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Paper 34
Entered: November 25, 2015

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

EASTMAN KODAK CO., AGFA CORP., ESKO SOFTWARE BVBA, and HEIDELBERG, USA,
Petitioner,

v.

CTP INNOVATIONS, LLC,
Patent Owner.

Case IPR2014-00789
Patent 6,738,155 B1

Before HOWARD B. BLANKENSHIP, BENJAMIN D. M. WOOD, and BRIAN J. MCNAMARA, *Administrative Patent Judges.*

WOOD, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background

Eastman Kodak Co., Agfa Corp., Esko Software BVBA, and Heidelberg, USA (collectively, "Petitioner") filed a Corrected Petition (Paper 4, "Pet.") to institute an *inter partes* review of claims 1–9 of U.S. Patent No. 6,738,155 B1 (Ex. 1001, "the '155 patent"). CTP Innovations, LLC ("Patent Owner") filed a Preliminary Response (Paper 8) ("Prelim. Resp."). We instituted an *inter partes* review of claims 1–9 based on the following alleged grounds of unpatentability:

Reference[s]	Basis	Claims Challenged
Jebens,[1] Apogee,[2] and OPI White Paper[3]	§ 103(a)	1–9
Dorfman,[4] Apogee, OPI White Paper, and Andersson[5]	§ 103(a)	1, 2, 4, 5, and 9
Dorfman, Apogee, OPI White Paper, Andersson, and Adams II[6]	§ 103(a)	3 and 6–8

Decision on Institution ("Dec. on Inst.") 24–25.

[1] Jebens et al., US 6,321,231 B1 (iss. Nov. 20, 2001) (Ex. 1005).

[2] AGFA, Agfa Apogee, The PDF-based Production System (1998) (Ex. 1007).

[3] Apple OPI White Paper (1995) (Ex. 1008).

[4] Dorfman et al., WO 98/08176 (pub. Feb. 26, 1998) (Ex. 1006).

[5] MATTIAS ANDERSSON ET AL., PDF PRINTING AND PUBLISHING, THE NEXT REVOLUTION AFTER GUTENBERG (Micro Publishing Press 1997) ("Andersson") (Ex. 1009).

[6] RICHARD M. ADAMS II ET AL., COMPUTER-TO-PLATE: AUTOMATING THE PRINTING INDUSTRY (Graphic Arts Technical Foundation 1996) (Ex. 1010).

After the Board instituted trial, Patent Owner filed a Patent Owner Response (Paper 19, "PO Resp."),[7] to which Petitioner replied (Paper 24, "Pet. Reply"). Oral Hearing was held on June 30, 2015, and the Hearing Transcript (Paper 33, "Tr.") has been entered in the record.

We have jurisdiction under 35 U.S.C. § 6(c). This Final Decision is entered pursuant to 35 U.S.C. § 318(a). We determine that Petitioner has shown by a preponderance of the evidence that claims 1–9 are unpatentable.

B. Related Proceedings

Petitioner discloses that the '155 patent has been asserted in 49 infringement actions. Pet. 1; Ex. 1002. Petitioner also has filed three additional petitions for *inter partes* review: IPR2014-00788, for review of claims 10–20 of the '155 patent; IPR2014-00790, for review of claims 1–3 of U.S. Patent No. 6,611,349 ("the '349 patent"), which shares the '155 patent's disclosure; and IPR2014-00791, for review of claims 4–14 of the '349 patent. Pet. 2. The '155 and '349 patents were also the subject of two previous petitions for *inter partes* review, both of which were denied. *See Printing Indus. of Am. v. CTP Innovations, LLC*, Case IPR2013-00474 (PTAB Dec. 31, 2013) (Paper 16) (denying petition for *inter partes* review of the '349 patent); *Printing Indus. of Am. v. CTP Innovations, LLC*, Case IPR2013-00489 (PTAB Dec. 30, 2013) (Paper 15) (denying petition for *inter partes* review of the '155 patent).

[7] Patent Owner also filed two motions to exclude evidence, which are discussed in section II.B.4 below.

C. The '155 Patent

The '155 patent issued May 18, 2004 from an application filed July 30, 1999. Ex. 1001, cover page. The '155 patent relates to "a system and method of providing publishing and printing services via a communications network." *Id*. at 1:9–10. According to the '155 patent, "[k]ey steps for producing printed materials using a plate process include (1) preparing copy elements for reproduction, (2) prepress production, (3) platemaking, (4) printing, and (5) binding, finishing and distribution." *Id*. at 1:12–15. In the first or "design" stage, an end user—e.g., a publisher, direct marketer, advertising agency, or corporate communication department—uses a desktop publishing program such as "QuarkXpress" to design "pages" from image and data files. *Id*. at 1:16–25. In the prepress production stage, the user-created pages are "transformed into a medium that is reproducible for printing." *Id*. at 1:26–28. This transformation typically involves typesetting, image capture and color correction, file conversion, "RIPing, trapping, proofing, imposition, filmsetting, and platesetting." *Id*. at 1:29–32.

"RIPing" is based on the acronym "RIP," which stands for raster image processor. *Id*. at 7:57–59. A RIP is a hardware or software component that "rasterize[s]" an image file—i.e., converts it to a "bitmap" or raster image. *Id*. "RIPing" is therefore synonymous with rasterizing. A bitmap "is a digitized collection of binary pixel information that gives an output device, such [as a printer, proofer, or platesetter,] the ability to image data to paper, film, or plate." *Id*. at 7:59–62. "Proofing" involves creating a sample of the finished product that is sent to the end user for approval. *Id*. at 1:32–35. Once the end user approves the proof, a medium, such as a computer-to-plate (CTP) file, is produced and sent to the printer. *Id*. at

1:35–39. "Imposition" involves "the set of pages on a particular plate as well as their positioning and orientation" to facilitate "the stripping, collating, and folding of the printed product." *Id*. at 1:38–44. A printer makes a plate "using the medium created during prepress," e.g., a CTP file. *Id*. at 1:45–48. The printer uses the plate on a printing press to reproduce the product, which is then bound, finished, and distributed. *Id*. at 1:45–51.

