

**PUBLIC VERSION**

**UNITED STATES INTERNATIONAL TRADE COMMISSION  
WASHINGTON, D.C. 20436**

**In the Matter of**

**CERTAIN GAMING AND  
ENTERTAINMENT CONSOLES,  
RELATED SOFTWARE, AND  
COMPONENTS THEREOF**

**Investigation No. 337-TA-752**

**INITIAL DETERMINATION**

**Administrative Law Judge David P. Shaw**

Pursuant to the notice of investigation, 75 Fed. Reg. 80843 (2010), this is the Initial Determination in *Certain Gaming and Entertainment Consoles, Related Software, and Components Thereof*, United States International Trade Commission Investigation No. 337-TA-752.

It is held that a violation of section 337 of the Tariff Act, 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 gaming and entertainment consoles, related software, or components thereof that infringe asserted claims 1 and 12 of U.S. Patent No. 6,069,896; asserted claims 7, 8, and 10 of U.S. Patent No. 7,162,094; claim 2 of U.S. Patent No. 6,980,596; and asserted claims 12 and 13 of U.S. Patent No. 5,357,571. A violation of section 337 has not occurred with respect to asserted claim 1 of U.S. Patent No. 6,980,596, or asserted claims 6, 8, or 17 of U.S. Patent No. 5,319,712.

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The following abbreviations may be used in this Initial Determination:

|      |   |                                     |
|------|---|-------------------------------------|
| ALJ  | - | Administrative Law Judge            |
| CDX  | - | Complainants' Demonstrative Exhibit |
| CPX  | - | Complainants' Physical Exhibit      |
| CX   | - | Complainants' Exhibit               |
| Dep. | - | Deposition                          |
| EDIS | - | Electronic Document Imaging System  |
| JPX  | - | Joint Physical Exhibit              |
| JX   | - | Joint Exhibit                       |
| RDX  | - | Respondent's Demonstrative Exhibit  |
| RPX  | - | Respondent's Physical Exhibit       |
| RWS  | - | Rebuttal Witness Statement          |
| RX   | - | Respondent's Exhibit                |
| Tr.  | - | Transcript                          |
| WS   | - | Witness Statement                   |

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### **I. Background**

#### **A. Institution of the Investigation; Procedural History**

By publication of a notice in the *Federal Register* on May 21, 2010, pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, the Commission instituted this investigation 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 gaming and entertainment consoles, related software, and components thereof that infringe one or more of claims 6, 8-10, and 17 of the '712 patent [(U.S. Patent No. 5,319,712)]; claims 9-18 of the '571 patent [(U.S. Patent No. 5,357,571)]; claims 1-3 and 12 of the '896 patent [(U.S. Patent No. 6,069,896)]; claims 1-3, 7, and 8 of the '596 patent [(U.S. Patent No. 6,980,596)]; and claims 5-8 and 10 of the '094 patent [(and U.S. Patent No. 7,162,094)], and whether an industry in the United States exists as required by subsection (a)(2) of section 337.

75 Fed. Reg. 80843 (2010).

The complainants are: Motorola Mobility, Inc. of Libertyville, Illinois ("Motorola Mobility"); and General Instrument Corporation of Horsham, Pennsylvania ("General Instrument") (collectively, Motorola Mobility and General Instrument are referred to as "Motorola" or "complainants"). The Commission named as the respondent: Microsoft Corporation of Redmond, Washington ("Microsoft" or "respondent").<sup>1</sup> *Id.*

Initially, the target date for completion of this investigation was set at 17 months, *i.e.*, May 23, 2012. Order No. 5 (initial determination setting target date); Comm'n

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<sup>1</sup> Although the Commission named the Office of Unfair Import Investigations ("OUII") as a party in the investigation, OUII withdrew from participation in accordance with the Commission's Strategic Human Capital Plan. *See* 75 Fed. Reg. 80843 (2010); Letter from OUII to the Administrative Law Judge (Mar. 3, 2011).

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Notice Not to Review (Feb. 10, 2011). Subsequent to revised procedural schedules, and reassignment of the investigation to the undersigned (the third administrative law judge to preside over the investigation), pursuant to 19 C.F.R. §§ 210.51(a) and 210.42(a)(1)(i), the target date was extended by three months, *i.e.*, to August 23, 2012, and thus the due date for the Initial Determination on violation is April 23, 2012. Order No. 19 (initial determination setting target date); Notice of Comm'n Not to Review (Nov. 21, 2011).

Two two-hour tutorial sessions were held in this investigation, the first on December 13, and the second on December 21, 2011. *See* Order No. 23. The first session concerned the '596 patent and the '094 patent. Tutorial Tr. 7.<sup>2</sup> The second session concerned the '571 patent, the '712 patent and the '896 patent. Tutorial Tr. 108.

A prehearing conference was held on January 9, 2012, with the evidentiary hearing in this investigation commencing immediately thereafter. The hearing concluded on January 20, 2012. *See* Order Nos. 21 and 26; Tr. 1-2724. The parties were requested to file post-hearing briefs not to exceed 300 pages in length, and to file reply briefs not to exceed 100 pages in length. Tr. 17-20, 372, 2422.

**B. The Parties; Assignment of Patents**

Motorola Mobility is a corporation organized under the laws of the State of Delaware, having a principal place of business in Libertyville, Illinois. General Instrument is a corporation organized under the laws of the State of Delaware, having a principal place of business in Horsham, Pennsylvania. Motorola Mobility and General

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<sup>2</sup> The two tutorial sessions were paginated continuously. Thus, the transcript for the first session covers pages 1 through 101; and the transcript for the second session covers pages 102 through 200.

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Instrument are subsidiaries of Motorola Mobility Holdings, Inc. CX-715C (Dailey WS) at 3-4; CX-11 at 1, 4, 10; Compls. Br. at 4.

Microsoft is a corporation organized under the laws of the State of Washington, having its principal place of business in Redmond, Washington. Resp. to Complaint at 5, ¶ 18; Compls. Br. at 4.

The '896 patent, the '571 patent and the '721 patent are assigned to Motorola Mobility. CX-1; CX-2; CX-4; CX-5. Both the '596 patent and the '094 patent are assigned to General Instrument. CX-6; CX-7.

**C. The Accused Products**

The accused products in this investigation are Microsoft Xbox 360 consoles and accessories. The accused products are listed in a joint filing that was required by Ground Rule 12 (requiring “a comprehensive joint outline of the issues to be decided in the final Initial Determination on violation”).<sup>3</sup> By listing a product in the joint filing, Microsoft has not admitted infringement. Nevertheless, the joint filing indicates the final extent of Motorola’s accusations in this investigation. *See Parties’ Joint Submission Pursuant to GR12* (EDIS Doc. No. 471326) (“Ground Rule 12 Filing”).

