

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC., SAMSUNG ELECTRONICS CO., LTD.,
Petitioner

v.

SUMMIT 6 LLC,
Patent Owner

CASE: IPR2015-00806¹
Patent No. 7,765,482

Title: Web-Based Media Submission Tool

PATENT OWNER'S NOTICE OF APPEAL

¹ Samsung Electronics Co., Ltd., who filed a Petition in IPR2016-00029, has been joined as a petitioner in the instant proceeding.

IPR2015-00806
U.S. Pat. No. 7,765,482
Patent Owner's Notice of Appeal

Office of the General Counsel
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

Patent Owner Summit 6 hereby gives notice pursuant to 35 U.S.C. §§ 141-142 and 319 and 37 C.F.R. § 90.2(a) that it appeals to the United States Court of Appeals for the Federal Circuit from the Board's Final Written Decision in IPR2015-00806, entered on September 6, 2016 (Paper No. 63), and from all orders, decisions, rulings, and opinions underlying the Final Written Decision. A copy of the Final Written Decision is attached to this Notice.

In accordance with 37 C.F.R. 90.2(a)(3)(ii), Patent Owner further notes that the issues on appeal will likely include, but are not limited to:

- 1) The Board's determination of unpatentability of claims 12, 13, 16, 18, 19, 21-25, 35-38, 40-42, 44-46, and 49 of U.S. Patent 7,765,482 (the "482 patent"), under 35 U.S.C. § 103, and any finding or determination (factual or legal) supporting that determination; and
- 2) Whether the Board erred in any finding or determination supporting or relating to the above-referenced issues and any other issues decided adversely to Patent Owner in any orders, decisions, rulings, or opinions of the Board.

IPR2015-00806
U.S. Pat. No. 7,765,482
Patent Owner's Notice of Appeal

Copies of this Notice of Appeal are being filed simultaneously with the Patent Trial and Appeal Board. In addition, three copies of this Notice of Appeal, along with the required docketing fees, are being filed with the Clerk of the United States Court of Appeals for the Federal Circuit.

Dated: November 7, 2016.

Respectfully submitted,

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Certificate of Filing in Compliance with 37 C.F.R. § 90.2(a)(1)

I hereby certify that, in addition to being filed electronically through the Board's E2E System, the original version of this PATENT OWNER'S NOTICE OF APPEAL was filed by hand on November 7, 2016, with the Director of the United States Patent and Trademark Office, at the following address:

Director of the United States Patent and Trademark Office
c/o Office of the General Counsel
United States Patent and Trademark Office
Madison Building East, Room 10B20
600 Dulany Street
Alexandria, VA 22314

Certificate of Filing in Compliance with 37 C.F.R. § 90.2(a)(2)

I hereby certify that on November 7, 2016, the foregoing, PATENT OWNER'S NOTICE OF APPEAL, was filed with the Clerk's Office of the United States Court of Appeals for the Federal Circuit, using the Court's CM/ECF system.

Certificate of Service in Compliance with 37 CFR § 42.6(e)(4)

The undersigned certifies that a complete copy of this PATENT OWNER'S NOTICE OF APPEAL was served by email and overnight mail on November 7, 2016 to the Petitioner's lead and back-up counsel, as listed below:

IPR2015-00806
U.S. Pat. No. 7,765,482
Patent Owner's Notice of Appeal

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC. and SAMSUNG ELECTRONICS CO., LTD.,
Petitioner,

v.

SUMMIT 6 LLC,
Patent Owner.

Case IPR2015-00806¹
Patent 7,765,482 B2

Before HOWARD B. BLANKENSHIP, GEORGIANNA W. BRADEN, and
KERRY BEGLEY, *Administrative Patent Judges*.

BRADEN, *Administrative Patent Judge*.

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

¹ Samsung Electronics Co., Ltd., who filed a Petition in IPR2016-00029, has been joined as a petitioner in the instant proceeding.

I. INTRODUCTION

We have jurisdiction to hear this *inter partes* review under 35 U.S.C. § 6(c), and this Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 of U.S. Patent No. 7,765,482 B2 (Ex. 1001, “the ’482 patent”) are unpatentable.

A. Procedural History

Google Inc., HTC Corporation, and HTC America, Inc.² (collectively “Petitioner”) filed a Petition (Paper 1, “Pet.”) to institute an *inter partes* review of claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 of the ’482 patent. Summit 6 LLC (“Patent Owner”) filed a Preliminary Response (Paper 12, “PO Resp.”). Pursuant to 35 U.S.C. § 314(a), we instituted an *inter partes* review of claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 as (1) unpatentable under 35 U.S.C. § 103 in view of Creamer³ and Aihara⁴ and (2) unpatentable under 35 U.S.C. § 103 in view of Mayle⁵ and Narayan⁶. *See* Paper 19 (“Dec. to Inst.”), 33.

² Subsequent to filing the Petition, HTC Corporation and HTC America, Inc. settled with Patent Owner and sought to terminate their participation in this proceeding. *See* Paper 9. The request was granted, and HTC Corporation and HTC America, Inc. are no longer a party. *See* Paper 11.

³ U.S. Patent No. 6,930,709 B1 (issued Aug. 16, 2005, filed Dec. 3, 1998) (“Creamer,” Ex. 1004).

⁴ U.S. Patent No. 6,223,190 B1 (issued April 24, 2001, filed Apr. 13, 1998) (“Aihara,” Ex. 1005).

⁵ U.S. Patent No. 6,018,774 (issued Jan. 25, 2000, filed July 3, 1997) (“Mayle,” Ex. 1006).

⁶ U.S. Patent No. 6,035,323 (issued Mar. 7, 2000, filed Oct. 24, 1997) (“Narayan,” Ex. 1007).

After institution of trial, Patent Owner filed a Patent Owner Response (Paper 28, “PO Resp.”), to which Petitioner filed a Corrected Reply (Paper 46, “Reply”). In addition, Patent Owner filed Observations on the Cross-Examination of Petitioner’s declarant (Paper 52), to which Petitioner filed a response (Paper 58). Petitioner filed a Motion to Exclude Evidence (Paper 51), to which Patent Owner filed an Opposition (Paper 57), and Petitioner filed a Reply in support of its motion (Paper 61).

An oral argument was held on May 18, 2016. A transcript of the oral argument is included in the record. Paper 62 (“Tr.”).

B. Related Proceedings

Petitioner informs us that the ’482 patent and related U.S. Patent No. 8,612,515 B2 (“’515 patent”) are the subject of district court case *Summit 6 LLC v. HTC Corp.*, Case No. 7:14-cv-00014-O (N.D. Tex.). Pet. 3. In addition, Petitioner informs us that the ’482 patent was the subject of a district court case, resulting in a verdict of infringement and validity, that was appealed to the U.S. Court of Appeals for the Federal Circuit, *Summit 6 LLC v. Samsung Electronics Co.*, No. 2013-1648 (Fed. Cir.). *See id.* The Federal Circuit affirmed the final judgment entered on the jury verdict on September 21, 2015. *See Summit 6, LLC v. Samsung Elec. Co. Ltd.*, Nos. 2013-1648, -1651 (Fed. Cir. Sept. 21, 2015). Petitioner also informs us that the ’482 patent is the subject of *ex parte* reexamination no. 90/012,987, and four other petitions for *inter partes* review (IPR2015-00685, IPR2015-00686, IPR2015-00687, and IPR2015-00688). Pet. 3–4.

C. The ’482 Patent

According to the ’482 patent, at the time of the disclosed invention, sharing digital images over the Internet was complex and required “a level

of sophistication . . . beyond that of the ordinary user.” Ex. 1001, 1:20–34. The patent purports to solve this problem with a “web-based media submission tool,” which “allows submission of media objects in a convenient, intuitive manner” that does not require the user to make any modifications to media objects before sending or uploading them. *Id.* at 1:45–48, 2:60–67.

The tool disclosed in the ’482 patent allows a user to select media objects stored at a first location (e.g., a client). *Id.* at [57], 2:3–6, 2:44–47, 4:46–47. The media objects may be “pictures (images), movies, videos, graphics, sound clips.” *Id.* at 2:47–48. The user selects the media objects through either a “drag and drop” or a file browsing functionality. *Id.* at 3:20–48. The tool then may allow the user to confirm the selected media objects with a visual representation, such as a thumbnail image. *Id.* at [57], 2:9–11, 3:65–4:3.

Next, the tool pre-processes the selected media objects, “automatically prepar[ing]” the objects “to meet the requirements of [a] second location” (e.g., a server or web site). *Id.* at [57], 2:14–17, 2:44–3:12, 5:1–4, 5:26–33. The media objects may be pre-processed in “any number of ways,” such as changing the file format or quality setting, cropping, adding text or annotations, and resizing, which includes “compression.” *Id.* at [57], 4:52–4:67. After this pre-processing is complete, the tool transmits or uploads the media objects to the second location. *Id.* at [57], 3:17–19.

D. Illustrative Claims

As noted above, an *inter partes* review was instituted as to claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 of the ’482 patent, of

which claims 12, 13, 24, 25, and 35–38 are independent claims. Claim 12 is illustrative of the challenged claims and is reproduced below.

12. A computer implemented method of pre-processing media objects in a local device for subsequent transmission to a remote device, comprising:
 - a. receiving pre-processing parameters from a remote device, said pre-processing parameters including a specification of an amount of media data;
 - b. receiving an identification of a group of one or more media objects for transmission, a collective media data of said group of one or more media objects being limited by said received pre-processing parameters;
 - c. pre-processing said identified group of one or more media objects using said received pre-processing parameters, wherein said pre-processing comprises encoding or otherwise converting said media object; and
 - d. transmitting said pre-processed group of one or more media objects to the remote device.

Ex. 1001, 10:40–55.

II. DISCUSSION

A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *see Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (“We conclude that the regulation represents a reasonable exercise of the rulemaking authority that Congress delegated to the Patent Office.”). Under that standard, and absent any special definitions, we give claim terms their ordinary and customary meaning, as would be understood by one of ordinary skill in the art at the time of the invention. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

Petitioner proposes construction for the claim terms “an amount of media data/an amount of digital content,” “publication/publishing,” “distributing/distribution,” and “said identification” which are recited in certain dependent claims. Pet. 17–20. Patent Owner disputes Petitioner’s proposed constructions for the above terms. PO Resp. 7–9. Patent Owner also proposes a construction for the term “pre-processing” recited in all the challenged independent claims. *Id.* at 9.

In the Decision to Institute, we determined that the only term that required construction was “said identification” as recited in dependent claim 18. *See* Dec. to Inst. 5–8. During the course of the trial, neither party challenged our construction of this claim term. PO Resp. 8; *see generally* Reply. We see no reason to alter the construction of this claim term as set forth in the Decision to Institute, and we incorporate our previous analysis for purposes of this Decision. Therefore, for the reasons set forth in the Decision to Institute, we interpret that “said identification” as recited in dependent claim 18 refers to the “identification of digital content” recited in claim 13 of the ’482 patent. *See* Dec. to Inst. 8.

After analyzing the claims and supporting specification of the ’482 patent, we determine that we need not provide express constructions for any other claim terms.

B. Principles of Law

A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406

(2007). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) objective evidence of nonobviousness, i.e., secondary considerations. *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)) (discussing the burden of proof in *inter partes* review). Furthermore, Petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, No. 2015-1300, slip op. at 25 (Fed. Cir. July 25, 2016).

Thus, to prevail in an *inter partes* review, Petitioner must explain how the proposed combinations of prior art would have rendered the challenged claims unpatentable. At this final stage, we determine whether the evidence of record shows secondary considerations of non-obviousness, shows by a preponderance of the evidence that the challenged claims would have been obvious over the proposed combinations of prior art.

We analyze the instituted grounds of unpatentability in accordance with the above-stated principles.

C. Level of Ordinary Skill in the Art

According to Petitioner’s declarant, Paul Clark, D.Sc. (“Dr. Clark”), a person of ordinary skill in the art relevant to the ’482 patent would have been “someone with either an undergraduate, graduate, or doctoral degree in computer science (or similar field, e.g., electrical engineering, etc.), or three to five years’ industry experience in the general field of software engineering and web implementation.” Ex. 1003 ¶ 8.