The '155 patent describes and claims a publishing and printing system in which "[s]ystem components are installed at an end user facility, a printing company facility, and a central service facility," each connected to the others via a communication network. *Id*. at 2:31–36, 51–56. Figure 1, reproduced below, depicts an embodiment of the claimed invention:

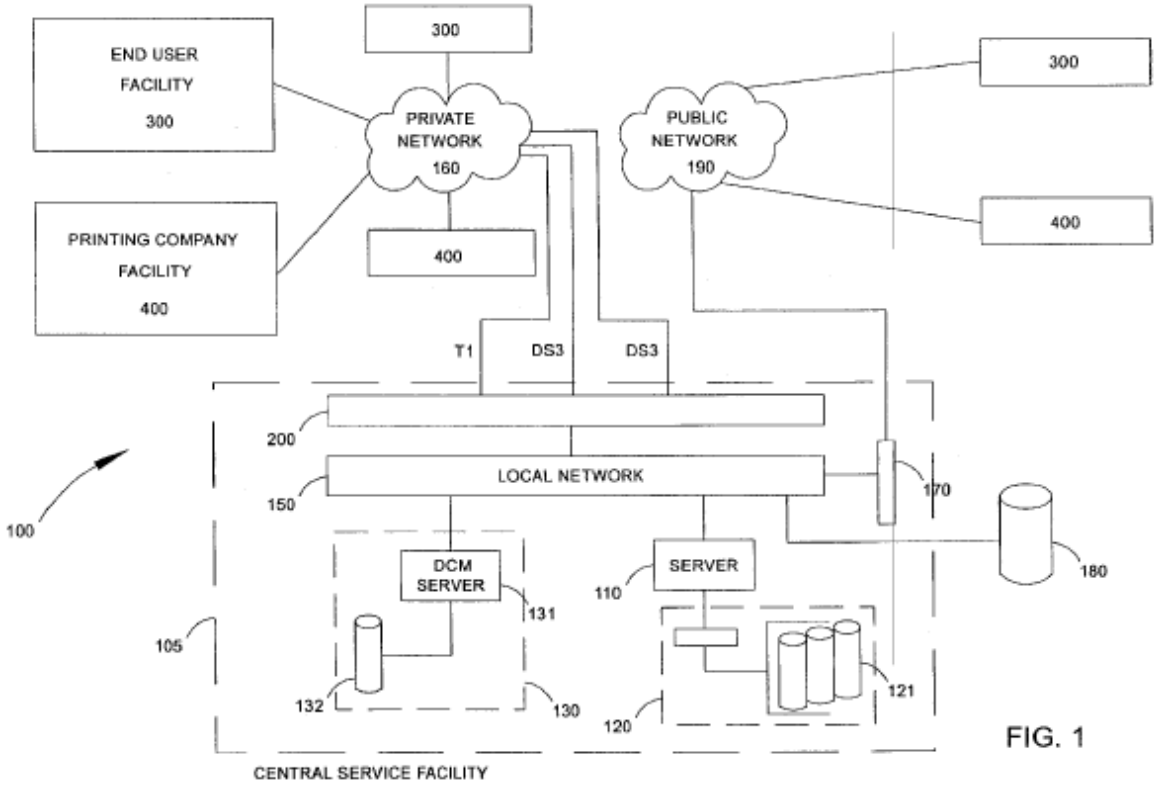

FIG. 1

Figure 1 depicts end user facility 300, printing company facility 400, and central service facility 105 connected together via either private network

160 or public network 190. *Id*. at Fig. 1. In this embodiment, end user facility 300 comprises a router, a desktop computer for page-building operations, and a color proofer and black and white printer for high-resolution proofing. *Id*. at 7:38–40, Figs. 1, 2, 5. Printing company facility 400 comprises a router, a server, a desktop computer, a laser printer, a color plotter, and a platesetter, and performs production management, digital plate-making, desktop imposition, and press services. *Id*. at 8:31–33, 9:38–43, Figs. 1, 4, 5. Central service facility 105 comprises server 110, "hierarchical storage management" (HSM) system 120, "digital content management" system 130, local area network (LAN) 150 and communication routing device 200. *Id*. at 5:34–50. "Data may be exchanged between central service facility 105 and either private network 160 or public network 190 in any suitable format, such as in accordance with the Internet Protocol (IP), the Transmission Control Protocol (TCP), or other known protocols." *Id.* at 5:21–25. An end user can store files in HSM system 120 to reduce storage needs at the end user facility. *Id*. at 7:19–23, 38–40.

Server 110 uses software capable of performing "open prepress interface" (OPI) operations. *Id*. at 5:62–64. OPI operations include "high resolution image swapping." *Id*. at 10:31–33. That is, OPI permits a lower resolution image file to be used as a proxy for a higher resolution file during page-building operations, which is advantageous because the low resolution image can be transmitted and manipulated more quickly. *Id*. at 7:46–49, 10:44–49. The low resolution images are replaced by the corresponding high resolution images before final proofing and printing. *Id*. at 7:49–51.

D. Illustrative Claims

Claim 1 is independent and recites a printing and publishing system comprising an end user facility, a central service facility, and a printing company facility. Claims 2–9 depend directly or indirectly from claim 1. Claim 1 is reproduced below:

> 1. A printing and publishing system providing prepress, content management, infrastructure, and workflow services to system subscribers in real time using a communication network, the printing and publishing system comprising:
>
> an end user facility coupled to a communication network, the end user facility providing page building operations, the page building operations including the design and construction of pages from images, text, and data available via said communication network and the generation of a portable document format (PDF) file;
>
> a printing company facility coupled to said communication network, the printing company facility providing imposition operations and generating a plate-ready file from said PDF file, the imposition operations including the setting of pages on a particular plate as well as positioning and orientation of pages on said plate; and
>
> a central service facility coupled to said communication network, the central service facility providing storage, file processing, remote access, and content management operations; the content management operations including the capture, organization, archival, retrieval, and reuse of electronic files containing any one of text, graphics, photos, artwork, full pages, audio, video, and completed projects; content management operations further including the organization and cataloging of file content for browsing, searching, and retrieving of files and data.

II. ANALYSIS

A. Claim Construction

The claims of an unexpired patent are interpreted using the broadest reasonable interpretation in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1278 (Fed. Cir. 2015). Under this standard, the claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1260 (Fed. Cir. 2010). 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).

We expressly construe below only those claim terms that require analysis to resolve arguments related to the patentability of the challenged claims. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc*., 200 F.3d 795, 803 (Fed. Cir. 1999) (holding that "only those [claim] terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy"). All other terms will be accorded their ordinary and customary meaning as would be understood by one of ordinary skill at the time of the invention.

