

Can anyone point me to some info (or tell me themselves) on how to implement long filenames for minix? [I know someone's done it – one of the dudes in the "MINIX" discussion mentioned it]

(RX-0677 at 1), but also through the tone of Mr. Torvalds response ("fooling around") itself indicates that one of ordinary skill in the art would already know how to accomplish this. (RX-0677 at 2.) Neither the question nor the response imply that any sort of additional knowledge or specialized skill is needed to add more directory entries. As such, the ALJ finds that Torvalds discloses this element. Furthermore, the ALJ finds that even if Torvalds is found not to explicitly disclose this element, the ALJ finds that the evidence shows that one of ordinary skill in the art would have the necessary knowledge to create multiple, sequential directory entries.

Arthrocare Corp. v., 406 F.3d at 1373-1374 ("even if a piece of prior art does not expressly disclose a limitation, it anticipates if a person of ordinary skill in the art would understand the prior art to disclose the limitation and could combine the prior art description with his own knowledge to make the claimed invention").

Similarly, the ALJ finds that it would have been obvious to one of ordinary skill in the art to add an additional 32 byte entry to the struct_baz of Natuerlich!. Aside from combining the instant prior art reference with Torvalds, the ALJ finds that it would have been obvious to one of ordinary skill in the art add more directory entries in order to accommodate holding a longer filename. (RX-1358C at Q&A 106.) Indeed, the very purpose of the Natuerlich! discussion was to "get[] longer filenames out of GEMDOS." (RX-675 at 1.) In addition, this would also motivate one of ordinary skill in the art to combine Natuerlich! with Torvalds disclosure to add additional directory entries.³⁷

Therefore, the ALJ finds that Torvalds discloses this element. The ALJ further finds that it would have been obvious to one of ordinary skill in the art to add more directory entries to either Torvalds or Natuerlich! to accommodate a longer filename.

f) "having a fixed number of characters" (claims 1(b) and 12(b))

MMI argues that based on Microsoft's explanation of this limitation, Natuerlich! and Torvalds meet this limitation since both prior art references disclose storing a long filename in additional directory entries when the filename exceeds the maximum number of characters permissible in the second directory entry. (RIB at 180-181; 187.) Microsoft's arguments are the

³⁷ MMI also argues that it would have been obvious to combine Natuerlich! with two other references, namely Yamada and Tsubosaki. (RIB at 180.) However, MMI fails to describe or explain what, exactly, these two references are or what they disclose. As such, the ALJ finds that such conclusory statements fail to rise to the level of clear and convincing evidence.

same as those for the previous claim element ("additional directory entry for holding a next sequential portion of the long filename").

Microsoft does not dispute that in order to satisfy this element "the entire long filename does not fit into the second directory entry, and one or more directory entries are required to store the balance of the long filename." (CRB at 33-38.) As set forth *supra*, the ALJ found that Torvalds specifically discloses the addition of MINIX-type directory entry to accommodate longer filenames. The ALJ similarly found that it would have been obvious to add additional entries on the Natuerlich!'s struct_baz to hold filenames longer than what can be held in the first and second directory entries. Thus, Natuerlich! and Torvalds meet this limitation.

g) "accessing the second directory entry [and the at least one additional directory entry] by the directory service to access the file" (claims 1(d) 12(e))

MMI argues that one of ordinary skill in the art would understand that the long filenames would be used to access the corresponding file in both Natuerlich! and Torvalds. (RIB at 181, 187.) Microsoft argues that neither reference necessarily discloses this element and that MMI's reliance on Mr. Pedrizetti's testimony is misleading since Mr. Pedrizetti was not discussing the prior art references. (CRB at 35, 38.)

The ALJ finds that Natuerlich! and Torvalds disclose this element. Both prior art references discuss the creation and storage of long filenames in directory entries. (RX-0675; RX-0677.) While these long filenames could certainly be used for a variety of reasons, one purpose of such long filenames that are stored in directory entries must be so that they may be used to access a corresponding file. (RX-1358C at Q&A 107, 124) ("[A] central reason for the existence of filename-bearing directory entries is so they can be accessed in order to access the corresponding file."

Therefore, the ALJ finds that Natuerlich! and Torvalds disclose this element.

The ALJ finds that MMI has shown by clear and convincing evidence the '352 Patent is obvious in light of Torvalds and Natuerlich! in combination with Torvalds and these references in combinations with other references.

4. The '910 Patent

As discussed above in detail in the anticipation discussion for the '910 Patent, the prior art contains numerous examples of mobile telephones that allow users to create new contacts and to update contacts from information contained in the call history of the device. The sole "difference" between the prior art mobile devices and the claimed invention is the way in which they save the contact information. There is no dispute that these devices all do save the contact information into a database on the phone. What is disputed is whether they "replace" the contact card in the contact database. (RIB at 128-130; CRB at 54-55.)

The named inventor, Justin Fuller, testified that there were two primary ways of effectuating the saving of the updated contact – (1) taking the existing contact card, update it with new information, and then replace the existing card in the contact card database with the updated card or (2) updating a particular field of the existing contact card in the contact card database without replacing the existing contact card. (Tr. 662:3-664:8.) Of course, Mr. Fuller also testified that while "those are the two general approaches," "there are variations on those that a developer could implement." (Tr. 664:6-664:8.) He also admitted that it would be "common sense" for a programmer because "those would be the two primary ways of effecting the same result." (Tr. 672:13-672:24.)

³⁸ Microsoft argues that Motorola waived its obviousness arguments. However, the ALJ finds that for the '054 Patent, Motorola presented more than sufficient argument to preserve this issue. (*See, e.g.*, RIB at 128-30; RRB at 68.)

Here, the difference between the prior art and the claimed invention is extremely narrow. The prior art teaches the saving of contact information from the call log into the contact database. (See supra Section VI. 5.) The patent claims a particular limited type of saving – "replacing the original contact card with the updated contact card in the contact database." The named inventor testified that "replacing" was one of two options of effecting the result of saving the updated contact card in the contact database. (Tr. 672:13-672:24; see also RX-1356C at Q50 (discussing three possible options for saving a contact).) He also agreed that it was "common sense" for a "programmer" to choose one of those two options. (Tr. 672:13-672:24.) While he claimed that there were variations on these options, he failed to offer any examples and, ultimately, agreed that they were merely "variations" on these two primary methods. (Tr. 664:6-8.)

Thus, in this case, the ALJ finds that the evidence establishes that a person of ordinary skill in the art would have been motivated by her "background knowledge, creativity, and common sense" to implement claimed method given the starting point of any of the four prior art phones discussed above in Section VI.5 because all four of these references are nearly identical in their functionality. The ALJ finds that this case presents the situation where the number of options confronting the skilled artisan is "small or easily traversed." *Ortho-McNeil Pharm., Inc. v. Mylan Labs., Inc.*, 520 F.3d 1358, 1364 (Fed. Cir. 2008). Much like the patent in *Perfect Web Tech., Inc. v. INfoUSA, Inc.*, there are "at most a few potential solutions for this problem at the time . . . [and] [e]ven without experimentation, simple logic suggests" one way to solve the problem. 587 F.3d 1324, 1331 (Fed. Cir. 2008). Moreover, "no evidence indicates that a person of skill in the art would needed to vary all parameter or try each of numerous possible choices, or explore a new technology or general approach . . . where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it, which would counsel

against an invention being obvious to try." *Id.* Thus, the ALJ finds that Motorola has shown by clear and convincing evidence that the '910 Patent is obvious and has at least established a *prima* facie case of obviousness.

5. Objective Indicia of Nonobviousness

As indicated above, one of the *Graham* factors that must be considered in an obviousness analysis, is "objective evidence of nonobviousness," also called "secondary considerations." *See Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1536 (Fed. Cir. 1983) ("Thus evidence arising out of the so-called 'secondary considerations' must always when present be considered en route to a determination of obviousness."). However, secondary considerations, such as commercial success, will not always dislodge a determination of obviousness based on analysis of the prior art. *See KSR Int'l*, 127 S.Ct. at 1745 (commercial success did not alter conclusion of obviousness).