With respect to the '896 patent, Motorola asserts claims 1 and 12, and accuses all versions and configurations of the Microsoft Xbox 360 console imported into the United

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<sup>3</sup> Ground Rule 12 provides: “On the same day the initial post-hearing briefs are due, the parties shall file a comprehensive joint outline of the issues to be decided in the final Initial Determination on violation. Moreover, the claim terms briefed by the parties must be identical. The construction of any part of a disputed claim term that is not briefed is waived.” Ground Rule 12 (attached to Order No. 20 (Issuing New Ground Rules)); *see* Tr. 2420-2423 (concerning Ground Rule 12).

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States and/or sold after importation into the United States on or after December 17, 2010, and all wireless accessories.<sup>4</sup> *Id.* at 4.

With respect to the '094 patent, Motorola asserts claims 7, 8 and 10, and accuses all versions and configurations of the Microsoft Xbox 360 console imported into the United States and/or sold after importation into the United States on or after December 17, 2010. *Id.* at 5.

With respect to the '596 patent, Motorola asserts claims 1 and 2, and accuses all versions and configurations of the Microsoft Xbox 360 console imported into the United States and/or sold after importation into the United States on or after December 17, 2010. *Id.* at 6.

With respect to the '571 patent, Motorola asserts claims 12 and 13, and accuses all versions and configurations of the Microsoft Xbox 360 console imported into the

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<sup>4</sup> As stated in the joint filing, Motorola accuses:

All versions and configurations of the Microsoft Xbox 360 console imported into the United States and/or sold after importation into the United States on or after December 17, 2010, including but not limited to the Xbox 360 4 GB Console and the Xbox 360 250 GB Console[, sic]; as well as all wireless accessories, including but not limited to the Xbox 360 Wireless Controller, Xbox 360 Wireless Controller Play and Charge Kit, Wireless Controller with Transforming D-Pad and Play and Charge Kit, Xbox 360 Halo: Reach Wireless Controller, Fable III Limited Edition Wireless Controller, Xbox 360 Wireless Headset, Xbox 360 Halo: Reach Wireless Headset, Xbox 360 Wireless Speed Wheel, Xbox 360 Wireless Microphone, and Xbox 360 ChatPad.

Ground Rule 12 Filing at 4. Although Motorola refers to two specific consoles (*i.e.*, “the Xbox 360 4 GB Console and the Xbox 360 250 GB Console”), Motorola’s use of the phrase “including but not limited to” indicates that those two consoles may be examples of accused consoles. Motorola uses similar language with reference to examples of “all wireless accessories.” In fact, Motorola has used similar “including but not limited” phrasing with respect to its accusations under each of the asserted patents. *See Id.* at 4-8. Whether Motorola has shown infringement by any specific version or configuration of accused consoles or accessories is addressed in connection with the infringement issue.

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United States and/or sold after importation into the United States on or after December 17, 2010. The parties dispute whether Xbox consoles and wireless adapters using WiFi chips made by Atheros have been properly accused in this investigation. *Id.* at 7 & n.2. That issue is decided below in connection with the infringement issue.

With respect to the '712 patent, Motorola asserts claims 6, 8 and 17, and accuses all versions and configurations of the Microsoft Xbox 360 console imported into the United States and/or sold after importation into the United States on or after December 17, 2010. The parties dispute whether Xbox consoles and wireless adapters using WiFi chips made by Atheros have been properly accused in this investigation. *Id.* at 8 & n.3. That issue is decided below in connection with the infringement issue.

**D. Technological Background**

An Xbox 360 console typically uses a customer's television to display games, videos or other entertainment; uses a customer's home router to reach the Internet; and may be controlled by a user through wired or wireless controllers or other accessories. Tutorial Tr. 96-97, 195-198. The patents asserted by Motorola in this investigation relate to several aspects of video technology and wireless communications.

The '094 and '596 patents relate to certain video coding techniques used in a video coding standard called H.264. The H.264 standard was published in 2003, is also known as MPEG-4 Part 10, and also as MPEG advanced video coding or AVC. MPEG is an acronym for the Motion Picture Experts Group. That group joined with another group called the Video Coding Experts Group (or VCEG) to form the Joint Video Team (or JVT). The JVT developed H.264 video standard. Tutorial Tr. 8-9.

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One goal of the H.264 (or MPEG-4 Part 10) standard was to enhance video compression efficiency over the previous standard called MPEG-2. Indeed, the H.264 standard allows one to achieve the same image quality while using fewer bits of information. Tutorial Tr. 9. This is done through a technique of encoding video data to eliminate temporal and spatial redundancies, thereby enabling one to store and transmit the data using a smaller bandwidth. The technique allows one to decompress the encoded data in order to decompress the video and to reconstruct an image in a way that is most faithful to the original image. The latter step is accomplished by generating approximated data that can be substituted for the nonessential data removed during the encoding process. Tutorial Tr. 9-11.

Video images are captured and displayed in lines. Video is available in two forms: progressive and interlaced. In progressive video, an image is captured or displayed line-by-line, in order, one after the other. In interlaced video, the odd lines are captured first; then, only a fraction of a second later, the even lines are captured. Thus, in encoding or decoding interlaced video, one must account for the short lapse of time in processing the odd and even lines that make up a video image. Tutorial Tr. 32-37, 50-57.

The '571 and '712 patents both involve wireless communications and the encryption of wireless communications. Encryption is used to prevent unauthorized reception of communications. Tutorial Tr. 164-165. The parties have referred to the '571 and '712 patents as the 802.11 patents. Tutorial Tr. 108, 140, 152.

The 802.11 standard is an international standard published by the IEEE (Institute of Electrical and Electronics Engineers), and concerns communications with a router.

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The standard is used to implement wireless networks, including WiFi networks. The 802.11 standard provides options for network encryption. Tutorial Tr. 118, 152-156, 165.

Work began on the 802.11 standard many years ago, and has been subject to revision. The printed standard is now lengthy with over one thousand pages, with many optional portions, and reflects the contributions of many organizations. Tutorial Tr. 152.

The '896 patent involves technology used to be sure that devices make only authorized wireless connections. Tutorial Tr. 175, 183, 192-193. This area of technology generally involves making sure that devices connect to other devices that the user has selected or that meet a specific need. For example, a cell phone or a PDA may need to connect to a specific printer. This area of technology also involves making sure that communications are not received by similar devices used by a neighbor (such as making sure that your MP3 player does not play music in your neighbor's car). Tutorial Tr. 168-176, 192.

## **II. Jurisdiction**

All parties have appeared and presented evidence and arguments on the merits in this investigation. No party has contested the Commission's jurisdiction over it. *See, e.g.,* Ground Rule 12 Filing. Accordingly, it is found that the Commission has personal jurisdiction over all parties in this investigation.

No party has contested the Commission's *in rem* jurisdiction over the accused products. *See, e.g., Id.* Indeed, as indicated below, the importation requirement has been satisfied with respect to the accused products. Accordingly, it is found that the Commission has *in rem* jurisdiction over the accused products.



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No party has contested the Commission's jurisdiction over the subject matter of this investigation. *See, e.g., Id.* Indeed, as indicated in the Commission's notice of investigation, discussed above, this investigation involves the importation of products alleged to infringe United States patents in a manner that violates section 337 of the Tariff Act, as amended. Based on those facts alone, it should be found that the Commission has subject matter jurisdiction over this investigation.