1. "A printing and publishing system providing . . . services to system subscribers in real time using a communication network"

The preamble for independent claim 1 recites a printing and publishing system providing services to system subscribers "in real time." In the Decision on Institution, we determined that "the preambles in the claims at issue, including the term 'real time,' do not limit the scope of the

claims." Dec. on Inst. 13. Neither Patent Owner in its Response nor Petitioner in its Reply disputed this determination. Further, we are not aware of any evidence adduced at trial that calls this determination into question. Therefore, based on our analysis in the Decision on Institution, we determine that the preambles in the claims at issue, including the term "real time," do not limit the scope of the claims.

2. "end user facility," "central service facility," and "printing company facility" (all claims)

Independent claim 1 is drawn to a printing and publishing system comprising, *inter alia*, an "end user facility," a "printing company facility," and a "central service facility," each coupled to the same communication network. Petitioner has "applied the construction of these terms as provided by the PTAB in connection with the [IPR2013-00489] Petition, which is that 'the claimed facilities must be distinct from each other in some manner.'" Pet. 22 (quoting Ex. 1004, 11). Patent Owner responds that this requirement should not be adopted because it "is unclear and ambiguous," in that "'in some manner' . . . can mean almost anything." PO Resp. 13. Patent Owner further contends that "any operational distinctions that can be made between these facilities are clear from the terms of the applicable claims." *Id.*

We agree with Patent Owner to the extent that the claim itself defines "end user facility," "printing company facility," and "central service facility" in terms of the particular functions they perform; e.g. the end user facility performs page building operations, the printing company facility performs imposition and generates a plate-ready file, and the central service facility performs content management operations. These functions are not limiting;

for example, the printing company facility obviously would also perform platemaking and offset printing functions.

But we maintain the view that these facilities must be distinct components of the claimed printing and publishing system. "Where a claim lists elements separately, the 'clear implication of the claim language' is that those elements are distinct components of the patented invention." *Becton, Dickenson and Co. v. Tyco Healthcare Group, LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (internal citations and quotation marks omitted); *cf. Regents of Univ. of Minn. v. AGA Med. Corp*., 717 F.3d 929, 935 (Fed. Cir. 2013) (holding that phrase "first and second occluding disks" means physically separate occluding disks). The Specification supports this conclusion because it consistently describes the three facilities as separate entities, each connected to the same communication network to facilitate the transfer of data between each other. *See, e.g*., Ex. 1001, 2:54–64, 4:26–33, Figs. 1–5.

3. "plate-ready file"(all claims)

Independent claim 1 requires a printing company facility to generate a "plate-ready file." Petitioner asserts that:

> The plate-ready file represents a page layout file that has gone through the prepress process (e.g., imposition, screening, trapping, color management, etc.) and has been RIPed such that it contains the exact dots to be transferred onto a printing plate. [Ex. 1021] at ¶ 65. The plate-ready file may be in a format that can be used with a platesetter as the output device, such that the digital file is directly used to create a printing plate; or in a format that can be used with an imagesetter, such that the digital file is indirectly used to create a printing plate. *Id*. at ¶¶ 65–69.

Pet. 21 (footnote omitted).

Patent Owner asserts that a plate-ready file is "a file that is ready to be made into a printing plate." PO Resp. 10–11 (emphasis omitted). Patent Owner relies in part on the deposition testimony of Petitioner's expert, Brian Lawler, which mirrors Petitioner's contentions above. *Id*. at 12 (quoting Ex. 2017, 35:19–36:3).

The Specification does not define "plate-ready file" expressly, but its meaning is discernible from the term itself: a file that can be used to produce a printing plate without further modification. *See* Ex. 1001, 10:7–14 (equating the term "plate-ready file" with "a single file that is stable, predictable, and ready to image to proof or plate"). Moreover, as Petitioner states, the plate-ready file can be used with a platesetter to create a plate directly, or with an imagesetter to produce film that is then used to create the plate. Pet. 21. Further, we agree with the parties that because the file is "plate-ready," it represents a page layout file that has gone through the prepress process, including RIPing. That is the purpose of prepress production: transforming "copy" into "a medium that is reproducible for printing," such as a "computer to plate (CTP) file." *Id*. at 1:26–38. Accordingly, in addition to the construction we applied in the Decision on Institution, we construe "plate-ready file" to mean a file that represents a page layout that has gone through prepress processing, including RIPing, and is ready to image to a plate using either a platesetter or imagesetter.

B. Claims 1–9—Jebens, Apogee, and OPI White Paper

Petitioner asserts that claims 1–9 are unpatentable under 35 U.S.C. § 103(a) as obvious over Jebens, Apogee, and OPI White Paper. Pet. 23–40.

1. Jebens

Jebens describes "a digital image management and order delivery system." Ex. 1005, 2:13–14. The system provides a centralized, searchable database of digital images that can be used and modified by authorized users. *Id*. at 4:54–56. The system also serves as a job order developer and conduit for routing files from a client, such as an advertising agency, to a printer. *Id*. at 4:60–62. Figure 1, reproduced below, illustrates Jebens' invention.

FIG. 1

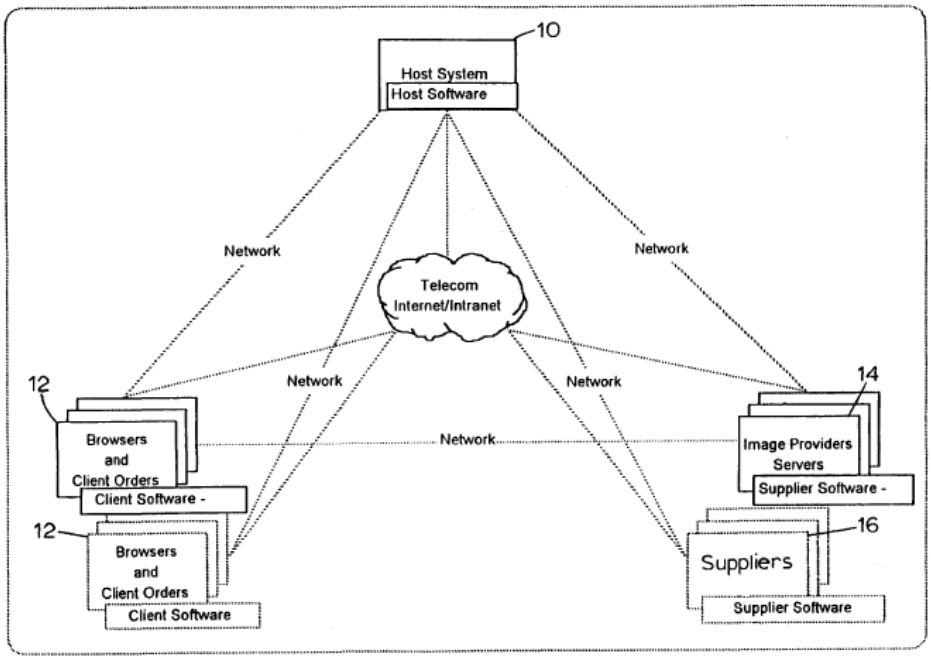

Figure 1 depicts a data management and work-order delivery system constructed according to Jebens. *Id*. at 4:20–23. The system comprises host system 10 in communication with a variety of users, such as browsers and client "orderers" 12, image providers 14, and suppliers 16. *Id*. at 6:52–65. The host system software includes, *inter alia*, an image database that archives low and high resolution copies of digital image files. *Id*. at 8:12–13. The system is "ideally suited for facilitating publication and the like."