Patent Owner disputes Dr. Clark’s opinion regarding the level of skill in the art at the time of the ’482 patent, arguing that “requiring 3 to 5 years of industry experience in ‘web implementation’ by July 1999 is unreasonable” and “[i]t is unreasonable to suggest that a [person of ordinary skill in the art] would have an advanced degree in computer science.” PO Resp. 6–7. Patent Owner’s declarant, Martin Kaliski, Ph.D. (“Dr. Kaliski”), testifies that a person of ordinary skill in the art relevant to the ’482 patent would have been a person with “at least a Bachelor of Science degree in computer science or electrical engineering or with 2–3 years of experience in software engineering.” Ex. 2058 ¶ 15.

Based on our review of the ’482 patent, the types of problems and solutions described in the ’482 patent and cited prior art, the testimony of Petitioner’s declarant, and the testimony of Patent Owner’s declarant, we find that a person of skill in the art relevant to the ’482 patent would have had (i) at least a Bachelor of Science degree in Computer Science or Electrical Engineering or a closely related field, or (ii) at least three years of experience in software engineering. We note that the applied prior art

reflects the appropriate level of skill at the time of the claimed invention.

See Okajima v. Bourdeau, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

D. Asserted Obviousness of Claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 in View of Creamer and Aihara

Petitioner contends claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 of the '482 patent are unpatentable under 35 U.S.C. § 103 in view of Creamer and Aihara. Pet. 23–41. Patent Owner disputes Petitioner's contentions. PO Resp. 27–36. We have reviewed the Petition, Patent Owner's Response, and Petitioner's Reply, as well as the relevant evidence discussed in those papers. For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that the challenged claims of the '482 patent would have been obvious in view of Creamer and Aihara. Additionally, as discussed below, we determine that Patent Owner's evidence of secondary considerations of non-obviousness do not overcome Petitioner's showing that the claims would have been obvious to one of ordinary skill in the art at the time of the invention.

1. Overview of Creamer

Creamer discloses a camera that can transmit real-time and stored digital images over a wireless network to a server without requiring the use of a personal computer. Ex. 1004, Title, 2:48–65; 10:24–26. One embodiment in Creamer discloses an integrated camera connected to the internet and is illustrated in Figure 4A, reproduced below.

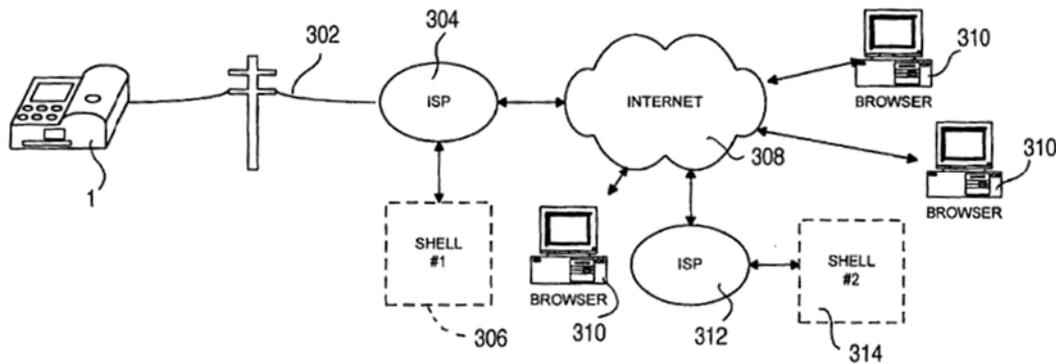


Figure 4A shows camera 1 connected to ISP 304. *Id.* at 11:56. Once a user ID and password are supplied by camera 1, camera 1 is given access to shell account 306, where a user may store compressed image files. *Id.* at 11:56–67. Camera 1 may upload and store image files into local shell account 306 according to controlling file attributes and destination information to the local user directory via a provided file transfer application. *Id.* at 12:9–25. Creamer discloses that once camera 1 is connected locally to the internet at a first location, it may store images at a second location anywhere in the world. *Id.* at 12:30–32. According to Creamer, camera 1 can store numerous variables and parameters that control the operation of the camera, and which may be adjusted by the user via a menu structure or via direct commands. *Id.* at 12:48–60. A “user may place a setup or configuration file in [a] destination directory . . . and the camera may download a new or modified full or partial set of operational parameters.” *Id.* at 24:10–14.

Another embodiment in Creamer discloses a capture routine for capturing, compressing, and storing one or more images. *Id.* at 18:18–20. The capture routine disclosed by Creamer is illustrated in Figure 8, reproduced below.

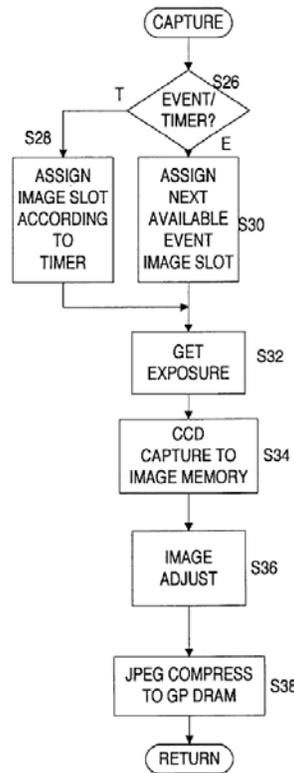


Figure 8 shows a capture routine where: (i) the camera checks if the capture is based on an event (e.g., a trigger) or a timer at step S26, (ii) an empty image slot is identified in step S30, (iii) an image capture is initiated at step S32, (iv) the image is stored into image memory (at this point without compression) at step S34, (v) the image is adjusted at step S36 according to stored parameters and settings, and (vi) the image is compressed at step S38. *Id.* at 18:20–19:13, Fig. 8. Image slots may be designated for batch operations where all images in the identified slots are transmitted as a group (*id.* at 19:23–37) or an image slot may be designated for immediate upload so that the single image is uploaded to a designated shell account (*id.* at 19:38–46, Fig. 9).

2. Overview of Aihara

Aihara discloses a method and system for capturing images using a digital camera with an internet connection and generating a formatted

electronic document that includes the images. Ex. 1005, 2:59–61. The camera preferably includes a LCD screen that provides for various modes, including a “play mode.” *Id.* at 6:39–59, Fig. 5A. In play mode, the user can review previously captured images on the LCD screen. *Id.* at 1:34–36, 6:65–7:10. Aihara further discloses using a script to provide configuration and setup information to the camera. *Id.* at 3:4–15. The script also can provide instructions to a user to capture specific images (*id.* at 8:10–18) or can prompt a user to select pictures from a set stored in the memory of the camera or elsewhere (*id.* at 8:25–28). The camera can be configured to process images and convert them into a single HTML file that may be uploaded to the internet, “wherein the HTML file is formatted in accordance with the script’s predefined model.” *Id.* at 3:16–25.

3. Analysis

a. Independent Claim 12

Claim 12 generally requires (i) receiving pre-processing parameters from a remote device, (ii) receiving an identification of a group of one or more media objects for transmission, (iii) pre-processing the identified group of one or more media objects, and (v) transmitting the pre-processed group of media objects. Ex. 1001, 10:40–55.

(1) “receiving pre-processing parameters from a remote device, said pre-processing parameters including a specification of an amount of media data”

Petitioner contends Creamer and Aihara teach “receiving pre-processing parameters from a remote device, said pre-processing parameters including a specification of an amount of media data,” as recited by challenged claim 12. Pet. 24–25 (citing Exhibit 1003 ¶¶ 34, 35, 37, 39). According to Petitioner, Creamer discloses camera downloading parameters,

such as compression level, that a user places in a setup or configuration file in the user's destination directory. *Id.* at 24 (citing Ex. 1004, 24:10–15, Fig. 5). Petitioner explains that the setup/configuration file may specify an amount of media data through “settings for (e.g., JPEG) compression level, resolution, whether an image is stored as a greyscale or a color image, as well as any cropping of the image specified, e.g., coordinates of opposite corners of the region to be cropped.” *Id.* at 24–25 (citing Ex. 1004, 13:36–44). Petitioner then cites to Aihara for the disclosure of a “set of predefined instructions and formatting commands.” *Id.* at 25 (citing Ex. 1005, 3:10–12).

Petitioner relies on the testimony of Dr. Clark to support its position. *Id.* at 24 (citing Exhibit 1003 ¶¶ 34, 35, 37, 39). Dr. Clark testifies that the combination of Creamer and Aihara renders a specification of an amount of digital content because Creamer discloses settings that specify how the camera will compress images, the desired resolution of images, whether an image will be cropped, and whether an image is stored in greyscale or in color. Exhibit 1003 ¶ 39 (citing Ex. 1004, 13:36–44). Dr. Clark further testified that “[o]ne of skill in the art would understand those settings to determine the size or quantity of digital content, as defined by the physical dimensions, pixel count, or kilobytes of the digital content.” *Id.*

Patent Owner contests Petitioner's position, contending Creamer and Aihara fail to teach the limitation “receiving pre-processing parameters from a remote device, pre-processing parameters including a specification of an amount of media data.” PO Resp. 29–31. According to Patent Owner, Creamer never specifies an amount of digital content; instead, it discusses the use of an optional parameter that changes the compression level of a

captured image based on the rate of data transmission. PO Resp. 30 (citing Ex. 1004, 19:9–22). Patent Owner further argues that Petitioner’s citations to parameters relating to JPEG are irrelevant because rather than specifying an amount of data, modifying the compression level merely changes the amount of data. *Id.* (citing Ex. 2058 ¶ 113). Patent Owner cites to testimony from Petitioner’s Declarant, Dr. Clark, who testified that JPEG compression does not specify an amount of data. *Id.* (citing Ex. 2057, 66:20–67:4).

We do not agree with Patent Owner. To the contrary, we agree with Petitioner’s position and we find that Creamer teaches or suggests “receiving pre-processing parameters from a remote device.” In Creamer, a user “may place a setup or configuration file,” with parameters specifying the desired resolution and compression level of images, in a destination directory on the Internet. Ex. 1004, [57], 3:50–56, 13:36–48, 24:1–15, Fig. 5. Creamer’s camera may “download” these operational parameters from the “defined directory.” *Id.* at 24:1–15.

As to whether these “pre-processing parameters includ[e] a specification of an amount of media data,” Petitioner has shown sufficiently that setting a compression level—which is used to adjust images—specifies the amount of media data. We are satisfied that specifying a compression level constitutes a specification of an amount of media data, because compressing an image to meet a certain compression standard alters the amount of stored data. *See* Ex. 1003 ¶ 38 (opining that compression “reduces the overall size of a file of digital content, to limit the digital content”); Ex. 3001 (MICROSOFT COMPUTER DICTIONARY (5th ed. 2002)),

142 (defining “data compression” as “[a] means of reducing the amount of space or bandwidth needed to store or transmit a block of data”).

(2) *“receiving an identification of a group of one or more media objects for transmission, a collective media data of said group of one or more media objects being limited by said received preprocessing parameters”*

Petitioner contends Creamer and Aihara teach “receiving an identification of a group of one or more media objects for transmission, a collective media data of said group of one or more media objects being limited by said received preprocessing parameters” as recited by challenged claim 12. Pet. 25–26. Petitioner explains that Creamer discloses a means to identify media objects for transmission through an “image pickup . . . to store an image,” whereupon the image is converted into digital format and stored in “the image memory (at this point, without compression).” *Id.* at 25 (citing Ex. 1004, 18:46–56). According to Petitioner, when “settings stored in the IMAGE FILES: UPLOAD variable group indicate that the image . . . is to be uploaded immediately (e.g., following capture),” the camera’s compression engine will limit the designated media data (i.e. the captured images), “according to settings stored in the IMAGE FILES: IMAGE ADJUST, . . . [and] compress the image in the image memory.” *Id.* (citing Ex. 1004, 19:9–15). Petitioner argues that the captured images (e.g. media objects) are limited by the received pre-processing parameters in that the parameters define a level of compression that will limit (e.g. reduce) the file sizes of those images when the preprocessing occurs. *Id.* at 25–26 (citing Ex.1003 ¶ 38). Petitioner then cites to Aihara for the disclosure of “select[ing] pictures from a set stored in the memory of the camera.” *Id.* at 26 (citing Ex. 1005, 8:26–28).