Additionally, it is noted that early in Microsoft's initial post-hearing, respondent states: "Microsoft does not contest the Commission's jurisdiction, except to the extent set forth below concerning MMI's assertion of patents for which it has committed to provide licenses on RAND terms and conditions." Resp. Br. at 3 (Jurisdiction). Yet, Microsoft does not further address such a jurisdictional issue in its briefing. Indeed, nowhere in Microsoft's initial post-hearing brief (or reply brief) does respondent show that a failure of Motorola to fulfill licensing commitments, or otherwise to prevail in its infringement case, would deprive the Commission of subject matter jurisdiction, or any other form of jurisdiction, necessary to conclude this investigation.<sup>5</sup>

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<sup>5</sup> *See Amgen v. Int'l Trade Comm'n*, 902 F.2d 1532 (Fed. Cir. 1999) ("As is very common in situations where a tribunal's subject matter jurisdiction is based on the same statute which gives rise to the federal right, the jurisdictional requirements of section 1337 mesh with the factual requirements necessary to prevail on the merits. In such a situation, the Supreme Court has held that the tribunal should assume jurisdiction and treat (and dismiss on, if necessary) the merits of the case." *Id.* at 1536 (footnote omitted) (citing *Bell v. Hood*, 327 U.S. 678, 682 (1946); *Jackson Transit Authority v. Local Division 1285, Amalgamated Transit Union, AFL-CIO-CLC*, 457 U.S. 15, 21 (1982))).

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Accordingly, it is found that along with personal jurisdiction over the parties and *in rem* jurisdiction over the accused products, the Commission also has subject matter jurisdiction over this investigation.

### **III. Importation**

Review of Microsoft's initial post-hearing and reply briefs, as well as the Ground Rule 12 Filing, shows that respondent has not contested the issue of importation.

In addition, the parties have stipulated that, for the purposes of this investigation, the importation requirement of section 337 (19 U.S.C. § 1337(a)(1)(B)) has been satisfied with respect to the 250 GB Xbox 360 S and the 4 GB Xbox 360 S. CX-628C.

Consequently, it is found that the importation requirement is satisfied with respect to all accused products.

### **IV. General Principles of Patent Law**

#### **A. Claim Construction**

Claim construction begins with the plain language of the claim.<sup>6</sup> Claims should be given their ordinary and customary meaning as understood by a person of ordinary skill in the art, viewing the claim terms in the context of the entire patent. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006).<sup>7</sup>

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<sup>6</sup> Only those claim terms that are 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.*, 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).

<sup>7</sup> Factors that may be considered when determining the level of ordinary skill in the art include: "(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are

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In some instances, claim terms do not have particular meaning in a field of art, and claim construction involves little more than the application of the widely accepted meaning of commonly understood words. *Phillips*, 415 F.3d at 1314. “In such circumstances, general purpose dictionaries may be helpful.” *Id.*

In many cases, claim terms have a specialized meaning and it is necessary to determine what a person of skill in the art would have understood the disputed claim language to mean. “Because the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to ‘those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean.’” *Id.* (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)). The public sources identified by in *Phillips* include “the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Id.*

In cases in which the meaning of a claim term is uncertain, the specification usually is the best guide to the meaning of the term. *Id.* at 1315. As a general rule, the particular examples or embodiments discussed in the specification are not to be read into the claims as limitations. *Markman*, 52 F.3d at 979. However, the specification is always highly relevant to the claim construction analysis, and is usually dispositive. *Id.* Moreover, “[t]he construction that stays true to the claim language and most naturally

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made; (5) sophistication of the technology; and (6) educational level of active workers in the field.” *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 696 (Fed. Cir. 1983), *cert. denied*, 464 U.S. 1043 (1984).

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aligns with the patent's description of the invention will be, in the end, the correct construction." *Id.* at 1316.

Claims are not necessarily, and are not usually, limited in scope to the preferred embodiment. *RF Delaware, Inc. v. Pacific Keystone Techs., Inc.*, 326 F.3d 1255, 1263 (Fed. Cir. 2003); *Decisioning.com, Inc. v. Federated Dep't Stores, Inc.*, 527 F.3d 1300, 1314 (Fed. Cir. 2008) ("[The] description of a preferred embodiment, in the absence of a clear intention to limit claim scope, is an insufficient basis on which to narrow the claims."). Nevertheless, claim constructions that exclude the preferred embodiment are "rarely, if ever, correct and require highly persuasive evidentiary support." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996). Such a conclusion can be mandated in rare instances by clear intrinsic evidence, such as unambiguous claim language or a clear disclaimer by the patentees during patent prosecution. *Elekta Instrument v. O.U.R. Sci. Int'l*, 214 F.3d 1302, 1308 (Fed. Cir. 2000); *Rheox, Inc. v. Entact, Inc.*, 276 F.3d 1319 (Fed. Cir. 2002).

If the intrinsic evidence does not establish the meaning of a claim, then extrinsic evidence may be considered. Extrinsic evidence consists of all evidence external to the patent and the prosecution history, and includes inventor testimony, expert testimony, and learned treatises. *Phillips*, 415 F.3d at 1317. Inventor testimony can be useful to shed light on the relevant art. In evaluating expert testimony, a court should discount any expert testimony that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent. *Id.* at 1318. Extrinsic evidence may be considered

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if a court deems it helpful in determining the true meaning of language used in the patent claims. *Id.*

This investigation involves means-plus-function claim limitations. When a claim uses the term “means” to describe a limitation, a presumption arises that the inventor used the term to invoke the means-plus-function format authorized by 35 U.S.C. § 112, ¶ 6.<sup>8</sup> *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). “This presumption can be rebutted when the claim, in addition to the functional language, recites structure sufficient to perform the claimed function in its entirety.” *Id.*

Once a court concludes that a claim limitation is a means-plus-function limitation, two steps of claim construction remain: (1) the court must first identify the function of the limitation; and (2) the court must then look to the specification and identify the corresponding structure for that function. *Biomedino LLC v. Waters Technologies Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007). If there is no structure in the specification corresponding to the means-plus-function limitation, the claim will be found invalid as indefinite. *Id.*

While the specification must contain structure linked to claimed means, “[a]ll one needs to do in order to obtain the benefit of [§ 112, ¶ 6] is to recite some structure corresponding to the means in the specification, as the statute states, so that one can readily ascertain what the claim means and comply with the particularity requirement of

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<sup>8</sup> The relevant portion of section 112 provides:

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.

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[§ 112,] ¶ 2.” *Id.* (citing *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1382 (Fed. Cir. 1999)). Additionally, interpretation of what is disclosed in the specification must be made in light of the knowledge of one skilled in the art. *Id.* at 1380.

Thus, under section 112, the corresponding structure of the limitation “must be disclosed in the written description in such a manner that one skilled in the art will know and understand what structure corresponds to the means limitation. Otherwise, one does not know what the claim means.” *Id.* at 1382. Yet, “the testimony of one of ordinary skill in the art cannot supplant the total absence of structure from the specification.” *Id.* (quoting *Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1302 (Fed. Cir. 2005)).