Id. at 4:66–67. Image providers 14 may include a corporation that stores digital images of its products on host system 10 to more efficiently use its in-house computer storage facilities. *Id*. at 4:67–5:5, 6:55–60. Browsers and client orderers 12 may include an advertising agency that the corporation hires to create a brochure using the stored images, and suppliers 16 may include the printer that will print the finished brochure. *Id*. at 5:5–10, 6:54–65. To use the system, the corporation gives the agency information to access the host system; the agency searches the host system, downloads low-resolution copies of desired images, and uses the low-resolution images to create the brochure. *Id*. at 5:11–17. The agency then reconnects to the system "to request that the system electronically route the created document with high resolution copies of the selected digital images to a publishing entity such as a printer, where the finalized brochure would be published." *Id*. at 5:17–22. Communication between host system 10 and users 12, 14, and 16 "can be effected by any known means of connectivity," such as "through local area networks or wide area networks," or "hardwired to one another as an intranet." *Id*. at 6:66–7:4, 7:20.

2. Apogee

Apogee describes the Agfa Apogee print-production system. Ex. 1007, 1. Content can be created in any format and output to Apogee in either PostScript or PDF; Apogee normalizes incoming files to PDF "to guarantee complete predictability and compatibility." *Id*. at 3–4. The PDF files are stored as individual PDF pages and become "Digital Masters" to create all production versions of the document and to provide a version that can be proofed and edited remotely. *Id*. at 4, 6. For a specific print job, Apogee collects the appropriate pages, automatically imposes the pages into

a "digital flat," and rasterizes it for the selected output device (e.g., an image setter or plate setter). *Id*. at 6. The result is a "Print Image File" (PIF) that "contains all the dots that will appear on the film or plate." *Id*.

3. OPI White Paper

OPI White Paper describes the OPI "image swapping" process. Ex. 1008, 10. "[I]image swapping enables a page designer to work with a small screen-resolution picture file during page design and then rely on the intervention of the OPI server to swap it out for the high-resolution, color-separated file necessary to render the picture in print." *Id*. at 10, 12, Fig. 2d. OPI White Paper describes the typical manner in which the low-resolution image files, or "preview files," are generated: a user saves a high-resolution file to a particular folder on the OPI server, which triggers a routine that creates a preview file and puts it in a different folder. *Id*. at 12. A particular implementation of the OPI process at a printing facility is also described. *Id*. at 31–32, Fig. 4c.

4. Whether Apogee is a Prior Art Publication

Before discussing the merits of this ground of unpatentability, we first address Patent Owner's contention, PO Resp. 46–53, that Petitioner has not shown that Apogee was publicly accessible before July 30, 1999, the '155 patent's filing date. Petitioner contends that Apogee—which bears a copyright date of 1998 by Agfa-Gevaert N.V.—was published in 1998, and "[a]t the latest" was made available to the public on May 28, 1998. Pet. 5 (citing Ex. 1022); *see* Ex. 1007, 8. Petitioner relies on the Declaration of Johan Suetens, an employee of Agfa Graphics, to support this contention. Mr. Suetens testifies that in 1998 he was responsible for "marketing-communications of commercial printing" at Agfa. Ex. 1022 ¶ 4. According

to Mr. Suetens, the Apogee reference was created to promote the Agfa Apogee system to potential customers. *Id.* ¶ 8. Mr. Suetens further testifies that a code appearing on the last page of the Apogee reference—"NEFDU"—is unique to the Apogee reference, and is used by Agfa's "Enterprise Management System" to track the document. *Id.* ¶ 10. Attachment D to Mr. Suetens' Declaration is a printout from the Enterprise Management System that Mr. Suetens asserts shows that 76,030 copies of the Apogee reference were printed for Agfa in April 1998. *Id.* Mr. Suetens asserts that this printed version of the Apogee reference was distributed by Agfa sales departments at "seminars, exhibitions, and demos of Apogee to the public," and was made available to the public as an electronic PDF file on Agfa's website, www.agfahome.com, no later than May 28, 1998, when Agfa issued a press briefing announcing the release of Apogee Pilot. *Id.* ¶¶ 8–10.

Patent Owner counters that "Petitioners have failed to establish that [Apogee] was distributed outside of Agfa or was otherwise publicly accessible." PO Resp. 46. Based on Mr. Suetens' deposition testimony, Patent Owner asserts that he "has no actual personal knowledge of when (or even if) the Apogee reference was distributed to the public, made available to the public, or provided to any member of the public." *Id.* at 47. According to Patent Owner, Mr. Suetens testified at his deposition that (1) Agfa's marketing-communication department "does not provide documents—including the Apogee reference—directly to the public," but only makes documents available to Agfa subsidiaries (*id.* (citing Ex. 2016, 23:8–24:10)); (2) he does not have any personal knowledge of the distribution of the Apogee reference to a customer or potential customer, or

when the printed form would have been distributed to Agfa subsidiaries (*id*. at 48–49 (citing Ex. 2016, 34:4–18, 40:7–41:1, 50:5–23)); (3) he does not know who, if anyone, posted a PDF version of Apogee on Agfa's website or when it was posted (*id*. at 50 (citing Ex. 2016, 48:3–49:21); and (4) he does not remember seeing it on the website (*id*.).