"[S]econdary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented." *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). "It is jurisprudentially inappropriate to disregard any relevant evidence on any issue in any case, patent cases included. Thus evidence arising out of the so-called 'secondary considerations' must always when present be considered en route to a determination of obviousness." *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538 (Fed. Cir. 1983). "A nexus between the merits of the claimed invention and the evidence of secondary considerations is required in order for the evidence to be given substantial weight in an obviousness decision." *Simmons Fastener Corp. v. Ill. Tool Works, Inc.*, 739 F.2d 1573, 1575 (Fed. Cir. 1984). In other words, evidence of

commercial success or industry praise is material "only if it flows from the merits of the claimed invention." *Sjolund v. Musland*, 847 F.2d 1573, 1582 (Fed. Cir. 1988).

a) The '352 Patent

Microsoft argues that its extensive and compelling evidence of secondary considerations rebuts any allegations of obviousness. (CIB at 74-75.) Specifically, Microsoft argues that it has presented evidence of copying, long-felt need, prior failure of others, skepticism of others and unexpected results, commercial success and licensing. (CIB at 74.) However, the ALJ finds that these secondary considerations cannot overcome the strong showing of obviousness in this instance. Perfect Web Techs., Inc. v. InfoUSA, Inc., 587 F.3d 1324, 1333 (Fed. Cir. 2009) ("Moreover, as we have often held, evidence of secondary considerations does not always overcome a strong prima facie showing of obviousness.); Sundance, Inc. v. Demonte Fabricating Ltd., 550 F.3d 1356, 1368 (Fed. Cir. 2008) ("Secondary considerations of nonobviousnessconsidered here by the district court--simply cannot overcome this strong prima facie case of obviousness.") (citing Agrizap, Inc. v. Woodstream Corp., 520 F.3d 1337, 1344 (Fed. Cir. 2008)); see also Dystar Textilfarben GMBH & Co. Deutschland KG v. C.H. Patrick Co., 464 F.3d 1356, 1371 (Fed. Cir. 2006) ("The presence of certain secondary considerations of nonobviousness are insufficient as a matter of law to overcome our conclusion that the evidence only supports a legal conclusion that claim 1 would have been obvious."). Furthermore, the ALJ finds that Microsoft's "evidence" of these secondary considerations to be insufficient since Microsoft only provides conclusory sentences. For example,

If it was the former, then it is not clear whether this patent was the

pioneer patent that drove the licensees to enter into the agreement or whether there was some other patent that drove the agreement and the licensing of the '352 patent was merely ancillary.

Thus, the ALJ finds that Microsoft has failed to overcome the strong showing of obviousness for the '352 Patent.

b) The '910 Patent

Microsoft offers only two secondary consideration of non-obviousness – commercial success and industry praise. (CIB at 122.) Microsoft points to an article that Microsoft says praised the operating system that included the feature "for the operating system's integration of phone functionality with a Pocket PC." (CIB at 122 (citing CRX-19.) Microsoft argues that "a review highlights the '910 patent feature that allows a user to modify contact information from the call log." (CIB at 122 (citing CRX-19).) Microsoft argues that "[t]his feature helped PPC 2002 phone edition to achieve commercial success." (CIB at 122 (citing CRX-3C at Q205-06; CRX-20).)

The ALJ finds that Microsoft has failed to establish any secondary considerations at all that would overcome the *prima facie* case of obviousness. The ALJ begins by looking at the "evidence" that Microsoft cites for "industry praise" and "commercial success." Looking through Dr. Stevenson's direct testimony, he cites to CRX-18, which appears to be a review of the Pocket PC operating system from a webpage. (CRX-3C at Q203-Q204.) A careful review of this document just shows that it lists the contact update from call log feature along with a laundry list of other new features in the operating system. (CRX-18; CRX-3C at Q204-Q205.) This "praise" is in a paragraph that begins "[t]he most *obvious* software addition is the built-in Phone Dialer." (CRX-18 at MSMOTOITC-VOL51-00558510 (emphasis added).) This seems dubious "praise" at best. Accordingly, the ALJ gives this evidence of "industry praise" no weight.

As for commercial success, Microsoft offers no sales figures, no growth figures, indeed, no figures at all. It does not even offer a single Microsoft document. Instead, it offers an article from what appears to be a periodical named *infoSync*. Microsoft points to the first paragraph as establishing "commercial success." Even if this evidence was probative of commercial success, *Kansas Jack, Inc. v. Kuhn*, 719 F.2d 1144, 1151 (Fed. Cir. 1983), which it is not, Microsoft has failed to provide any evidence of a nexus between that alleged commercial success and the patented invention. *See Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988) ("The term 'nexus' is often used, in this context, to designate a legally and factually sufficient connection between the proven success and the patented invention, such that the objective evidence should be considered in the determination of nonobviousness. The burden of proof as to this connection or nexus resides with the patentee."). Accordingly, Microsoft has failed to establish any commercial success that can support a finding of non-obviousness of the '910 Patent.

Accordingly, the ALJ finds that the asserted claims of the '910 Patent are obvious in light of each of the four prior art phones — the Qualcomm pdQ, the Sanyo SCP-5000, the Sprint Touchpoint, and the Kyocera Wireless QCP 6035. The ALJ approaches this result with extreme caution and notes that "[s]implicity is not inimical to patentability." *In re Oetiker*, 977 F.2d 1443 (Fed. Cir. 1992). In addition, the ALJ is very much aware and respects the presumption of validity. However, when the prior art leaves the person of ordinary skill only two options to implement a particular step that is taught in the prior art, it would be obvious to a person of ordinary skill to perform either one of those two options. This is particularly the case when it appears that those two options are essentially equal and the choice is simply a matter of discretion. (Tr. 672:9-12; *see also* RX-1356C at Q54 (discussing obviousness).)

D. Best Mode

Section 112, ¶ 1 of Title 35 of the United States Code sets out the best mode requirement, stating in relevant part that "[t]he specification shall contain . . . and shall set forth the best mode contemplated by the inventor of carrying out the invention." 35 U.S.C. § 112 ¶ 1. The Court of Appeals for the Federal Circuit has held that "[t]he purpose of the best mode requirement is to ensure that the public, in exchange for the rights given the inventor under the patent laws, obtains from the inventor a full disclosure of the preferred embodiment of the invention." *Dana Corp. v. IPC Ltd. Partnership*, 860 F.2d 415, 418 (Fed. Cir. 1988), *cert. denied*, 490 U.S. 1067 (1989). The determination of whether the best mode requirement is satisfied is a question of fact, which must be proven by clear and convincing evidence. *Transco Products Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 559-60 (Fed. Cir. 1994).

In determining compliance with the best mode requirement, two inquires are undertaken. The first inquiry is whether, at the time of filing the patent application, the inventor possessed a best mode of practicing the invention. *Eli Lilly and Co. v. Barr Laboratories, Inc.*, 251 F.3d 955, 963 (Fed. Cir. 2001); see also Liquid Dynamics Corp. v. Vaughan Co., Inc., 449 F.3d 1209, 1223 (Fed.Cir. 2006); Spectra-Physics, Inc. v. Coherent, Inc., 827 F.2d 1524, 1535 (Fed. Cir. 1987) (The specificity of disclosure necessary to meet the best mode requirement is determined "by the knowledge of facts within the possession of the inventor at the time of filing of the application."). This first inquiry is subjective and focuses on the inventor's state of mind at the time the patent application was filed. *Eli Lilly*, 251 F.3d at 963. The second inquiry is, if the inventor did possess the best mode, whether the inventor's disclosure is adequate to enable one of ordinary skill in the art to practice the best mode of the invention. *Id.* This second inquiry is objective and depends on the scope of the claimed invention and the level of skill in the relevant art. *Id.*

The "contours of the best mode requirement are defined by the scope of the "claimed invention" and thus, the first task in any best mode analysis is to define the invention. *Northern Telecom Ltd. v. Samsung Electronics Co., Ltd.*, 215 F.3d 1281, 1286-87 (Fed. Cir. 2000). "The definition of the invention, like the interpretation of the patent claims, is a legal exercise, wherein the ordinary principles of claim construction apply." *Id.* Once the invention is defined, the best mode inquiry moves to determining whether a best mode of carrying out that invention was held by the inventor. If so, that best mode must be disclosed. In *Pfizer, Inc. v. Teva Pharmaceuticals USA, Inc.*, 518 F.3d 1353 (Fed. Cir. 2008), the Federal Circuit summarized its best mode jurisprudence as follows:

We held that the best mode requirement does demand disclosure of an inventor's preferred embodiment of the claimed invention. However, it is not limited to that. We have recognized that best mode requires inventors to disclose aspects of making or using the claimed invention [when] the undisclosed matter materially affects the properties of the claimed invention.