Contrary to Petitioner's arguments, Patent Owner contends that Creamer and Aihara fail to teach "receiving an identification of a group of one or more media objects for transmission." PO Resp. 27–29. Patent Owner argues that Creamer does not teach this limitation because its system automatically transfers every picture taken either immediately or in a batch operation at a future time. *Id.* at 28. Moreover, according to Patent Owner, Creamer merely collects and then processes the collected raw image data in image memory to create and store an image in general purpose memory but does not identify an image for transmission. *Id.* (citing Ex. 2058 ¶ 110). Patent Owner argues that before the image data is stored as an addressable file in general purpose memory, the data is merely raw data indicative of photons captured by the CCD sensor, i.e., no digital image files exists until after the image pickup unit captures light photons and the raw data is processed and stored as an image file in S38 of the capture routine. *Id.* Therefore, Patent Owner concludes that the functions performed by the image pickup unit and the resultant storage of the digital image as a file cannot meet this claim limitation. *Id.* at 28–29. Patent Owner also argues that Aihara does not teach this limitation because selecting images for an HTML pages does not evidence "receiving an identification" of "media objects for transmission." *Id.* at 29.

We do not agree with Patent Owner. To the contrary, we agree with Petitioner's position that Creamer's teaching of identifying images in image files for transmission meets the disputed claim limitation. Additionally, we find that a user being prompted to select pictures from a set stored in the memory of the camera, as disclosed in Aihara, constitutes receiving an identification of a group of one or more media objects for transmission. *See*

Ex. 1005, 8:26–28. Aihara explains that this selection of pictures is made for purposes of incorporating the selected pictures into a HTML file, or web site. *Id.* Such “user selection” confirms the identification of an image for transmission.

(3) “*pre-processing said identified group of one or more media objects using said received pre-processing parameters*”

Petitioner contends the combination of Creamer and Aihara teaches or at least suggests “pre-processing said identified group of one or more media objects using said received pre-processing parameters,” as recited in challenged claim 12. Pet. 26–27. Petitioner explains that Creamer discloses a camera comprising a “compression engine” to pre-process media objects (i.e. images) through “image compression under a JPEG standard, but [the camera] may be alternatively arranged to output other image formats (e.g., TIFF, GIF) and/or other compression schemes (e.g., Huffman, wavelet, fractal). *Id.* at 26. Petitioner specifically argues that in Creamer, captured images are stored in “image slots,” and when “settings stored in the IMAGE FILES: UPLOAD variable group indicate that the image in the image slot is to be uploaded immediately (e.g., following capture),” the camera’s compression engine will, “according to settings stored in the IMAGE FILES: IMAGE ADJUST, . . . [and] compress the image in the image memory to the appropriate slot.” *Id.* (citing Ex. 1004, 19:9–32; Fig. 5). Petitioner further argues that a person of skill in the art would have understood “encoding or otherwise converting a media object” to encompass the rendering of analog information into digital form and compressing digital information of Creamer, since compression changes the way in which a file is coded in the memory of a device. *Id.* at 27 (Ex. 1003 ¶ 41).

Petitioner also relies on Aihara for this claim element, because Aihara discloses “[a] script, comprised of computer readable instructions, is provided to the digital camera” and “images [that] are located and scaled . . . in accordance with the script’s predefined model.” *Id.* (citing Ex. 1005, 3:4–6, 13:19–23).

Patent Owner disputes Petitioner’s position and contends Creamer and Aihara fail to teach “pre-processing said identified group of one or more media objects using said received pre-processing parameters,” as recited in challenged claim 12. PO Resp. 31–32. According to Patent Owner, the parameters in Creamer identified by Petitioner do not control processing of image files before transmission as required by the claim language, because Creamer’s parameters define how raw image data is manipulated before initially being saved in general purpose memory. *Id.* at 31 (citing Pet. 26–27; Ex. 2058 ¶ 116). Patent Owner argues that Figure 8 of Creamer defines the *image capture* routine as including the image adjustment (S36) and JPEG compression steps (S38), but Creamer does not teach further modifying these image files after they are created. *Id.* (citing Ex. 1004, Fig. 8; Ex. 2058 ¶ 116). Patent Owner concludes that because the compression and adjustment steps are performed on raw image data, not on identified image files, Creamer does not teach or disclose the disputed claim limitation. *Id.* at 32.

Patent Owner supports its position with the testimony of Dr. Kaliski. Dr. Kaliski testifies that Creamer’s parameters define how raw image data is manipulated before initially being saved in general purpose memory—the parameters tell the camera how to package the raw pixel data collected by a camera’s lens and sensor into a digital image file saved in general purpose

memory, but *not* how to process an existing image file prior to or in preparation for transfer. Ex. 2058 ¶ 116. Dr. Kaliski further testifies that Figure 8 of Creamer defines the image adjustment step (S36) and JPEG compression step (S38) as part of the *image capture* routine and the parameters are applicable only to a particular image slot, which does not identify any unique image. *Id.*

Patent Owner further argues Aihara does not disclose this element because reference to how an image is placed in a web page does not describe how the image is pre-processed in accordance with received pre-processing parameters as recited by the claim language. PO Resp. 32.

We do not agree with Patent Owner's position. Specifically, we do not agree with Patent Owner that Creamer's processing is performed only during an image capture process and merely controls how a digital image is saved (*see* PO Resp. 29–31), because Creamer teaches adjusting a saved image file, including compressing the image (*see* Ex. 1004, 18:61–19:13, Fig. 8). Creamer teaches that in step S34, the YCrCb (i.e., a luminance and two color difference signals) are converted to a digital image signal, which is passed by compression engine 224 and memory controller 226 to the image memory (at this point, without compression). *Id.* at 18:46–56. At that point, according to Creamer, microcontroller 200 controls compression engine 226 to adjust the image per parameters and setting stored in the camera. *Id.* at 18:61–19:13. Creamer goes on to teach that in step S38, compression engine 226 compresses the image in image memory 22 to the appropriate slot in general purpose (GP) memory. *Id.* at 19:9–13. Additionally, Creamer discloses changing the size of a stored image via cropping. *Id.* at 8:43–48 (“a scaling module for interpolating or resampling the stored image

to increase or decrease the size of the stored image, including adjustment of an aspect ratio of the image and cropping of any portion of the image”) (emphasis added).

Considering that the ’482 patent discloses that pre-processing can include resizing an image (i.e., increase or decrease its size as defined by either physical dimensions, pixel count, or kilobytes), and compression is a type of sizing (*see* Ex. 1001, 4:58–66), we determine that Creamer’s teachings of resizing and image compression fall squarely within the bounds of the disputed claim limitation.

Accordingly, we are satisfied the combination of Creamer and Aihara teaches or at least suggests “pre-processing said identified group of one or more media objects using said received pre-processing parameters,” as recited in challenged claim 12.

(4) *Conclusion*

We have reviewed the Petition and the supporting evidence, and determine Petitioner has identified how Creamer and Aihara teach or suggest each limitation of challenged claim 12, and as discussed below, has provided sufficient reasoning for the proposed combination of Creamer and Aihara to reach the method recited in the claim.

b. Independent Claims 13, 35, and 38

In addition to reciting limitations for “receiving an identification of digital content,” and “pre-processing said identified [digital content/media object] at said [client/local] device in accordance with one or more pre-processing parameters,” claims 13 and 38 recite “pre-processing parameters controlling said client device in a placement of said digital content into a specified form in preparation for publication.” Ex. 1001,

10:66–11:1, 14:5–8. Claim 35 similarly recites “pre-processing parameters enabling said client device to place said digital content into a specified form in preparation for publication.” *Id.* at 12:66–13:2.

Petitioner contends that Creamer and Aihara, as summarized above, teach or suggest the requirements of independent claim 13. Pet. 28–31. In arguing that Creamer and Aihara teach or suggest these limitations, Petitioner points to Creamer’s disclosures that its compression engine performs image compression under the JPEG standard or other compression schemes and image formats, such as Tag Image File Format (“TIFF”) or Graphics Interchange Format (“GIF”). *Id.* at 24–29. Petitioner further argues that a person of skill in the art would have understood that the claim element regarding the “specified form in preparation for publication” would have been a form which depends on the nature of the publication. *Id.* at 29 (citing Exhibit 1003 ¶ 41). According to Petitioner, the ’482 patent relates to the field of “handling, manipulation and processing of digital content and more particularly to the transportation and Internet publishing of digital content.” *Id.* (citing Ex. 1001, 1:11–14). Consequently, Petitioner explains, with supporting testimony from Dr. Clark, that one of skill in the art would have known that the “specified form” dictated by the parameters would have been a well-known form of digital content suitable for Internet publishing, such as HTML, JPEG, and other similar encoding. *Id.* (citing Ex. 1003 ¶ 41).

Patent Owner disputes Petitioner’s position, arguing that neither Creamer nor Aihara teaches pre-processing parameters that place digital content into a specified form in “preparation for publication.” PO Resp. 33. According to Patent Owner, simply because an image is JPEG compressed

does not mean that the JPEG compression was performed in preparation for publication. *Id.* (citing Ex. 2058 ¶ 121). Patent Owner argues that JPEG compression predates the asserted prior art, and was developed to compress a stream of bytes of image data, and that the visual detail of a decoded JPEG compressed image depends on a quality factor so that many low quality compressed images would not reproduce without substantial loss of color and detail in the image, and such images may not be appropriate for publication. *Id.* at 33–34. Patent Owner further argues that a person of ordinary skill in the art would have recognized that JPEG compression was performed as a convenient way to reduce the size of an image to facilitate storage and transfer of that image, and not performed in preparation for publication. *Id.* at 34.

Patent Owner contends that Creamer does not teach or suggest that these functions are performed “in preparation for publication [or distribution]” as recited by the claims. Instead, according to Patent Owner, Creamer teaches that compression is performed in preparation for transmission, not publication of the image data. *Id.* (citing Ex. 1004, 19:9–20). Patent Owner, thus, argues that Petitioner’s obviousness theory is incorrect. *Id.* Additionally, Patent Owner argues that to the extent that the script file identified by Petitioner in Aihara determines how (e.g., where) an image file appears on a web page, it does not modify the image. *Id.* at 35 (citing Ex. 2058 ¶ 123). Patent Owner notes that in Aihara, “the HTML commands which determine the appearance, hereafter referred to as the format, of the resulting web page, are generated in script in accordance with the predefined model.” *Id.* (citing Ex. 1005, 7:48–51). Patent Owner argues that the script disclosed in Aihara does not pre-process any image, let alone

in a “specified form.” *Id.* (citing Ex. 2058 ¶ 123). Therefore, Patent Owner concludes that Petitioner has not shown that Aihara discloses pre-processing parameters controlling the placement of the digital content in a specified form in preparation for publication. *Id.*

We do not agree with Patent Owner’s position. First, we find that the compression engine of Creamer’s camera compresses image files “into a specified form in preparation for publication,” because Creamer expressly discloses that its “compression engine” “performs image compression under a JPEG standard, but may be alternatively arranged to output other image formats (e.g., TIFF, GIF) and/or other compression schemes (e.g., Huffman, wavelet, fractal),” pursuant to stored parameters or settings. Ex. 1004, 8:21–25, 19:9–12. Additionally, Creamer explains that the compressed images, “(e.g., JPEG) image files,” are “uploaded . . . to the local user directory” on the Internet, such that “[a]ny Internet 308 user may then access and view the uploaded (e.g., JPEG) images from the user directory.” *Id.* at 12:2–17. Dr. Clark testifies that JPEG, GIF, and HTML are “[f]ormats of digital content suitable for Internet publishing [that] were well known in the art.” Ex. 1003 ¶ 41.

Moreover, we do not agree with Patent Owner’s argument that Creamer’s camera performs compression only for purposes of transmission, not publication, because we find that Creamer’s disclosure is not as narrow as Patent Owner contends. For example, Patent Owner’s argument appears to be based on image compression in Creamer where a particular condition is met, specifically “*if* the MISC OPTION: ADAPTIVE parameter is set to change . . . the image compression depending on the data rate.” PO Resp. 34 (quoting Ex. 1004, 19:9–20) (emphasis added). This specific condition,

however, does not limit Creamer's other disclosures regarding compression by the compression engine, discussed above. Accordingly, we find that Creamer teaches or suggests "pre-processing parameters controlling said client device in a placement of said digital content into a specified form in preparation for publication" as recited in claims 13 and 38, and as recited in the comparable limitation in claim 35.

In conclusion, we have reviewed the Petition and the supporting evidence, and determine Petitioner has identified how Creamer and Aihara teach or suggest each limitation of challenged claims 13, 35, and 38, and as discussed below, has provided sufficient reasoning for the proposed combination of Creamer and Aihara to reach the methods recited in these claims. We determine the record supports Petitioner's contentions as summarized above and adopt the supported contentions as our own.

c. Independent Claims 24, 25, and 35–38

Claims 24, 25, and 35–38 generally require (i) receiving an identification of a media object for transmission to a remote device, (ii) pre-processing the identified media object at a local device, (iii) retrieving information that enables identification of a user, and (iv) transmitting a message from the local device to the remote device with the pre-processed media object. Ex. 1001, 11:40–12:29, 12:54–14:14.

