UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

MPHJ TECHNOLOGY INVESTMENTS, LLC,
Patent Owner.

Case IPR2014-00538
Patent 8,488,173 B2

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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 1–8 of U.S. Patent No. 8,488,173 (Ex. 1001, "the '173 patent"). Paper 1 ("Pet."). MPHJ Technology Investments, LLC ("MPHJ" or "Patent Owner") filed a Preliminary Response. Paper 7 ("Prelim. Resp."). Based on these submissions, on August 25, 2014, we granted the Petition and instituted trial for claims 1–8 of the '173 on all of the grounds of unpatentability alleged in the Petition. Paper 8 ("Institution Decision" or "Dec.").

After institution of trial, Patent Owner filed a Patent Owner Response. Paper 13 ("PO Resp."). Petitioner filed a Reply. Paper 17 ("Pet. Reply"). In addition, the parties rely upon expert testimony. Petitioner proffered the Declaration of Dr. Roger Melen (Ex. 1006) with the Petition. Patent Owner proffered the Declaration of Dr. Martin Kaliski (Ex. 2006) with its Response. A transcript of Dr. Kaliski's deposition (Ex. 1012) was submitted by Petitioner. Patent Owner did not take the deposition of Dr. Melen in this case but Patent Owner filed Dr. Melen's deposition from a related case as Exhibit 2004.

An oral hearing was held on May 27, 2015. The transcript of the hearing has been entered into the record. Paper 24 ("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

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[1] Petitioner advises that additional real parties in interest include Ricoh Americas Holding, Inc. and Ricoh Company, Ltd. Pet. 5.

reasons that follow that Petitioner has shown by a preponderance of the evidence that claims 1–8 of the '173 patent are unpatentable.

A. Related Proceedings

The '173 patent is alleged to be involved in the following actions for patent infringement in the District of Delaware: (1) *MPHJ Technology Investments, LLC v. Coca-Cola Co.*, 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.). Pet. 6–7. The '173 patent is also asserted in (5) *MPHJ Technology Investments, LLC v. Research Now, Inc.*, No. 2:13CV00962 (E.D. Tex.); and (6) *MPHJ Technology Investments, LLC v. Unum Group*, No. 1:14CV00006 (D. Del.). Paper 16, 1–2.

The '173 patent is a continuation of U.S. Patent No. 7,986,426, which is in turn a continuation of U.S. Patent No. 6,771,381. Pet. 7–8. Final decisions have been entered at the conclusion of trial on *inter partes* review of each of the preceding patents. *See Ricoh Americas Corp. v. MPHJ Technology Investments LLC*, Case IPR2013-00302, Paper 52 (PTAB Nov. 19, 2014)("the '302 IPR") and *Hewlett-Packard Co. v. MPHJ Technology Investments LLC*, Case IPR2013-00309, Paper 35 (PTAB Nov. 21, 2013)("the '309 IPR"). *Id.*

The '173 patent claims the benefit of the filing date of U.S. Patent No. 7,477,410 ("the '410 patent"). Petitioner filed a petition for *inter partes* review of the '410 patent. *See Ricoh Americas Corp. v. MPHJ Technology Investments LLC*, Case IPR2014-00539. Paper 16, 4. Petitioner has filed a second petition for *inter partes* review of the '410 patent. *See Ricoh*

Americas Corp. v. MPHJ Technology Investments LLC, Case IPR2015-
01178. Paper 21, 1.

Patent Owner has filed a complaint with the Federal Trade
Commission ("FTC") relating generally to its patents. *See MPHJ*
Technology Investments, LLC v. *FTC*, No.6:14-cv-00011 (W.D. Tex.).
Paper 16, 2. Patent Owner has filed a complaint against the attorney general
of Vermont relating generally to its patents. *See MPHJ Technology*
Investments, LLC v. William H. Sorrell, 2:14-cv-00191 (D. VT).[2] Paper 21,
1. The State of Vermont has also filed suit against Patent Owner. Paper 16,
2–3.

B. The '173 patent

The '173 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 '173 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 47:64–67.

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

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

> 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 5:48–55.

The VC includes "five essential modules": input module, output
module, process module, client module, and server module. *Id.* at 8:5–65.
"Each module is a counterpart to an aspect that is found on a conventional
copier." *Id*. at 8:4–6. Notwithstanding that the latter sentence refers to each
module, the '173 patent ambiguously states that "[t]here is no counterpart to
VC's Server Module on a conventional copier." *Id*. at 8:63–65. 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 8:11–19. "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 8:20–28. "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 8:29–38. "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 8:39–48. "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 8:49–65.

Figure 28 of the '173 patent, reproduced below, represents an
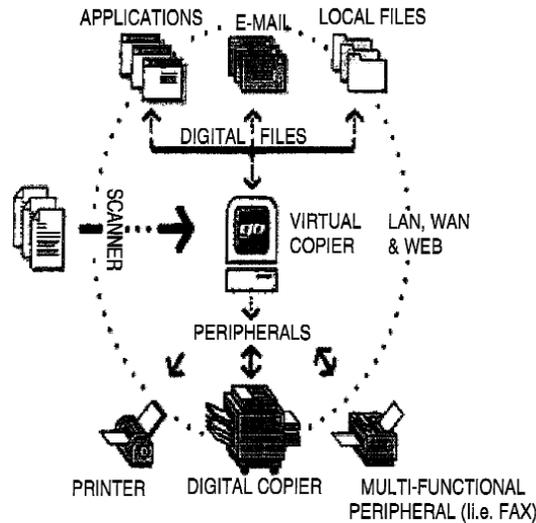
embodiment of VC:

FIG. 28

Figure 28 depicts various peripheral devices attached to a Virtual Copier on

a network. *See id*. at Abstract.