Pfizer, 518 F.3d at 1364 (internal quotations and citations omitted).

MMI argues that Microsoft failed to meet the best mode requirement for the '352 Patent by failing to disclose a method that would prevent corruption and deletion of long filenames in word processing programs. (RIB at 166-167.) Specifically, MMI argues that Microsoft failed to disclose a software "HACK" that would preserve the long filename in word processing programs by caching the long filename while the file was being worked on by an old word processing program that only reads short filenames. (RIB at 167-168.) MMI argues that Mr. Raymond Pedrizetti, one of the inventors of the '352 Patent, believed that "the HACK would be 'beneficial' and create 'high user benefit' by preserving the long filename." (RIB at 168.) Despite this belief, however, the '352 Patent never discusses or discloses the HACK and, therefore, violates best mode. (RIB at 168.)

Microsoft argues that MMI has failed to show that HACK was a subjective best mode and that it relates to an operating system product and not the claimed invention. (CRB at 30.) Microsoft further argues that HACK is not within the scope of the claims because it is directed to preserving long filenames and not accessing long filenames to which the invention is directed. (CRB at 31-32.) Microsoft further argues that its inventors did not conceal the invention. (CRB at 32.)

As set forth *supra*, MMI must first show by clear and convincing evidence that the inventors of the '352 Patent subjectively believed that the HACK software was the best method of practicing the invention of the '352 Patent. While MMI's arguments are extremely compelling, the ALJ finds that they fall just short of meeting the clear and convincing evidence standard. Specifically, it not completely clear that Mr. Pedrizetti, the inventor of the '352 Patent upon whose testimony MMI relies upon for its best mode arguments, considered the HACK to be the best method of practicing the '352 invention. Mr. Pedrizetti testified:

Well, the HACK and the invention were kind of two different things. The invention was how we would support long file names, and the HACK was a characteristic behavior in the operating system based on users using a word processor and trying to allow, in a narrow case, where a user would create a long file name and then take it to a down level system, with a down level word processor on it and modify the file.

In that case, they would rename this file, and it would go away. Okay. So if you did that on the Chicago operating system with the down level word processor, we wanted to recognize that pattern of the delete rename to the original name and preserve the long file name, instead of having the delete delete it and leave it deleted.

* * *

Well, the HACK and the invention were two different things. The HACK was the behavior for the operating system we wanted. It really didn't have anything to do with the invention.

(Tr. At 1547:17-1548:22.) Thus, while there is no dispute that the HACK software was the best method for preserving long filenames for word processing applications, it is not undisputed that it is essential for the invention as defined by the claims. See Northern Telecom Ltd., 215 F.3d at 1286-87 ("contours of the best mode requirement are defined by the scope of the "claimed invention"). The ALJ agrees with MMI's assertion that given the realities of how users commonly used word processors and the way in which down level word processors treated long filenames, the HACK software is undoubtedly important in maintaining compatibility. It is not clear, however, that this method of caching the long filename is what the inventors, particularly Mr. Pedrizetti, considered to be the best method of practicing the '352 invention. While Mr. Pedrizetti's testimony reveals that he certainly did find the HACK software to be beneficial to users, the ALJ finds that such testimony does not clearly and convincingly show that he considered the HACK software to be the best method of practicing the invention of the '352 Patent, i.e., allowing long filenames to coexist with down level systems and reduce the possibility of corruption by the down level systems. The ALJ finds that MMI has failed to show by clear and convincing evidence that the '352 Patent is invalid for failure to disclose best mode.

Having made the foregoing findings on whether the asserted patents are valid, the ALJ finds that the disposition of this material issue, *i.e.*, validity, satisfies Commission Rule 210.42(d). The ALJ's failure to discuss any matter raised by the parties, or any portion of the record, does not indicate that it has not been considered. Rather, any such matter(s) or portion(s) of the record has/have been deemed immaterial.

VII. DOMESTIC INDUSTRY

A. Applicable Law

As stated in the notice of investigation, a determination must be made as to whether an industry in the United States exists as required by subsection (a)(2) of section 337. Section 337 declares unlawful the importation, the sale for importation or the sale in the United States after importation of articles that infringe a valid and enforceable U.S. patent only if an industry in the United States, relating to articles protected by the patent . . . concerned, exists or is in the process of being established. There is no requirement that the domestic industry be based on the same claim or claims alleged to be infringed. 19 U.S.C. § 1337(a)(2).

The domestic industry requirement consists of both an economic prong (i.e., there must be an industry in the United States) and a technical prong (i.e., that industry must relate to articles protected by the patent at issue). See Certain Ammonium Octamolybdate Isomers, Inv. No. 337-TA-477, Comm'n Op. at 55, USITC Pub. 3668 (Jan. 2004). The complainant bears the burden of proving the existence of a domestic industry. Certain Methods of Making Carbonated Candy Products, Inv. No. 337-TA-292, Comm'n Op. at 34-35, USITC Pub. 2390 (June 1991).

Thus, in this investigation Microsoft must show that it satisfies both the technical and economic prongs of the domestic industry requirement with respect to the asserted patents. As noted, and as explained below, it is found that these domestic industry requirements have been satisfied for the '566 Patent, the '133 Patent and the '910 Patent and has not been satisfied for the '054 Patent, the '352 Patent, the '376 Patent and the '762 Patent.

A complainant in a patent-based Section 337 investigation must demonstrate that it is practicing or exploiting the patents at issue. See 19 U.S.C. § 1337(a)(2) and (3); also see Certain Microsphere Adhesives, Process for Making Same, and Products Containing Same, Including

Self-Stick Repositionable Notes, Inv. No. 337-TA-366, Commission Opinion at 8, 1996 WI. 1056095 (U.S.I.T.C., January 16, 1996) ("Certain Microsphere Adhesives"), aff'd sub nom. Minnesota Mining & Mfg. Co. v. U.S. Int'l Trade Comm'n, 91 F.3d 171 (Fed. Cir. 1996) (Table); Certain Encapsulated Circuits, Commission Opinion at 16. The complainant, however, is not required to show that it practices any of the claims asserted to be infringed, as long as it can establish that it practices at least one claim of the asserted patent. Certain Point of Sale Terminals and Components Thereof, Inv. No. 337-TA-524, Order No. 40, 2005 ITC LEXIS 374, *26 (April 11, 2005). Fulfillment of this so-called "technical prong" of the domestic industry requirement is not determined by a rigid formula, but rather by the articles of commerce and the realities of the marketplace. Certain Diltiazem Hydrochloride and Diltiazem Preparations, Inv. No. 337-TA-349, U.S.I.T.C. Pub. No. 2902, Initial Determination at 138, 1995 WL 945191 (U.S.I.T.C., February 1, 1995) (unreviewed in relevant part) ("Certain Diltiazem"); Certain Double-Sided Floppy Disk Drives and Components Thereof, Inv. No. 337-TA-215, 227 U.S.P.Q. 982, 989 (Commission Opinion 1985) ("Certain Floppy Disk Drives").

The test for claim coverage for the purposes of the technical prong of the domestic industry requirement is the same as that for infringement. *Certain Doxorubicin and Preparations Containing Same*, Inv. No. 337-TA-300, Initial Determination at 109, 1990 WL 710463 (U.S.I.T.C., May 21, 1990) ("*Certain Doxorubicin*"), *aff'd*, Views of the Commission at 22 (October 31, 1990). "First, the claims of the patent are construed. Second, the complainant's article or process is examined to determine whether it falls within the scope of the claims." (*Id.*) As with infringement, the first step of claim construction is a question of law, whereas the second step of comparing the article to the claims is a factual determination. *Markman*, 52 F.3d at 976. The technical prong of the domestic industry can be satisfied either literally or under the

doctrine of equivalents. Certain Excimer Laser Systems for Vision Correction Surgery and Components Thereof and Methods for Performing Such Surgery, Inv. No. 337-TA-419, Order No. 43, 1999 ITC LEXIS 245, *7 (July 30, 1999). The patentee must establish by a preponderance of the evidence that the domestic product practices one or more claims of the patent. See Bayer, 212 F.3d at 1247.