“A means-plus-function claim encompasses all structure in the specification corresponding to that element and equivalent structures.” The statute does not, however, permit limitation of a means-plus-function claim by adopting a function different from that explicitly recited in the claim. Nor does the statute permit incorporation of structure from the written description beyond that necessary to perform the claimed function. *Micro Chem. Inc. v. Great Plains Chem. Co., Inc.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999).

**B. Infringement**

**1. Direct Infringement**

Under 35 U.S.C. §271(a), direct infringement consists of making, using, offering to sell, or selling a patented invention without consent of the patent owner. The complainant in a section 337 investigation 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, Comm’n Notice of Final Determination of No Violation

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of Section 337, 2002 WL 448690 at \*59, (Mar. 22, 2002); *Enercon GmbH v. Int'l Trade Comm'n*, 151 F.3d 1376 (Fed. Cir. 1998).

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.<sup>9</sup> *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. “Under this doctrine, a product or process that does not literally infringe upon the express terms of a patent claim may nonetheless be found to infringe if there is ‘equivalence’ between the elements of the accused product or process and the claimed elements of the patented invention.”

*Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 21 (1997) (citing *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 609 (1950)). “The determination of equivalence should be applied as an objective inquiry on an element-by-element basis.”<sup>10</sup> *Id.* at 40.

“An element in the accused product is equivalent to a claim limitation if the differences between the two are insubstantial. The analysis focuses on whether the element in the accused device ‘performs substantially the same function in substantially

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<sup>9</sup> 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). If an accused device lacks a limitation of an independent claim, the device cannot infringe a dependent claim. See *Wahpeton Canvas Co. v. Frontier, Inc.*, 870 F.2d 1546, 1552 n.9 (Fed. Cir. 1989).

<sup>10</sup> “Infringement, whether literal or under the doctrine of equivalents, is a question of fact.” *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1130 (Fed. Cir. 2011).

the same way to obtain the same result’ as the claim limitation.” *AquaTex Indus. v. Techniche Solutions*, 419 F.3d 1374, 1382 (Fed. Cir. 2005) (quoting *Graver Tank*, 339 U.S. at 608); accord *Absolute Software*, 659 F.3d at 1139-40.<sup>11</sup>

Prosecution history estoppel can prevent a patentee from relying on the doctrine of equivalents when the patentee relinquishes subject matter during the prosecution of the patent, either by amendment or argument. *AquaTex*, 419 F.3d at 1382. In particular, “[t]he doctrine of prosecution history estoppel limits the doctrine of equivalents when an applicant makes a narrowing amendment for purposes of patentability, or clearly and unmistakably surrenders subject matter by arguments made to an examiner.” *Id.* (quoting *Salazar v. Procter & Gamble Co.*, 414 F.3d 1342, 1344 (Fed. Cir. 2005)).

## **2. Indirect Infringement**

### **a. Induced Infringement**

Section 271(b) of the Patent Act provides: “Whoever actively induces infringement of a patent shall be liable as an infringer.” 35 U.S.C. § 271(b).

“To prevail on a claim of induced infringement, in addition to inducement by the defendant, the patentee must also show that the asserted patent was directly infringed.”

*Epcon Gas Sys. v. Bauer Compressors, Inc.*, 279 F.3d 1022, 1033 (Fed. Cir. 2002).

Further, “[s]ection 271(b) covers active inducement of infringement, which typically includes acts that intentionally cause, urge, encourage, or aid another to directly infringe

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<sup>11</sup> “The known interchangeability of substitutes for an element of a patent is one of the express objective factors noted by *Graver Tank* as bearing upon whether the accused device is substantially the same as the patented invention. Independent experimentation by the alleged infringer would not always reflect upon the objective question whether a person skilled in the art would have known of the interchangeability between two elements, but in many cases it would likely be probative of such knowledge.” *Warner-Jenkinson*, 520 U.S. at 36.



a patent.” *Arris Group v. British Telecomm. PLC*, 639 F.3d 1368, 1379 n.13 (Fed. Cir. 2011). The Supreme Court recently held that “induced infringement under § 271(b) requires knowledge that the induced acts constitute patent infringement.” *Global-Tech Appliances, Inc. v. SEB S.A.*, -- U.S. --, 131 S.Ct. 2060, 2068 (May 31, 2011). The Court further held: “[g]iven the long history of willful blindness<sup>[12]</sup> and its wide acceptance in the Federal Judiciary, we can see no reason why the doctrine should not apply in civil lawsuits for induced patent infringement under 35 U.S.C. § 271(b).” 131 S.Ct. at 2060 (footnote omitted).

**b. Contributory Infringement**

Section 271(c) of the Patent Act provides: “Whoever offers to sell or sells within the United States or imports into the United 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 especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer. 35 U.S.C. § 271(c).

Section 271(c) “covers both contributory infringement of system claims and method claims.”<sup>13</sup> *Arris*, 639 F.3d at 1376 (footnotes omitted). To hold a component

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<sup>12</sup> “While the Courts of Appeals articulate the doctrine of willful blindness in slightly different ways, all appear to agree on two basic requirements: (1) the defendant must subjectively believe that there is a high probability that a fact exists and (2) the defendant must take deliberate actions to avoid learning of that fact. We think these requirements give willful blindness an appropriately limited scope that surpasses recklessness and negligence.” *Global-Tech*, 131 S.Ct. 2070-71.

<sup>13</sup> “Claims which recite a ‘system,’ ‘apparatus,’ ‘combination,’ or the like are all analytically similar in the sense that their claim limitations include elements rather than

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supplier liable for contributory infringement, a patent holder must show, *inter alia*, that (a) the supplier's product was used to commit acts of direct infringement; (b) the product's use constituted a material part of the invention; (c) the supplier knew its product was especially made or especially adapted for use in an infringement" of the patent; and (d) the product is not a staple article or commodity of commerce suitable for substantial noninfringing use. *Id.*

### **C. Validity**

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). Nevertheless, each claim of a patent is presumed to be valid, even if it depends from a claim found to be invalid. 35 U.S.C. § 282; *DMI Inc. v. Deere & Co.*, 802 F.2d 421 (Fed. Cir. 1986). A respondent that has raised patent invalidity as an affirmative defense must overcome the presumption by "clear and convincing" evidence of invalidity. *Checkpoint Systems, Inc. v. United States Int'l Trade Comm'n*, 54 F.3d 756, 761 (Fed. Cir. 1995).

In this investigation, respondent raises affirmative defenses based on the following alleged ground of patent claim invalidity: anticipation, obviousness, indefiniteness, and lack of a written description. *See* Ground Rule 12 Filing at 5-9.

#### **1. Anticipation**

Anticipation under 35 U.S.C. § 102 is a question of fact. *z4 Techs., Inc. v. Microsoft Corp.*, 507 F.3d 1340, 1347 (Fed. Cir. 2007). Section 102 provides that, depending on the circumstances, a claimed invention may be anticipated by variety of

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method steps. All such claims can be contributorily infringed by a component supplier." *Arris*, 639 F.3d at 1376 n.8.