Petitioner responds to Patent Owner's contentions by submitting additional evidence with its Reply, i.e., a supplemental Declaration from Mr. Suetens ("Supplemental Suetens Declaration," Exhibit 1024), and a Declaration from Michael Jahn ("Jahn Declaration," Exhibit 1023). Attached to the Supplemental Suetens Declaration were additional records obtained from Agfa's Electronic Management System. Ex. 1024, Att. E–H. According to Mr. Suetens, these records demonstrate how the Electronic Management System tracked the ordering and delivery of copies of the Apogee reference and other promotional brochures from Agfa headquarters to its subsidiaries and regional offices in 1998. For example, Mr. Suetens testifies that Attachment H demonstrates that 400 copies of the Apogee reference were sent to Declarant Michael Jahn. *Id.* ¶ 14, Att. H.

Mr. Jahn testifies that from August 1997 to September 2001 he worked for Agfa Corporation as a contract consultant. Ex. 1023 ¶¶ 4–5. Mr. Jahn asserts that "it was my job, beginning in August 1997 until leaving the company in September 2001, to travel internationally and throughout the U.S. to meet with potential customers and industry groups for the purpose of educating them on the AGFA Apogee PDF workflow." *Id*. ¶ 10. He states that he "recognize[d] [the Apogee reference] as one that I personally distributed to interested members of the public on behalf of Agfa beginning in 1998, and thereafter." *Id*. ¶ 9. For example, Mr. Jahn testified that he

attended the "Vue/Point conference 9th annual communication event held April 14–16 in Arlington, Virginia, and the PIRA International meeting held in England," and that "[a]t these conferences, . . . [t]he Apogee [reference] was the literature that attendees were given to take back to their office." *Id.* ¶¶ 10–11. Mr. Jahn also testifies that he directed conference attendees to his website, www.jahn.org., where he had posted and made publicly available an earlier "near identical" version of the Apogee reference. *Id.* ¶¶ 12, 15, Att. C.

a. Patent Owner's First Motion to Exclude Evidence

On April 2, 2015, concurrently with its Patent Owner Response, Patent Owner filed its First Motion to exclude the Apogee reference, Ex. 1007, and Mr. Sueten's first Declaration, Ex. 1022. Paper 18, 3–13. On April 16, 2015, Petitioner responded to Patent Owner's First Motion as if it were evidentiary objections filed under 37 C.F.R. § 42.64(b)(1), and served on Patent Owner "supplemental evidence" under 37 C.F.R. § 64(b)(2); specifically, the Supplemental Suetens Declaration and the Jahn Declaration. Paper 29, 3; Tr. 31:4–8.

Patent Owner seeks to exclude Mr. Suetens' first Declaration for essentially the same reasons discussed above: that Mr. Suetens lacks personal knowledge regarding the public accessibility of Apogee. We have reviewed the First Motion and determine that Patent Owner's objections to the First Suetens Declaration go more to the weight of the Declaration than to its admissibility. Further, we note that the public accessibility of the Apogee reference is a substantive issue that is better suited for Patent Owner's Response than for a motion to exclude. For these reasons, we deny Patent Owner's First Motion to Exclude.

b. Patent Owner's Second Motion to Exclude Evidence

Patent Owner filed its Second Motion on June 11, 2015, ten days after Petitioner filed its Reply and Exhibits 1023 and 1024, the Jahn Declaration and Supplemental Suetens Declaration, respectively. In the Second Motion Patent Owner moves for the exclusion of these Declarations. Patent Owner's principal argument is that the Declarations constitute "supplemental information, not supplemental evidence." Paper 25, 10. According to Patent Owner, "[i]nformation submitted to the Board that is directed to the public accessibility of Apogee is per se supplemental information . . . because Apogee serves as one of Petitioners' asserted bases for unpatentability." *Id*. Because Petitioner did not follow the procedure for submitting supplemental information under 37 C.F.R. § 42.123(b), Patent Owner argues that the Supplemental Suetens Declaration should be excluded. *Id*. at 11.

Petitioner responds that both the Jahn and Supplemental Suetens Declarations are "offered solely to support the admissibility of Apogee," and "are not offered to further support 'any argument on the merits (i.e., regarding the patentability or unpatentability of a claim)' in view of Apogee, and, therefore, are proper supplemental evidence." Paper 29, 4.

As an initial matter, we reject the notion that evidence submitted to support a reference's public availability can never be served as "supplemental evidence" under 37 C.F.R. § 42.64(b)(2). The rule does not limit the subject matter of evidence served under this rule, and at least two other panels have noted that such evidence has been served as supplemental evidence. *See Palo Alto Networks, Inc. v. Juniper Networks, Inc.*, Case

IPR2013-00369, slip op. at 2, 5 (PTAB Feb. 5, 2014) (Paper 37) (noting its understanding that the supplemental information under consideration previously had been served to Patent Owner in response to Patent Owner's evidentiary objections); *Toyota Motor Corp. v. American Vehicular Scis., LLC*, Case IPR2013-00417, slip op. at 8 (PTAB Jan. 7, 2015) (Paper 78) (noting Petitioner's submission of supplemental evidence to establish a prior-art reference's publication date).

More importantly, we disagree with Patent Owner that evidence must be submitted as supplemental information in accordance with 37 C.F.R. § 42.123 in order for the evidence to be admitted as rebuttal evidence with Petitioner's Reply. The Board "has broad discretion to regulate the presentation of evidence under Fed. R. Evid. 611(a)." *Belden Inc. v. Berk-Tek LLC*, ——F.3d——, 2015 WL 6756451, at *14 (Fed. Cir. Nov. 5, 2015). In particular, the Board has discretion to permit Petitioner to submit evidence with its Reply to rebut an argument raised in the Patent Owner Response. *Id.*; *Flir Sys., Inc. v. Leak Surveys, Inc.*, Case IPR2014-00411, slip op. at 11 (PTAB Sept. 3, 2015) (Paper 113).

Under the circumstances of this case, we determine not to exclude the Jahns and Supplemental Suetens Declarations. First, the Declarations serve the permissible rebuttal function of responding directly to an argument Patent Owner made in its Response, PO Resp. 46, that Petitioner has failed to establish that Apogee "was distributed outside of Agfa." *See Belden*, 2015 WL 6756451, at *14 ("the traditional principle [is] that evidence offered to rebut must accomplish the function of rebuttal; 'to explain, repel, counteract, or disprove the evidence of the adverse party'" (internal citation omitted)); *Flir*, slip op. at 11 ("[t]he object of a reply is to address arguments

made in an opposition"). Second, Patent Owner had a fair opportunity to respond to the Declarations. Because the Declarations were served on Patent Owner on April 16,[8] well before they were filed with the Reply, Patent Owner had ample opportunity to depose Mr. Jahn and Mr. Suetens before the June 11 deadline for filing motions for observations regarding cross-examination. Indeed, Patent Owner has not argued that it did not depose the declarants because it was unable to do so, but rather because it believed that such depositions were "unnecessary." Paper 32, 4–5. Finally, the Declarations do not add to the evidence initially presented in the Petition to support the grounds of unpatentability authorized in this proceeding, but are relied on only to support the public accessibility of a reference that was presented with the Petition. *See Belden*, 2015 WL 6756451, at *11 (rejecting argument that rebuttal expert declaration was necessary to establish prima facie case of unpatentability because "prior art itself, together with the Petition, sufficed to supply a prima facie case of obviousness").