Petitioner contends that Creamer and Aihara, as summarized above, teach or suggest each limitation of the devices recited in independent claims 24, 25, and 35–38. Pet. 28–36. Patent Owner does not provide separate contentions regarding claims 24, 25, and 35–38. PO Resp. 32–36.

We have reviewed the Petition and the supporting evidence, and determine Petitioner has identified how Creamer and Aihara teach or suggest

each limitation of claims 24, 25, and 35–38, and as discussed below, has provided sufficient reasoning for the proposed combination of Creamer and Aihara to reach the devices recited in independent claims 24, 25, and 35–38. We determine the record supports Petitioner’s contentions as summarized above and adopt the supported contentions as our own.

d. Dependent Claims 16, 18, 19, 21–23, 40–42, 44–46, and 49

Claims 16, 18, 19, and 21–23 depend from claim 13, while claims 40–42, 44–46, and 49 depend, directly or indirectly, from claim 38. Ex. 1001, 11:18–42, 14:19–41. Petitioner contends that Creamer and Aihara, as summarized above, teach or suggest the limitations of each of these dependent claims. Pet. 36–40. Patent Owner does not provide separate contentions regarding the additional limitations recited in these dependent claims. PO Resp. 36.

We have reviewed the Petition and the supporting evidence, and determine Petitioner has identified how Creamer and Aihara teach or suggest each limitation of challenged dependent claims 6, 18, 19, 21–23, 40–42, 44–46, and 49, and as discussed below, has provided sufficient reasoning for the proposed combination of Creamer and Aihara to reach the methods recited in these claims. We determine the record supports Petitioner’s contentions as summarized above and adopt the supported contentions as our own.

e. Obvious to Combine the Teachings of Creamer and Aihara

Petitioner contends it would have been obvious to a person of skill in the art to combine the teachings of Creamer and Aihara with a reasonable success in doing so, because such a combination merely would have used a

known technique to improve similar devices and methods in the same way. Pet. 11–14 (citing Ex. 1003 ¶¶ 30–31). According to Petitioner, Creamer and Aihara would have been combined because both references describe: (1) internet-connected digital cameras that process captured images prior to transmitting those images over a network connection, (2) the benefits associated with processing digital images on a network connected camera, including faster transmission speeds for compressed digital images and the ease of uploading images onto a server so they may be viewed by other users, and (3) digital cameras having LCD display screens for previewing and reviewing images captured by the camera. Pet. 12–13 (citing Ex. 1003 ¶ 30; Ex. 1004, 29:43–53). Petitioner specifically argues that a person of ordinary skill in the art would have had reason to combine the use of thumbnail images in Aihara for previewing and reviewing images captured by the camera in Creamer so as to improve the ability of a relatively small LCD display to show multiple images. *Id.* at 12 (citing Ex. 1005, 1:28–36), 22; Tr. 15:13–19.

Petitioner supports its position with the Declaration of Dr. Clark, who testifies that a person of ordinary skill in the art would have understood that Creamer and Aihara relate to processing images stored on cameras before subsequently transmitting those images to the Internet through a network connection, and that combining the technique of displaying preview images, as disclosed by Aihara, on a camera display of limited size, as disclosed by Creamer, would improve the ability of the screen to display multiple images. Ex. 1003 ¶¶ 30–31. Dr. Clark also testified that a skilled artisan would have applied the improvement of Aihara to the camera system in Creamer to achieve the predictable result of displaying an array of thumbnail preview

images representing the digital images stored on the camera. *Id.* Moreover, according to Dr. Clark, a person of ordinary skill would know how to write code to enable Creamer's camera screen to display images, as disclosed in Aihara. *Id.* at 30.

Patent Owner contends that Petitioner's obviousness challenges fail because a person of ordinary skill in the art would not have combined Creamer and Aihara. PO Resp. 14–21. According to Patent Owner, the LCD screen on the camera in Creamer is used solely to preview an image that will be captured, not “viewing of captured images.” *Id.* at 15. Patent Owner argues that displaying multiple images on a display screen having a “relatively small LCD display” would not improve the ability of the screen to display images, nor improve the ability of a user to review such images faster and more accurately. *Id.* at 16. Rather, Patent Owner posits that combining Creamer and Aihara as proposed by Petitioner would result in a *very* inefficient and cumbersome image review system. *Id.* at 17 (citing Ex. 2058 ¶ 44).

Patent Owner relies on the Declaration of Dr. Kaliski to support its position. Dr. Kaliski testifies that reviewing arrays of captured images would reduce the resolution of each image by an amount related to the number of images concurrently displayed, further degrading the quality of displayed images leading to a slower and less accurate review. Ex. 2058 ¶ 43. Dr. Kaliski further testifies that the resulting image degradation undermines, rather than supports, a motivation to combine these references. *Id.*

Patent Owner argues that a person of ordinary skill in the art would not have had a reasonable expectation of success in combining Aihara and

Creamer to “improve the ability of the screen to display multiple images,” because the accuracy of the image display is subjective based on numerous unknown factors, and therefore, a person of ordinary skill in the art would not have combined Aihara and Creamer. PO Resp. 18 (citing Ex. 2057, 36:8–21; Ex. 2058 ¶ 45). Patent Owner further argues that a person of ordinary skill in the art would not have been motivated to “writ[e] code executed by the microcontroller disclosed in Creamer to enable it to display arrays of preview images on the display screen like the processor and LCD screen disclosed in Aihara,” because the LCD display in Creamer can preview only a single image—the current scene. *Id.* at 18 (citing Pet. 13–14; Ex. 1004, 29:50–53; Ex. 2058 ¶ 46). According to Patent Owner, a person of ordinary skill in the art would not have been motivated to modify Creamer to display multiple stored images in memory on the LCD screen and Creamer does not suggest to a person of ordinary skill in the art that “captured images could be accessed and displayed on the LCD screen without adversely affecting the pictur[e] captur[ing] and uploading functionality of Creamer.” *Id.* at 19–20 (citing Ex. 2058 ¶¶ 47–49).

Patent Owner further argues that a person of ordinary skill in the art would not have been motivated to modify Creamer in view of Aihara because the preview function of Creamer does not permit a user to review previously stored images on the viewfinder and the display is constantly updated with a representation of the current screen with no ability to capture and display stored images. *Id.* at 19 (citing Ex. 1004, 29:50–51).

Patent Owner concludes that the mere ability to simultaneously display multiple images on a screen and review images uploaded to a web server would not have motivated a person of skill in the art to combine

Creamer with Aihara. *Id.* at 21. Rather, according to Patent Owner, a person of skill in the art would have recognized that image review and analysis is performed faster and more efficiently using the images uploaded from the camera, instead of reviewing captured images directly on the LCD screen of the camera, and therefore there would have been no motivation to combine the cited references. *Id.*

We have considered all of Patent Owner’s arguments that the Petition fails to provide a proper reason to combine the teaching of Creamer and Aihara for the challenged claims. We do not agree with Patent Owner on this point. For example, Patent Owner’s argument that “displaying multiple images on a display screen having a ‘relatively small LCD display’ would not improve the ability of the screen to display images, nor improve the ability of a user to review such images faster and more accurately” (PO Resp. 16–18) is not persuasive, because Aihara specifically teaches that thumbnail images can be previewed on the LCD display of a camera in arrays of four, nine, or sixteen images so that a user can quickly see multiple miniature images at one time rather than being forced to view each image individually. *See* Ex. 1005, 1:33–36. Such a teaching by Aihara supports Petitioner’s position. Furthermore, Creamer appears to suggest modifying its structure with the type of display image preview taught in Aihara, because Creamer specifically discloses an architecture where LCD 218 is connected to GP DRAM 228 via Integrated Microcontroller 200. Ex. 1004, Fig. 17; *see* Ex. 2057, 30:17–31:2.

Additionally, Patent Owner’s argument that “a [person of ordinary skill in the art] would not [have been] motivated to ‘writ[e] code executed by the microcontroller disclosed in Creamer to enable it to display arrays of

preview images on the display screen like the processor and LCD screen disclosed in Aihara” because “[t]he LCD display in Creamer can preview only a single image—the current scene” is misplaced. *See* PO Resp. 16. Petitioner’s position is premised on modifying Creamer in view of the teachings of Aihara in order use thumbnail images to improve the ability of a relatively small LCD display to display multiple images. *See* Exhibit 1003 ¶¶ 30–31. The test for obviousness is what the combined teachings of the references would have suggested to a person of ordinary skill in the art, not whether one reference may be bodily incorporated into the structure of another reference. *In re Mouttet*, 686 F.3d 1322, 1332 (Fed. Cir. 2012); *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

We are satisfied that a person of skill in the art would have combined Aihara’s teachings regarding review of captured images with the camera in Creamer. We specifically credit the testimony of Dr. Clark, which explains that the combination of Creamer and Aihara would constitute the use of a known technique to improve a similar device thereby yielding predictable results. Ex. 1003 ¶ 31 (citing Ex. 1005, 12:64–13:30). We give Dr. Clark’s testimony substantial weight in that regard because it is supported by Creamer and Aihara’s disclosures and what both Creamer and Aihara would have conveyed to a person of ordinary skill in the art at the time of the invention.

f. Secondary Indicia of Non-Obviousness

Factual inquiries for an obviousness determination include secondary considerations based on evaluation and crediting of objective evidence of nonobviousness. *See Graham*, 383 U.S. at 17. Notwithstanding what the teachings of the prior art would have suggested to one of ordinary skill in the

art at the time of the invention, the totality of the evidence submitted, including objective evidence of nonobviousness, may lead to a conclusion that the challenged claims would not have been obvious to one of ordinary skill in the art. *In re Piasecki*, 745 F.2d 1468, 1471–72 (Fed. Cir. 1984). Secondary considerations may include any of the following: long-felt but unsolved needs, failure of others, unexpected results, commercial success, copying, licensing, and praise. *See Graham*, 383 U.S. at 17; *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007).

To be relevant, evidence of nonobviousness must be commensurate in scope with the claimed invention. *In re Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011) (citing *In re Tiffin*, 448 F.2d 791, 792 (CCPA 1971)); *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998). In that regard, in order to be accorded substantial weight, there must be a nexus between the merits of the claimed invention and the evidence of secondary considerations. *In re GPAC Inc.*, 57 F.3d 1573, 1580 (Fed. Cir. 1995). “Nexus” is a legally and factually sufficient connection between the objective evidence and the claimed invention, such that the objective evidence should be considered in determining nonobviousness. *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988). “The burden of proof as to . . . nexus resides with the patent[owner].” *Id.*; *see Paulsen*, 30 F.3d at 1482. “In meeting its burden of proof, the patent[owner] in the first instance bears the burden of coming forward with evidence sufficient to constitute a prima facie case of the requisite nexus.” *Demaco*, 851 F.2d at 1392; *see Crocs, Inc. v. Int’l Trade Comm’n*, 598 F.3d 1294, 1310–11 (Fed. Cir. 2010). “When the patent[owner] has presented a prima facie case of nexus, the burden of coming forward with evidence in rebuttal shifts to the [patent]

challenger,” i.e., the petitioner. *Demaco*, 851 F.2d at 1393; *Crocs*, 598 F.3d at 1311.

Here, Patent Owner argues that commercial success, licensing, long-felt but unresolved need, and industry praise indicate that the claims would not have been obvious to a person of ordinary skill in the art. PO Resp. 44–60.

(1) Alleged Nexus Between Rimfire with Prepare & Post Tools and the Claimed Invention

Patent Owner contends its commercial product “Rimfire,” incorporating the Prepare & Post tools, embodies the claimed invention.⁷ PO Resp. 45 (citing Ex. 2058 ¶¶ 188–194, 214–244, 226–231), 48–49 (citing Ex. 2050 ¶ 40; Exs. 2010; 2014; Ex. 2058 ¶¶ 185–187). According to Patent Owner, Rimfire, including the Prepare & Post Tools, contains each component of the challenged claims and therefore is at least “reasonably commensurate with the scope” of the challenged claims. *Id.* at 46 (citing *Rambus Inc. v. Rea*, 731 F.3d 1248, 1257 (Fed. Cir. 2013)). Patent Owner concludes that because “Rimfire” embodies the claimed features, the secondary considerations of non-obviousness are presumed to be attributable to the patented invention. *Id.* (citing *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1328 (Fed. Cir. 2008); *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000)).