C. Illustrative Claims

Of the challenged claims, claims 1 and 4 are independent and are

reproduced below:

> 1. A 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, local files and applications responsively
> connectable to at least one communication network,
> comprising:
>
> at least one network addressable scanner, digital copier or
> other multifunction peripheral capable of rendering at least one
> of said electronic image, electronic graphics and electronic
> document in response to a selection of a Go button;
>
> at least one memory storing a plurality of interface
> protocols for interfacing and communicating;

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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 one of said plurality of interface protocols is employed when one of said external destinations is email application software;

wherein a second of said plurality of interface protocols is employed when the one of said external destinations is a local file;

wherein a plurality of said external destinations is in communication with said at least one network addressable scanner, digital copier or other multifunction peripheral over a local area network;

wherein at least one of said external destinations receives said electronic image, electronic graphics and electronic document as a result of a transmission over the at least one communication network;

a printer other than said at least one network addressable scanner, digital copier or other multifunction peripheral;

wherein, in response to the selection of said Go button, an electronic document management system integrates at least one of said electronic image, electronic graphics and electronic document using software so that said electronic image, electronic graphics and electronic document gets seamlessly replicated and transmitted to at least one of said plurality of external destinations;

wherein at least one of said electronic image, electronic graphics and electronic document is processed by said at least one network addressable scanner, digital copier or other multifunction peripheral into a file format, and wherein a plurality of said external destinations are compatible with said file format without having to modify said external destinations; and

wherein upon said replication and seamless transmission to at least one of said external destinations, said electronic image, electronic graphics and electronic document is

communicable across a network to at least three other of said external destinations, and is optionally printable by said printer.

Ex. 1001, 86:9–63.

4. A method of managing at least one of an electronic image, electronic graphics or electronic document comprising the steps of, in any order:

(a) transmitting a plurality of any of said electronic image, electronic graphics or electronic document from a source address to a plurality of external destinations including one or more of external devices, local files and applications responsive to said source address using at least one communication network;

(b) rendering said plurality of any of said electronic image, electronic graphics or electronic document by a network addressable scanner, digital copier or other multifunction peripheral located at said source address;

(c) communicatively linking said scanner, digital copier or other multifunction peripheral with said plurality of said external destinations via application-level interface protocols;

(d) interfacing between at least one of said scanner, digital copier or other multifunction peripheral and email application software using a first of said interface protocols;

(e) interfacing between at least one of said scanner, digital copier or other multifunction peripheral and a local file using a second of said interface protocols;

(f) communicating over a local area network between said at least one of said scanner, digital copier or other multifunction peripheral and said plurality of said external destinations;

(g) transmitting a first electronic image, electronic graphics or electronic document from said at least one of said scanner, digital copier or other multifunction peripheral to at least one of said external destinations where at least a portion of said transmitting of step (g) occurs by communicating via Internet, and using one or more of said interface protocols;

(h) integrating via at least one processor communicatively coupled with said at least one of said scanner,

digital copier or other multifunction peripheral, a second
electronic image, electronic graphics or electronic document so
that said second electronic image, electronic graphics or
electronic document gets seamlessly replicated and transmitted
to at least one of said plurality of said external destinations;

(i) processing via said at least one processor said plurality
of any of said electronic image, electronic graphics or electronic
document into a uniform file format wherein said plurality of
said external destinations are compatible with said format
without having to modify said external destinations; and

(j) seamlessly transmitting said first or second electronic
image, electronic graphics or electronic document over said
network from a first external destination to another of said
external destinations.

Ex. 1001, 87:11–88:20.

D. Grounds Upon Which Trial was Instituted

Inter partes review was instituted on three grounds: (1) claims
1–8 for anticipation by XNS[3]; (2) claims 1–8 for anticipation by
Harkins[4]; and (3) claims 1–8 as obvious over Harkins and Motoyama.[5]
Dec. 24–25.

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[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* 150, Jan. 1985 ("GIS 150," Ex. 1003)).
Pet. 19.
[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).

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 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. 48756, 48766 (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:

1. *"application/applications" (claims 1–5)*

The term "application" or "applications" appears in claims 1–5. We construed the phrase "software application/application" in the final written decisions in the '302 and '309 IPRs. We interpreted the "application" to mean, as follows:

> 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.

The above construction differs from our preliminary construction in the Institution Decision.[6] 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. 2006 ¶¶ 28–31).

In support of its proposed construction, Patent Owner points to the Specification's description of "Input and Output Module registers." PO Resp. 9–10 (citing Ex. 1001, 9:35–37; Ex. 2006 ¶ 32). Patent Owner contends that because the modules register with the operating system means they cannot be the operating system. *Id.* at 9–10. Thus, according to Patent Owner, the '173 patent "uses of 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,[7] are too broad. The patents at issue in the '302 and '309 IPRs have the same Specification as the '173 patent and

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[6] "'[A] program that may or may not be stored on a device such as a printer or scanner.'" Dec. 11.

[7] 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.

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.

2. "Go button" (claims 1 and 6)

The term "Go button" appears in claims 1 and 6. In the Institution Decision, consistent with construction of the similar term "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. 10. The final decisions in the '302 and '309 IPRs did not construe the term.

Petitioner argues we should adopt the construction from the Institution Decision. Pet. Reply 4. Patent Owner proposes that selection of a "'Go Button'" should be interpreted as selecting "'an operation that begins a process and requires no further action from the user to complete.'" PO Resp. 10.

Patent Owner observes that the Specification states "[t]he interface of the consumer product called Virtual Copier has a Go button much like a physical copier." PO Resp. 10 (citing Ex. 1001, 46:42–44). It therefore follows, according to Patent Owner, that word "Go" not only initializes but also "means *execute* in the context of user interfaces." *Id.* (citing Ex. 2006 ¶ 35). Patent Owner argues its proposed construction is the broadest reasonable interpretation because it eliminates confusion with a process that is started but "does not complete execution without further manual intervention." *Id.* at 10–11. Patent Owner asserts the claim language itself supports its construction.