The economic prong of the domestic industry requirement is defined in subsection 337(a)(3) as follows:

- (3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark or mask work concerned
 - (A) Significant investment in plant and equipment;
 - (B) Significant employment of labor or capital; or
 - (C) Substantial investment in its exploitation, including engineering, research and development, or licensing.

19 U.S.C. § 1337(a)(3).

The economic prong of the domestic industry requirement is satisfied by meeting the criteria of any one of the three factors listed above.

Section 337(a)(3)(C) provides for domestic industry based on "substantial investment" in the enumerated activities, including licensing of a patent. See Certain Digital Processors and Digital Processing Systems, Components Thereof, and Products Containing Same, Inv. No. 337-TA-559, Initial Determination at 88 (May 11, 2007) ("Certain Digital Processors"). Mere ownership of the patent is insufficient to satisfy the domestic industry requirement. Certain Digital Processors at 93. (Citing the Senate and House Reports on the Omnibus Trade and Competitiveness Act of 1988, S.Rep. No. 71. However, entities that are actively engaged in licensing their patents in the United States can meet the domestic industry requirement. Certain Digital Processors at 93. In establishing a domestic industry under Section 337(a)(3)(C), the

complainant does not need to show that it or one of its licensees is practicing a patent-in-suit. See Certain Semiconductor Chips with Minimized Chip Package Size and Products Containing Same, Inv. No. 337-TA-432, Order No. 13, at 11, (Jan. 24, 2001) ("Certain Semiconductor Chips"). The complainant must, however, receive revenue, e.g. royalty payments, from its licensing activities. Certain Digital Processors, at 93-95 ("Commission decisions also reflect the fact that a complainant's receipt of royalties is an important factor in determining whether the domestic industry requirement is satisfied...[t]here is no Commission precedent for the establishment of a domestic industry based on licensing in which a complainant did not receive any revenue from alleged licensing activities. In fact, in previous investigations in which a complainant successfully relied solely on licensing activities to satisfy section 337(a)(3), the complainant had licenses yielding royalty payments.") (citations omitted). See also Certain Video Graphics Display Controllers and Products Containing Same, Inv. No. 337-TA-412, Initial Determination at 13 (May 14, 1999) ("Certain Video Graphics Display Controllers"); Certain Integrated Circuit Telecommunication Chips and Products Containing Same Including Dialing Apparatus, Inv. No. 337-TA-337, U.S.I.T.C. Pub. No. 2670, Initial Determination at 98 (March 3, 1993) ("Certain Integrated Circuit Telecommunication Chips"); Certain Zero-Mercury-Added Alkaline Batteries, Parts Thereof and Products Containing Same, Inv. No. 337-TA-493, Initial Determination at 142 (June 2, 2004) ("Certain Zero-Mercury-Added Alkaline Batteries"); Certain Semiconductor Chips, Order No. 13 at 6 (Jan. 24, 2001); Certain Digital Satellite System DSS Receivers and Components Thereof, Inv. No. 337-TA-392, Initial and Recommended Determinations at 11 (Dec. 4, 1997) ("Certain Digital Satellite System DSS Receivers").

B. Technical Prong

a) Manufacturing mobile devices

Microsoft argues that it has satisfied the technical prong of the domestic industry requirement based on mobile device running Window Mobile 6.5 or Windows Phone 7 operating systems. (CIB at 190.) MMI argues that Microsoft has failed to satisfy the technical prong because it improperly relies on third party phones that are manufactured abroad. (RIB at 190.) MMI argues that Microsoft cannot use third-party phones to satisfy the technical prong as the domestic industry analysis must only be done "with reference to the Microsoft operating systems themselves." (RIB at 191.) MMI argues that Microsoft cannot meet the technical prong because the products that Microsoft actually produces and sells cannot independently practice the patents without a hardware component, which Microsoft does not itself produce. (RIB at 190-191.) MMI argues that Microsoft has failed to show any domestic manufacturing activities. (RIB at 194-195.)

The ALJ finds MMI's arguments unpersuasive. MMI cites only one decision to support its argument – Certain Optical Disk Controller Chips, 337-TA-523, which was vacated by the Commission, in particular the portions of its domestic industry analysis. See 71 Fed. Reg. 17136-38. The ALJ declines MMI's invitation to rely on a vacated Commission decision. Furthermore, the ALJ finds that MMI's arguments fail to follow the recent Commission precedence, especially the Commission's recent decision in Certain Printing and Imaging Devices and Components Thereof, Inv. No. 337-TA-694 ("Printing and Imaging Devices"). Specifically, the Commission stated, in relevant part

Thus, under the statute, whether the complainant's investment and/or employment activities are "significant" is not measured in the abstract or in an absolute sense, but rather is assessed with respect to the nature of activities and how they are "significant" to the articles protected by the intellectual property right.

Rather, the Commission determination entails "an examination of the facts in each investigation, the article of commerce, and the realities of the marketplace." The determination takes into account the nature of the investment and/or employment activities, "the industry in question, and the complainant's relative size."

Printing and Imaging Devices, Comm'n Op. at 26-27 (February 1, 2011) (emphasis added). Thus, based on the foregoing, the ALJ must examine Microsoft's activities related to the operating systems and how "significant" they are to the mobile telephones that run the operating systems.

The evidence shows that the operating systems developed by Microsoft are extremely "significant" to the mobile telephones. Specifically, the evidence shows that Microsoft and its software developers work closely with the mobile telephone manufacturers to ensure that the software integrates with the hardware as intended and ensure the software runs properly on the devices. (CX-956C at Q8, 14-16, 47-63, 1213-146; *See* Tr. 752:24-753:1, 755:12-16, 762:14-763:16, 764:12-765:9; CX-147C; CX-148C; CX-149C; CX-150C.) Microsoft adds features required by mobile telephone manufacturers and/or makes modifications to the code to enable mobile telephone-specific features. (CX-956C at Q8, 16, 55-63, 136-146.) Microsoft also works to resolve problems and fix bugs with the integration of the software with the mobile telephone hardware before the phones are released. (*Id.* at Q16, 60.) After release, Microsoft begins sustained engineering, which involves working closely with the mobile telephone manufacturers to identify problems, respond to customer feedback, and release updates for the software (including bug fixes, product updates, and mobile telephone-specific modifications) to ensure the mobile telephones remain up to date and continue to operate as intended. (*See* CX-956C at Q8, 17-19, 66-74, 148-156.) Thus, contrary to MMI's arguments, Microsoft's operating systems are

not necessarily a "separate" commodity that may simply be loaded on to any mobile device as MMI seems to imply. Rather, the operating systems are specifically tailored to meet the specifications and demands of each mobile device that utilizes it. Microsoft continues to provide software updates to these operating systems such that the mobile devices will continue to operate correctly. To that extent, it is clear that the operating system is "significant" to the mobile device.

Furthermore, taking into account the nature of Microsoft's activities and the realities of the marketplace, the ALJ finds that Microsoft does "manufacture" a product - namely, the mobile devices that operate using the Windows Mobile 6.5 or Windows Phone 7. As set forth supra, Microsoft works closely with the mobile telephone manufacturers on creating an entire finalized product, i.e., mobile devices running Windows Mobile 6.5 or Windows Phone 7. The operating systems are not mere commodity items that may be replaced with any other operating system such that Microsoft could be considered as not having a role in the creation of the final mobile device. Rather, the evidence shows that it takes a significant amount of work between successfully implement the operating system on the mobile devices. MMI seeks to limit "manufacturing" in the traditional sense by limiting it, in this instance, to the manufacture of mobile telephones. However, as the Commission has aptly noted, the realities of the marketplace should be considered. In this instance, given the complexity of mobile devices in this current climate, limiting activities to only those that fall in line with the traditional meaning of "manufacture" to the physical and literal production of a tangible good would ignore the realities of the marketplace for the sake of adhering to a rigorous standard – something the Commission has declined to do.