We do not agree with Patent Owner’s arguments. “Evidence of commercial success, or other secondary considerations, is only significant if there is a nexus between the claimed invention and the commercial success.”

⁷ Patent Owner identifies “the claimed invention” in its discussion of secondary considerations as independent claims 12, 13, 24, 25, 35–38. PO Resp. 45–46 (citing Ex. 2058 ¶¶ 188–194, 214–244, 226–231).

Ormco Corp. v. Align Tech., Inc., 463 F.3d 1299, 1311–12 (Fed. Cir. 2006). As Petitioner argues, Patent Owner’s evidence to support the allegation that its allegedly commercially successful product has the requisite nexus with the claimed invention is inadequate. *See* Reply 13–16.

Patent Owner relies on the testimony of Dr. Kaliski to support its argument of nexus. PO Resp. 45–46 (citing Ex. 2058). Dr. Kaliski relies on three exhibits to form his opinions regarding Rimfire: Exhibits 2010, 2014, and 2030. *See* Ex. 2058 ¶ 14. Dr. Kaliski did not review the source code for Rimfire, nor was he aware of what language was used to code the Prepare & Post Tools. *See* Ex. 1017, 44:22–24, 90:4–7. During his deposition, Dr. Kaliski testified that he could not identify (1) which version of Rimfire the exhibits he reviewed describe, (2) how many versions of Rimfire were ultimately released, (3) what versions of Rimfire were physically implemented for any particular customers, (4) how the Prepare & Post Tools were integrated into Rimfire, or (5) what algorithms were built into those tools. *Id.* at 81:4–88:9. Mr. Kaliski’s testimony is insufficient evidence to establish a nexus between the Rimfire product and Patent Owner’s proffered objective indicia of non-obviousness.

Additionally, the three exhibits relied upon by Mr. Kaliski (Exhibits 2010, 2014, and 2030) are insufficient evidence to establish a nexus between the Rimfire product and Patent Owner’s proffered objective indicia of non-obviousness. Patent Owner and Dr. Kaliski heavily rely on Exhibit 2010, which purports to be the “Rimfire Functional Specification, Version 1.0 Core Feature Set.” *See* PO Resp. 45; Ex. 2010, Title; Ex. 2058, ¶¶ 189–192, 194, 198, 199, 201, 209, 213, 248, 250, 252, 254. Patent Owner’s declarant Sarah Pate testifies, however, that the exhibit is

incomplete and contains placeholders for content yet to be added. Ex. 1019, 73:1–77:9;⁸ *see also* Ex. 2010, 17 (“In the near future, we will be adding support for formats we cannot display on the browser side but which are supported on the server side. When this happens, we will have to add a more dynamic way of specifying and checking allowable types on the browser side.”), 32 (“Current [sic] no versions of IE handle minimal browser file sends from the Macintosh. We are currently working with 3 file upload utility developers to resolve this issue.”), 34 (“For details on Pre-production and development servers, see the document [TBD].”), 71 (“*Modifying the Schema TBD [ORACLE DESIGNER DISCUSSION]* At the time of this writing, we are using Oracle Designer as our primary database schema modeling tool. A master Rimfire model has been set up and a target database configuration created.”), 76 (Web Servers, TBD). Moreover, Patent Owner provides insufficient evidence that the version of Rimfire described in Exhibit 2010 (Version 1.0, Revision 4) was implemented in a commercial product. Although the incomplete nature of Exhibit 2010 is not

⁸ To the extent that we rely on information in papers and exhibits for which confidentiality is claimed, we determine that the general nature of the discussions of such information herein does not require that this Decision be treated as confidential. The parties are reminded that confidential information that is subject to a protective order ordinarily becomes public 45 days after final judgment in a trial. Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,761 (Aug. 14, 2012). Furthermore, there is an expectation that information will be made public where the existence of the information is identified in a final written decision. *Id.* We provided the parties advance notice “that information subject to a protective order will become public if identified in a final written decision in this proceeding.” Paper 44, 4; Paper 59, 5.

wholly determinative, it affords the document less weight. Moreover, Patent Owner has not shown that this incomplete document describes an actual commercial product.

Similarly, Exhibit 2014 lacks any indication as to the version of Rimfire it describes, and Patent Owner provides insufficient evidence that this exhibit discloses each limitation in the challenged claims. *See, e.g.*, Ex. 2058 ¶¶ 189, 194, 201, 213 (relying on Exhibit 2010 for several limitations for the challenged claims of the '482 patent with no citations to Ex. 2014 for those limitations).

Exhibit 2030 is a claim construction order issued by the District Court in the Northern District of Texas, Wichita Falls Division, and is relied on by Dr. Kaliski only for his opinions on claim construction, which are not relevant to our patentability analysis or to the question of nexus. *See* Ex. 2058 ¶ 313. Patent Owner provides insufficient evidence that this exhibit discloses each limitations in the challenged claims.

Based on the foregoing, we do not agree with Patent Owner's arguments that "Rimfire" necessarily embodies the claimed features and is coextensive with them. Accordingly, we find Patent Owner has not established a nexus, and the evidence of record before us does not support a nexus, between the Rimfire product, with the Prepare & Post Tools, and the challenged claims of the '482 patent.

*(2) Commercial Success: Rimfire with the Prepare
& Post Tools*

As evidence of commercial success, Patent Owner first relies on Picturebay.com, also known as "pBay," which was originally owned by PictureWorks. PO Resp. 52. Patent Owner explains that PictureWorks's pBay was an image-hosting website that relied on Rimfire and allowed users

to upload images and insert them into online auctions such as eBay.com. *Id.* at 52 (citing Ex. 2011, Ex. 2012; Ex. 2050 ¶¶ 36–37; Ex. 2051 ¶¶ 22–24). According to Patent Owner, pBay achieved immediate commercial success as shown by the fact that pBay reached one million image views by July 6, 1999, exceeded two million views by August of that year, became the largest image hosting and distributing site for eBay users, and after one year, Rimfire processed “over 250 million image views” for businesses and grew rapidly as its image views increased by over 3.5 million each week. *Id.* at 52–53 (Ex. 2012, 3; Ex. 2013; Ex. 2014, 3; Ex. 2050 ¶ 37; Ex. 2051 ¶ 24).

Patent Owner further argues that the dramatic growth iPIX, a company that acquired PictureWorks, achieved in market share among online newspapers demonstrates the commercial success of the Rimfire product. *Id.* at 50, 54 (citing Ex. 2020, 12, 24–26; Ex. 2051 ¶¶ 41–42). One example cited by Patent Owner is the fact that the L.A. Times used Rimfire and achieved 225% growth in photo revenue year-over-year and its profits increased 36%. *Id.* (citing Ex. 2019, 7, 10).

As Petitioner argues, Patent Owner’s arguments for commercial success are insufficient, because the evidence proffered by Patent Owner is limited to its own sales data, and does not include evidence of market share or growth in market share. *See* Reply 18. “An important component of the commercial success inquiry in the present case is determining whether [Patent Applicant] had a significant market share relative to *all* competing [product and companies] based on the merits of the claimed invention, which [Patent Applicant] did not show.” *See In re Applied Materials, Inc.*, 692 F.3d 1289, 1300 (Fed. Cir. 2012); *see also In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996) (“The more probative evidence of commercial success

relates to whether the sales represent a substantial quantity in th[e] market.”). Without evidence of market share, we have no way to determine the impact that the Rimfire product had on a specific market, and hence, its commercial success.

Accordingly, we give little weight to Patent Owner’s allegations of commercial success of the Rimfire product with the Prepare & Post Tools.

(3) Commercial Success: Licensing

Patent Owner further argues that the commercial success of the patented technology behind the Rimfire product used by pBay led to the sale of PictureWorks to iPIX. *Id.* at 55 (citing Ex. 2050 ¶ 41; Ex. 2051 ¶ 26), 56–57 (citing Ex. 2050 ¶ 41). According to Patent Owner, eBay’s subsequent licensing of the Rimfire technology from iPIX “represents a clear example of Rimfire’s success.” *Id.* at 53 (citing Ex. 2021 ¶ 5.9; Ex. 2020, 12; Ex. 2051 ¶ 39). Patent Owner notes that “as demonstrated in the Future Image Report’s market research study, the ‘[r]eason for [eBay’s] image server purchase’ was ‘the drag and drop picture submission feature of Rimfire.’” *Id.* at 57 (citing Ex. 2015, 10).

We are not persuaded. In cases in which the proffered evidence of commercial success is licenses, the nexus between the commercial success and the patent cannot be inferred; rather, “affirmative evidence of nexus” is required. *Iron Grip Barbell Co. v. USA Sports, Inc.*, 392 F.3d 1317, 1324 (Fed. Cir. 2004). In other words, a patent owner must demonstrate “a nexus between the *merits of the invention* and the licenses of record”; otherwise the licenses are to be accorded little weight. *In re GPAC Inc.*, 57 F.3d 1573, 1580 (Fed. Cir. 1995) (citation omitted). Moreover, our reviewing court has held that “without a showing of a nexus, ‘the mere existence of . . . licenses

is insufficient to overcome the conclusion of obviousness.” *In re Antor Media Corp.*, 689 F.3d 1282, 1293 (Fed. Cir. 2012) (quoting *Iron Grip Barbell Co.*, 392 F.3d at 1324).

The cited testimony of Mr. Lewis only details the existence of a contract to eBay and does not establish that a license was negotiated because of the merits of the claimed invention, the merits of other patented inventions, the merits of unpatented technology, or for other economic reasons, such as hosting services or prior business relationships. *See* Ex. 2050 ¶¶ 40–43; *see also Antor Media*, 689 F.3d at 1294 (affirming Board’s finding that evidence of existence of licenses was insufficient to overcome prima facie case of obviousness). Additionally, Mr. Lewis’s testimony appears to indicate that the license was negotiated successfully because eBay desired the “the drag and drop picture submission feature of Rimfire,” which is not a claimed limitation in the ’482 patent. *See* Ex. 2050 ¶¶ 37, 40–42. In fact, Patent Owner specifically states that “eBay ultimately chose Rimfire because of its ‘killer . . . drag and drop picture submission feature’ and executed an agreement in April, 2000 for Rimfire services.” PO Resp. 50 (citing Ex 2015, 10; Ex. 2033; Ex. 2050 ¶ 42; Ex. 2051 ¶¶ 29, 30).

Patent Owner’s position is further undermined by Ms. Pate’s testimony, which reveals that the license to eBay may not have been based on invention in the ’482 patent at all. Ms. Pate specifically testifies that:

Although iPIX desired a royalty-based license, its bargaining position was severely weakened without an issued patent, so we accepted eBay’s offer. iPIX also agreed to continue providing its hosting service while converting the system to eBay’s control. iPIX received an additional \$6.3 million for that work. To ensure that iPIX continued to provide adequate services, eBay paid the \$8 million in three separate payments.

Ex. 2051 ¶ 39. We, therefore, find that the evidence provided by Patent Owner does not establish a sufficient link between the merits of the invention claimed in the '482 patent and the taking of the noted license.

Furthermore, evidence of \$8 million in licensing revenue alone is not enough to show commercial success, because there must be evidence relating that figure to the overall market. *In re Baxter Travenol Labs.*, 952 F.2d 388, 392 (Fed. Cir. 1991) (“Information solely on numbers of units sold is insufficient to establish commercial success.”); *see also In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996) (declining to find evidence of commercial success because “[a]though [the inventor’s] affidavit certainly indicates that many units have been sold, it provides no indication of whether this represents a substantial quantity in this market”). We, therefore, cannot determine whether the license reflects the commercial value of the invention claimed in the '482 patent, or whether it reflects other market conditions. Absent a persuasive showing of nexus, Patent Owner’s evidence of licensing fails to establish commercial success. Accordingly, we give little weight to Patent Owner’s argument that its licensing to eBay is evidence that the claims are not obvious.

(4) Long-Felt but Unsolved Need

Patent Owner argues that the inventors of the '482 patent recognized that there was a long-felt need “for a web-based media submission tool that pre-processes media prior to submission for both online real estate listing websites and major online auction websites.” PO Resp. 47 (citing Ex. 2050 ¶¶ 11–13; Ex. 2014, 6). According to Patent Owner, “[t]here was no tool to help Realtors process images prior to uploading them to the Internet to meet

various websites' requirements for file format, resolution, compression, file size, etc.” *Id.* (citing Ex. 2050 ¶ 11).