Petitioner points to our prior analysis in the Institution Decision finding that "the Specification does not preclude a sequence of actions or otherwise limit the claim term." Pet. Reply 4 (citing Dec. 12). Petitioner also contends the argument of Patent Owner is both without support in and inconsistent with the Specification. *Id.*

According to the '173 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, 6:46–48; 70:12–15, and "the user simply has one sequence to execute: select From, select To, and then press GO," *id.* at 7:2–3; 70:36–37. The VC of the '173 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 46:50–57. The "process feels familiar because the sequence is the same." *Id.* We credit Petitioner's expert that the person of ordinary skill in the art would understand the "Go button" to be equivalent to pushing the button on a prior art copier to make a copy. Ex. 1006 ¶ 39.

The additional language proposed by Patent Owner is unnecessary for the construction, because, on this record, 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 at 1480 (omitting an extraneous limitation unnecessary for the purpose of making sense of the claim).

Furthermore, the plain and ordinary meaning of "Go button" as used in the claims does not support Patent Owner's proposed construction. For example, claim 1 recites that an electronic image is rendered "in response to

a selection of a Go button." Ex. 1001, 86:15–19. This language does not suggest that the "Go button" does anything more than start the process.

The '173 patent Specification and claim language support our prior interpretation in the Institution Decision. We, therefore, adopt the construction of "Go button" from the Institution Decision.

3. "interfacing" (claim 4)

The phrase "interfacing between at least one of said scanner, digital copier or other multifunction peripheral and email application software using a first of said interface protocols" appears in claim 4. In the Institution Decision we construed "'interfacing'" to mean "'making a connection between two elements so they can work with each other or exchange information.'" Dec. 13. The term was not construed in the final decisions in either the '302 or the '309 IPR.

Patent Owner generally agrees with our construction from the Institution Decision. PO Resp. 11. Patent Owner raises a scenario where two computers may not be connected but are interfacing through a third computer. *Id.* Petitioner takes issue with the three computer example and contends that such an indirect connection is still an interface between two computers through a third. Pet. Reply 5.

Neither party presents us with an alternative construction to what we found in the Institution Decision. However, both parties contest whether or not an "indirect connection" through, for example, another computer is an "interface."

The Specification does not specifically define "interface" or "interfacing." Several parts of the Specification describe "interface" as being connected to multiple hardware and software components. Figure 16

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is a block diagram depicting an "interface" connected to multiple components (keyboard 50, mouse 52, among others). The Summary section describes the "need to provide a single consistent interface to many different engines with the ability to access the unique features of each engine." Ex. 1001, 4:12–14. The Specification also describes a "computer implemented method includes the steps of defining a substantially consistent interface for individual object components that represent diverse technologies, and migrating a plurality of engines to the consistent interface." *Id.* at 11:31–35. One described "interface . . . enables copying images between physical devices, applications, and the Internet using a single 'GO' operation." *Id.* at 13:11–15.

The preceding is a non-exhaustive list of how "interface" is described in the Specification. The Specification is replete with descriptions of various interfaces interconnecting more than one component, including both hardware and software. Conversely, nothing limits an "interface" to a connection between two components. In addition, the claim limitations which recite "interface" or "interfacing" are in broad language. *See, e.g.*, Ex. 1001, claim 4(d)("interfacing *between at least one* of said scanner, digital copier or other multifunction peripheral and email application software *using a first of said interface protocols*")(emphasis added).

Our construction includes indirect connection. Applying the broadest reasonable interpretation, we construe "interface" or "interfacing" to mean "making a direct or indirect connection between two elements so they can work with each other or exchange information."

4. "seamlessly" (claims 1–5, and 7)

The term "seamlessly" appears in claims 1–5 and 7. We construed the term in the Institution Decision to mean "'a low amount of effort.'" Dec. 11–12. 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. 8. 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. 17; Dec. 11–12. We, therefore, adopt the construction of "seamlessly" from the Institution Decision.

5. "capable of" (claim 1)

Independent claim 1 uses the term "capable of" in its preamble and in its first limitation. 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. 8. 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. 13. We, therefore, adopt the construction of "capable of" from the Institution Decision.

6. "at least one of" and related phrases (claims 1, 3–5, and 8)

Claims 1, 3, 4, 5, and 8 all 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 network addressable scanner." Ex. 1001, 86:15. 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.[8]

Patent Owner does not take issue with the construction from the Institution Decision. PO Resp. 8. Petitioner urges that we adopt the prior determination in the institution decisions in the '302 and '309 IPRs, which as noted above were used in the final decisions in those cases. Pet. 15. We therefore adopt the construction of "at least one of" from the Institution Decision.

B. Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability.

1. Anticipation by XNS

Petitioner argues that the claims 1–8 are unpatentable under 35 U.S.C. § 102(b) as anticipated by XNS. Pet. 27–40. Petitioner also relies on the Declaration of Dr. Melen (Ex. 1006 ¶¶ 45–63).

Patent Owner limits its argument to the following: (1) the "Go button" of claim 1; (2) the commercially available email application of dependent claim 2; and (3) the interface between the elements of claim 4. PO Resp. 15–20. Each will be addressed below.

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.[9] It

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[8] The final construction is the same as what was found in the institution decisions in the '302 and '309 IPRs.

[9] Page references are to XNS as printed and not to Petitioner's Exhibit pages.