We have reviewed the additional arguments that Patent Owner raises in support of its Motion, and determine that they address the weight to be given the Declarations rather than their admissibility. For these reasons, Patent Owner's Second Motion to Exclude Evidence is denied.

c. Petitioner Has Shown That Apogee Is Prior Art

"In order to qualify as a printed publication within the meaning of § 102, a reference must have been sufficiently accessible to the public interested in the art." *In re Lister*, 583 F.3d 1307, 1311 (Fed. Cir. 2009) (internal citation and quotation marks omitted). "Whether a reference is

[8] Paper 29, 3; Tr. 31:4–8.

publicly accessible is determined on a case-by-case basis based on the facts and circumstances surrounding the reference's disclosure to members of the public." *Id*. (internal citation and quotation marks omitted). "A reference is considered publicly accessible if it was disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it." *Id*. (internal citation and quotation marks omitted).

We find that Petitioner has shown by a preponderance of the evidence that Apogee was publicly accessible before the '155 patent's filing date. There does not seem to be any dispute that Apogee was printed at least as early as April 1998. Further, Petitioner has shown that a large number of copies were printed and distributed to Agfa subsidiaries around the world in 1998. Ex. 1024 ¶¶ 10–14, Atts. E–H. Petitioner also has proffered evidence of at least one Agfa sales representative, Mr. Jahn, publicly distributing Apogee to potential customers at conferences. Ex. 1023. We also credit Mr. Jahn's testimony that an earlier version of Apogee was posted on his website before the critical date, and that he directed interested persons to that document. Although we do not rely on this version itself in considering Petitioner's grounds of unpatentability, we consider this testimony evidence that a person of ordinary skill, using reasonable diligence, could have gained access to the earlier version Apogee, which reasonably would have led that person to the updated version. Given that Apogee was created to promote the Apogee system to prospective customers; a very large number of copies of the reference were printed, at least some of which were distributed at conferences and trade shows; and an earlier, substantively identical version

was publicly available in electronic form on the internet; we find that Apogee was publicly accessible before the critical date.

5. The Parties' Contentions

Petitioner generally relies on Jebens for its disclosure of a "digital data management system" that "can be used to coordinate design, prepress, and printing activities, by connecting the front-end users (e.g., page designers) to service bureaus and printing companies over a communication network." Pet. 23. Petitioner relies on Apogee to teach the generation of a plate-ready file by subjecting the digital file to prepress operations and then RIPing the digital file into a format that can be used to produce a printing plate. *Id*. at 28. According to Petitioner, Apogee shows:

> [W]hat would have been well-known and understood to one of ordinary skill—namely, that in order for a printing plate to be produced, a software program that rasterizes the output of the prepress process must be incorporated into the printing system workflow to produce a plate-ready file. Thus one of ordinary skill in the art would have been motivated to incorporate Apogee into the Jebens printing system to allow for a printing facility to produce a printing plate for offset printing.

Id. at 28 (citing Ex. 1021 ¶ 94).

Likewise, Petitioner relies on OPI White Paper "for its disclosure regarding imposition." *Id*. at 29. Petitioner contends that "it would have been commonplace and entirely obvious to one of ordinary skill in the art to include a computer that performed imposition operations at the printing facility of Jebens." *Id*. at 29 (citing Ex. 1021 ¶ 97). OPI White Paper is also relied on for its teaching of remote proofing. *Id*. at 31 (citing Ex. 1021 ¶ 101).

Thus, Petitioner contends that (1) Jebens discloses an end-user facility coupled to a communications network and providing page building operations, with Jebens combined with Apogee teaching the generation of a PDF file (*id*. at 32); (2) Jebens teaches a printing company facility coupled to the communication network, with Jebens combined with OPI White Paper and Apogee to teach providing, respectively, imposition operations and generating a plate-ready file from said PDF file at the printing company facility (*id*. at 33–34) and (3) Jebens teaches a central service facility couple to a communication network and performing storage, file processing, remote access, and the claimed content management operations (*id*. at 35–36).

Patent Owner does not dispute that the proposed combination teaches the claimed facilities themselves, but does dispute that it teaches the facilities "all coupled to the same communication network." PO Resp. 26.

Regarding Jebens, Patent Owner contends that:

> Jebens discloses a system in which an advertising agency (or similar designer) and hosting site share a communication network, and once the advertising agency logs [off] of the network, the hosting site establishes a separate communication network with any number of potential suppliers (e.g., printing facilities) . . . [t]he advertising agency, hosting site, and suppliers of Jebens are never on the same communication network, and Jebens does not disclose or suggest that the first user (e.g., advertising agency) directly communicates with the second user (e.g., printing facility or suppliers) as reflected in Figure 1 of Jebens.

Id. at 26–27 (citing Ex. 1005, 4:20–23, 52–65, Fig. 1; Ex. 2014 ¶ 20). In other words, Patent Owner contends that Jebens' "user 12 communicates with the hosting system via a network separate and apart from the communication network used by hosting system to communication with one

of the several printing companies that are separate users 16[, and] Jebens does not show a communication network established between user 12 and users 16." *Id*. at 28. Relying on the testimony of its expert, Patent Owner asserts that "[w]hile the communications between the host system and the suppliers may occur over the Internet, or private networks, this should not be confused with an end user facility, a central service facility, and a printing company facility all coupled to a single communication network." *Id*. at 30–31 (citing Ex. 2014 ¶ 24). Finally, Patent Owner asserts that Apogee and OPI White Paper do not "cure this defect." *Id*. at 31–32 (citing Ex. 1007, 6–7; Ex. 1008, 33, 40; Ex. 2014 ¶¶ 25–26).

In Reply, Petitioner disagrees that Jebens does not disclose the three facilities connected to the same communication network, as Figure 1 of Jebens "clearly shows all three facilities coupled to an intranet or the internet." Pet. Reply 3–4. Petitioner further contends that "whether or not the claimed facilities operate through the central service facility is inapposite; the facilities are still internetworked, and the claims require nothing more." *Id*. at 3.