MMI further argues that Microsoft improperly relies on two different products to meet the domestic industry requirement, namely mobile devices running Windows Mobile 6.5 and

Windows Phone 7 operating systems for the technical prong and the operating systems alone to satisfy the economic prong. Again, the ALJ declines to take MMI's approach in "divvying" up the mobile device from the operating system and treating them as two completely separate and independent products. The evidence shows that Microsoft's expenditures go beyond simply the general design and creation of the operating system, but includes close collaboration with mobile device manufacturers to successfully and effectively implement the operating systems on the mobile devices. The evidence further shows that Microsoft continues to provide additional support after the operating system has been loaded on to the mobile devices. MMI's approach would ignore and discredit this additional work and collaboration – work and collaboration that adds value to the final product.

Therefore, based on the foregoing the ALJ finds that Microsoft may rely on mobile devices running Windows Mobile 6.5 or Windows Phone 7 operating systems to satisfy the domestic industry requirement.

b) The '054 Patent

(CIB at 7.) Accordingly, for the reasons set forth above in Section V.B, Microsoft has failed to establish that the accused "resource state information" meets the "resource state information" limitation found in all of the asserted claims. Thus, Microsoft has failed to meet the technical prong of the domestic industry requirement.

c) The '566 Patent

Microsoft argues that it has satisfied the technical prong of the domestic industry requirement. (CIB at 35.) Motorola has stated that it will not dispute technical prong. (Tr. 1438:7-24.)

Therefore, the ALJ finds that Microsoft has shown by a preponderance of the evidence that it has satisfied the technical prong of the domestic industry requirement. (CX-0974C at Q&A 309-340.)

d) The '352 Patent

Microsoft argues that it has satisfied the technical prong of the domestic industry requirement. (CIB at 60-61.) MMI does not address the '352 technical prong in its brief. (See RIB at 166-189; RRB at 82-92.) As with its infringement section for the '352 Patent, regardless of Motorola's lack of response, Microsoft must still show that it practices a claim of the '352 Patent. In its brief, Microsoft has failed to show how its domestic industry product, the HP IPAW Glisten phone, practices the patent. Rather, Microsoft's entire technical prong analysis consists of a few conclusory sentences:

Dr. Nutt testified that Microsoft Windows Mobile 6.5 running on an HP IPAQ Glisten phone practices the preamble and elements 1(a) - (c) and 1(e) of this claim. MMI has not disputed any of these elements.

Other than its legally deficient argument that Windows Mobile 6.5 alone is not a "computer system" and does not itself have "storage" (which is addressed separately in this brief), MMI only disputes that the HP IPAQ phone running Windows Mobile 6.5 falls within element 1(d), "accessing the second directory entry by the directory service to access the file," based on the same incorrect claim construction it uses to dispute infringement. Applying the correct construction, Dr. Nutt testified that Microsoft Windows Mobile 6.5 practices disputed element 1(d).

(CIB at 60) Rather than setting forth a full element by element analysis in its brief, Microsoft simply makes conclusory statements and simply cites evidence with no further explanation. This is, quite simply, nothing more than an improper attempt to circumvent the page limitations set by

the ALJ for post-hearing briefs.³⁹ In the ALJ's view, simply making conclusory statements and citing evidence with no explanation fails to constitute "a discussion" of the issue in the post-hearing brief as required by the Ground Rules and is insufficient to carry a party's burden of proof. Therefore, the ALJ finds that Microsoft has failed to show by a preponderance of the evidence that it has satisfied the technical prong of the domestic industry requirement.

e) The '133 Patent

Microsoft argues that it practices claim 1 of the '133 Patent as evidenced by mobile devices that run the Windows Mobile 6.5 operating system. (CIB at 89.) Aside from its general assertion that Microsoft cannot rely on mobile devices manufactured by third parties, MMI does not dispute that Windows 6.5 satisfies claim 1 of the '133 Patent. (See RIB at 142-166; RRB at 69-82.)

The ALJ finds that Microsoft has shown that mobile devices running Windows Mobile 6.5, such as the LG Fathom, practice claim 1 of the '133 Patent. As set forth *supra*, the ALJ found that Microsoft could rely on mobile devices manufactured by third parties. The evidence shows that a mobile device running Windows Mobile satisfies the first element of claim 1 by "generating a set of menu selections for a selected computer resource in response receiving, by the CPU, a context menu generation signal from the user interface selection device." (CX-975C at Q&A 338-43.)

³⁹ Allowing Microsoft to simply make conclusory statements and cite to evidence without explanation would render the page limitations, and to a certain extent post-hearing briefing, set by the ALJ meaningless since the parties could simply cite to the evidence rather then make any arguments.

A	mobile device runni	ng Windows Mobile 6.5 sat	isfies the second element of	claim 1 by
retrievir	ng a menu selection	relating to a class of object	s."	
Α	mobile device runni	ing Windows Mobile 6.5 s	atisfies the third element of	claim 1
<u>.</u>			(Id. at Q346-4	1 7.)

Finally, a Windows Mobile 6.5 device will display the set of menu selections in a menu positioned in the proximity of a graphical representation of the selected computer resource. The selected computer resource, in the call log is a graphical list item representing the phone number. When a user touches and holds this selected list item, a context menu is generated at or near the graphical list item. (*Id.* at Q348-49.)

Therefore, the ALJ finds that Microsoft has satisfied the technical prong of the domestic industry requirement for the '133 Patent.

f) The '910 Patent

Microsoft argues that its Windows Mobile 6.5 operating system practices claim 10 of the '910 Patent. (CIB at 111.) Aside from its general assertion that Microsoft cannot rely on mobile devices manufactured by third parties, MMI does not dispute that Windows 6.5 satisfies claim 10 of the '910 Patent. (See RIB at 115-141; RRB at 54-68.)

The ALJ finds that Microsoft has shown that the Windows Mobile 6.5 operating system practices claim 10 of the '910 Patent. The evidence shows that Windows Mobile 6.5 contains a Contacts application that performs the method of claim 10 on a computer device with a graphical user interface and a user interface selection mechanism. (CX-975C at Q601-604; CPX-271.) Windows Mobile 6.5 performs the method of claim 10 in a computer device such as the LG Fathom smart phone or a computer running the Windows Mobile 6.5 emulator that is included with the Software Development Kit. (CX-975 at Q596-598; CRX-3C at Q215-217; Tr. 977:9-12.) By including a "Call History" screen, Windows Mobile 6.5 performs the step of displaying a list of call entries in a call log of phone calls. (CPX-24; CX-975C at Q605-609.) When the user performs a tap and hold on a particular call entry, a context menu is generated and displayed to the user. (CPX-24C; CX-975C at Q610-616.) The context menu displayed to the user includes the "Save to Contacts" option that will update a contact card in the contact database and replace the existing contact card. (CPX-24C; CX-975C at Q617-622.)

Therefore, the ALJ finds that Microsoft has satisfied the technical prong.

g) The '762 Patent

The parties' dispute regarding the technical prong for the '762 Patent is a narrow one. Motorola argues that Microsoft has failed to actually provide any evidence regarding the software actually on the phones it identified as running the Windows Mobile 6.5 operating system that Microsoft asserts meet the technical prong. (RIB at 191-92.) Motorola further argues that

(citing RX-0874C at 70:18-71:18).) Motorola further argues that Microsoft's expert Dr. Olivier

relied upon "[c]ode implementing an example driver layer" that is provided by Microsoft to OEMs. (RIB at 192 (citing CX-973C at Q35).) Motorola argues that this is a fatal flaw because

(RIB at 192 (citing RX-0874C at 69:24-70:1; 71:19-72:3).) Thus, Motorola argues that Microsoft's proof fails because "Dr. Olivier based his domestic industry opinions for the '762 patent upon source code that is never actually implemented in products that are sold commercially." (RIB at 192.)

Microsoft responds that it did identify actual phones running the software and its expert examined those phones. (CRB at 91.) Microsoft also argues that since their expert examined the source code Microsoft provides, there was no need to examine actual devices. Microsoft argues that Motorola "does not dispute that these operating systems are *capable* of practicing the '762... patent[]." (CRB at 91.) Microsoft argues that "[a]t a minimum, Microsoft has established that it actively took steps to propagate the use of mobile devices running its operating systems." (CRB at 91.)