"describes the architecture of Xerox Network Systems," and "provides information 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 department 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.
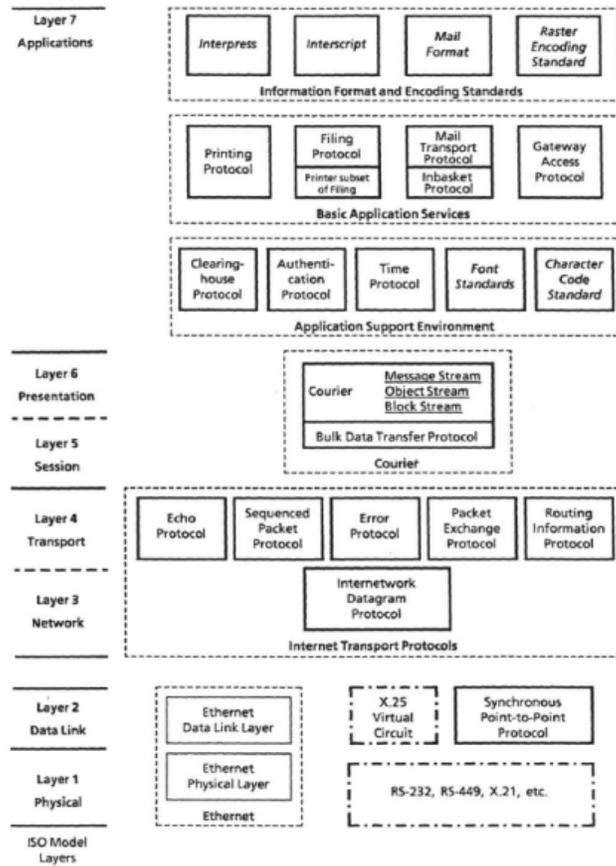
Figure 2–4 of XNS is reproduced below.

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 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. Ex. 1002, 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. 27, n. 8 (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. 14, 16–17 (arguing claim 1 is not anticipated by "XNS (and GIS 150)"). Indeed, in the Institution Decision we specifically stated that "Patent Owner does contest that GIS 150

may be used as extrinsic evidence in support of the anticipation grounds, as

Petitioners assert." Dec. 17.

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, which GIS 150 features

XNS discloses as an integrated Xerox networked device in XNS, is proper.

Hereafter, reference to XNS includes GIS 150 unless otherwise specified.

c. XNS Anticipates Claim 1

Petitioner asserts claim 1 is anticipated by XNS. Pet. 27–35.

Petitioner's supporting evidence includes the Melen Declaration. Ex. 1006,

¶¶ 40–63. The Petition includes a claim chart, which is reproduced in the

Melen Declaration. Pet. 28–35; Ex. 1006 ¶ 63, Attachment D. The Melen

Declaration also includes a comparison of claim 1 of the '173 patent to claim

1, among others, of U.S. Patent No. 7,986,426 ("the '426 patent). Ex. 1006

¶ 63, Attachment D.[10]

The only issue argued specifically argued by Patent Owner is whether

XNS includes the "Go button" of claim 1. PO Resp. 15–17. As relevant to

this argument, claim 1 recites limitation 1 and limitation 2 as follows:

> 1. [A]t least one network addressable scanner, digital copier or
> other multifunction peripheral capable of rendering at least one

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[10] 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. While Petitioner demonstrates that there is some correlation between
claim 1 and claims of the '426 patent, it does not argue we are bound by the
final decision in the '302 IPR. The claims are different and, as such, we
proceed with an independent analysis of the evidence presented here.

of said electronic image, electronic graphics and electronic document *in response to a selection of a Go button.* Ex. 1001, 86:15–19. Emphasis added.

2. [W]herein, *in response to the selection of said Go button*, an electronic document management system integrates at least one of said electronic image, electronic graphics and electronic document using software so that said electronic image, electronic graphics and electronic document gets seamlessly replicated and transmitted to at least one of said plurality of external destinations. Ex. 1001, 86:44–50. Emphasis added.

Claim 1 also recites "wherein one of said plurality of interface protocols is employed when one of said external destinations is email application software." Ex. 1001, 86:28–30.

Patent Owner contends that "[t]he claims require a selection of a Go Button that by itself causes a multifunction peripheral (*e.g.*, scanner, digital copier) to render **and** transmitting a document to at least one external destination in response to a Go Button." PO Resp. 15. Patent Owner contends that neither XNS or GIS 150 disclose that "'one of said external destinations is email application software.'" *Id.*

At the final hearing Patent Owner emphasized that neither XNS nor GIS 150 disclosed "scan-to-e-mail" it alleges are required by the claims. Tr. 24:22–25:7. The following exchange between the Board and Patent Owner took place at the final hearing:

JUDGE TIERNEY: Where referring to scan-to-e-mail, can you show me the exact language in the claim where it says scan-to-e-mail?

MR. GANTI: Yes I can, Your Honor. . . . Later in the claims, where I'm pointing to here, in response to the selection of the same go button, that document gets transmitted to at least one

of a plurality of external destinations. And this is accomplished by the application that's implementing a plurality of protocols. One of those protocols is for an external destination. That's an e-mail application software.

Tr. 25:21–26:24. The alleged "scan-to-email" is:

[T]he ability to scan -- using a scanner, render an electronic document in response to a selection of a go button. And then in response to the same selection of that go button, transmit it to an external destination.

Tr. 34:5–9. Stated another way, Patent Owner contends the claims require that scanning and transmitting via email occur as a single step in response to the Go button. *Id.* at 33:22–34:9.

Patent Owner acknowledges that XNS and GIS 150 disclose both scanning in response to a Go button (Ex. 1003, 43 ("START button causes the 150 GIS to begin scanning")) and distribution of documents by "XNS mail" (Ex. 1002, 125 ("documents can be manipulated and printed . . . filed using XNS filing, distributed with XNS mail"). PO Resp. 16. However, Patent Owner contends that these are "isolated concepts" performed by the GNS hardware and the separate XNS software. *Id.* Patent Owner argues, even assuming XNS and GIS 150 are a single software application that performs both scanning and distribution, there is "no disclosure of rendering ***and*** transmitting a document to at least one external destination in response to a Go Button, 'when one of said external destinations is email application software,' as required by claim 1." *Id.*

Petitioner observes that neither limitation 1 nor 2 "require the 'Go button' to be used by itself for transmitting a document to an email application." Pet. Reply 6. As to limitation 1, Petitioner cites to a "START"

button in GIS 150 as meeting the recited "Go button" of limitation. Pet. 30
(citing Ex. 1003, 43). According to Petitioner, the electronic image is
rendered and transmitted, as is found in GIS 150's further disclosure that
"[a]fter scanning is complete the image is <u>automatically sent to the selected
destination</u>." *Id.* In addition the Petition cites to XNS's disclosure of the
GIS 150 scanner ("Xerox 150 scanner") for digitizing a hard copy "<u>by
scanning it at the scanner</u>," all of which is cited in the Petition. *Id.* (citing
Ex. 1002, 122, 123, 127–145, Figs. 11–2, 11–3, 12–1, 12–7, and 12–8).