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prior art, including publications, earlier-sold products, and patents. *See* 35 U.S.C. § 102 (e.g., section 102(b) provides that one is not entitled to a patent if the claimed 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”).

The general law of anticipation may be summarized, as follows:

A reference is anticipatory under § 102(b) when it satisfies particular requirements. First, the reference must disclose each and every element of the claimed invention, whether it does so explicitly or inherently. *Eli Lilly & Co. v. Zenith Goldline Pharms., Inc.*, 471 F.3d 1369, 1375 (Fed.Cir.2006). While those elements must be “arranged or combined in the same way as in the claim,” *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1370 (Fed.Cir.2008), the reference need not satisfy an *ipsissimis verbis* test, *In re Bond*, 910 F.2d 831, 832-33 (Fed.Cir.1990). Second, the reference must “enable one of ordinary skill in the art to make the invention without undue experimentation.” *Impax Labs., Inc. v. Aventis Pharms. Inc.*, 545 F.3d 1312, 1314 (Fed.Cir.2008); *see In re LeGrice*, 49 C.C.P.A. 1124, 301 F.2d 929, 940-44 (1962). As long as the reference discloses all of the claim limitations and enables the “subject matter that falls within the scope of the claims at issue,” the reference anticipates -- no “actual creation or reduction to practice” is required. *Schering Corp. v. Geneva Pharms., Inc.*, 339 F.3d 1373, 1380-81 (Fed.Cir.2003); *see In re Donohue*, 766 F.2d 531, 533 (Fed.Cir.1985). This is so despite the fact that the description provided in the anticipating reference might not otherwise entitle its author to a patent. *See Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1562 (Fed.Cir.1991) (discussing the “distinction between a written description adequate to support a claim under § 112 and a written description sufficient to anticipate its subject matter under § 102(b)”).

*In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009).

## **2. Obviousness**

Under 35 U.S.C. § 103, a patent claim is invalid “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

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ordinary skill in the art.”<sup>14</sup> While the ultimate determination of whether an invention would have been obvious is a legal conclusion, it is 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) objective evidence of nonobviousness.” *Eli Lilly and Co. v. Teva Pharmaceuticals USA, Inc.*, 619 F.3d 1329 (Fed. Cir. 2010).

The objective evidence, also known as “secondary considerations,” include commercial success, long felt need, and failure of others. *Graham v. John Deere Co.*, 383 U.S. 1, 13-17 (1966); *Dystar Textilfarben GmbH v. C.H. Patrick Co.*, 464 F.3d 1356, 1361 (Fed. Cir. 2006). “[E]vidence 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). 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 Co. v. Teleflex Inc.*, 550 U.S. 398, 426 (2007) (commercial success did not alter conclusion of obviousness).

“One of the ways in which a patent’s subject matter can be proved obvious is by noting that there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent’s claims.” *KSR*, 550 U.S. at 419-20. “[A]ny need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *Id.*

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<sup>14</sup> The standard for determining whether a patent or publication is prior art under section 103 is the same as under 35 U.S.C. § 102, which is a legal question. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1568 (Fed. Cir. 1987).

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Specific teachings, suggestions, or motivations to combine prior art may provide helpful insights into the state of the art at the time of the alleged invention. *Id.* at 420. Nevertheless, “an 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.” *Id.* “Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *Id.* A “person of ordinary skill is also a person of ordinary creativity.” *Id.* at 421.

Nevertheless, “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 so.” *PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1360 (Fed. Cir. 2007); *see KSR*, 550 U.S. at 416 (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).<sup>15</sup>

### **3. Indefiniteness**

The definiteness requirement of 35 U.S.C. § 112 ensures that the patent claims particularly point out and distinctly claim the subject matter that the patentee regards to

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<sup>15</sup> Further, “when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious.” *KSR*, 550 U.S. at 416 (citing *United States v. Adams*, 383 U.S. 39, 52 (1966)).

be the invention. See 35 U.S.C. § 112, ¶ 2; *Metabolite Labs., Inc. v. Laboratory Corp. of America Holdings*, 370 F.3d 1354, 1366 (Fed. Cir. 2004). If a claim's legal scope is not clear enough so that a person of ordinary skill in the art could determine whether or not a particular product infringes, the claim is indefinite, and is, therefore, invalid. *Geneva Pharm., Inc. v. GlaxoSmithKline PLC*, 349 F.3d 1373, 1384 (Fed. Cir. 2003).<sup>16</sup>

Thus, it has been found that:

When a proposed construction requires that an artisan make a separate infringement determination for every set of circumstances in which the composition may be used, and when such determinations are likely to result in differing outcomes (sometimes infringing and sometimes not), that construction is likely to be indefinite.

*Halliburton Energy Servs. v. M-I LLC*, 514 F.3d 1244, 1255 (Fed. Cir. 2008).

#### **4. Lack of a Written Description**

The issue of whether a patent is invalid for failure to meet the written description requirement of 35 U.S.C. § 112, ¶ 1 is a question of fact. *Bard Peripheral Vascular, Inc. v. W.L. Gore & Associates, Inc.*, 670 F.3d 1171, 1188 (Fed. Cir. 2012). A patent's written description must clearly allow persons of ordinary skill in the art to recognize that the inventor invented what is claimed. The test for sufficiency of written description is "whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Id.* (quoting *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc)).

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<sup>16</sup> Indefiniteness is a question of law. *IGT v. Bally Gaming In'l, Inc.*, 659 F.3d 1109 (Fed. Cir. 2011).

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**D. Domestic Industry**

A violation of section 337(a)(1)(B), (C), (D) or (E) can be found “only if an industry in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned, exists or is in the process of being established.” 19 U.S.C. § 1337(a)(2). Section 337(a) further provides:

(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, mask work, or design 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.

19 U.S.C. § 1337(a)(3).

These statutory requirements consist of an economic prong (which requires certain activities) and a technical prong (which requires that these activities relate to the intellectual property being protected). *Certain Stringed Musical Instruments and Components Thereof*, Comm’n Op. at 8 (May 16, 2008) (“*Stringed Musical Instruments*”).

The Commission practice is usually to assess the facts relating to the economic prong at the time that the complaint was filed. *See Certain Coaxial Cable Connectors and Components Thereof and Products Containing Same*, Inv. No. 337-TA-560, Comm’n Op. at 39 n.17 (Apr. 14, 2010) (“We note that only activities that occurred before the filing of a complaint with the Commission are relevant to whether a domestic industry exists or is in the process of being established under sections 337(a)(2)-(3).”) (citing

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*Bally/Midway Mfg. Co. v. U.S. Int'l Trade Comm'n*, 714 F.2d 1117, 1121 (Fed. Cir. 1983)). In some cases, however, the Commission will consider later developments in the alleged industry, such as “when a significant and unusual development occurred after the complaint has been filed.” See *Certain Video Game Systems and Controllers*, Inv. No. 337-TA-743, Comm’n Op., at 5-6 (Jan. 20, 2012) (“[I]n appropriate situations based on the specific facts and circumstances of an investigation, the Commission may consider activities and investments beyond the filing of the complaint.”).