The ALJ finds that Microsoft has failed to offer sufficient proof to meet the technical prong of the domestic industry requirement. Microsoft does not dispute that its expert relied on example code provided by Microsoft. Microsoft offers no evidence to rebut the testimony of its Rule 30(b)(6) representative that

(RX-0874C at 69:24-70:1; 71:19-72:3.) In addition,

Microsoft also does not dispute that its Rule 30(b)(6) witness testified that

(RX-

0874C at 70:18-71:18.) Microsoft points to no evidence that its expert conducted any

examination or analysis of the third-party software that is necessary to implement the claimed invention or in any way confirmed how the devices it relies on actually operate.

As for Microsoft's argument that its operating systems and sample code are "capable of practicing the '762 . . . patent[]." This is insufficient. The law is clear that the mere possibility of infringement is not enough. *See ACCO Brands, Inc. v. ABA Locks Mfr. Co.*, 501 F.3d 1307, 1313 (Fed. Cir. 2007) (holding that the patent owner must show actual infringement, rather than just the capability to infringe). Indeed, the capability of infringement has not even been proved here because Microsoft has failed to offer any evidence that anyone implements the example code on any device. Thus, the ALJ is left only with a hypothetical device, which is insufficient. *See Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1275-76 (Fed. Cir. 2004).

Microsoft's alternative argument is that it meets the technical prong because it "actively took steps to propagate the use of mobile devices running its operating systems." (CRB at 91.) Microsoft attempts to conflate the economic prong of the domestic industry requirement with the technical prong.

Microsoft relies on the Commission's decision in *Coaxial Cables* for the proposition that efforts to bring devices to market satisfies the technical prong. (CRB at 91 (citing *Certain Coaxial Cable Connectors*, Inv. No. 337-TA-650, Comm'n Op. at 49 (April 14, 2010).) However, the section Microsoft relies on from this opinion is a discussion of the satisfaction of the economic prong for licensing under Section 337(a)(3)(C), not the technical prong. This is irrelevant to whether the technical prong (which undeniably must be met in this investigation) is met. *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1375 (Fed. Cir. 2003) ("The test for satisfying the 'technical prong' of the industry requirement is essentially same as that for infringement, *i.e.*, a comparison of domestic products to the asserted claims.").

The ALJ notes that this is not a case of a fundamental unfairness in the law. Microsoft chose to rely on code for which it has no evidence was ever implemented to meet its burden to prove the technical prong. This is not to say that Microsoft was required to actually examine the source code of every device, but there must be some evidence presented as to how the device actually works. *See Dynacore*, 363 F.3d at 1275-76.

The ALJ further notes that Microsoft's relationships with the OEMs in question should have made obtaining information from them possible. Accordingly, the ALJ finds that Microsoft has simply failed to prove by a preponderance of the evidence that any of the domestic industry devices actually implement the claimed inventions of the '762 Patent and, therefore, Microsoft has failed to meet the technical prong of the domestic industry requirement for the '762 Patent.

h) The '376 Patent

The parties' dispute regarding the technical prong is similar to that of the technical prong dispute with the '762 Patent. Motorola argues that Microsoft's expert "did not identify specific third-party phones that allegedly practice the asserted claims." (RIB at 191.) Motorola argues that Microsoft's expert only "opined generically upon devices loaded with Microsoft's Windows Mobile 6.5 operating system." (RIB at 191 (internal quotation marks omitted.).) Microsoft responds that they may rely on third-party mobile devices to satisfy the technical prong. (CRB at 90.) Microsoft also responds that they did identify actual phones practicing the '376 patent and its expert examined those phones. (CRB at 91.) Microsoft argues that they have met the technical prong because Motorola "does not dispute that these operating systems are *capable* of practicing the . . . '376 patent[]." (CRB at 91.) Microsoft argues that "[a]t a minimum, Microsoft has established that it actively took steps to propagate the use of mobile devices running its operating systems." (CRB at 91.)

The ALJ finds that Microsoft has failed to offer sufficient proof to meet the technical prong of the domestic industry requirement. Microsoft does not dispute that its expert relied on example code provided by Microsoft. Microsoft offers no evidence to rebut the testimony of its Rule 30(b)(6) representative that it does not know of any OEM that actually implements the example code Microsoft's expert analyzed. (RX-0874 at 40:21-41:20.) Microsoft's expert then relied on unnamed client applications from third-party mobile devices to prove that mobile devices running Windows Mobile 6.5 meet the limitations of the '376 Patent. In discussing the limitations of claim 10, Microsoft's expert testified that "[a] mobile device running Windows Mobile includes client applications on the mobile device that are configured to automatically register notification [sic] . . . and receive notification." (CX-973C at Q439.) Microsoft's expert also testified that client applications send "notification requests [that] indicate when the clients should receive notifications." (CX-973C at Q441.) Despite relying heavily on actions performed by client applications on third-party mobile phones, Microsoft points to no evidence that its expert conducted any examination or analysis of these client applications or confirmed how they operate. Rather, Microsoft's analysis was limited to its own example code, which has not been shown to be implemented on any of the third party mobile devices relied upon by Microsoft. As such, Microsoft has not met its burden in establishing the technical prong of the domestic industry requirement.

As for Microsoft's argument that its operating systems and sample code are "capable of practicing the '376...patent[]," this is insufficient to satisfy the technical prong of the domestic industry requirement. The law is clear that the mere possibility of infringement is not enough. See ACCO Brands, Inc., 501 F.3d at 1313 (holding that the patent owner must show actual infringement, rather than just the capability to infringe). Indeed, the capability of infringement

has not even been proved here because Microsoft has failed to offer any evidence that anyone implements the example code on any device. Thus, the ALJ is left only with a hypothetical device, which is insufficient. *See Dynacore Holdings Corp*, 363 F.3d at 1275-76.

Microsoft's alternative argument is that it meets the technical prong because it "actively took steps to propagate the use of mobile devices running its operating systems." (CRB at 91.) Microsoft's arguments are identical to those for the '762 Patent and the ALJ finds them unpersuasive for the same reasons set forth *supra*.

Accordingly, the ALJ finds that Microsoft has simply failed to prove by a preponderance of the evidence that any of the domestic industry devices actually implement the claimed inventions of the '376 Patent and therefore, Microsoft has failed to meet the technical prong of the domestic industry requirement for the '376 Patent.

C. Economic Prong

Motorola argues that Microsoft has failed to meet the economic prong of the domestic industry requirement because it relies on different products for the economic and technical prongs, namely the telephones that run the Windows Mobile 6.5 or Windows Phone 7 operating systems for technical prong and the operating systems themselves for economic prong. As set forth *supra*, the ALJ rejected Motorola's arguments that these are, in fact, two "different" products versus a single product at different stages.

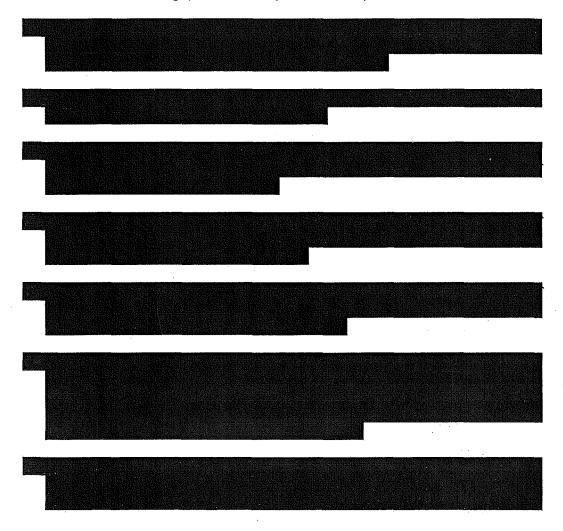
Motorola further argues that Microsoft has failed to compare its domestic expenditures to its foreign expenditures; has failed to show any domestic manufacture of goods; and has failed to show a nexus between the expenditures and the patents at issue. (RIB at 193-197.) As set forth *supra*, the ALJ rejected Motorola's argument that Microsoft must show domestic manufacturing activities. As for Motorola's arguments that Microsoft failed to compare its domestic

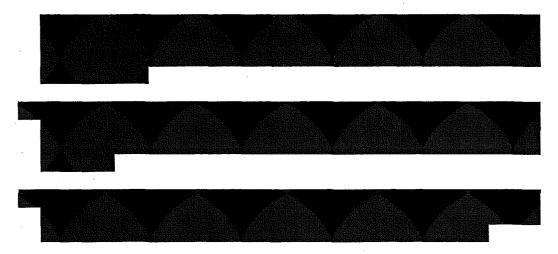
expenditures to its foreign expenditures, the ALJ finds that there is no Commission precedent that supports such a requirement. Rather, as the Commission recently reiterated in *Printing and Imaging Devices*, such a comparison is simply a factor to be considered and not required as asserted by Motorola. (*Printing and Imaging*, Com'n Op. at 27.)