> As to limitation 2, Petitioner cites to the description in XNS that
>
> [w]here graphic elements are acquired from other sources (e.g.,
> photographs), they can be scanned . . . and subsequently edited.
> <u>These electronic graphic elements can be automatically
> integrated with the text to form electronic final-form page
> masters</u>, ready for production.

Pet. 33 (citing Ex. 1002, 38; Ex. 1006 ¶¶ 52–58). XNS further discloses the
services are "transparent." *Id.* at 34 (citing Ex 1002, 131).

Relative to interface protocols relating to email applications recited in
claim 1, Petitioner cites to the "Xerox Network Systems Overview," which
includes a heading on "Mailing." Pet. 32 (citing Ex. 1002, 17–30, 93–100).
Under the heading "Application protocols," the Petition cites to the XNS
application protocols as including "mailing," which is implemented in
hardware and software in the "XNS application services." *Id.* (citing
Ex. 1002, 26; *see id.* at 25, Fig. 2–4).

Given our construction of "Go button," we are not persuaded by
Patent Owner's argument that claim 1 requires "rendering ***and*** transmitting a
document" in a single step. All that our construction requires is that the Go
button is "an operation that begins a process." Thus, the "Go button" or

START button of GIS 150 can initiate a scan in one step and send a document via email in another. The evidence produced shows, and Patent Owner acknowledges, that XNS discloses scanning and distribution of documents two steps.

In addition, our construction of "software application/application" includes both the GIS 150 hardware as well as the XNS software. Our construction of "application" included hardware and software as well as "a program, *or group of programs*." Accordingly, contrary to Patent Owner's position, XNS and GIS 150 are a "single application" that performs both scanning and distribution of electronic documents by email.

Patent Owner does not cite to its expert testimony from the Kaliski Declaration in support of its arguments. We have reviewed paragraphs 49 through 52, the relevant portions of the Kaliski Declaration. The Kaliski Declaration does not add anything additional to what Patent Owner argues above.

We have also reviewed the testimony of Petitioner's expert, Dr. Melen, specifically paragraphs 52 through 58 of the Melen Declaration. The Melen Declaration directly addresses how the XNS architecture describes "scan-to-Email." Ex. 1006 ¶ 55 (citing Ex. 1002, 125). XNS specifically discloses that scanned documents can be scanned and distributed through XNS mail. Ex. 1002, 125.

Based on the foregoing discussion and the record evidence, Petitioner shows by a preponderance of evidence that the XNS anticipates claim 1.

d. XNS Anticipates Claim 2

Claim 2 depends from claim 1 and recites, in pertinent part, that "said electronic image, electronic graphics and electronic document gets

seamlessly transmitted to a commercially-available software package for business electronic mail exchange running as an application on said communication network." Ex. 1001, 86:64–87:3.

Patent Owner asserts one argument in support of the patentability of claim 2. That argument is that XNS cannot be both the claimed software application of claim 1 and the commercially available software of claim 2. PO Resp. 17. Patent Owner argues the result is illogical because the software application cannot transmit to itself as a commercial software application. *Id.* (citing Ex. 2006 ¶¶ 53–54).

Petitioner argues XNS mail "allows users to send and receive electronic mail" and "is directly accessible to all XNS workstations." Pet. Reply 8 (citing Ex. 1002, 98). Petitioner further notes that XNS discloses that the IBM Personal Computer is an XNS workstation. *Id*. (citing Ex. 1002, 27). Petitioner notes that Dr. Kaliski admitted that the IBM Personal Computer was commercially available by at least 1980. *Id.* (citing Ex. 1012, 86:7–87:3). Petitioner concludes XNS Mail was commercially available. *Id.* (citing Ex. 1006 ¶ 78). Accordingly, Petitioner alleges XNS "supports the transmission of electronic documents to itself, a commercially-available email application, or any other commercially-available email application associated with a valid email account." *Id.* (citing Ex. 1012, 102:12–15 ("You can send mail to anybody who has a valid email account with a valid domain name and a valid user name. If you happen to send it to yourself, then it will be received by you.").

Based on the evidence provided by Petitioner, we are persuaded that XNS was "a commercially-available software package." Ex. 1006 ¶ 78 ("XNS firmly establishes that office networks, including networked

scanners, were known *at least* 11 years before '173 Patent."). As a result of its XNS mail functionality, XNS also discloses "business electronic mail exchange running as an application on said communication network." *Id.* at ¶ 55 (citing Ex. 1002, 125); Ex. 1001, 87:1–3. XNS at least sends email to its own "commercially available" network. *See* Ex. 1012, 102:12–15.

Patent Owner also argues that XNS is not a "single software application." PO Resp. 18. Rather, XNS discloses both hardware and software components. *Id.* These arguments imply that claim 2, which depends from claim 1, recites a "***single*** software application." This argument is flawed because Patent Owner does not show how or where claim 1 or claim 2 recite or require a "single software application." Additionally, based on our construction of "application" and as we determined above, XNS and GIS 150 are an "application," as the claims require. Also as determined above the use of GIS 150 with XNS to show inherent features disclosed in XNS is proper.