The burden is on the complainant to show by a preponderance of the evidence that the domestic industry requirement is satisfied. *Certain Multimedia Display and Navigation Devices and Systems, Components Thereof, and Products Containing Same*, Inv. No. 337-TA-694, Comm’n Op. at 3 (July 22, 2011) (“*Navigation Devices*”).

“With respect to section 337(a)(3)(A) and (B), the technical prong is the requirement that the investments in plant or equipment and employment in labor or capital are actually related to ‘articles protected by’ the intellectual property right which forms the basis of the complaint.” *Id.* “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.” *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.2d 1361, 1375 (Fed. Cir. 2003). Consequently, the sections of this Initial Determination that discuss the claim construction and technical infringement issues relative to each asserted patent (*i.e.*, sections V through IX) also contain analyses of products that complainant relies upon to satisfy the technical prong of section 337(a)(3)(A) and (B).



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“With respect to section 337(a)(3)(C), the technical prong is the requirement that the activities of engineering, research and development, and licensing are actually related to the asserted intellectual property right.” *Id.*

With respect to the economic prong, and whether or not section 337(a)(3)(A) or (B) is satisfied, the Commission has held that “whether a complainant has established that its investment and/or employment activities are significant with respect to the articles protected by the intellectual property right concerned is not evaluated according to any rigid mathematical formula.” *Certain Printing and Imaging Devices and Components Thereof*, Inv. No. 337-TA-690, Comm’n Op. at 27 (Feb. 17, 2011) (“*Printing and Imaging Devices*”) (citing *Certain Male Prophylactic Devices*, Inv. No. 337-TA-546, Comm’n Op. at 39 (Aug. 1, 2007)). Rather, the Commission examines “the facts in each investigation, the article of commerce, and the realities of the marketplace. *Id.* The determination takes into account the nature of the investment and/or employment activities the industry in question, and the complainant’s relative size. *Id.* (citing *Stringed Musical Instruments*, Comm. Op. at 26).<sup>17</sup>

With respect to section 337(a)(3)(C), whether an investment in domestic industry is “substantial” is a fact-dependent inquiry for which the complainant bears the burden of proof. *Stringed Musical Instruments*, Comm’n Op. at 8. There is no minimum monetary expenditure that a complainant must demonstrate to qualify as a domestic industry under the “substantial investment” requirement of this section. There is no need to define or

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<sup>17</sup> A further discussion of “significant investment” under section 337(a)(3)(A)-(B) is contained in section XI, in connection with the specific arguments made by Motorola in this investigation.

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quantify an industry in absolute mathematical terms. Rather, “the requirement for showing the existence of a domestic industry will depend on the industry in question, and the complainant’s relative size.” *Id.* at 14.<sup>18</sup>

**V. U.S. Patent No. 6,069,896**

U.S. Patent No. 6,069,896 (“the ‘896 patent”) is titled, “Capability Addressable Network and Method Therefor.” JX-5 (‘896 patent). The ‘896 patent issued on May 30, 2000, and the named inventors are Ronald Borgstahl, Jeffrey Harris, Ernest Woodward, and David Leeper. *Id.* The ‘896 patent relates generally to “data communication networks,” and more specifically relates to “a peer-to-peer network in which node addressing is dynamically configurable.” *Id.* at col. 1, lns. 5-8 (Technical Field of the Invention).

Motorola asserts independent method claims 1 and 12. The asserted claims read as follows:

1. In a capability addressable peer-to-peer data communication network, a method of establishing network connectivity comprising the steps of:
  - initiating a setup connection between first and second peers of said network by transmitting an unsolicited message containing an identification of said first peer to said second peer;
  - authorizing said second peer to establish said setup connection with said first peer based on said identification of said first peer:
  - exchanging needs and capabilities between said first and second peers after establishing said setup connection; and

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<sup>18</sup> A further discussion of “substantial investment” under section 337(a)(3)(C) is contained in section XI, in connection with the specific arguments made by Motorola in this investigation.

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selectively processing an addressed service connection in response to said exchange of needs and capabilities.

**12.** A method of operating a capability addressable peer-to-peer data communication network comprising the steps of:

- a) detecting, at a first one of a service-requesting peer and a service-providing peer, physical proximity of a second one of said service-requesting and service-providing peers;
- b) determining whether a need for a service connection exists at one of said service-requesting and service-providing peers;
- c) establishing, if said determining step identifies said need, a setup wireless connection between said service-requesting and service-providing peers;
- d) communicating authorization information describing said service-requesting peer to said service-providing peer;
- e) forming a wireless service connection between said service-requesting and service-providing peers when said service-requesting peer is authorized through an identification code;
- f) communicating capability information describing said service-providing peer to said service-requesting peer;
- g) forming said wireless service connection between said service-requesting and service-providing peers when said service-providing peer is determined to have a capability compatible with said need determined in step b); and
- h) providing said capability using said service connection.

JX-5 at col. 10, lns. 27-42; col. 11, ln. 46 – col. 12, ln. 13.

### **A. Claim Construction<sup>19</sup>**

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<sup>19</sup> A person of ordinary skill in the art of the '896 patent as of the fall of 1996 was typically a person who had a bachelor's degree in electrical engineering or computer science and three years of experience in networking and consumer electronics, or an

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**1. “peer-to-peer” / “peer” (Claims 1, 12)**

Below is a chart showing the parties’ proposed claim constructions.

| <b>Claim Term</b> | <b>Motorola’s Construction</b>  | <b>Microsoft’s Construction</b>   |
|-------------------|---|---|
| “peer-to-peer”    | having at least common portions of communications protocol and/or capability and does not refer to equivalence of physical size, functional capability, data processing capacity or transmitter/receiver range or power | communication between peers   |
| “peer”            | a computer or microprocessor controlled electronic device in a peer-to-peer network   | device having at least common portions of communications protocol and/or capability with another peer, that can establish a personal area network, and that can initiate a connection with other peers without servers being required to manage the connections |

The claim term “peer-to-peer” appears in the preamble of independent claims 1 and 12. JX-5 at col. 10, lns. 27-42; col. 11, ln. 46 – col. 12, ln. 13.<sup>20</sup>

Motorola construes the term to mean “having at least common portions of communications protocol and/or capability and does not refer to equivalence of physical size, functional capability, data processing capacity or transmitter/receiver range or power.” Compls. Br. at 17-18; RX-394 (Joint Identification of Claim Terms and Proposed Constructions) at 9. Microsoft construes the term to mean “communication between peers.” Resp. Br. at 110-11.

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advanced degree and one to two years of experience in the field. *See* CX-712C (Madisetti WS) at 9-10.

<sup>20</sup> The term also appears in non-asserted independent claim 10. JX-5.

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As proposed by Motorola, the claim term “peer-to-peer” is construed to mean “having at least common portions of communications protocol and/or capability and does not refer to equivalence of physical size, functional capability, data processing capacity or transmitter/receiver range or power.”