6. Analysis

Although we agree with Patent Owner that claim 1 requires the end-user facility, printing company facility, and central service facility to be coupled to the same communication network, we agree with Petitioner that Jebens teaches this configuration. As Petitioner notes, Jebens Figure 1 depicts host system 10, users 12, and suppliers/printers 16 connected to "Telecom Internet/Intranet." Ex. 1005, Fig. 1. Patent Owner' s expert testified that "[w]hile the communications between the host system and the suppliers may occur over the Internet, or private networks, this should not be

confused with an end user facility, a central service facility, and a printing company facility all coupled to a single communication network." Ex. 2014 ¶ 24. However, this testimony is conclusory and unsupported, and we give it little weight. *See* 37 C.F.R. § 42.65(a) ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight"). Further, claim 1 does not require the end-user facility to be able to communicate directly with the printing company facility without going through the central service facility, so it is irrelevant that Jebens does not teach this feature.

As stated above, Patent Owner does not dispute that the proposed combination teaches the other limitations of claim 1, and that a person of ordinary skill would have had reason to combine Jebens, Apogee, and OPI White Paper. Further, Patent Owner does not dispute that the proposed combination teaches the additional limitations of claims 2–9. Therefore, we determine that claim 1 would have been obvious over Jebens, Apogee, and OPI White Paper.

C. Claims 1, 2, 4, 5, and 9—Dorfman, Apogee, OPI White Paper, and Andersson

Petitioner contends that claims 1, 2, 4, 5, and 9 would have been obvious over Dorfman, Apogee, OPI White Paper, and Andersson. Pet. 41–58.

1. Dorfman

Dorfman describes a "technique for easily creating and proofing customized printed material before printing on a production printing system." Ex. 1006 (abstract). A user can access a template in PDF format from the system's website, modify the template by adding low-resolution

copies of selected images and other variable data, and thereby create a dynamic PDF file. *Id*. at 4:3–8, 8:1–4.[9] The PDF file may be viewed or printed to a local low-resolution printer for final proofing. *Id*. at 8:4–11. The user can make any necessary changes or corrections to the PDF file from the system website and send the file "for printing using conventional printing technology where the low resolution images would be replaced by the high resolution images by an OPI . . . process before printing." *Id*. at 4:18–21; *see id.* at 8:23–26.

Figure 1, reproduced below, depicts an embodiment of this system:

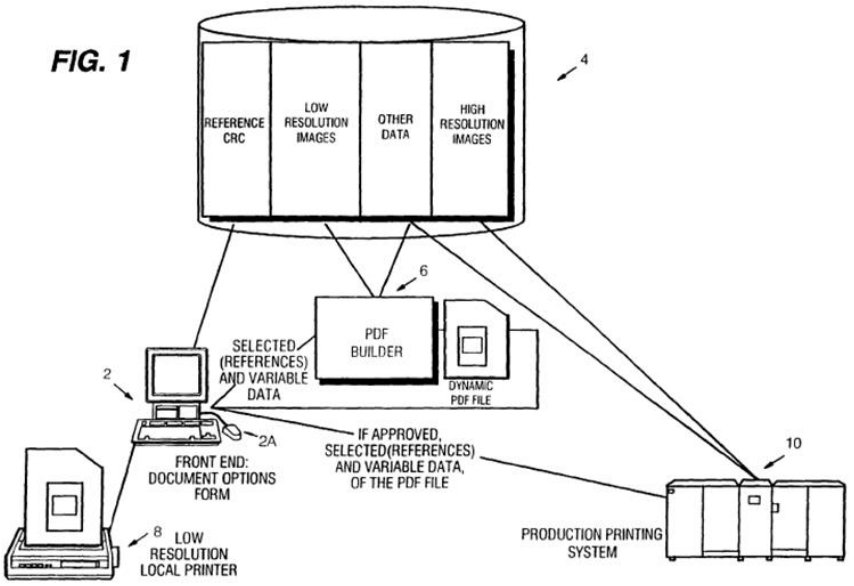

Figure 1 depicts Dorfman's system comprising front end 2, memory 4, PDF builder 6, and production printing system 10. *Id*. at 5:25–6:7. Front end 2 may be the office of a graphic artist employed by an advertising agency, and typically includes a PC with internet connectivity and browser software. *Id*. at 5:29–6:10. Memory 4, PDF builder 6, and printing system

[9] We conform to Petitioner's usage of Dorfman's original page numbers rather that Petitioner's supplemental page numbers.

10 are remotely located from front end 2, e.g., at the facilities of a commercial printing service. *Id*. at 6:4–7. Memory 4 may contain a reference library, low resolution and high resolution images, and other data. *Id*. at 5:27–29. Commercial printer 10 maintains a website that allows front end users access to templates and images stored in memory 4. *Id*. at 6:10–13.

2. Andersson

Andersson describes the PDF format. According to Andersson, a PDF document is a self-contained file format that includes multiple objects, e.g., bitmap images, text, font information, and line art. Ex. 1009, 22–24. Andersson teaches how to create, view, and edit PDF files, and how to use them to create and simplify digital prepress workflows as compared with "traditional" prepress workflows. *Id*. at 66–67. Andersson also discusses digital environments, in particular, computer networks and servers, suitable for implementing these workflows. *Id*. at 51.

3. The Parties' Contentions

For claim 1, Petitioner relies on Dorfman to teach an end user facility couple to a communication network and providing page building operations, including generating a PDF file. Pet. 50–52 (citing Ex. 1006, Abstract, 5:25–6:2, 6:20–27, 7:9–12, 7:15–8:5, Figs. 1, 6). Petitioner also relies on Dorfman to teach the printing company facility coupled to a communication network, and relies on Dorfman combined with OPI White Paper and Apogee to teach providing, respectively, imposition operations and generating a plate-ready file from said PDF file at the printing company facility. *Id*. at 52–53 (citing Ex. 1006, 6:4–7, 6:22–7:2, 8:21–26; Ex. 1007 at 6–7; Ex. 1008 at 33, 40). Petitioner further relies on Dorfman to teach a

central services facility coupled to the communication facility and providing storage, file processing, remote access, and content management operations, and on the combination of Dorfman and Andersson to teach the requisite content management operations. *Id*. at 54–56 (citing Ex. 1006, 6:4–7, 5:27–29, 6:20–27, 7:4–8, 12–20; Ex. 1009, 51, 67–69, 190).