Based on the foregoing discussion and the record evidence, Petitioner shows by a preponderance of evidence that the XNS anticipates claim 2.

e. XNS Anticipates Claim 4

Patent Owner asserts one argument in support of the patentability of claim 4. PO Resp. 18–20. Claim 4 is a method claim similar to the system of claim 1. Patent Owner's argument is that XNS does not disclose the following limitation of claim 4: "interfacing between at least one of said scanner, digital copier or other multifunction peripheral and email application software using a first of said interface protocols." *Id.* at 18 (emphasis omitted).

Petitioner relies on the same disclosure from XNS it used in the corresponding limitation of claim 1: "These protocols—mailing, printing, filing, and gateway access—are implemented in hardware/software to provide the XNS application services." Pet. 36 (citing to Pet. 32 (emphasis omitted) (citing Ex. 1001, 26; *see id.* at 25, Fig. 2–4)). Patent Owner contends XNS does not disclose as scanner, e.g., as disclosed in GIS 150, "communicatively linked to, or interfaces with an email application software using one or more application-level protocols." PO Resp. 19. Restated, Patent Owner contends the GIS 150 scanner does not interface with an email application as required by the limitation at issue. *Id.* (citing Ex. 2006 ¶ 57).

We agree with Petitioner, who summarizes Patent Owner's argument as based on the construction of "interfacing." Pet. Reply 9. Specifically Patent Owner relies on Dr. Kaliski's "opinion that 'interfacing' requires a direct connection between the scanner/copier and the email application software." *Id.* (citing PO Resp. 18–20 (citing Ex. 2006 ¶ 57)). Dr. Kaliski's cited testimony follows:

> The GIS 150 scanner does not interface with any email application software. Instead, it can send a scanned document to a print server or a file server. (page 158 of GIS 150).

Ex. 2006 ¶ 57. At the final hearing Patent Owner argued the "lack of connection" between the email application and the scanner precluded XNS from disclosing the claimed interface. Tr. 37:7–38:6.

Based upon our construction of "interface," Patent Owner's argument is not persuasive. As analyzed above, "interfacing" includes indirect as well as direct connection.

Based on the foregoing discussion and evidence of record,
Petitioner shows by a preponderance of evidence that the XNS
anticipates claim 4.

f. XNS Anticipates Claims 3 and 5–8

Patent Owner's Response does not argue the patentability of
claims 3 and 5–8. We have reviewed Petitioner's evidence relating to
those claims. Pet. 39–40; Ex. 1006 ¶¶ 45–63. Based on the evidence
of record, Petitioner shows by a preponderance of evidence that the
XNS anticipates claims 3 and 5–8. *Id.*

g. Summary of Ground based on Anticipation by XNS

Patent Owner argued that XNS did not disclose the "Go button" of
claim 1; the commercially available email application of dependent claim 2;
and the interface between the elements of claim 4. 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 the XNS anticipates claims 1–8. Pet. 27–40.

2. Anticipation by Harkins

Petitioner argues that the claims 1–8 are unpatentable under 35 U.S.C.
§ 102(a) and (e) as anticipated by Harkins. Pet. 40–54. Petitioner also relies
on the Declaration of Dr. Melen (Ex. 1006 ¶¶ 64–73).

Patent Owner limits its argument to (1) the "Go button" of claim 1;
and (2) the interface between the elements of claim 4. PO Resp. 22–26.
Each will be addressed below.

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.
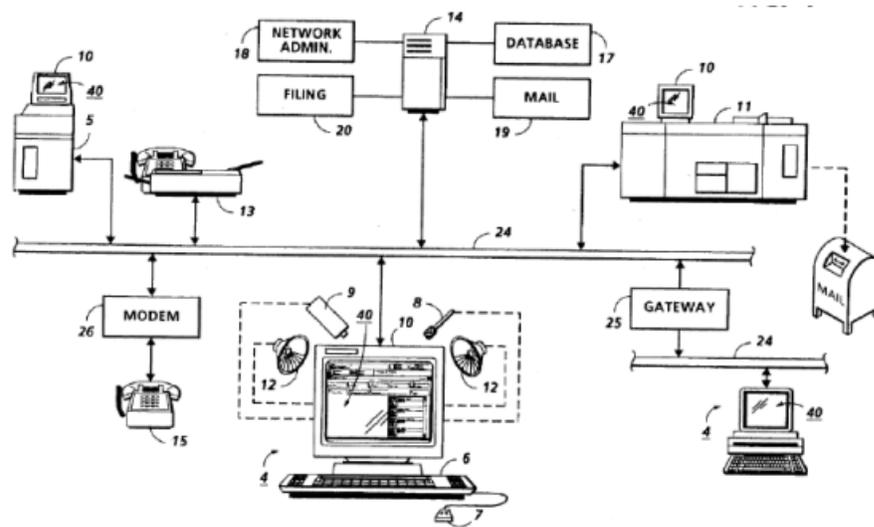
Figure 1 of Harkins is reproduced below.

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.
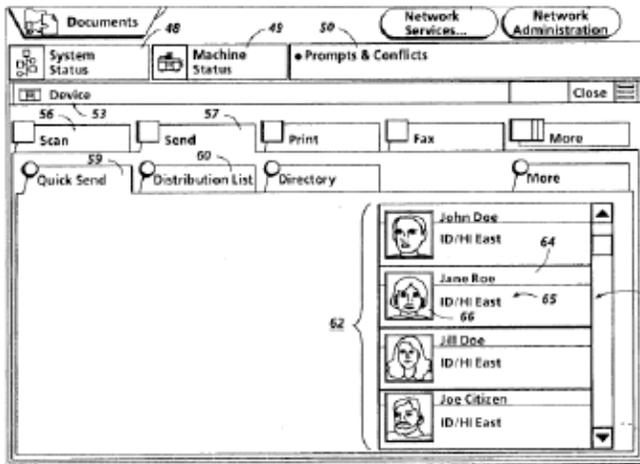
Figures 2 and 4 of Harkins are reproduced below.