The ‘896 patent provides an express definition of the term “peer-to-peer”:

As used herein, the term “peer-to-peer” is defined to mean  
having at least common portions of communications  
protocol and/or capability and does not refer to equivalence  
of physical size, functional capability, data processing  
capacity or transmitter/receiver range or power.

JX-5 at col. 3, lns. 8-12 (emphasis added); Madisetti Tr. 264-66. When, as here, the patentee chooses to be his own lexicographer and provides an explicit definition, that definition governs. *See Sinorgchem Co. Shandong v. U.S. Int’l Trade Comm’n*, 511 F.3d 1132, 1138 (Fed. Cir. 2007); *Phillips.*, 415 F.3d at 1316 (“the specification may reveal a special definition given to a claim term [so] the inventor’s lexicography governs.”). Because the language used by the applicants (“as used herein” and “is defined to mean”) “clearly, deliberately, and precisely” defines the term “without ambiguity,” this definition governs. *Sinorgchem*, 511 F.3d at 1136, 1138.

The term “peer” appears in the first, second, and third steps of independent claim 1, and steps a) through g) of independent claim 12. JX-5 at col. 10, lns. 27-42; col. 11, ln. 46 – col. 12, ln. 13.<sup>21</sup>

Motorola construes the term to mean “a computer or microprocessor controlled electronic device in a peer-to-peer network.” Compls. Br. at 17-18. Microsoft construes the term to mean a “device having at least common portions of communications protocol

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<sup>21</sup> The term also appears in non-asserted claims. JX-5.

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and/or capability with another peer, that can establish a personal area network, and that can initiate a connection with other peers without servers being required to manage the connections.” Resp. Br. at 110-11.

As proposed by Motorola, the claim term “peer” is construed to mean “a computer or microprocessor controlled electronic device in a peer-to-peer network.”

The ‘896 patent explains that a “peer” can be “virtually any electronic device”:

While FIG. 1 shows only a few peers 20, virtually any computer or microprocessor controlled electronic device throughout the world may serve as a peer 20.

JX-5 at col. 3, lns. 3-5 (emphasis added). Such a broad definition of “peer” is further supported elsewhere in the specification. For example, the specification provides that “a wide variety of everyday, commonly encountered electronically controlled devices” can be peers. JX-5 at col. 5, lns. 23-25. Examples of peers in the ‘896 patent include “a personal digital assistant (PDA), television, radio, CD player, tape player, copier, facsimile machine, telephone, cellular telephone, cordless telephone, pager, watch, computer, point of sale (POS) terminal, automated teller, or other electronic device.” JX-5 at col. 5, lns. 25-30. The ‘896 patent further explains that a peer can be an input/output device, such as “keyboards, pointing devices, optical scanners, microphones, and other well known input devices” and “printers, monitors, speakers, and other well known output devices.” JX-5 at col. 5, lns. 42-50. *See also* Madisetti Tr. 186.

Microsoft’s proposed construction omits the second half of the specification’s express definition of “peer-to-peer,” in which the specification explains that the term peer-to-peer “does not refer to equivalence of physical size, functional capability, data processing capacity or transmitter/receiver range or power.” JX-5 at col. 3, lns. 9-12.

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Indeed, although Microsoft's expert, Mr. McNair, agrees that the '896 patent provides an express definition of "peer-to-peer," RRX-68C (McNair RWS) at 11-13, he nevertheless referred to the second half of the express definition as "not really necessary to me or useful."<sup>22</sup> McNair Tr. 1110. But this approach is contrary to law. *Sinorgchem*, 511 F.3d at 1136-1139 (overturning construction where it left off part of definition explicitly provided in patentee's lexicography).

Microsoft proposes two unrelated requirements that are not part of the '896 patent's disclosure. First, Microsoft requires that a peer be a device "that can establish a personal area network." However, this is an optional characteristic: "Each peer or communication node 20 of communications network 22 may establish a personal area network." JX-5 at col. 3, lns. 12-14 (emphasis added); *see also* Madisetti Tr. 181-183; 187; 332-333; 336. Microsoft's expert, Mr. McNair, believes that this sentence limits the term "peer" in the claims. McNair Tr. 1110-1111. However, he concedes that "may establish" in the sentence in question is ambiguous and that it could mean "may or may not establish." McNair Tr. 1113. Although Mr. McNair goes on to claim that this ambiguity is resolved in the specification, the sentence he points to says, "In the preferred embodiments, each peer 20 can initiate a connection with other peers 20 ...." JX-5 at col. 5, lns. 35-37; McNair Tr. 1113. However, the words "initiate" and "establish" are used differently in the claims and the specification. Further, this sentence describes only a preferred embodiment.

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<sup>22</sup> In his rebuttal witness statement, Mr. McNair took this position a step further, asserting that "peers" must be "interchangeable" and "act in the same manner when presented with the same inputs." RRX-68C (McNair RWS) at 11. This position is in direct conflict with the specification's express disclosure, JX-5 at col. 3, lns. 9-12.

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Second, Mr. McNair conflates the meanings of “establish” and “initiate.” RRX-68C (McNair RWS) at 23. As Dr. Madisetti pointed out, establishing a network requires only the ability to participate in the formation of that network. Madisetti Tr. 188-189.

Microsoft’s construction also requires a peer to be a device “that can initiate a connection with other peers without servers being required to manage the connections.” This characteristic, however, is a feature of only preferred, not all, embodiments. JX-5 at FIG. 1; col. 2, lns. 38-42; col. 3, lns. 35-37; col. 10, lns. 20-25; Madisetti Tr. 332-333. The Federal Circuit has repeatedly instructed that limiting the claims to a preferred embodiment is improper. *Phillips*, 415 F.3d at 1323.

**2. “capability addressable peer-to-peer data communication network”**

| <b>Claim Term</b>  | <b>Motorola Construction</b>  | <b>Microsoft Construction</b>  |
|--|---|--|
| “capability addressable peer-to-peer data communication network” | a peer-to-peer data communications network where messages may be addressed in some manner related to capability | a peer-to-peer data communications network that allows connection without any prior setup or activation procedures |

The claim term “capability addressable peer-to-peer data communication network”<sup>23</sup> appears in the preamble of independent claims 1 and 12. JX-5 at col. 10, lns. 27-42; col. 11, ln. 46 – col. 12, ln. 13.<sup>24</sup>

Motorola construes the term to mean “a peer-to-peer data communications network where messages may be addressed in some manner related to capability.”

Compls. Br. at 19-20. Microsoft construes the term to mean “a peer-to-peer data

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<sup>23</sup> The parties’ post-hearing briefs refer to “communication” as “communications.”

<sup>24</sup> The term also appears in non-asserted independent claim 10. JX-5.



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communications network that allows connection without any prior setup or activation procedures.” Resp. Br. at 116-17.

As proposed by Motorola, the claim term “capability addressable peer-to-peer data communication network” is construed to mean “a peer-to-peer data communications network where messages may be addressed in some manner related to capability.”

The parties’ constructions both require “a peer-to-peer data communications network” but differ in their characterization of a “capability addressable” network. Consistent with the plain language of the claim (*i.e.*, “capability addressable”), Motorola’s construction provides that the network is one in which “messages may be addressed in some manner related to capability.” Both parties’ experts agree with this construction. CX-712C (Madisetti WS) at 14-16; McNair Tr. 1094.