The ALJ further finds that Microsoft has shown a sufficient nexus between its expenditures and the asserted patents. Motorola argues that Microsoft has only shown significant investment in Windows Mobile 6.5 and Windows Phone 7 and not in the asserted patents themselves, including the specific features that the asserted patents cover. The ALJ disagrees that Microsoft must make such a showing, namely that the expenditures relate to the specific features covered by the asserted patents. The language of the statute clearly states that "an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent..." 19 U.S.C. § 1337(a)(3). In its recent decision in Inv. No. 337-TA-694, the Commission noted that a factor to be considered in a domestic industry analysis under section (C) included whether "the licensee's efforts relate to 'an article protected by' the asserted patent under Section 337(a)(2)-(3). For example, if a licensee's product is an 'article protected by' the patent, then the license is by definition connected to that patent." Certain Multimedia Display and Navigation Devices and Systems, Component Thereof, and Products Containing Same, Inv. No. 337-TA-694, Comm'n Op. at 10; see also Certain Electronic Devices, Including Handheld Wireless Communications Devices, Inv. Nos. 337-TA-673 and 337-TA-667 (Consolidated), Order No. 49C (October 15, 2009) (not reviewed by the Commission (Notice of Commission Determination Not to Review an Initial Determination Granting Complainant's Motion That It Has Met the Economic Prong of the Domestic Industry Requirement) (November 17, 2009)); Certain Unified Communication Systems, Products Used

With Such Systems, and Components Thereof, 337-TA-598, Order No. 9 (September 5, 2007). Thus, while the Commission was specifically addressing the licensing aspect of the subsection, its logic can certainly be extended to engineering and research and development efforts. Microsoft need only show that its expenditures relate to the articles covered by the patent, namely mobile devices running Windows Mobile 6.5 and Windows Phone 7, and not the specific features themselves.

The evidence shows that Microsoft has made significant investments and expenditures related to the development of Windows Mobile 6.5 and Windows Phone 7 on mobile devices through the work of its Mobile Group (CX-956C at Q&A 8; 21-158):





Therefore, the ALJ finds that Microsoft has met the economic prong of the domestic industry requirement.

Having made the foregoing findings on whether Microsoft has satisfied the domestic industry requirement, the ALJ finds that the disposition of this material issue, *i.e.*, whether a domestic industry exists, satisfies Commission Rule 210.42(d). The ALJ's failure to discuss any matter raised by the parties, or any portion of the record, does not indicate that it has not been considered. Rather, any such matter(s) or portion(s) of the record has/have been deemed immaterial.

VIII. CONCLUSIONS OF LAW

- 1. The Commission has personal jurisdiction over the parties, and subject-matter jurisdiction over the accused products.
- 2. The importation or sale requirement of section 337 is satisfied.
- 3. The accused products do not literally infringe the asserted claims of the '054 Patent, the '352 Patent, the '133 Patent, the '910 Patent, the '376 Patent and the '762 Patent.
- 4. The accused products do literally infringe the asserted claims of the '566 Patent.
- 5. Respondents do not induce infringement of any of the asserted claims of the asserted patents.
- 6. The asserted claims of the '054 Patent, the '566 Patent, the '352 Patent, the '133 Patent, the '910 Patent, the '762 Patent, and the '376 Patent are not invalid under 35 U.S.C. § 102 for anticipation.
- 7. The asserted claims of the '054 Patent and the '566 Patent are not invalid under 35 U.S.C. § 103 for obviousness.
- 8. The asserted claims of the '352 Patent and the '910 Patent are invalid under 35 U.S.C.§ 103 for obviousness.
- 9. The '352 Patent is not invalid for failing to meet the best mode requirement.
- 10. The domestic industry requirement for the '566 Patent, the '133 Patent, and the '910 Patent has been satisfied.
- 11. The domestic industry requirement for the '054 Patent, the '352 Patent, the '762 Patent and the '376 Patent has not been satisfied
- 12. It has been established that a violation exists of section 337 for the '566 Patent.

13. It has not been established that a violation exists of section 337 for the '054 Patent, the '352 Patent, the '133 Patent, the '910 Patent, the '376 Patent and the '762 Patent.

IX. INITIAL DETERMINATION AND ORDER

Based on the foregoing, it is the INITIAL DETERMINATION ("ID") of this ALJ that a violation of section 337 of the Tariff Act of 1930, as amended, has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain mobile device, associated software and components thereof by reason of infringement of one or more of claims 1, 2, 5 and 6 of U.S. Patent No. 6,370,566 and that no violation of section 337 of the Tariff Act of 1930, as amended, has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain mobile device, associated software and components thereof by reason of infringement of one or more of claims 1 and 12 of U.S. Patent No. 5,758,352; claims 1-9, 15, and 16 of U.S. Patent No. 6,826,762; claims 1-3, 8 and 10 of U.S. Patent No. 6,909,910; claims 10-13 of U.S. Patent No. 7,644,376; claims 1, 2, 35 and 36 of U.S. Patent No. 5,664,133; and claims 11 and 13-15 of U.S. Patent No. 6,578,054.

Further, this Initial Determination, together with the record of the hearing in this investigation consisting of:

- (1) the transcript of the hearing, with appropriate corrections as may hereafter be ordered, and
- (2) the exhibits received into evidence in this investigation, as listed in the attached exhibit lists in Appendix A,

are CERTIFIED to the Commission. In accordance with 19 C.F.R. § 210.39(c), all material found to be confidential by the undersigned under 19 C.F.R. § 210.5 is to be given *in camera* treatment.

The Secretary shall serve a public version of this ID upon all parties of record and the confidential version upon counsel who are signatories to the Protective Order (Order No. 1.) issued in this investigation, and upon the Commission investigative attorney.

RECOMMENDED DETERMINATION ON REMEDY AND BOND

I. Remedy and Bonding

The Commission's Rules provide that subsequent to an initial determination on the question of violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, the administrative law judge shall issue a recommended determination containing findings of fact and recommendations concerning: (1) the appropriate remedy in the event that the Commission finds a violation of section 337, and (2) the amount of bond to be posted by respondents during Presidential review of Commission action under section 337(j). See 19 C.F.R. § 210.42(a)(1)(ii).

A. Limited Exclusion Order

Under Section 337(d), the Commission may issue either a limited or a general exclusion order. A limited exclusion order directed to respondents' infringing products is among the remedies that the Commission may impose, as is a general exclusion order that would apply to all infringing products, regardless of their manufacturer. See 19 U.S.C. § 1337(d).

The ALJ recommends that a limited exclusion order be issued for the Accused Products that infringe the '566 Patents in this investigation. Should the Commission determine that there is a violation of the other asserted patents in this investigation, the ALJ recommends that a limited exclusion order be issued for the Accused Products that infringe the valid asserted patents in this investigation.

B. Cease and Desist Order

Section 337 provides that in addition to, or in lieu of, the issuance of an exclusion order, the Commission may issue a cease and desist order as a remedy for violation of section 337. *See* 19 U.S.C. § 1337(f)(1). The Commission generally issues a cease and desist order directed to a

domestic respondent when there is a "commercially significant" amount of infringing, imported product in the United States that could be sold so as to undercut the remedy provided by an exclusion order. See Certain Crystalline Cefadroxil Monohydrate, Inv. No. 337-TA-293, USITC Pub. 2391, Comm'n Op. on Remedy, the Public Interest and Bonding at 37-42 (June 1991); Certain Condensers, Parts Thereof and Products Containing Same, Including Air Conditioners for Automobiles, Inv. No. 337-TA-334, Comm'n Op. at 26-28 (Aug. 27, 1997).