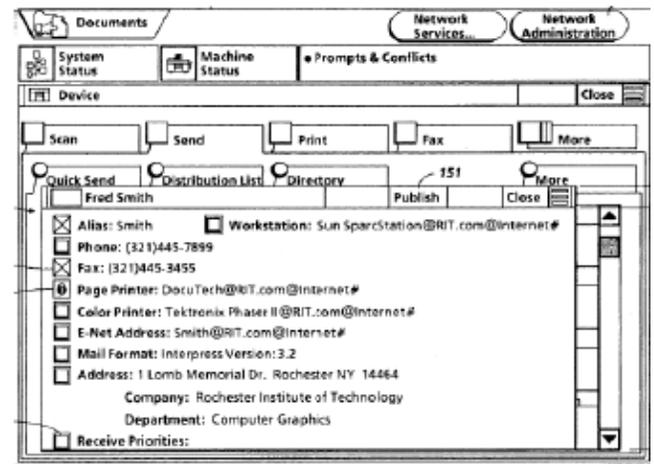
Fig. 2   Fig. 4

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 Claim 1*

Petitioner asserts claim 1 is anticipated by Harkins. Pet. 40–54. Petitioner's supporting evidence includes the Melen Declaration. Ex. 1006, ¶¶ 64–73. The Petition includes a claim chart, which is reproduced in the Melen Declaration. Pet. 42–52; Ex. 1006 ¶ 73, Attachment E.

The only issue argued specifically argued by Patent Owner is whether Harkins includes the "Go button" of claim 1. PO Resp. 15–17. As relevant to this argument, claim 1 recites limitation 1 and limitation 2 as set forth above in connection with the XNS anticipation ground.

Petitioner asserts the Go button is disclosed by Harkins UI which allows "a user [to] select a service module or access a specific document service (e.g., scan 56 or send 57)." Pet. 44. Patent Owner argues Harkins selection of scanning or sending is not scanning *and* sending as it alleges are

required by limitations 1 and 2. PO Resp. 22. Further, Patent Owner

contends using the UI of Harkins involves a "drag and drop" interface that is

"applied to documents previously saved in a suitcase 45." *Id.* at 23–24

(citing Ex. 2006 ¶ 43). Thus, Patent Owner contends Harkins discloses a

temporary storage for the documents selected. *Id.* at 23–25 (citing Ex. 2006

¶¶ 66–67; Ex. 1004, 6:63–67, Fig. 2 (number 45). Patent Owner concludes

that the drag or move function of Harkins is not rendering as required by a

"scanner, digital copier or other multifunction peripheral" recited in

limitation 1. *Id.* at 25 (citing Ex. 2006 ¶ 68). Patent Owner concludes that

"Harkins does not disclose rendering (*e.g.*, scanning) and transmitting (*e.g.*,

sending to email application software) in response to a single selection of a

Go Button." *Id.*

Petitioner does not disagree with Patent Owner's technical analysis of

Harkins. However, Petitioner points out that the "rendering" of limitation 1

may occur once the transmitted, i.e., emailed, document reaches its

destination. Pet. Reply 10 (Ex. 1004, 10:38–47 ("'to be rendered'"), 10:60–

11–17, Figs. 8, 11); Pet. 44. "Thus, the drag/drop action is 'an operation that

begins a process' for transmitting and rendering a document." *Id.*

We are not persuaded by Patent Owner's arguments because they are

not commensurate with the scope of the claims. As discussed previously,

limitations 1 and 2 may be accomplished separately and no claim language

is identified that requires otherwise.[11] The claim language does not prohibit

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[11] Claim 4 is a method claim which closely tracks the system claim 1. Claim
4 includes a rendering step similar to limitation 1 (claim 4 (b)) and a
seamlessly transmitting step that correlates to limitation 2 (claim 4 (j)).
Claim 4 states specifically the steps may be performed "in any order." At
least with respect to claim 4, the timing between rendering and transmitting

the "temporary storage" of documents before they are rendered, as per limitation 1. Neither does the claim language preclude the process of rendering from beginning (Go button) with a drag and drop or move of a document.

None of the preceding is inconsistent with limitation 2. Limitation 2 recites that the "electronic image, electronic graphics and electronic document gets seamlessly replicated and transmitted to at least one of said plurality of external destinations." The antecedent for the "electronic image" is in the preamble of claim 1 and not in limitation 1. To the extent Patent Owner argued a single step scan and send based on antecedence between limitation 1 and limitation 2, we disagree. *See* Tr. 26:13–18. Scanning and sending of limitations 1 and 2 are separate steps.

Harkins discloses that the recipient of a document may set up a "profile describing the preferred form (facsimile, electronic mail, voice mail, hard copy, color or black, file server, etc.) and service (the specific printer, facsimile machine etc.) documents should take *to be rendered*." Ex. 1004, 10:37–47 (emphasis added). The "rendering" of limitation 1 contemplates Harkins's service bar 55 begins a process to scan or send a document. *Id.* at 7:32–38. We agree with Petitioner that the claims do not preclude rendering from occurring after the "electronic image" is transmitted.

Per limitation 2, Harkins discloses several ways in which a rendered document is transmitted including networked: device-to-device, device-to-application, and application-to-application. Pet. 45 (citing Ex. 1004, 7:32–33, 7:47–51, 5:62–62). The Petition cites to our constructions of "Go button" and "seamlessly" (as proposed by Dr. Melen) and certain disclosures

is neither critical nor a limitation.

of Harkins as meeting limitation 2. Pet. 47 (citing Ex. 1004, 1:25–31, 6:4–7).