We are not persuaded. Evidence of long-felt need is “particularly probative . . . when it “demonstrates both that a demand existed for the patented invention, and that others tried but failed to satisfy that demand.” *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1082 (Fed. Cir. 2012). Additionally, to establish a long-felt but unresolved need, the evidence must show that there was a persistent problem recognized by those of ordinary skill in the art and the problem could not be solved by another. *See In re Gershon*, 372 F.2d 535, 533–39 (CCPA 1967); *Tandus Flooring, Inc. v. Interface, Inc.*, IPR2013-00527, slip. op. at 47, (PTAB Feb. 12, 2015) (Paper 48).

First, Patent Owner's argument fails to identify where there was a demand for the patented invention or where others tried but failed to satisfy that demand. Second, Patent Owner's arguments that realtors “lacked the knowledge and patience to complete th[e claimed] process and often hired digital imaging professionals to scan and manipulate photos to meet the websites' requirements” undermines Patent Owner's position for two reasons: (i) realtors were not considered a person of ordinary skill in the art at the time of the invention; and (ii) Patent Owner's evidence demonstrates that those of ordinary skill in the art could accomplish the claimed process. *See Ex. 2050 ¶¶ 11–13, 16–17.*

Accordingly, we give little weight to Patent Owner's argument that there was a long-felt but unmet need that overcomes Petitioner's showing of obviousness in this case.

(5) Industry Praise

Patent Owner argues that the '482 patent has generated industry praise, because several articles have been written about the Rimfire product and because the company that owns Rimfire, iPIX, received the “Gold Award in Marketing Innovation” from the Yellow Pages Association. PO Resp. 58–59 (citing Ex. 2007; Ex. 2011; Ex. 2013; Ex. 2015; Ex. 2016, 10–11, 255; Ex. 2023; Ex. 2024; Ex. 2025; Ex. 2026, 1, 6; Ex. 2027 ¶ 54; Ex. 2052; Ex. 2053). According to Patent Owner, this recognition by others is strong objective indicia of the significance of the patent that weighs against obviousness. *Id.* at 59–60.

Industry praise for an invention may provide evidence of nonobviousness where the industry praise is linked to the claimed invention. *See Geo. M. Martin Co. v. Alliance Mach. Sys. Int'l LLC*, 618 F.3d 1294, 1305 (Fed. Cir. 2010); *Asyst Tech'n., Inc. v. Emtrak, Inc.*, 544 F.3d 1310, 1316 (Fed. Cir. 2008). As Petitioner argues, Patent Owner does not provide sufficient, if any, analysis explaining how the cited articles and award praise the invention recited in the challenged claims. *See* Reply 19. Nor does Patent Owner show relevant praise by the industry that includes those of ordinary skill in the art. *See Bayer Healthcare Pharms., Inc. v. Watson Pharms., Inc.*, 713 F.3d 1369, 1377 (Fed. Cir. 2013) (finding that brief discussions of Patent Owner's product in journal articles “fall well short of demonstrating true industry praise” and reasoning that “industry praise of what was clearly rendered obvious by published references is not a persuasive secondary consideration”). Accordingly, in this case, Patent Owner has not established a nexus, and the record evidence is insufficient to

support a nexus, between the merits of the claimed invention of the challenged claims and the alleged industry praise.

g. Summary of Analysis Regarding Creamer and Aihara

We have considered the entirety of the evidence, including the evidence of obviousness and the evidence submitted by Patent Owner to show secondary considerations of non-obviousness. For the foregoing reasons, and weighing the evidence as a whole, we find Petitioner has proven by a preponderance of the evidence that Creamer and Aihara teach or suggest all elements of challenged claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 of the '482 patent. We determine the record supports Petitioner's contentions as summarized above and adopt the supported contentions as our own. We further find that understanding Creamer and Aihara's teachings as they apply to the challenged claims would have been within the level of ordinary skill in the art, as evidenced by the prior art of record. Additionally, we determine that Patent Owner's arguments and evidence of objective indicia of nonobviousness are insufficient to overcome the evidence of obviousness over Creamer and Aihara. We, therefore, conclude that claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 would have been obvious at the time of the invention, and thus, are unpatentable under 35 U.S.C. § 103.

E. Asserted Obviousness of Claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 in View of Mayle and Narayen

Petitioner contends claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 of the '482 patent are unpatentable under 35 U.S.C. § 103 in view of Mayle and Narayen. Pet. 40–59. Patent Owner disputes Petitioner's contention. PO Resp. 36–44. We have reviewed the Petition, Patent

Owner's Response, and Petitioner's Reply, as well as the relevant evidence discussed in those papers. For reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that the challenged claims of the '482 patent would have been obvious in view of Mayle and Narayan. Additionally, as discussed below, we determine that Patent Owner's evidence of secondary considerations of non-obviousness does not overcome Petitioner's showing that the claims would have been obvious to one of ordinary skill in the art at the time of the invention.

1. Overview of Mayle

Mayle describes a "system for the creation of an image display such as an electronic postcard." Ex. 1006, Abstract. An example of such a display is the electronic postcard illustrated in Figure 17, reproduced below.

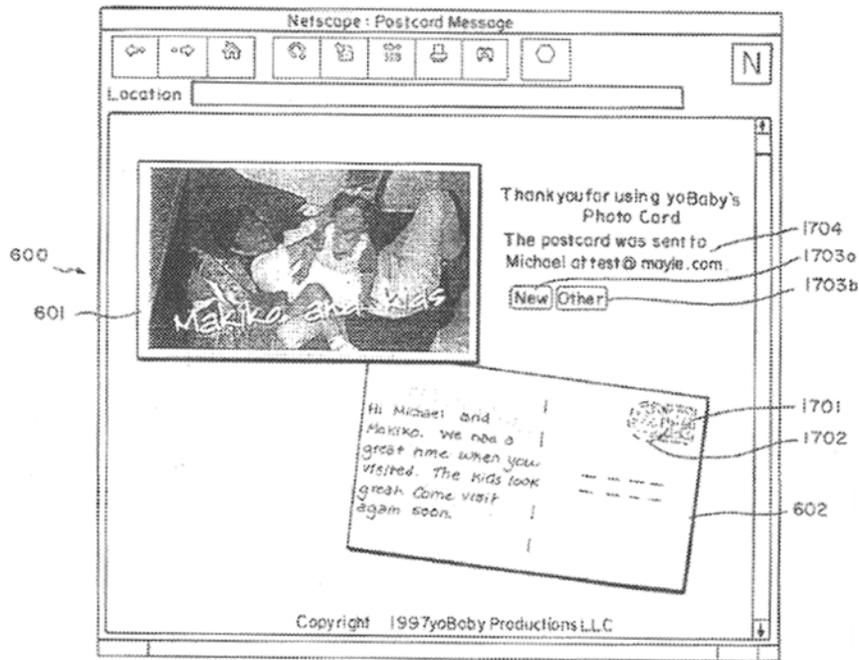
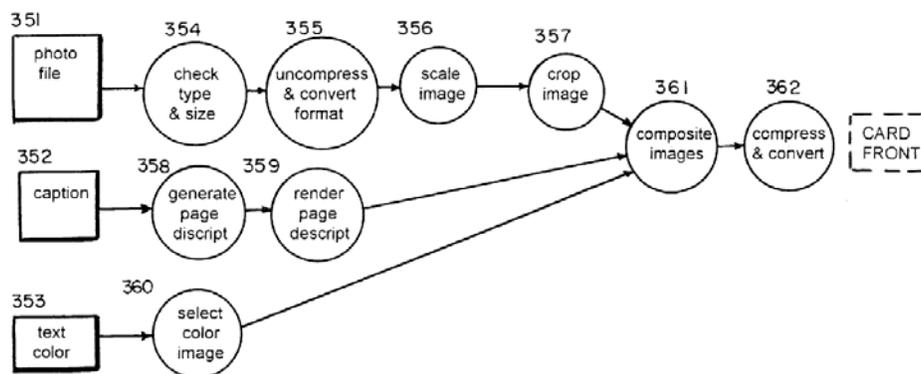


Figure 17 shows postcard 600 with front 601 that contains an image and back 602 that contains postmark 1702 and a message. Ex. 1006, 9:9–22.

The system in Mayle includes a server connected to a network, where the server receives image data from a second computer connected to the

network. *Id.* at 2:48–52. The server processes the electronic image data and creates a display containing at least a portion of the processed electronic image data. *Id.* at 2:52–54.

One embodiment in Mayle is illustrated in Figure 3A, reproduced below. According to Mayle, image files located in photo file 351 can be specified by a user as an image to be used on the electronic postcard. *Id.* at 10:36–39.



As shown in Figure 3a, form data is sent with the image file in file 351 from the user to a server (*id.* at 10:44–45), so that when an image file is received on the server, the “[e]lectronic postcard server software processes the photo using several steps as illustrated in Fig. 3a” (*id.* at 10:63–65). Such processing includes checking the image size, cropping, flipping, compressing, and scaling an image file. *Id.* at 10:66–11:48.

In another embodiment in Mayle, the electronic postcard functionality is implemented as a component of a web site. *Id.* at 4:37–38. A web site is essentially a server computer providing public access to one or more files containing hypertext documents. *Id.* at 4:39–40. A user uses a web browser running on a client computer to access the hypertext documents stored on one or more server computers located on the network. *Id.* at 4:41–43. The server, running hypertext transfer protocol (HTTP) web server software,

transfers the hypertext document to the user computer for display on the browser. *Id.* at 4:44–46.

In another embodiment, Mayle contemplates that its system could be used to create a family album. *Id.* at 13:28–46. Specifically, Mayle discloses that a user could upload electronic images to a server, and the server could impose a structure for displaying and segregating the images into a viewable album. *Id.* at 13:28–37. According to Mayle, the user could specify one or more recipients to receive notice of the album or to allow visitors to comment on the images. *Id.* at 13:37–46.

Mayle further contemplates that its system and disclosed embodiments could “be adapted to provide additional processing by the client computer of the electronic image data and/or the display.” *Id.* at 13:51–53. Mayle states that:

[s]oftware running on the client computer can also preview the result of the various other types of image data processing e.g. scaling, filtering, color correcting, compositing text, etc. The result produced as result of this processing on the client computer could be at the same resolution as created by the server computer or it could be a lower quality so as to minimize processing time for the preview, thus allowing the server to actually produce the final processed information. The client computer software can be implemented in the Java language so as to run within a Java enabled browser.

Id. at 13:59–14:9.

2. *Overview of Narayen*

Narayen discloses a method for generating a collection of digital media and transmitting the collection to a server system. Ex. 1007, Abstract. The method of Narayen allows “a user on a client computer system 121 to create a media container which contains digital media and publish this media

container with its digital media onto the Internet for other client computer systems to be able to view the media container with its digital media.” Ex. 1007, 7:29–34. Prior to uploading images to the Internet, the client device creates “a lower resolution version of a digital image, such as a ‘thumbnail’ version [that] is stored in the database along with a link to the original image stored on the file storage device.” *Id.* at 6:56–59. In addition, “the album authoring software scales each picture if necessary to cause it to fit into the corresponding slot on the album page.” *Id.* at 9:45–47.

Figure 4, reproduced below, illustrates one embodiment of a digital media collection method taught in Narayen.

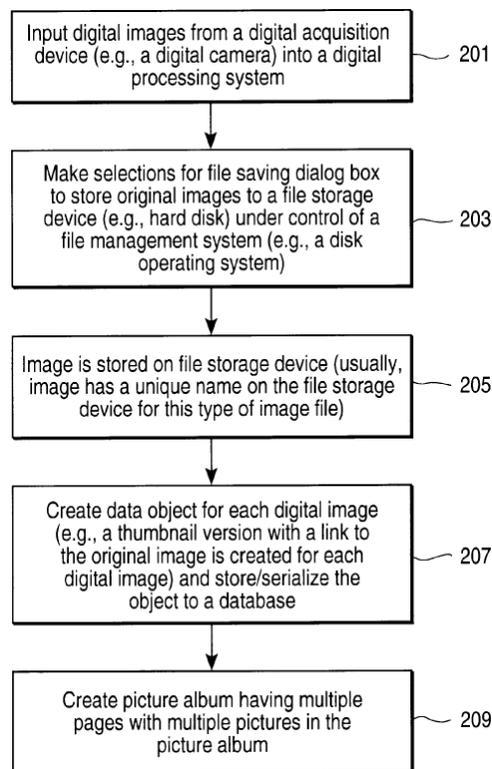
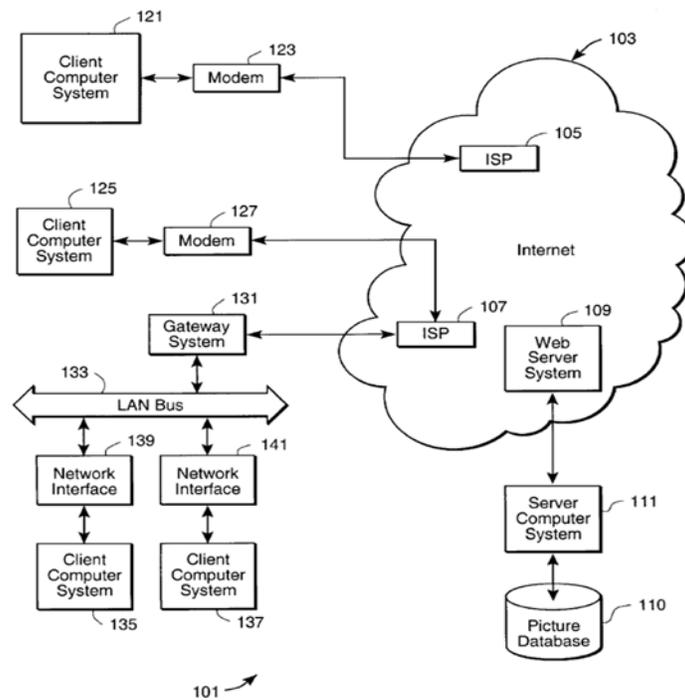


Figure 4 shows the steps for acquiring a digital image for use in a digital processing system. *Id.* at 6:28–31. In step 201, a user inputs digital images from a digital camera into a digital processing system, such as a computer.

Id. at 6:31–34. In step 203, the user makes selections in a file saving dialog box presented to the user on a display of the computer system and stores an original image to the file storage device, such as a hard disk. *Id.* at 6:40–43. In step 205, the image is stored and typically the image has a unique name on the file storage device or at least a unique full path name for this type of image file. *Id.* at 6:45–48. Then in step 207, a data object is created for each digital image stored in a database. *Id.* at 6:48–50. According to Narayan, a lower resolution version of a digital image, such as a “thumbnail” version, can be stored in the database along with a link to the original image stored on the file storage device. *Id.* at 6:56–60. Narayan discloses that the link, which is stored in association with the thumbnail version, refers back to the original image by identifying the picture title or caption as well as the full path name of the original image stored on the file storage device in step 203. *Id.* at 6:61–64.

Narayan further discloses that the album authoring software on the client system can scale each picture if necessary to cause it to fit into a corresponding slot on the album page. *Id.* at 9:45–47, Fig. 13. Another embodiment of Narayan, shown in Figure 2 reproduced below, details how album data created and formatted on a client system is sent to a server system.



As illustrated in Figure 2, above, a client system, such as system 121, communicates to server computer system 111 through the web server 109. *Id.* at 10:8–10. The client system from which publication is to occur sends the log-in message, such as user ID and user password, to the server system. *Id.* at 10:10–13. The server system responds to a log-in request and confirms acceptance, then the user at the client system selects an album name. *Id.* at 10:13–15. This selection may occur by typing in a name or by selecting a name from a list. *Id.* at 10:15–17. The client system then transmits the album name to the server system. *Id.* at 10:17–18. The client system, which is publishing the album, transmits the album format data to the server and also transmits a signature of each picture in the picture album to the server. *Id.* at 10:36–39. According to Narayan, additional processing can be performed by the server system after receiving the album format data and the images from the client system. *Id.* at 10:51–53, Fig. 8.

3. Analysis

a. Independent Claim 12

Claim 12 generally requires (i) receiving pre-processing parameters from a remote device, (ii) receiving an identification of a group of one or more media objects for transmission, (iii) pre-processing the identified group of one or more media objects, and (v) transmitting the pre-processed group of media objects. Ex. 1001, 10:40–55.

(1) “receiving pre-processing parameters from a remote device, said pre-processing parameters including a specification of an amount of media data”

Petitioner contends Mayle and Narayan, as summarized above, teach or suggest “receiving pre-processing parameters from a remote device, said pre-processing parameters including a specification of an amount of media data,” as recited by challenged claim 12. Pet. 41–47. According to Petitioner, Mayle discloses a system where a user accesses a digital image processing system via a web browser which, “[w]hen the user first comes to the site the initial web page, as illustrated in Fig. 6, is a blank electronic postcard.” *Id.* at 42 (citing Ex. 1006, 7:55–56). Petitioner explains that preprocessing parameters received at the local device require that “[t]he image data that is POSTed to the server must be in a size and format that the electronic postcard software can handle.” *Id.* Petitioner argues that the first step in the system would have been to check the byte count of the data sent to the server, and if the byte count exceeded some limit then the image would have been ignored and the user redirected to an error page. *Id.* (citing Ex. 1006, 10:66–11:4). Petitioner postulates that the parameters specifying the amount of media data would have been received and implemented by the local device, such that “[t]he resulting image [would have been] finally

compressed and converted into an image format viewable in a web browser (such as GIF or JPEG).” *Id.* (citing Ex. 1006, 12:30–33). According to Petitioner, it would have been obvious to one of ordinary skill in the art to send the parameters specifying maximum byte count, maximum scale, and compression format from the server hosting the web site comprising the system to the client device because the browser-based system of Mayle would need those parameters at the client device in order to preprocess the digital content. *Id.* at 42–43 (citing Ex. 1003 ¶ 55).

Petitioner relies on the Declaration of Dr. Clark to support its position. *See* Pet. 43. Dr. Clark testifies that because Mayle describes a client-server image processing system comprising a server that hosts the website (Ex. 1006, 4:5–20; Fig. 2), a person of ordinary skill in the art would have recognized that a client device accessing this website could receive parameters (*e.g.*, maximum byte count, maximum scale, and compression format) from the server. Ex. 1003 ¶ 55. Dr. Clark opines that, for example, these parameters determine the pre-processing that would have been performed on the client device (Ex. 1006, 3:2–4; 10:66–11:25, 12:30–33, 13:47–14:19) and that pre-processing could have occurred within the web browser on the client device (*id.* at 4:40–45; Fig. 2). Dr. Clark, thus, concludes that it would have been obvious to one of ordinary skill in the art that these parameters may be sent from the server to the client. Ex. 1003 ¶ 55. Dr. Clark then testifies that a person of ordinary skill in the art would have recognized that these parameters may be necessary to enable the user to access the website through a browser on the client. *Id.*

Petitioner then cites to Narayen for the disclosure of an “album authoring software scal[ing] each picture if necessary to cause it to fit into

the corresponding slot on the album page,” where “the album authoring software determines the set of album pages based upon the selected layout.” Pet. 43–44 (citing Ex. 1007, 9:32–47).

Patent Owner contests Petitioner’s position, contending that Mayle and Narayen fail to teach the limitation “receiving pre-processing parameters from a remote device, said pre-processing parameters including a specification of an amount of media data,” as recited in claim 12.

PO Resp. 35–36. According to Patent Owner, Petitioner misrepresents the teachings of Mayle, because the server in Mayle performs image processing and Mayle does not disclose receiving pre-processing parameters from a remote device. *Id.* at 37 (citing Pet. 41). Patent Owner then argues that the byte count in Mayle is not a pre-processing parameter and the byte count parameter is not sent to the client, rather it is used by the server “to check the byte count of the data sent to the server.” *Id.* (citing Ex. 2058 ¶¶ 118, 131; Ex. 1006, 11:1–2).

Patent Owner further argues that Mayle recognizes that the client could preview images before sending to the server for processing, and therefore, a person of ordinary skill in the art would have recognized that a user may want to preview a postcard in Mayle before allowing access to recipients to ensure that the server-generated postcard will be acceptable for viewing by the recipients. *Id.* at 38 (citing Ex. 2058 ¶ 132). Patent Owner concludes that Petitioner’s challenge is based on hindsight analysis, because absent such a preview function, the server may generate unnecessary and inappropriate post cards, so a person of ordinary skill in the art would have understood that Mayle teaches that all image processing is performed on the

server with no pre-processing parameters received by the client from a remote device in Mayle. *Id.* at 38–39.

Despite Patent Owner’s arguments, we agree with Petitioner that Mayle and Narayen teach or suggest the limitation “receiving pre-processing parameters from a remote device, said pre-processing parameters including a specification of an amount of media data.” *See* Pet. 38–39. Mayle specifically discloses that its server-sided system may “be adapted to provide additional processing by the client computer of the electronic image data and/or the display.” Ex. 1006, 13:51–53. Given Mayle’s teaching of a server-based display system that includes parameters specifying maximum byte count, maximum scale, and compression format from the server hosting the web site, we find that a person of ordinary skill in the art would have understood that implementing Mayle’s suggestion of a client-sided system, parameters from the server-based display system would have been required to be sent to the client device.

Patent Owner’s arguments are not persuasive, because “[a] person of ordinary skill is also a person of ordinary creativity, not an automaton.” *KSR Int’l v. Teleflex Inc.*, 550 U.S. 398, 421 (2007). Consequently, we ‘can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.’ *Id.* at 418. Furthermore, ‘we do not ignore the modifications that one skilled in the art would make to a device borrowed from the prior art.’ *In re Icon Health and Fitness, Inc.*, 496 F.3d 1374, 1382 (Fed. Cir. 2007) (citing *Optivus Tech., Inc. v. Ion Beam Applications, S.A.*, 469 F.3d 978, 989–90 (Fed. Cir 2006)). Patent Owner’s arguments that Petitioner’s challenge is based solely on hindsight analysis also is not persuasive, because:

[a]ny judgment on obviousness is . . . necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper.

In re McLaughlin, 443 F.2d 1392, 1395 (CCPA 1971); *see also Radix Corp. v. Samuels*, 13 USPQ2d 1689, 1693 (D.D.C. 1989) (“[A]ny obviousness inquiry necessarily involves some hindsight.”). Here, Petitioner's reason for modifying the server-based system of Mayle to a client-based device is based on an explicit suggestion in Mayle itself. This reason does not include knowledge gleaned only from the '482 patent. Accordingly, we do not agree with Patent Owner's assertions that one having ordinary skill in the art would not have been motivated to modify Mayle.

Therefore, on the record before us, we are satisfied that one of ordinary skill in the art would have understood that the disclosure in Mayle teaches, or at least suggests, the disputed claim limitation.

(2) “*pre-processing said identified one or more media objects using said received pre-processing parameters*”

Petitioner contends the combination of Mayle and Narayen teaches or at least suggests “pre-processing said identified one or more media objects using said received pre-processing parameters,” as recited in challenged claim 12. Pet. 45–46. Petitioner argues that Mayle discloses pre-processing parameters received at a local device because “[t]he image data that is POSTed to the server must be in a size and format that the electronic postcard software can handle.” *Id.* at 45. According to Petitioner, Mayle teaches that “[t]he first step is to check the byte count of the data sent to the server. If the byte count exceeds some limit then the image is ignored and

the user is redirected to an error page.” *Id.* (citing Ex. 1006, 10:66–11:4). Petitioner argues that the parameters specifying the amount of media data are received and implemented by the local device such that “[t]he resulting image is finally compressed and converted into an image format viewable in a web browser (such as GIF or JPEG).” *Id.* (citing Ex. 1006, 12:30–33). Petitioner explains that Mayle also discloses that “[pre-]processing by the client computer of the electronic image data” can include “a variety of processing (e.g. captioning, formatting, storing, transmitting, centering, cropping, flipping, anti-aliasing, scaling, compressing, filtering, color correcting, adding special border and/or corner motifs, blurring, adding visual effects etc.)” *Id.* (citing Ex. 1006, 13:48–54),

Petitioner reasons that although Mayle’s preferred embodiment contemplates the server performing the image pre-processing, “[t]he result produced as result of this processing on the client computer could be at the same resolution as created by the server computer.” *Id.* at 45–46 (quoting Ex. 1006, 14:2–5). Petitioner concludes that a person of ordinary skill in the art would have understood encoding or otherwise converting a media object to encompass rendering analog information into digital form and compressing digital information because compression alters the way digital content is encoded. *Id.* at 46 (citing Ex. 1003 ¶ 56).