The ‘896 patent provides that “[r]ather than specifying a network unique address to initiate a connection, network 22 uses physical proximity along with a needs and capabilities evaluation (discussed below) to target a peer 20 with which a connection is desired.” JX-5 at col. 4, lns. 18-22. Similarly, the Abstract of the ‘896 patent states that a “wireless, peer-to-peer, capability addressable network (22) is disclosed. The network (22) accommodates any number of peers (20). Network connections are formed based upon proximity between peers (20) and upon a needs and capabilities evaluation (82).”

In contrast, Microsoft’s proposed construction requires that the network “allows connection without any prior setup or activation procedures.” Microsoft’s own expert describes that characteristic as “a phrase that was used in the specification to describe desirable characteristics of the capability addressable network.” McNair Tr. 1092.

Desirable features are not claim limitations. Whether connections can take place without

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|  |   |  |
|--|---|--|
| “setup connection” /<br>“setup wireless<br>connection” | an initial connection over<br>which two peers can<br>negotiate an addressed<br>service connection | an initial connection that permits<br>two peers to exchange needs and<br>capabilities to determine whether<br>to create an “addressed service<br>connection” |
|--|---|--|

The claim term “setup connection” appears in the first, second, and third steps of independent claim 1. JX-5 at col. 10, lns. 27-42.<sup>25</sup> The term “setup wireless connection” appears in step c) of independent claim 12. JX-5 at col. 11, ln. 46 – col. 12, ln. 13.

Motorola construes the terms to mean “an initial connection over which two peers can negotiate an addressed service connection.” Compls. Br. at 21. Microsoft construes the terms to mean “an initial connection that permits two peers to exchange needs and capabilities to determine whether to create an ‘addressed service connection’.” Resp. Br. at 122.

As proposed by Motorola, the claim term “setup wireless connection” is construed to mean “an initial connection over which two peers can negotiate an addressed service connection.” Additionally, the term “setup wireless connection” is construed to mean “an initial wireless connection over which two peers can negotiate an addressed service connection.”

The parties dispute whether a setup connection is a connection that allows peers to negotiate an addressed service connection (as Motorola proposes) or is somehow limited to a connection that permits two peers to exchange needs and capabilities to determine whether to create an addressed service connection (as Microsoft proposes).

The ‘896 patent discloses that a setup connection is used generally for the

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<sup>25</sup> The term also appears in non-asserted claims. JX-5.

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prior activation or setup procedures has nothing to do with whether something is “capability addressable.” Prior activation and setup procedures relate to setting up the networks, whereas capability addressable relates to how messages will be addressed once a network has been set up.

Indeed, the inventors of the ‘896 patent recognized the importance of retaining some user control. Leeper Tr. 128-129. Microsoft’s proposed construction contradicts how the patent describes network set-up. While the ‘896 patent does state that “[a] priori activation and setup procedures are not required in this network because no network specific equipment requires network addresses in order to make connections” (JX-5 at col. 10, lns. 4-7; *see also id.* at col. 2, lns. 2-6), this statement does not preclude use of “a priori activation and setup procedures.” In fact, the ‘896 patent specifically contemplates that some prior setup procedures may take place: “Whether user intervention is required or not should depend upon the security.... For example, peers 20 involved in financial transactions can benefit upon user intervention to ensure security....” JX-5 at col. 8, lns. 46-55; *see also Id.* at col. 7, lns. 47-51. Similarly, in the “BACKGROUND OF THE INVENTION,” the ‘896 patent repeatedly describes the prior art as requiring “excessive” a priori activation and setup procedures. JX-5 at col. 1, lns. 53-54; col. 2, lns. 2-8, 29-31. This is consistent with the statement quoted immediately above, which makes clear that some user intervention and a priori knowledge is within the scope of the invention.

**3. “setup connection” / “setup wireless connection”**

| <b>Claim Term</b> | <b>Motorola Construction</b> | <b>Microsoft Construction</b> |
|-------------------|------------------------------|-------------------------------|
|-------------------|------------------------------|-------------------------------|

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negotiation of an addressed service connection. Such use may include the evaluation of needs or capabilities. JX-5 at col. 7, ln. 55 – col. 8, ln. 6. A setup connection may also be used, however, for other negotiations:

If the negotiation process is not complete, a task 88 establishes or otherwise continues the setup connection in furtherance of the negotiation process by sending an addressed negotiation message (not shown) to the peer 20 whose peer ID 66 (see FIG. 7) was included in a just-received needs/capabilities message 64.

JX-5 at col. 8, lns. 23-30. Additional negotiations performed over the setup connection are further discussed in the following paragraph of the specification. JX-5 at col. 8, lns. 33-42.

Nonetheless, Microsoft requires the “setup connection” to permit peers to exchange needs and capabilities. However, only claim 1 requires an exchange of needs and capabilities. Claim 12 does not. Thus, Microsoft’s construction improperly reads a step from claim 1 into claim 12. Also, Microsoft improperly requires that a setup connection be used to make a binary decision—*whether* to create an addressed service connection.

**4. “addressed service connection” (Claim 1) and “wireless service connection” (Claim 12)**

| <b>Claim Term</b>                        | <b>Motorola Constructions</b>   | <b>Microsoft Constructions</b>   |
|--|---|--|
| “addressed service connection” (Claim 1) | a connection over which service(s) can be provided to addressed peer(s) | connection created between two peers over which one peer provides the capability to satisfy another peer’s needs and where the peers are identified by address |
| “wireless service connection” (Claim 12) | a wireless connection over which services can be provided to peers      | wireless connection created between two peers over which one peer provides the capability to satisfy another peer’s needs                                      |

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The claim term “addressed service connection” appears in the third step of independent claim 1. JX-5 at col. 10, lns. 27-42.<sup>26</sup>

Motorola construes the term to mean “a connection over which service(s) can be provided to addressed peer(s).” Compls. Br. at 22. Microsoft construes the term to mean “connection created between two peers over which one peer provides the capability to satisfy another peer’s needs and where the peers are identified by address.” Resp. Br. at 120-21.

As proposed by Motorola, the claim term “addressed service connection” is construed to mean “a connection over which service(s) can be provided to addressed peer(s).”

The term “wireless service connection” appears in steps e) and g) of independent claim 12. JX-5 at col. 11, ln. 46 – col. 12, ln. 13.

Motorola construes the term to mean “a wireless connection over which services can be provided to peers.” Compls. Br. at 22. Microsoft construes the term to mean “wireless connection created between two peers over which one peer provides the capability to satisfy another peer’s needs.” Resp. Br. at 120-21.

The term “wireless service connection” is construed to mean “a wireless connection over which services can be provided to peers.”

The ‘896 patent discloses that, after some preliminary steps, “a process service connection procedure 92 is performed. During procedure 92, a one-to-one, addressed connection is established between peers 20 to perform network services.” JX-5 at col. 8,

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<sup>26</sup> The term also appears in non-asserted claims. JX-5.