Patent Owner disputes that the proposed combination renders unpatentable claims 1, 2, 4, 5, and 9. First, Patent Owner argues that Dorfman is a "response on demand" digital printing system, which is "one where a digital-based file is printed directly to a variety of media." PO Resp. 33 (citing Ex. 2014 ¶ 28). Patent Owner reasons that "[b]ecause Dorfman is a 'response on demand' digital printing system using variable data, a POSITA would understand that the system of Dorfman does not and would not involve the generation of printing plates or plate-ready files." *Id*. at 37 (citing Ex. 2014 ¶ 36). Patent Owner acknowledges that "printing plates are inexpensive when producing many identical copies of a document," but contends that "they would be extremely expensive if one were to attempt to produce multiple unique documents, or smaller runs of documents requiring frequent changes or variable data." *Id*. at 38 (citing Ex. 2014 ¶ 36). Thus, argues Patent Owner, a POSITA would not use a digital printing system as disclosed in Dorfman to produce printing plates or plate-ready files. *Id*.

Second, Patent Owner argues that claim 1 "requires a separate central service facility and remote printer," but Dorfman "merges the central service facility and the printing company facility, which are described as all being present at the same remote location, e.g., the facilities of a commercial printing service." PO Resp. 40 (citing Ex. 1006, 6:4–7). Patent Owner

further argues that neither Apogee nor OPI White Paper cures this defect. *Id*.

Petitioner replies that Dorfman's teachings are not limited to only low volume print jobs. Pet. Reply 5. Petitioner further contends that Dorfman's system may use "conventional printing technology," which includes offset printing using an imagesetter or a platesetter. *Id*. (citing Ex. 1006, 8:1–23; Ex. 1021 ¶ 116). Petitioner also argues that Dorfman teaches separate central service and printing facilities, stating that "[n]othing in the [claims] require the facilities to be geographically remote from one another." *Id*. at 9.

4. Analysis

We are not persuaded that Dorfman is limited to response-on-demand systems or a system for which offset printing is not feasible. As an initial matter, it is unclear whether Dorfman actually describes its invention as a "response on demand" system, as Patent Owner contends. Dorfman uses the term "response on demand" only in the "Background of the Invention" section, primarily as an "example" of a printing system that allows a user to "readily customize printed materials for a particular need." Ex. 1006, 1. But that term is not used in Dorfman's summary of the invention or in its description of the preferred embodiment. In any event, the premise on which Patent Owner's argument is based—that Dorfman's system is limited to low volume print jobs that would not be economically feasible produced using offset printing—is incorrect. Dorfman expressly teaches that customized printed materials may be printed "in large quantities." Ex. 1006, 2:13–16. As Patent Owner and its Declarant acknowledge, it is generally less expensive to use offset printing for large print jobs. *See* PO Resp. 38 (printing plates used for offset printing "are inexpensive when producing

many identical copies") (citing Ex. 2014 ¶ 36). Moreover, Dorfman teaches that its system may be used with "conventional printing technology," and Patent Owner does not dispute the testimony of Petitioner's expert, Professor Lawler, that this includes offset lithography. Ex. 1021 ¶ 116.

We also agree with Petitioner that Dorfman teaches a separate central services facility and printing company facility. Contrary to Patent Owner's argument, the claims do not require that these facilities be "remote" with respect to each other. Unlike independent claims 10 and 16, which require a plate-ready file to be sent to a "remote printer," the term "remote" does not appear in independent claim 1. Further, while claim 1 does require separate and distinct "facilities," this requirement does not itself require geographical separation. The term "facilities" was described at the time of the invention as an "imprecisely defined word that means anything and everything," and can simply refer to "the equipment and services which make up a telecom system." NEWTON'S TELECOM DICTIONARY 319 (15th ed. 1999) (Ex. 3001). Thus, "central services facility" simply may refer to the equipment that performs the claimed functions of that facility. Petitioner relies on Dorfman's PDF Builder 6 and memory 4 as corresponding to the claimed central service facility, which Dorfman depicts and describes as separate from production printing system 10. *See*, *e.g.*, Ex. 1006, Fig. 1.

Having reviewed the record and the parties' contentions, and for the foregoing reasons, we determine that Petitioner has shown by a preponderance of the evidence that claims 1, 2, 4, 5, and 9 would have been obvious over Dorfman, Apogee, OPI White Paper, and Andersson.

D. Claims 3 and 6–8—Dorfman, Apogee, OPI White Paper, Andersson, and Adams II

Petitioner asserts that claims 3 and 6–8 would have been obvious over Dorfman, Apogee, OPI White Paper, Andersson, and Adams II. Pet. 58–60. These claims depend, directly or indirectly, from claim 1, and contain additional limitations relating to aspects of the communication network and devices connecting the end-user facility, central service facility, and printing company facility, such as the use of a fast Ethernet network or asynchronous transfer mode (ATM) network. Ex. 1001, 21:34–42, 54–63. Petitioner relies on Adams II as teaching these additional limitations. Pet. 59–60. Petitioner notes that "Dorfman discloses that a user 'may use an internet browser or the like to establish communication with the remote location through an internet connection or other appropriate communication technique.'" Pet. 58–59 (citing Ex. 1006, 6:4–10). According to Petitioner, Adams II teaches "numerous of these well-known systems, including using an Ethernet and asynchronous transfer mode, as disclosed in claims 3, 6 and 8, to reduce transfer times, and using a packet switching network, as disclosed in claim 7, to increase transmission efficiency." *Id.* Petitioner cites the testimony of its Declarant, Professor Brian P. Lawler, in support of this assertion. *Id*. (citing Ex. 1021 ¶ 135).

Patent Owner raises the same arguments with respect to this ground as raised above. As explained above, we find these arguments unpersuasive. Accordingly, for the reasons explained above, we determine that claims 3 and 6–8 would have been obvious over Dorfman, Apogee, OPI White Paper, Andersson, and Adams II.

III. CONCLUSION

For the foregoing reasons, we determine that Petitioner has shown by a preponderance of the evidence that claims 1–9 would have been obvious over Jebens, Apogee, and OPI White Paper; that claims 1, 2, 4, 5, and 9 would have been obvious over Dorfman, Apogee, OPI White Paper, and Andersson; and that claims 3 and 6–8 would have been obvious over Dorfman, Apogee, OPI White Paper, Andersson, and Adams II.

IV. ORDER

For the reasons given, it is

ORDERED that claims 1–9 are held unpatentable.

This is a Final 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.

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Patent 6,738,155 B1

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