Based on the foregoing discussion and evidence of record, Petitioner shows by a preponderance of evidence that the Harkins anticipates claim 1.

c. Harkins Anticipates Claim 4

Patent Owner asserts one argument in support of the patentability of claim 4. PO Resp. 25–26. As discussed above, claim 4 is a method claim similar to the system of claim 1. Patent Owner's argument is that XNS does not disclose the following limitation of claim 4: "interfacing between at least one of said scanner, digital copier or other multifunction peripheral and *email application software using a first of said interface protocols*." *Id.* at 25 (emphasis added). Patent Owner focuses on the italicized portion of claim 4 as not disclosed in Harkins. *Id.* (citing Ex. 2006 ¶¶ 66–68).

Petitioner summarizes Patent Owner's argument to be that Harkins's disclosure of both a scanner and an email application are not "interfacing" because scanned documents in Harkins are stored at the intermediary location before being emailed. Pet. Reply 11. Patent Owner relies on Dr. Kaliski's testimony that an interfacing requires a direct connection. *Id.* Based on our construction of "interfacing," we rejected this argument in connection with XNS above and do so here.

Petitioner has shown that Harkins discloses both scanning and email transmission. Petitioner references a similar limitation from claim 1 for the limitation in dispute. Pet. 50. The cited portions of Harkins from claim 1 disclose transmitting "multimedia," which includes documents via email. *Id.* at 46 (citing Ex. 1006 ¶ 68). Harkins further discloses a plurality of interface protocols. Ex. 1004, 1:21–31. Dr. Melen explains that "Harkins

inherently discloses employing at least one email protocol to transmit multimedia via email." Ex. 1006 ¶ 67.

A prior art reference may anticipate when the claim limitation or limitations not expressly found in that reference are nonetheless inherent in it. *Atlas Powder Co. v. Ireco, Inc.*, 190 F.3d 1342, 1347 (Fed. Cir. 1999) (citing *Std. Havens Prods. v. Gencor Indus.*, 953 F2d 1360, 1369 (Fed. Cir. 1991); *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 630 (Fed. Cir. 1987)). Dr. Kaliski testifies that "I see no reference to any protocol recognized by a person of ordinary skill in the art as enabling an interface between a peripheral device (scanner/copier) and email software." Ex. 2006 ¶ 69. The testimony is conclusory and entitled to little weight. Conversely, Dr. Melen describes several aspects of Harkins disclosure, including that it discloses the transmission of "multimedia" via email before concluding that "Harkins inherently discloses employing at least one email protocol to transmit multimedia via email." Ex. 1006 ¶¶ 66–67 (citing Ex. 1004, 5:32–6:2, 10:38–54, Fig. 4). We are persuaded that Petitioner has shown the limitation is inherent in Harkins.

Based on the foregoing discussion and evidence of record, Petitioner shows by a preponderance of evidence that the Harkins anticipates claim 4.

d. *Harkins Anticipates Claims 3 and 5–8*

Patent Owner's Response does not argue the patentability of claims 3 and 5–8. We have reviewed Petitioner's evidence relating to those claims. Pet. 53–54; Ex. 1006 ¶¶ 64–73. Based on the evidence of record, Petitioner shows by a preponderance of evidence that the Harkins anticipates claims 3 and 5–8.

e. Summary of Ground based on Anticipation by Harkins

Patent Owner argued that the drag/drop or move function of Harkins
is not copying in response to a "GO button," as per claim 1. Patent
Owner's argues the "interfacing" limitation of claim 4 is not met by
the connections disclosed in Harkins. 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 1–8. Pet. 40–54.*3.*

Obviousness Over Harkins and Motoyama

Petitioner argues that the claims 1–8 are unpatentable under 35 U.S.C.
§ 103 as obvious over Harkins and Motoyama. Pet. 54–58. Petitioner also
relies on the Declaration of Dr. Melen (Ex. 1006 ¶¶ 74–76).

Patent Owner limits its argument to 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. 27 (citing Ex. 2006 ¶¶ 71–73).

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. 28 (citing Ex. 1005 3:43–50; Ex. 2006 ¶ 73). 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 11–12 (citing Ex. 1005, 3:41–50, FIG. 1 (fax, copier, *etc.*); Ex. 1004, 1:21–25, Fig. 1; *see also* Ex. 1012, 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.* at 12.

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' network, with the ability to interact with different protocols automatically, and in a manner that is transparent to end users." Ex. 1006 ¶ 75 (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.[12] Thus, we determine that the preponderance of the evidence supports a person of ordinary skill in the art would have combined Motoyama and Harkins.

c. Obviousness of Claims 1–8

Other than whether or not the references should be combined, Patent Owner's Response does not argue the patentability of claims 1–8 over the combination of Motoyama and Harkins. We have reviewed Petitioner's evidence relating to those claims. Pet. 54–58; Ex. 1006 ¶¶ 74–76. Based on the evidence of record, Petitioner shows by a preponderance of evidence that 1–8 would have been obvious over Harkins and Motoyama.

d. 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 shows rational underpinnings for combining Motoyama with Harkins. Petitioner has shown by a

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[12] Dr. Kaliski spent 20 to 30 hours on this case and IPR2014-00539. Ex. 1012, 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.

preponderance of the evidence that claims 1–8 would have been obvious over Harkins and Motoyama

III. CONCLUSION

Petitioner has shown by a preponderance of the evidence that: (1) claims 1–8 are anticipated by XNS; (2) claims 1–8 are anticipated by Harkins; and (3) claims 1–8 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 1–8 of U.S. Patent No. 8,488,173 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.

For Petitioners:

Michael D. Specht
Richard M. Bemben
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
mspecht-PTAB@skgf.com
rbemben-PTAB@skgf.com

For Patent Owner:

Vivek A. Ganti
HILL, KERTSCHER & WHARTON, LLP
vg@hkw-law.com

Scott A. Horstemeyer
N. Andrew Crain
THOMAS | HORSTEMEYER, LLP
scott.horstemeyer@thomashorstemeyer.com
andrew.crain@thomashorstemeyer.com