Microsoft argues that a cease and desist order against Motorola is necessary because Motorola currently maintains significant inventory of Accused Products in the United States. (CIB at 198.) Microsoft argues that a cease and desist order prohibiting Motorola from importing or selling after importation the Accused Products. (CIB at 119.) Microsoft specifically argues that all of Motorola's products, including the accused products, are housed in inventory by Motorola in Fort Worth, Texas before distribution to Motorola's U.S. customers. (CX-884C at 53:20-54:16; CX-291C at 7:15-24, 11:1-15, 12:3-15; CX-887C.) Microsoft argues that in January 2011, for example, Motorola maintained almost units of the accused products in inventory in the Texas facility and that significant inventories also exist in Colorado and Kentucky. (CX-884C at 49:25-51:9; CX-887C; CX-888C, CX-889C.) Microsoft argues that Motorola also maintains inventory in Illinois and Florida. (CX-291C at 35:7-36:4.)

Motorola argues that Microsoft has failed to show that Motorola maintains a commercially significant inventory of accused products. (RIB at 199; RRB at 98.) Specifically, Motorola argues that the inventory that Microsoft cites are Accused Products that are delivered into the Foreign Trade Zone ("FTZ"). (RRB at 98.) Motorola argues that Microsoft maintains that "the inventory that is in the FTZ has not yet cleared Customs" because that "inventory" in the Fort Worth FTZ has not imported into the United States. (RRB at 98.) Motorola argues

"these inventories can be addressed by any limited exclusion order which issues in this investigation, and Microsoft has failed to meet its burden to establish that a cease-and-desist order is warranted." (RRB at 98.)

As an initial note, the ALJ finds Microsoft's arguments relating to products located in the FTZ to be in direct contradiction to its arguments for the importation requirement. Those products cannot simultaneously be outside of the United States for purposes of satisfying the importation requirement yet, at the same time, be within the jurisdiction of the United States for purposes of a cease and desist order. This reason alone is sufficient to deny Microsoft's request. Nevertheless, the ALJ also finds that a cease and desist order is not necessary since a limited exclusion order will suffice. (See supra in Section II (discussing products located in the FTZ.)

Therefore, the ALJ recommends that the Commission not issue a cease and desist order against respondent Motorola with regard to products located in the FTZ.

C. Bond During Presidential Review Period

The Administrative Law Judge and the Commission must determine the amount of bond to be required of a respondent, pursuant to section 337(j)(3), during the 60-day Presidential review period following the issuance of permanent relief, in the event that the Commission determines to issue a remedy. The purpose of the bond is to protect the complainant from any injury. 19 C.F.R. § 210.42(a)(1)(ii), § 210.50(a)(3).

When reliable price information is available, the Commission has often set the bond by eliminating the differential between the domestic product and the imported, infringing product. See Certain Microsphere Adhesives, Processes for Making Same, and Products Containing Same, Including Self-Stick Repositionable Notes, Inv. No. 337-TA-366, Comm'n Op. a 24 (1995). In other cases, the Commission has turned to alternative approaches, especially when the level of a

reasonable royalty rate could be ascertained. See, e.g., Certain Integrated Circuit Telecommunication Chips and Products Containing Same, Including Dialing Apparatus, Inv. No. 337-TA-337, Comm'n Op. at 41 (1995). A 100 percent bond has been required when no effective alternative existed. See, e.g., Certain Flash Memory Circuits and Products Containing Same, Inv. No. 337-TA-382, USITC Pub. No. 3046, Comm'n Op. at 26-27 (July 1997) (a 100% bond imposed when price comparison was not practical because the parties sold products at different levels of commerce, and the proposed royalty rate appeared to be de minimis and without adequate support in the record).

Microsoft argues that the bond should be set at 100% of the entered value. (CIB at 199-200.) Microsoft argues that quantitative analytical techniques are inappropriate here and that Motorola's sales of infringing devices divert sales from legitimate licensee's and users of Microsoft's software. (CIB at 199.)

Motorola argues that since Microsoft has failed to present any evidence that could be used as a basis for determining a bond amount, Motorola should not be required to post a bond. (RIB at 199-200; RRB at 99-100.) Respondents further argue, in the alternative, the bond should be determined as a percentage of a "reasonable royalty" which should be approximately per device. (RRB at 100.)

The ALJ recommends that the Commission set a bond at a reasonable royalty rate of the entered value of the accused products. Microsoft's argument that the bond should be set at 100% of the entered value because "any quantitative analytical approach in setting the bond amount is per se inappropriate and impracticable since it would require comparing hardware sales versus software royalties [and] [s]uch a comparison is a classic 'apples-to-oranges' scenario that precludes a meaningful price comparison" is inappropriate. Such an argument is tantamount to

shifting the burden of proving a bond to the respondent in all but the simplest cases and punishes Motorola for the complexity of the case Microsoft brought. This is especially true when Microsoft is in the business of licensing its software at established royalty rates. Such a business model should provide at least some guidance on the appropriate rate at which to set the bond in this case.

II. Conclusion

In accordance with the discussion of the issues contained herein, it is the RECOMMENDED DETERMINATION ("RD") of the ALJ that the Commission should issue a limited exclusion order directed at Motorola's products found to infringe the '566 Patent. The Commission should also issue a cease and desist order against respondent Motorola because it currently maintains significant inventories of Accused Products in the United States that prohibits the sale of any commercially significant quantities of the Accused Products. Furthermore, if the Commission imposes a remedy following a finding of violation, Motorola should be required to post a bond set at a reasonable royalty rate of the entered value of the accused products during the Presidential review period.

Within seven days of the date of this document, each party shall submit to the office of the Administrative Law Judge a statement as to whether or not it seeks to have any portion of this document deleted from the public version. The parties' submissions must be made by hard copy by the aforementioned date.

Any party seeking to have any portion of this document deleted from the public version thereof must submit to this office (1) a copy of this document with red brackets indicating any portion asserted to contain confidential business information by the aforementioned date and (2) a list specifying where said redactions are located. The parties' submission concerning the public version of this document need not be filed with the Commission Secretary.

SO ORDERED.

Theodore R. Essex

Administrative Law Judge

IN THE MATTER OF CERTAIN MOBILE DEVICES, ASSOCIATED SOFTWARE AND COMPONENTS THEREOF Inv. No. 337-TA-744

PUBLIC CERTIFICATE OF SERVICE

I, James R. Holbein, hereby certify that the attached INITIAL DETERMINATION ON VIOLATION OF SECTION 337 AND RECOMMENDED DETERMINATION ON REMEDY AND BOND has been served in the manner indicated to the following parties on December 29, 2011.

James R. Holbein, Secretary
U.S. International Trade Commission
500 E Street, SW, Room 112A
Washington, D.C. 20436

ON BEHALF OF COMPLAINANT MICROSOFT CORPORATION:

Brian R. Nester,, Esq. SIDLEY AUSTIN LLP 1501 K Street, NW Washington, DC 20005	 () Via Hand Delivery () Via Overnight Mail () Via First Class Mail () Other:
BEHALF OF RESPONDENT MOTOR	ROLA MOBILITY, INC.:
Charles F. Schill, Esq.	() Xia Hand Delivery () Via Overnight Mail

IN THE MATTER OF CERTAIN MOBILE DEVICES, ASSOCIATED SOFTWARE AND COMPONENTS THEREOF Inv. No. 337-TA-744

CERTIFICATE OF SERVICE - PAGE TWO

PUBLIC MAILING LIST:

Heather Hall	() Via Hand Delivery () Via Overnight Mail
LEXIS - NEXIS	(Via Overnight Mail
9443 Springboro Pike	() Via First Class Mail
Miamisburg, OH 45342	() Other:
Tr. d. Cl. l	
Kenneth Clair	() Via Hand Delivery (Via Overnight Mail
THOMSON WEST	(Via Overnight Mail
1100 Thirteenth Street, NW, Suite 200	() Via First Class Mail
Washington, D.C. 20005	() Other: