

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RICOH AMERICAS CORPORATION,
XEROX CORPORATION, and
LEXMARK INTERNATIONAL, INC.
Petitioners,

v.

MPHJ TECHNOLOGY INVESTMENTS, LLC
Patent Owner.

Case IPR2014-00539
Patent 7,477,410 B1

Before MICHAEL P. TIERNEY, KARL D. EASTHOM, and
GREGG I. ANDERSON, *Administrative Patent Judges*.

ANDERSON, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

On March 25, 2014, Ricoh Americas Corporation,¹ Xerox Corporation, and Lexmark International, Inc. (collectively “Petitioner”) filed a Petition requesting an *inter partes* review of claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34–35, 37, 39–42, 44, and 46–47 of U.S. Patent No. 7,477,410 B1 (“the ’410 patent”). Paper 1 (“Pet.”). MPHJ Technology Investments, LLC (“MPHJ” or “Patent Owner”) did not file a Preliminary Response. On August 25, 2014, we granted the Petition and instituted trial for claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34–35, 37, 39–42, 44, and 46–47 of the ’410 patent on all of the grounds of unpatentability alleged in the Petition. Paper 7 (“Institution Decision” or “Dec.”).

After institution of trial, Patent Owner filed a Patent Owner Response. Paper 12 (“PO Resp.”). Petitioner filed a Reply. Paper 16 (“Pet. Reply”). In addition, the parties rely upon expert testimony. Petitioners proffered the Declaration of Dr. Roger Melen (Ex. 1006) with the Petition. Patent Owner proffered the Declaration of Dr. Martin Kaliski (Ex. 2001) with its Response. A transcript of Dr. Kaliski’s deposition (Ex. 1011) was submitted by Petitioner. Patent Owner did not take the deposition of Dr. Melen.

An oral hearing was held on May 27, 2015. The transcript of the hearing has been entered into the record. Paper 22 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a). We conclude for the reasons that follow that Petitioner has shown by a preponderance of the evidence that claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34, 35, 37, 39–42, 44, 46, and 47 of the ’410 patent are unpatentable.

¹ Petitioners advise that additional Real Parties in Interest include Ricoh Americas Holding, Inc. and Ricoh Company, Ltd. Pet. 4–5.

A. Related Proceedings

The '410 patent and U.S. Patent No. 8,488,173 (“the '173 patent”) are alleged to be infringed in *MPHJ Technology Investments, LLC v. Research Now, Inc.*, No. 2:13CV00962 (E.D. Tex.). Pet. 6. The '410 and '173 patents are also involved in the following actions for patent infringement in the District of Delaware: (1) *MPHJ Technology Investments, LLC v. Coca-Cola Company*, No. 1:14CV00003 (D. Del.); (2) *MPHJ Technology Investments, LLC v. Dillard's Inc.*, No. 1:14CV00004 (D. Del.); (3) *MPHJ Technology Investments, LLC v. Huhtamaki Americas Inc.*, No. 1:14CV00005 (D. Del.); and (4) *MPHJ Technology Investments, LLC v. Unum Group*, No. 1:14CV00006 (D. Del.). *Id.* at 6–7.

Concurrently with the '410 patent, we instituted *inter partes* review of the '173 patent. *See Ricoh Ams. Corp. v. MPHJ Tech. Invs.s LLC*, Case IPR2014-00538 (“the '538 IPR”). The '410 patent is a continuation of U.S. Patent No. 6,771,381, and U.S. Patent No. 7,986,426 (“the '426 patent”) is a continuation of the '410 patent. Pet. 7–8. We have instituted *inter partes* review of each of the preceding patents (*see* Pet. 7) and final decisions have been entered. *See Ricoh Ams. Corp. v. MPHJ Tech. Invs. LLC*, Case IPR2013-00302, Paper 52 (PTAB Nov. 19, 2014) (“the '302 IPR”) and *Hewlett-Packard Co. v. MPHJ Tech. Invs. LLC*, Case IPR2013-00309, Paper 35 (PTAB Nov. 21, 2013) (“the '309 IPR”). Petitioner has filed a second petition for *inter partes* review of the '410 patent, styled *Ricoh Americas Corp. v. MPHJ Technology Investments LLC*, Case IPR2015-01178. *See* Paper 20, 2.

Patent Owner has filed a complaint with the Federal Trade Commission (“FTC”) relating generally to its patents. *See MPHJ Tech. Invs., LLC v. FTC*, No. 6: 14-cv-000 11 (W.D. Tex.). Pet. 7. Patent Owner has filed a second complaint against the attorney general of Vermont, also relating generally to its

patents. *See MPHJ Tech. Invs., LLC, v. William H. Sorrell*, 2:14-cv-00191 (D. Vt.).² Paper 20, 2.

B. The '410 patent

The '410 patent describes a “Virtual Copier” (VC) system. The system enables a personal computer user to scan paper from a first device and copy an electronic version of it to another remote device, or integrate that electronic version with a separate computer application in the network. *See* Ex. 1001, Abstract.

According to the '410 Patent, “VC can be viewed as a copier. Like a copier, VC takes paper in, and produces paper going out. The only difference is that VC does not distinguish between electronic and physical paper.” *Id.* at 7:61–64.

The VC extends from “its simplest form” to its “more sophisticated form”:

In its simplest form it extends the notion of copying from a process that involves paper going through a conventional copier device, to a process that involves paper being scanned from a device at one location and copied to a device at another location. In its more sophisticated form, VC can copy paper from a device at one location directly into a business application residing on a network or on the Internet, or [vice] versa.

Id. at 5:45–52.

The VC includes “five essential modules”: input module, output module, process module, client module, and server module. *Id.* at 70:62–71:43. “Each module is a counterpart to an aspect that is found on a conventional copier.” *Id.* at 70:56–58. Notwithstanding that the latter sentence refers to each module, the '410 patent ambiguously states that “[t]here is no counterpart to VC’s Server Module on

² The claims made in the FTC and Vermont lawsuits are not relevant to patentability and the lawsuits are identified only for purposes of completeness. In addition, Petitioner identifies other abandoned applications filed by Patent Owner, which, likewise, are not pertinent here.

a conventional copier.” *Id.* at 71:42–43. In any event, the other four modules have “counterparts” on “conventional” copiers: “The Input Module manages paper or electronic paper entering VC. . . . The counterpart to VC’s Input Module on a conventional copier is the scanner subsystem.” *Id.* at 70:63–71:2. “The Output Module manages paper or electronic paper exiting VC. . . . The counterpart to VC’s Output Module on a conventional copier is the printer or fax subsystem.” *Id.* at 71:3–10. “The Process Module applies processing to the electronic paper as it is being copied. . . . The counterpart to VC’s Process Module on a conventional copier is the controller.” *Id.* at 71:11–19. “The Client Module presents the electronic paper as it is being copied, and any relevant information related to the input or output functions. . . . The counterpart to VC’s Client Module on a conventional copier is the panel.” *Id.* at 71:20–28. “Unlike conventional copiers, VC’s Server Module is a unique subsystem that can communicate with the other modules as well as third-party applications.” *Id.* at 71:29–43.

Figure 28 of the ’410 patent, reproduced below, represents an embodiment of VC:

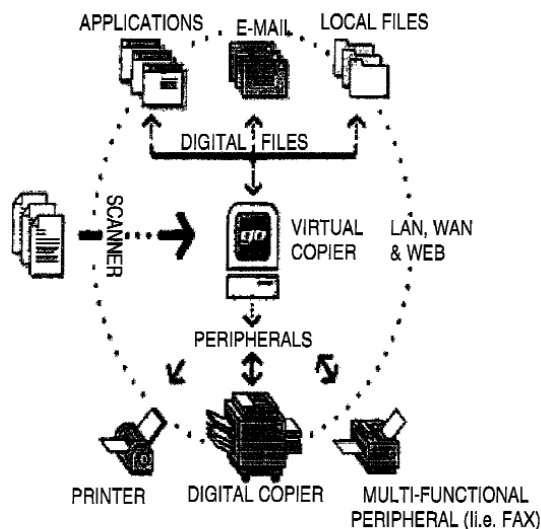


FIG. 28

Figure 28 depicts various peripheral devices attached to a Virtual Copier on a network. *Id.* at 69:29–30. The interface of the Virtual Copier has a “Go button” which can copy paper, whether physical or electronic. *Id.* at 69:31–32.

C. Illustrative Claims

Of the challenged claims, claims 1, 8, 15, 22, 34, and 41 are independent. System claim 1 and method claim 41 are reproduced below:

1. A computer data management system including at least one of an electronic image, graphics and document management system capable of transmitting at least one of an electronic image, electronic graphics and electronic document to a plurality of external destinations including one or more of external devices and applications responsively connectable at least one of locally and via the Internet, comprising:
 - at least one memory storing a plurality of interface protocols for interfacing and communicating;
 - at least one processor responsively connectable to said at least one memory, and implementing the plurality of interface protocols as a software application for interfacing and communicating with the plurality of external destinations including the one or more of the external devices and applications,
 - wherein the computer data management system includes the capability to integrate an image using software so that the image gets seamlessly replicated and transmitted to at least one of other devices and applications, and via the Internet.

Ex. 1001, 84:57–85:9.

41. A computer data management method including at least one of an electronic image, graphics and document management system capable of transmitting at least one of an electronic image, electronic graphics and electronic document to a plurality of external destinations including one or more of external devices and applications responsively connectable at least one of locally and via the Internet, wherein the method comprises the steps of:

integrating an image using software so that the image gets seamlessly replicated into at least one of other devices and applications, and via the Internet;
integrating electronic images into existing applications without the need to modify the destination application;
interfacing via a software application enabling copying images between physical devices, applications, and the Internet using a single “GO” operation; and
adding at least one of electronic document and paper processing with a single programming step.

Ex. 1001, 90:47–64.

D. Grounds Upon Which Trial was Instituted

Inter partes review was instituted on three grounds: (1) claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34, 35, 37, 39–42, 44, 46, and 47 for anticipation by XNS;³ (2) claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34, 35, 37, 39–42, 44, 46, and 47 for anticipation by Harkins;⁴ and (3) claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34, 35, 37, 39–42, 44, 46, and 47 as obvious over Harkins and Motoyama.⁵ Dec. 24.

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, “[a] claim in an unexpired patent shall be given its broadest reasonable construction in light of the specification of the patent in which

³ Xerox Corporation, *Xerox Network Systems Architecture General Information Manual*, Apr. 1985 (“XNS,” Ex. 1002) (with inherent features evidenced by GIS 150, Xerox Corporation, *Xerox 150 Graphic Input Station Operator And Reference Manual*, Jan. 1985 (“GIS 150,” Ex. 1003)). Pet. 20.

⁴ U.S. Patent No. 5,513,126 to Harkins, issued Apr. 30, 1996 (“Harkins,” Ex. 1004).

⁵ U.S. Patent No. 5,818,603 to Motoyama, filed Mar. 29, 1996 (“Motoyama,” Ex. 1005).

it appears.” 37 C.F.R. § 42.100(b); see *In re Cuozzo Speed Techs., LLC*, No. 2014-1301, 2015 WL 4097949, at *5–8 (Fed. Cir. July 8, 2015), *reh’g en banc denied*, 2015 WL 4100060 (Fed. Cir. July 8, 2015); see also *Office Patent Trial Practice Guide*, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012) (Claim Construction). Under the broadest reasonable construction standard, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definition for a claim term must be set forth in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). In the absence of such a special definition or other consideration, “limitations are not to be read into the claims from the specification.” *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

The Board construes the following claim phrases and terms:⁶

1. “*application/applications*” (*claims 1, 6–8, 13–15, 20–22, 27, 28, 34, 39–41, 46, and 47*)

The term “application” or “applications” appears throughout the challenged claims. We construed the phrase “software application/applications” in the final written decisions in the ’302 and ’309 IPRs. We interpreted the “application” to mean:

a program, or group of programs, which operate together in a system to perform a function or functions, and the programs can be stored in a variety of places on a variety of devices, and operate in a distributed manner. An application may include software and hardware and performs a function or functions.

’302 IPR, Paper 52, 13; ’309 IPR, Paper 35, 11.

⁶ In addition to the terms analyzed below, Patent Owner’s response makes reference to “interfacing.” PO Resp. 4. The reference appears to be a mistake.

The above construction differs from our preliminary construction in the Decision on Institution.⁷ Petitioner argues we should adopt the construction from the final decision in the '302 IPR, set forth above. Pet. Reply 3. Patent Owner proposes the term be construed as “a discrete software program executable on an operating system for the purpose of accomplishing a task.” PO Resp. 8–10 (citing Ex. 2001 ¶ 17).

In support of its proposed construction, Patent Owner points to the Specification’s description of “Input and Output Module registers.” PO Resp. 6–7 (citing Ex. 1001, 9:35–37). Patent Owner contends that because the modules register with the operating system means they cannot be the operating system. *Id.* at 7 (citing Ex. 2001 ¶ 21). Patent Owner argues the '410 patent uses the term “‘application’ so that it does not bleed into the concept of ‘Windows’ or any other operating system.” *Id.*

We are not persuaded that the citation to the Specification, including the testimony of Dr. Kaliski, supports Patent Owner’s argument that our prior construction in the Institution Decision, or those after trial in the final decisions in the '302 and '309 IPRs,⁸ are too broad. The patents at issue in the '302 and '309 IPRs have the same Specification as the '410 patent and the analysis there is equally applicable here. Patent Owner does not present any other arguments specific to this case that require further analysis.

We agree with the constructions set forth in the '302 and '309 IPRs. We therefore adopt the construction of “application” from the final decisions in those cases.

⁷ “[A] program that may or may not be stored on a device such as a printer or scanner.” Dec. 11.

⁸ The Patent Owner’s Response was filed November 25, 2014, after the November 19, 2014, filing date of the final decisions in the '302 and '309 IPRs.

2. “Go operation” (claims 15, 34, and 41)

The term “Go operation” appears in claims 15, 34, and 41. In the Institution Decision, consistent with construction “Go operation” in the Institution Decisions in the ’302 and ’309 IPRs, we construed the term to mean “an operation that begins a process.” Dec. 11–12. The final decisions in the ’302 and ’309 IPRs did not construe the term.

The Institution Decision in the ’538 IPR used the same construction, “an operation that begins a process,” for the closely related term “Go button.” Petitioner cites to that decision in support of adopting the same construction here.⁹ Pet. Reply 5. Patent Owner proposes that “Go Operation” should be interpreted as selecting “an operation that begins a process and requires no further action from the user to complete.” PO Resp. 7.

Patent Owner observes that the Specification states “[t]he interface of the consumer product called Virtual Copier has a Go button¹⁰ much like a physical copier.” PO Resp. 7–8 (citing Ex. 1001,¹¹ 46:23–25, Ex. 2001 ¶ 23). It therefore follows, according to Patent Owner that the word “Go” not only initializes but also “means *execute* in the context of user interfaces.” *Id.* at 8 (citing Ex. 2001 ¶ 24). Patent Owner argues its proposed construction is the broadest reasonable

⁹ Petitioner cites to the ’538 IPR because Patent Owner proposed the same construction there as it proposes here. Pet. Reply 5.

¹⁰ Patent Owner alleges the Specification uses “Go operation” synonymously with “Go button.” PO Resp. 7. The Specification does not explicitly state the two are the same. However, Patent Owner made the same arguments regarding interpretation of “Go button” in the ’538 IPR as it makes here in connection with “Go operation.” Petitioner has not questioned this assertion. Accordingly, we treat the terms as synonymous.

¹¹ Patent Owner mistakenly references the ’173 patent.

interpretation because it eliminates confusion with a process that is started but “merely initializes a process but does not ensure its complete execution.” *Id.* at 8.

Petitioner relies on our prior analysis in the Institution Decision in the ’538 IPR finding that “the Specification does not preclude a sequence of actions or otherwise limit the claim term.” Pet. Reply 5 (citing ’538 IPR, Paper 8, 12 (citing ’173 patent 7:2–3, 70:36–37)). Petitioner also contends the argument of Patent Owner is both without support in and inconsistent with the Specification “which equates “Go” with “Start,” ’410 patent, 46:19 (“GO or START button”), and describes using a Go button/operation in a sequence of operations to complete a task, *id.* at 6:65, 69:57.” *Id.* at 6.

According to the ’410 patent, “[t]his Go button can copy paper, whether physical or electronic, from one device and[/]or application to another device and/or application,” Ex. 1001, 6:41–43, 69:53–57, and “the user simply has one sequence to execute: select From, select To, and then press GO,” *id.* at 6:64–67; 69:53–57. The VC of the ’410 patent does act like a photocopier in that the user simply “press[es] a GO button to actually carry out the photocopy process.” *Id.* at 46:34–35. The “process feels the same because the sequence is the same.” *Id.* 46:36–38. We credit Petitioner’s expert, Dr. Melen, that the person of ordinary skill in the art would understand the “Go operation” is the same operation performed by the “Go button,” which is the equivalent to pushing the button on a prior art copier to make a copy. Ex. 1006 ¶ 40.

The additional language proposed by Patent Owner is unnecessary for the construction, because the Specification does not preclude a sequence of actions, manual or otherwise, that would limit the term as Patent Owner proposes. *See, e.g., In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994) (omitting an extraneous limitation unnecessary for the purpose of making sense of the claim).

Furthermore, the plain and ordinary meaning of “Go operation” as used in the claims does not support Patent Owner’s proposed construction. For example, claim 15 recites “wherein the computer data management system includes an interface that enables copying images between physical devices, applications, and the Internet using a single ‘GO’ operation.” Ex. 1001, 86:56–59. This language does not suggest that the “Go operation” does anything more than “enable,” i.e., start the copying process.

The ’410 patent Specification and claim language support our prior interpretation in the Institution Decision. We therefore adopt the construction of “Go operation” from the Institution Decision.

3. *“capable of/the capability to” (claims 1, 7, 8, 14, 15, 21, 22, 28, 34, 40, 41, and 47)*

The term “capable of” or “the capability to” appears in association with various cited functions of the claims, including the preamble of all of the challenged independent claims. In the Institution Decision we found “capable of” some stated function means the claimed component has the ability to, but does not necessarily, achieve the recited function. Dec. 9–10. We did not construe the term in the final decisions in the ’302 or ’309 IPRs.

Patent Owner does not take issue with the previous construction. PO Resp. 5. Petitioner agrees with our construction and argued that the plain meaning applies and that the component claimed to be “capable of” a function may, but does not necessarily, achieve that function. Pet. 15. We therefore adopt the construction of “capable of” from the Institution Decision.

4. *“at least one of” and related phrases (claims 1, 6, 7, 8, 13-15, 20-22, 27, 28, 34, 39, 40, 41, 46, and 47)*

Many of the challenged claims recite the phrase “at least one of,” followed by a listing of components, i.e., A and B, in a number of places. Related phrases

including “at least” are also found in the claims, i.e., “at least one memory.”

Ex. 1001, 84:64. We found in the Institution Decision that “at least one of A and B,” and “at least one” are interpreted in the alternative, “one or more of A or B” or “one or more.” Dec. 10. We used this same construction in the final decisions in the ’302 and ’309 IPRs. ’302 IPR, Paper 52, 9; ’309 IPR, Paper 35, 7.¹²

Patent Owner does not take issue with the construction from the Institution Decision. PO Resp. 5. With one minor exception, Petitioner agrees with the construction recited above. Pet. 16. We therefore adopt the construction of “at least one of” from the Institution Decision.

5. *“seamlessly” (claims 1, 34, and 41)*

The term “seamlessly” appears in claims 1, 34, and 41. We construed the term in the Institution Decision to mean “a low amount of effort.” Dec. 11. Neither of the final decisions in the ’302 nor the ’309 IPRs construed the term. Patent Owner does not take issue with the previous construction. PO Resp. 5. Petitioner’s Reply does not identify the term for construction, although the construction was initially proposed by Petitioner and adopted in the Institution Decision. Pet. 18–19, Dec. 11. We therefore adopt the construction of “seamlessly” from the Institution Decision.

¹² The final construction is the same as what was found in the institution decisions in the ’302 and ’309 IPRs.

B. Grounds of Unpatentability

Petitioners assert the following grounds of unpatentability.¹³

1. Anticipation by XNS

Petitioners argue that all of the challenged claims, 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34, 35, 37, 39–42, 44, 46, and 47, are unpatentable under 35 U.S.C. § 102(b) as anticipated by XNS. Pet. 28–37. Petitioners also rely on the Declaration of Dr. Melen (Ex. 1006 ¶¶ 45–63).

Patent Owner’s only argument regarding XNS is that it does not disclose the “Go operation” button of independent claims 15, 34, and 41 as it relates to “applications.” PO Resp. 11–13. As such, Patent Owner asserts XNS does not disclose all the limitations of the dependent claims: (1) claims 16, 18, 20, and 21, depending from claim 15; (2) claims 34, 35, 37, 39, and 40, depending from claim 34; and (3) claims 42, 44, 46, and 47 depending from claim 41. *Id.* at 11.

a. XNS (Exhibit 1002)

XNS is directed to computer networking, especially in the context of integrated office systems and document management. Ex. 1002, 1–6.¹⁴ It “describes the architecture of Xerox Network Systems,” and “provides information

¹³ The ’426 patent was the subject of review in the ’302 IPR. In the final decision in the ’302 IPR claim 1 of the ’426 patent was cancelled on the same grounds asserted here, anticipation by XNS. ’302 IPR, Paper 52, 48–49. Petitioner demonstrates that there is some correlation between the claims of the ’410 and the claims of the ’426 patent. Pet. 8–11; Pet. Reply 7–8; Ex. 1006, Attachment C. It argues that Patent Owner has not refuted the testimony of Dr. Melen or the final decision in the ’302 IPR. For sake of clarity, Dr. Melen provides no testimony regarding Attachment C. See Ex. 1006 ¶ 63. Regardless, what happens in a related *inter partes* review proceeding has not been shown to be conclusive here. The burden is on Petitioner, not Patent Owner. The claims are different and, as such, we proceed with an independent analysis of the evidence presented here.

¹⁴ Page references are to XNS as printed and not to Petitioners’ Exhibit pages.

on the standards and protocols that comprise the architecture.” *Id.* at 5. XNS also describes document management: “The general objective[] of XNS is . . . to increase the ROIA [return-on-information assets] by facilitating the creation, capture, storage, communication, printing, and replicating of electronic or paper documents within the office, especially at the work group and departmental levels. This is what Xerox calls document management.” *Id.* at 8.

Among other capabilities, the overall XNS network architecture includes a local area network (LAN) and wide area network (WAN) communication. *Id.* at 21–42. In addition, there is a protocol for interfacing with other systems and equipment as well as email services and network scanning services. *Id.* at 65–70, 83–90, 107–116. XNS describes network configurations for connecting office equipment — such as scanners, printers, facsimile machines, workstations, and mainframe computers. *Id.* at 17, 38, 67, 72, 94, 112, 113, 118, 122, 124, 130, 131, 135.

The XNS architecture consists of a hierarchy of protocols. *Id.* at 17. Thus, XNS discloses transmission protocols and application protocols for different types of communication services, as well as for different functions performed within the architectural boundaries. *Id.* at 14.

Figure 2–4 of XNS is reproduced below.

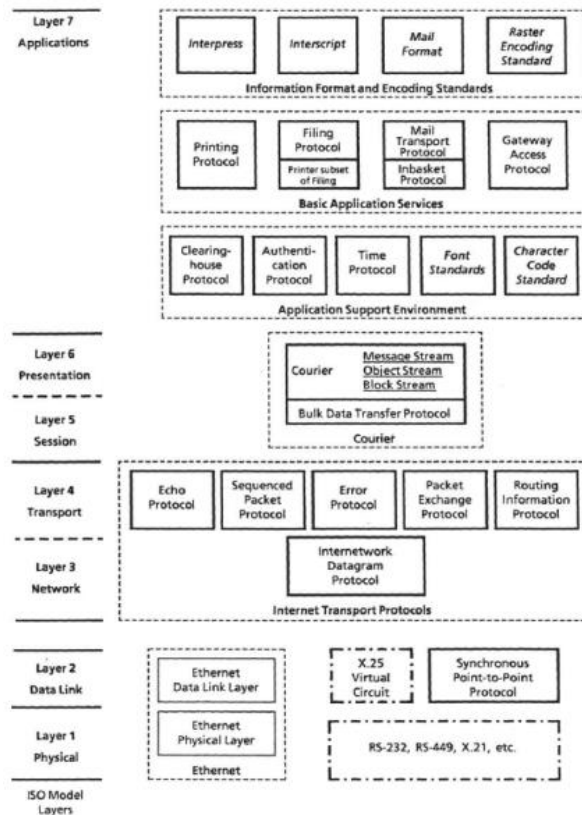


Figure 2-4 Overview of Xerox Network Systems

Figure 2–4 provides an overview of XNS and illustrates the numerous protocols supported and used in XNS. *Id.* at 15–16. The application protocols are implemented in both hardware and software, and include protocols for mailing, printing, filing, and gateway access. *Id.* at 16. XNS refers to “devices that use XNS protocols and connect to the network” as “system elements” and explains “[t]he significance of direct Link XNS connection is that ordinarily a directly-connected device is expected to implement all the layers of XNS appropriate to its function, which would include *at least* all the layers upward through Courier (see Fig. 2–4), plus selected application protocols.” *Id.* at 17–18.

“Courier” is described in XNS as a middle layer in the XNS architecture, situated between application-layer protocols and network/transport layer protocols. *Id.* at 43. Courier specifies the manner in which a workstation or other active

system elements invoke operations used by a server or other passive system element. *Id.*

The XNS architecture allows for high speed and high quality scanning to combine hardcopy and electronic information. *Id.* at 115. Scanned documents can be manipulated and printed, and by use of “XNS filing, distributed with XNS mail, edited at a workstation, or sent to any device that is directly or indirectly connected to the internet (including remote facsimile machines).” *Id.*

b. GIS 150 (Exhibit 1003)

XNS supports various scanners or printers, specifically including GIS 150. Ex. 1002, 112, 114, 134–135, Fig. 12–8. The GIS 150 scanner allows a user to select a destination to send a scanned image. Ex. 1003, 148. “There can be a maximum of five destinations from which to choose. The destination device can be either a file server or a print server (8700/9700).” *Id.*

Petitioner essentially maintains that because XNS discloses the GIS 150 scanner as part of XNS, GIS 150 forms a proper evidentiary basis to support anticipation by XNS. *See* Pet. 28–29, n.9 (citing *Schering Corp. v. Geneva Pharms.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003)). Patent Owner does not argue specifically that Petitioner’s evidentiary use of GIS 150 to show inherent features is improper. *See* PO Resp. 11–13. Indeed, Patent Owner argues the challenged claims are not anticipated by XNS, including the scanning feature of both GIS 150 and Kurzweil Intelligent Scanning System (“Kurzweil”).¹⁵ *Id.* at 12–13 (citing Ex. 1002, 123).

¹⁵ Kurzweil is described in XNS as the “Kurzweil Intelligent Scanning System, which not only scans a document but converts it into its textual rather than bit-map representation.” Ex. 1002, 123, Fig. 11–3.

Under the reasoning and holding of *Schering* and *In re Baxter Travenol Labs*, 952 F.2d 388, 390 (Fed. Cir. 1991) (extrinsic evidence may be used to explain what a reference discloses), using GIS 150 as evidence to show inherent basic features of the GIS 150 scanner, where XNS discloses those features as part of an integrated Xerox networked device, is proper. Hereafter, reference to XNS includes GIS 150 unless otherwise specified.

c. XNS Anticipates Claims 15, 34, and 41

Petitioner asserts claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34, 35, 37, 39–42, 44, 46, and 47, are unpatentable under 35 U.S.C. § 102(b) as anticipated by XNS. Pet. 28–37. Petitioner’s supporting evidence includes the Melen Declaration. Ex. 1006 ¶¶ 45–63. The Petition includes a claim chart, which is reproduced in the Melen Declaration. Pet. 30–37; Ex. 1006 ¶ 63, Attachment D.

The only issue specifically argued by Patent Owner relates to independent claims 15, 34, and 41. PO Resp. 11. Each of the preceding independent claims recites a “Go operation.” *Id.* For example, claim 15 recites “an interface that enables copying images between physical devices, applications, and the Internet using a single ‘GO’ operation.” *Id.*; see Ex. 1001, 86:56–59.

Petitioner asserts that the “Go operation” is disclosed in XNS and GIS 150. Pet. 36–37; see Ex. 1006. As to XSN, Petitioner alleges it discloses a “user interface . . . at a scanner” that allows a user to “digitize a hardcopy image” and send the digitized image “to a specified file in a File Service for storage, or to Print Service for printing.” *Id.* at 36 (citing Ex. 1002, 122). XNS explains “[t]he Xerox 150 scanner uses this model in providing scanned image service to XNS users.” *Id.* at 36–37.

Petitioner alleges GIS 150 shows a “Start” button/operation as an inherent feature of Xerox 150 Scanner:

After options and values for all features have been set . . . and the original has been positioned on the Document Glass, pressing the START button causes the 150 GIS to begin scanning. While the 150 GIS is scanning the message SCANNING is displayed. After scanning is complete the image is automatically sent to the selected destination

Pet. 37 (citing Ex. 1003, 43). Petitioner also cites to the disclosure in GIS 150 that up to five destinations for the scanned document may be stored in the Xerox 150 scanner, and a destination “may be a device installed on a different network.” *Id.* at 37 (citing Ex. 1003, 74). Petitioner concludes that “XNS (as evidenced by GIS 150) discloses an interface enabling copying between at least five external devices and applications using a Start operation.” *Id.*

Patent Owner does not dispute Petitioner’s technical description of XNS and GIS 150. PO Resp. 12–13. Patent Owner’s argument is that “[w]hile the GIS 150 may copy images between physical devices over a network (*e.g.*, a scanner and a printer server, a scanner and a file server), the GIS 150 does not disclose copying images between physical devices, **applications**, and the Internet using a single ‘GO’ operation.” *Id.* at 12 (citing Ex. 2001 ¶¶ 42–43). Thus, Patent Owner relies on its construction of “application” as limited to software, and not hardware. *Id.* at 13.

Petitioner argues the construction of application includes hardware as well as software. Pet. Reply 8–9. Petitioner is correct, as we determined, in part, “an application may include software and hardware and performs a function or functions.” Thus, we are not persuaded by Patent Owner’s argument.

Based on the foregoing discussion and the record evidence, Petitioner shows by a preponderance of evidence that the XNS anticipates claims 15, 34, and 41.

d. XNS Anticipates Claims 1, 2, 4, 6–9, 11, 13, 14, 16, 18, 20–23, 25, 27, 28, 35, 37, 39, 40, 42, 44, 46, and 47

Patent Owner's Response does not argue the patentability of claims 1, 2, 4, 6–9, 11, 13, 14, 16, 18, 20–23, 25, 27, 28, 35, 37, 39, 40, 42, 44, 46, and 47. We have reviewed Petitioner's evidence, including the testimony of Dr. Melen and the claim chart, Attachment D to the Melen Declaration. Pet. 27–28, 30–38; Ex. 1006 ¶¶ 45–63, Attachment D. Based on the evidence of record, Petitioner shows by a preponderance of evidence that the XNS anticipates claims 1, 2, 4, 6–9, 11, 13, 14, 16, 18, 20–23, 25, 27, 28, 35, 37, 39, 40, 42, 44, 46, and 47.

e. Summary of Ground Based on Anticipation by XNS

Patent Owner argued that the scanner of GIS 150 did not enable copying images between applications, as per claims 15, 34, and 41. Patent Owner's argument was based on a construction of "applications" limited to software and not hardware. Patent Owner's argument is not persuasive for reasons discussed above. Patent Owner makes no additional arguments. Petitioner has shown by a preponderance of evidence that XNS anticipates claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34–35, 37, 39–42, 44, and 46–47.

2. Anticipation by Harkins

Petitioner argues that all of the challenged claims, 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34, 35, 37, 39–42, 44, 46, and 47 unpatentable under 35 U.S.C. § 102(a) and (e) as anticipated by Harkins. Pet. 39–47. Petitioner also relies on the Declaration of Dr. Melen (Ex. 1006 ¶¶ 64–71).

Patent Owner limits its argument to the "Go operation" of independent claims 15, 34, and 41. PO Resp. 13–16. As such, Patent Owner asserts XNS does not disclose all the limitations of the dependent claims: (1) claims 16, 18, 20, and 21, depending from claim 1; (2) claims 34, 35, 37, 39, and 40, depending from

claim 34; and (3) claims 42, 44, 46, and 47, depending from claim 41. *Id.* at 14–15.

a. Harkins (Exhibit 1004)

Harkins is directed to a “method for a sender to automatically distribute information to a receiver on a network using devices (such as printers and facsimile machines) and communication channels (such as electronic mail)” in a manner controlled by the receiver. Ex. 1004, Abstract. Harkins discloses a network that connects a variety of computing devices, including a scanner or digital copier, a printer, a workstation, and a server, that can be used in an office environment. *Id.* at 6:4–23.

Figure 1 of Harkins is reproduced below.

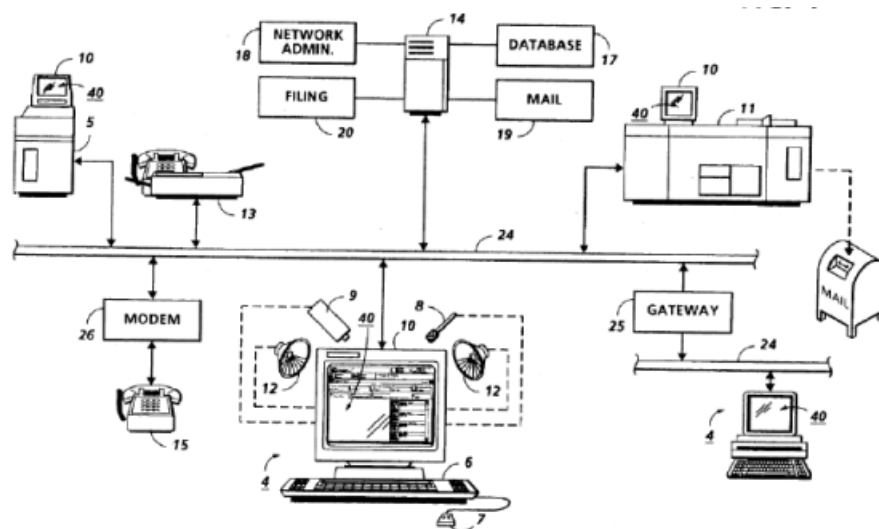


Fig. 1

Figure 1 illustrates the network disclosed by Harkins. The networked computing devices disclosed by Harkins implement protocols, including protocols for local area network (LAN) communication and communication via the Internet. *Id.* at 1:22–4:9; 6:30–37. More specifically, Harkins discloses the following:

Protocols defining integrated system behavior for devices such as printers, scanners, workstations and facsimiles, are well known.

These protocols define how the systems should integrate across networks. Operational transparency across networks and device platforms, provide users with an increasingly integrated and transparent system environment. In this environment the manipulation of information (such as documents) is transparent to users as a result of the various network protocols that define the manner in which devices manipulate information.

Id. at 1:22–31.

Harkins also describes a user interface (UI), which “can operate remotely from any system,” that is or is part of a software application that implements interface protocols to achieve networking functions. *Id.* at 6:37–7:63. Users interact with the UI to send and receive documents/graphics/images to a variety of networked devices and applications via the network. *Id.* at 5:23–6:2, 6:37–7:63, 10:55–11:17.

Harkins discloses that a sender can “automatically distribute information to a receiver on a network using devices (such as printers and facsimile machines) and communication channels (such as electronic mail) defined in a receiver profile.” *Id.* at 4:40–44. Harkins explains that a “receiver profile establishes the properties and mode for receipt of information for receivers on the network and the profile is published in a network repository for all network users or is accessible by selected groups or individuals on the network.” *Id.* at 4:44–48.

Figures 2 and 4 of Harkins are reproduced below.

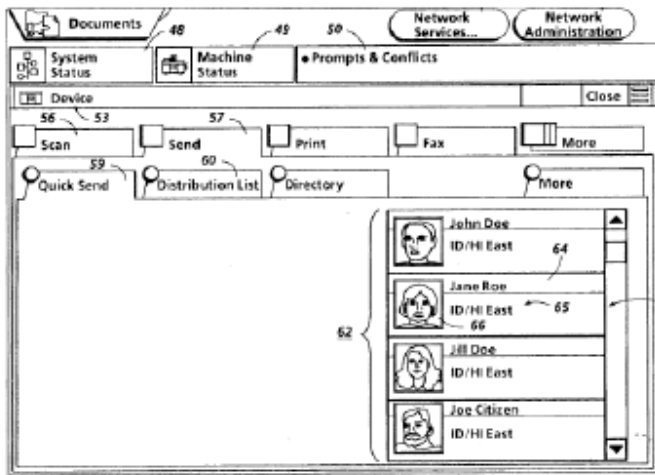


Fig. 2

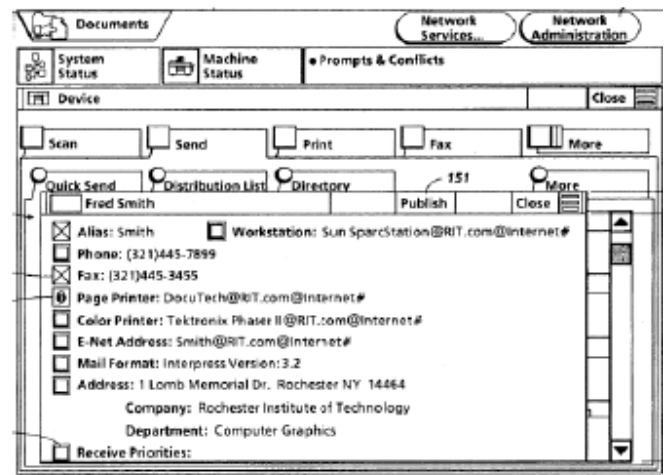


Fig. 4

Figure 2 shows a UI to transmit documents to desired receivers. *See* Ex. 1004, 6:49–7:63. Figure 4 shows how receivers interact with a user interface to generate receiver profiles. *Id.* at 8:28–10:54.

b. Harkins Anticipates Claims 15, 34, and 41

Petitioner asserts claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34–35, 37, 39–42, 44, 46, and 47 are anticipated by Harkins. Pet. 38–47. Petitioner’s supporting evidence includes the Melen Declaration. Ex. 1006 ¶¶ 64–71. The Petition includes a claim chart, which is reproduced in the Melen Declaration. Pet. 42–52; Ex. 1006 ¶ 71, Attachment E.

The only issue argued specifically argued by Patent Owner is whether Harkins includes the “Go button” of claims 15, 34, and 41.¹⁶ PO Resp. 15–17. As noted above, claim 15 recites an “interface that enables copying images between

¹⁶ Patent Owner argues that a provisional application to the application filed for the ’410 patent explains the advantages of the “Go operation” over prior art systems. PO Resp. 15 (citing Ex. 2002, 6). We note the argument but are not persuaded it adds anything to either the construction of “Go operation” or to Patent Owner’s position on patentability over Harkins.

physical devices, applications, and the Internet using a single ‘GO operation.’” *Id.* at 14.

Petitioner cites to Harkins’s disclosure of a network where users establish how they want to receive electronically imaged documents and the device to receive documents. Pet. 46 (citing Ex. 1004, 10:38–54). Specifically as to the “GO operation,” Petitioner relies on Harkins’s disclosure that “other network users can distribute copies through the network(s) via a ‘quick-send’ feature.” *Id.* (citing Ex. 1004, 7:42–63).

Patent Owner argues that the Harkins “quick send” feature is also used to scan a document. PO Resp. 16. Patent Owner concludes that Harkins does not disclose copying images between physical devices, applications, and the Internet using a single “GO operation,” as recited in claims 15, 34, and 41. *Id.*

Petitioner responds by noting that Patent Owner acknowledged that “Harkins discloses that a user may transmit a document by a drag/drop action from a document source to a communication channel.” Pet. Reply 10 (citing PO Resp. 15). Petitioner contends the drag/drop action transmits a copy of the document to a network destination, where it is rendered by a device. *Id.* (citing Ex. 1004, 10:38–11:17, Figs. 8, 11). Petitioner points specifically to a copy being rendered at a network printer or fax machine. *Id.* (citing Ex. 1004, 10:38–54).

The “copying” of the limitation in question occurs when the “electronic image, electronic graphics and electronic document” is transmitted, i.e., emailed, document reaches its destination and is rendered. See Pet. Reply 10 (citing Ex. 1004, 10:38–47 (“to be rendered”)). Our construction of “GO operation” requires only “an operation that begins a process.” Harkins discloses a “drag/drop” process that is followed by transmission of the “electronic image” and the copying of it at a receiving device.

Nothing in the claim language precludes the copying from occurring after it is transmitted to an external destination. The preamble of claim 15 recites that the system is “capable of transmitting . . . an electronic image . . . to a plurality of external destinations.” Ex. 1001, 86:41–46. The limitation in question requires only that the copying is “between physical devices.” Neither does the claim language preclude the process of rendering from beginning (Go operation) with a drag and drop or move of a document.

Based on the foregoing discussion and the record evidence, Petitioner shows by a preponderance of evidence that Harkins anticipates claims 15, 34, and 41.

c. Harkins Anticipates Claims 1, 2, 4, 6–9, 11, 13, 14, 16, 18, 20–23, 25, 27, 28, 35, 37, 39, 40, 42, 44, and 46–47

Patent Owner’s Response does not argue the patentability of claims 1, 2, 4, 6–9, 11, 13, 14, 16, 18, 20–23, 25, 27, 28, 35, 37, 39, 40, 42, 44, 46, and 47. We have reviewed Petitioner’s evidence, including the testimony of Dr. Melen and the claim chart, Attachment D to the Melen Declaration. Pet. 27–28, 39–47; Ex. 1006 ¶¶ 64–71, Attachment D.

Based on the foregoing discussion and the record evidence, Petitioner shows by a preponderance of evidence that Harkins anticipates claims 1, 2, 4, 6–9, 11, 13, 14, 16, 18, 20–23, 25, 27, 28, 35, 37, 39, 40, 42, 44, and 46–47.

d. Summary of Ground Based on Anticipation by Harkins

Patent Owner argued that the scanner of Harkins did not show copying in response to a “GO operation,” as per claims 15, 34, and 41. Patent Owner’s argument was based on an alleged lack of disclosure of copying in Harkins, based on the drag/drop functionality being related to electronically stored files in the first instance. Patent Owner’s arguments are not persuasive for reasons discussed above. Patent Owner makes no additional arguments. Petitioner has shown by a

preponderance of evidence that Harkins anticipates claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34– 35, 37, 39–42, 44, and 46– 47.

3. Obviousness over Harkins and Motoyama

Petitioner argues that the claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34– 35, 37, 39–42, 44, and 46– 47 are unpatentable under 35 U.S.C. § 103 as obvious over Harkins and Motoyama. Pet. 47–52. Petitioner also relies on the Declaration of Dr. Melen (Ex. 1006 ¶¶ 72–74).

Patent Owner sole argument is that a “person of ordinary skill in the art would not combine Motoyama with Harkins to achieve the modification that is proposed by Petitioner.” PO Resp. 16–18 (citing Ex. 2001 ¶¶ 52–54).

a. Motoyama

Motoyama relates to communicating with, and monitoring, diagnosis and control of machines using multiple communication protocols. Ex. 1005, 3:40–44. The machines include a digital camera, facsimile machine, or different models of copiers. *Id.* at 3:48–50. The system includes

hardware found in a conventional general purpose computer such as a microprocessor, RAM, ROM, display, disk drive such as a hard disk drive, keyboard, etc., connected using a system bus or multiple computers and servers connected by a local area network (LAN), a wide area network (WAN), or both a LAN and WAN.

Id. at 4:22–28.

b. The Combination of Motoyama and Harkins

Patent Owner argues the protocols disclosed by Motoyama are related to communication between various machines and do not appear to be the kinds of protocols that can implement a software application. PO Resp. 18 (citing Ex. 1005 3:43–50; Ex. 2001 ¶¶ 52–54). Petitioner responds that the conclusion of Dr. Kaliski that the protocols do not appear to be the same is insufficient to find the

combination improper. Pet. Reply 11. Further, Petitioner contends the combination is appropriate because Harkins and Motoyama are in the same field, controlling the same type of office equipment. *Id.* at 11 (citing Ex. 1005, 3:41–50, FIG. 1 (fax, copier, *etc.*); Ex. 1004, 1:21–25, Fig. 1; *see also* Ex. 1011, 54:19–55:19 (explaining that the office equipment disclosed by Harkins has mechanical components and performs mechanical functions, as does the office equipment disclosed by Motoyama)). Petitioner concludes that “any suggestion that Motoyama should not be combined with Harkins because they disclose different types of protocols or devices has no merit.” *Id.*

It is appropriate to look to interrelated teachings of multiple patents as part of the obviousness analysis. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Petitioner has provided a listing of the interrelated teachings between Motoyama and Harkins. We also agree that the field of endeavor, communicating with, and monitoring, diagnosis and control of machines using multiple communication protocol of Motoyama is sufficiently similar to the office document storage and transmission system of Harkins that the person of ordinary skill would combine Motoyama with Harkins to “yield predictable results.” *KSR*, 550 U.S. at 416.

Moreover, Dr. Melen testifies that a person of ordinary skill in the art “would understand Motoyama’s database of communication protocols to provide an office network, such as the Harkins’s network, with the ability to interact with different protocols automatically, and in a manner that is transparent to end users.” Ex. 1006 ¶ 73 (citing Ex. 1005, 1:59–2:57). Conversely, the circumstances surrounding Dr. Kaliski’s testimony are such that giving it any substantial weight

on the obviousness issue is problematic. See Pet. Reply 12–14.¹⁷ Thus, we determine that the preponderance of the evidence supports a person of ordinary skill in the art would have combined Motoyama and Harkins.

Other than whether or not the references should be combined, Patent Owner’s Response does not argue the patentability of claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34–35, 37, 39–42, 44, and 46–47 over the combination of Motoyama and Harkins. We have reviewed Petitioner’s evidence relating to those claims, including the testimony of Dr. Melen. Pet. 47–52; Ex. 1006 ¶¶ 72–74. Based on the evidence of record, Petitioner shows by a preponderance of evidence that 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34, 35, 37, 39–42, 44, 46, and 47 would have been obvious over Harkins and Motoyama.

*c. Summary of Ground Based on Obviousness over
Harkins and Motoyama*

Patent Owner argues the person of ordinary skill in the art would not combine Motoyama with Harkins. Petitioner persuasively articulates rational underpinnings for combining Motoyama with Harkins. Petitioner has shown by a preponderance of the evidence that claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34–35, 37, 39–42, 44, and 46–47 would have been obvious over Harkins and Motoyama.

¹⁷ Dr. Kaliski spent 20 to 30 hours on this case and IPR2014-00538. Ex. 1011, 11:14–18, 17:6–18:13. He did not write the declaration as he had no time. *Id.* at 19:18–19. He reviewed and adopted attorney argument. *Id.* at 18:20–25, 23:24–24:5.

III. CONCLUSION

Petitioner has shown by a preponderance of the evidence the following: (1) claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34–35, 37, 39–42, 44, and 46–47 are anticipated by XNS; (2) claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34–35, 37, 39–42, 44, and 46–47 are anticipated by Harkins; and (3) claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34–35, 37, 39–42, 44, and 46–47 would have been obvious over Harkins and Motoyama.

IV. ORDER

For the reasons given, it is

ORDERED that Petitioner has shown by a preponderance of the evidence that claims 1, 2, 4, 6–9, 11, 13–16, 18, 20–23, 25, 27, 28, 34–35, 37, 39–42, 44, and 46–47 of U.S. Patent No. 7,477,410 B2 are unpatentable; and

FURTHER ORDERED that, because this is a final written decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

Case IPR2014-00539

Patent 7,477,410 B1

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