Petitioner relies on testimony from Patent Owner’s Declarant, Dr. Kaliski, to support its position.

Q: So this section of Mayle discusses the client computer processing image data?

A: Electronic image data, yes.

Reply 5 (citing Ex. 1017, 40:5–8). Petitioner also relies on the testimony of its Declarant, Dr. Clark, to support its position. *Id.* at 6–7. Dr. Clark

testifies that it would have been obvious to a person of ordinary skill to send processing parameters from the server hosting the website to a client device executing a browser-based system to perform image processing locally.

Ex. 1003 ¶ 55. Dr. Clark further opines that it also would have been obvious, once client-side processing was completed, to transmit the processed image from the client to the server as Mayle teaches. *Id.* ¶ 59.

Patent Owner disputes Petitioner’s position and contends Mayle and Narayan fail to teach or suggest “pre-processing said identified one or more media objects using said received pre-processing parameters,” as recited in challenged claim 12. PO Resp. 39–40. Patent Owner first argues that Mayle is based on server-side processing and not client-side processing as portrayed by Petitioner. *Id.* at 39 (citing Ex. 2058 ¶ 134). According to Patent Owner, Mayle does not describe pre-processing, but rather, “only mentions augmenting the client to provide a preview of the image as it will appear after processing by the server.” *Id.* (citing Ex. 2058 ¶ 133).

Patent Owner further argues that Narayan does not disclose the disputed limitation because Narayan only discloses processing a picture album at a server. *Id.* (citing Ex. 1007, 10:51–11:6, 8:40–45). According to Patent Owner, Narayan’s discussion relating to the “album authoring software scal[ing] each picture if necessary to cause it to fit into the corresponding slot on the album page” is not an example of “preprocessing.” *Id.* at 38–39 (Ex. 1007, 9:45–47; Ex. 2058 ¶ 135). Patent Owner concludes that Narayan scales an image for *preview* on the client display and does not modify the underlying data for that identified image as required by pre-processing. *Id.* at 40.

Despite Patent Owner's arguments, we agree with Petitioner that Mayle teaches or at least suggests that the processing parameters could be used to enable a client device to pre-process one or more files in a manner specified by a distributing party. Mayle specifically discloses: (i) "the client may be augmented to perform a portion of the processing during interactions with the servers" (Ex. 1006, 3:2-4), (ii) "[t]he browser may be further augmented for supporting the Java language . . . to enable the browser to support processing local to the client" (*id.* at 6:62-65), (iii) "[t]he embodiments can further be adapted to provide additional processing by the client computer of the electronic image data and/or the display" (*id.* at 13:51-54), (iv) "[t]he result produced as [a] result of this processing on the client computer could be at the same resolution as created by the server computer" (*id.* at 14:2-7), and (v) "[t]he client computer software can be implemented in the Java language so as to run within a Java enabled browser" (*id.* at 14:7-9).

We credit the testimony of Petitioner's declarant, Dr. Clark, who testified that given the disclosure in Mayle of augmenting its browser to support programs written in the Java programming language, "one of skill in the art would be able to write a Java program accessible by Mayle's browser-based system that would implement Narayen's digital album authoring tools." Ex. 1003 ¶ 52 (citing Ex. 1006, 6:62-65). Thus, based on the explicit teaching in Mayle and testimony of Dr. Clark, we are satisfied that one of skill in the art would have been familiar with the Java programming language and would have been able to implement processes using that language.

Accordingly, on the record before us, we are satisfied the combination of Mayle and Narayen teaches or at least suggests “pre-processing said identified one more . . . files using pre-processing parameters . . . enabling said client device to pre-process one or more . . . files,” as recited in challenged claim 12.

(3) “*transmitting said pre-processed group of one or more media objects to the remote device*”

Petitioner contends the combination of Mayle and Narayen teaches or at least suggests “transmitting said pre-processed group of one or more media objects to the remote device,” as recited in challenged claim 12. Pet. 46–47. Petitioner argues that Mayle discloses transmission of pre-processed media objects “[w]hen the user clicks on the “Send” button [whereupon] the server creates a card key, saves the card into the Permanent Database and sends an email message to the recipient.” *Id.* at 46 (citing Ex. 1006, 12:37–41). According to Petitioner, the recipient consequently receives an “email message that is automatically sent to the recipient [which] states that there is a card available on the web site for the recipient and that it can be viewed by opening the specified URL” on the recipient’s remote device. *Id.* (citing Ex. 1006, 12:51–54). Petitioner points out that “[t]he recipient may view the card as soon as they receive the email message with the URL. The recipient will use a web browser to enter the URL, and view their personalized page” on a remote client computer. *Id.* (citing Ex. 1006, 12:57–60).

Petitioner also cites to Narayen’s disclosure that a user making “selections on a graphical user interface presented by the picture management software on the client computer system” that can “cause a media container with its associated digital media to be published to the

Internet for others to view with conventional web browsers.” *Id.* at 47 (citing Ex. 1007, 7:49–55). Petitioner argues that the user-selected “collection information [of digital media] is transmitted from the client digital processing system to a server digital processing system.” *Id.* (citing Ex. 1007, 2:38–40).

Patent Owner disputes Petitioner’s position and contends Mayle and Narayan fail to teach or suggest “transmitting said pre-processed group of one or more media objects to the remote device,” as recited in challenged claim 12. PO Resp. 40–41. Patent Owner argues that Petitioner misrepresents Mayle, because Mayle discloses that the Send command simply instructs the server to move the postcard data from the server’s temporary files to permanent storage in the server’s Card Database and Image Database, at which time the temporary data can be deleted. *Id.* at 40 (citing Ex. 1006, 5:32–40). Patent Owner further argues that neither the image that is previewed in Mayle (Ex. 1006, 13:59–15:7) on the client nor the image that is scaled in Narayan (Ex. 1007, 9:45–47) is transmitted to any device. *Id.* at 41 (citing Ex. 2058 ¶ 136). Patent Owner, thus, concludes that neither Mayle nor Narayan disclose the disputed claim element.

We do not agree with Patent Owner’s position. To the contrary, based on (1) Mayle’s disclosures regarding saving the postcard to the permanent database of the server and emailing the recipient to view the card on the Internet (Ex. 1006, 12:36–60), and (2) Narayan’s disclosures that the picture album generated at the client system “is transmitted from the client digital processing system to a server digital processing system,” and that the user can choose to “publish[]” the album on the Internet (Ex. 1007, 2:38–40, 7:49–55), we find that Mayle and Narayan teach or suggest “transmitting

said pre-processed group of one or more media objects to the remote device,” as recited in claim 12.

(4) Conclusion

We have reviewed the Petition and the supporting evidence, and determine Petitioner has identified how Mayle and Narayen teach or suggest each limitation of challenged claim 12, and as discussed below, has provided sufficient reasoning for the proposed combination of Mayle and Narayen to reach the method recited in the claim. We determine the record supports Petitioner’s contentions as summarized above and adopt the supported contentions as our own.

b. Independent Claims 13, 24, and 25

In addition to reciting limitations for “receiving an identification of digital content,” and “pre-processing said identified [digital content/media object] at said [client/local] device in accordance with one or more pre-processing parameters,” claims 13 and 24 require “pre-processing parameters that are received from a device separate from said client device.” Ex. 1001, 10:56–11:1, 11:43–60. Claim 13 further recites “pre-processing parameters controlling said client device in a placement of said digital content into a specified form in preparation for publication.” Ex. 1001, 10:56–11:1. Claim 25 recites similar limitations. *Id.* at 11:61–12:11.

(1) “pre-processing parameters that are received from a device separate from said client device”

Petitioner contends that Mayle and Narayen, as summarized above, teach or suggest the limitations of independent claims 13, 24, and 25. Pet. 47–50. According to Petitioner, it would have been obvious to a person of ordinary skill in the art, implementing Mayle’s system with processing at the client device, to send the parameters for processing from the server to the

client device because these parameters would be required to perform processing at the client device. *Id.* at 42–44, 48. Patent Owner disputes Petitioner’s assertions, arguing that both Mayle and Narayan disclose processing at the server, not the client. PO Resp. 41–42. Patent Owner argues that Mayle, therefore, “includes no teaching of delivery, to the client device, of pre-processing parameters originating from a separate device.” *Id.* (citing Ex. 2058 ¶ 138).

As explained above, we find that the combination of Mayle and Narayan teaches or suggests pre-processing according to pre-processing parameters. Accordingly, we also are satisfied that a person of ordinary skill, implementing Mayle’s system with processing at the client computer, would have recognized that the client would need these parameters in order to perform the processing, and would have been able to implement the system such that the server provides these parameters to the client. In particular, we credit Dr. Clark’s testimony that it would have been “obvious to one of skill in the art that the client device accessing the system in Mayle through a web browser could receive” these pre-processing parameters “from the server hosting the website accessed by the user because the browser-based system of Mayle would need th[e]se parameters at the client device in order to preprocess the digital content.” Ex. 1003 ¶ 55. Thus, Petitioner has made a sufficient showing that the combination of Mayle and Narayan teaches or suggests “receiving pre-processing parameters from a remote device,” as recited in claim 12, and the corresponding limitations of claims 13, 24, and 25.

(2) “*placement of said digital content into a specified form in preparation for publication*” (claim 13), or “*changing the file format of said media object*” (claim 24), or “*encoding or otherwise converting said media object*” (claim 25)

Petitioner contends that the combination of Mayle and Narayen teach or at least suggest “placement of said digital content into a specified form in preparation for publication,” as recited in challenged claim 13. Pet. 46–50. Petitioner argues that a person of skill in the art would have understood that the claim limitation regarding a “specified form in preparation for publication” is a form that depends on the nature of the distribution. *Id.* at 48 (citing Ex. 1003 ¶ 57.) According to Petitioner, the ’482 patent relates to the field of “handling, manipulation and processing of digital content and more particularly to the transportation and Internet publishing of digital content.” *Id.* (citing Ex. 1001, 1:11–14). Consequently, Petitioner explains that one of ordinary skill in the art would have known that the “manner specified” by the parameters would have been a well-known form of digital content suitable for Internet distribution, such as HTML, JPEG, and other similar encoding. *Id.* (citing 1003 ¶ 57).

Patent Owner disputes Petitioner’s position and contends Mayle and Narayen fail to teach or suggest “placement of said digital content into a specified form in preparation for publication,” as recited in challenged claim 13, “changing the file format of said media object,” as recited in claim 24, and “encoding or otherwise converting said media object,” as recited in claim 25. PO Resp. 42. Patent Owner specifically argues that Petitioner relies only on the alleged knowledge of one of ordinary skill in the art because “[t]he ’482 patent relates to the field of ‘handling, manipulation

and processing of digital content and more particularly to the transportation and Internet publishing of digital content.” *Id.* (citing Pet. 48). Patent Owner contends that Petitioner’s argument is based on improper hindsight reconstruction and neither Mayle nor Narayen places digital content in a form in preparation for publication, nor do either pre-process images. *Id.* (citing Ex. 2058 ¶ 139). According to Patent Owner, the preview images discussed in Mayle (*see* Ex. 1006, 13:59–14:8) and the scaled images discussed in Narayen (*see* Ex. 1007, 9:45–47) are for viewing by the user on the client, not for distribution to others, and therefore, these limitations are not met by Mayle and Narayen. *Id.* at 42 (citing Ex. 2058 ¶ 139).

We do not agree with Patent Owner’s position. First, as discussed previously, we find that Mayle teaches the pre-processing of images. Second, Narayen specifically discloses that after a user creates a picture album with associated pictures, the user can publish or distribute the picture album by making it available for viewing to web browsers over the Internet. *See* Ex. 1007, 7:49–56, 9:65–10:1. We credit the testimony of Dr. Clark, who explains that:

Based on my experience and knowledge, one of skill in the art would understand that the specified form determined by the parameters received by the client device would be a form of digital content suitable for Internet publishing. Formats of digital content suitable for Internet publishing were well known in the art at the time of the ’482 and ’515 Patents. These formats include JPEG, GIF, HTML, and other similar means of encoding digital content for Internet publishing.

Ex. 1003 ¶ 57.

Based on the above evidence, we find that a distributing party would have used the teachings in both Mayle and Narayen to specify the manner in

which a file is to be pre-processed by sending a setup/configuration file (i.e., pre-processing instructions) to the client device when it is connected to a remote server and place digital content into a specified form in preparation for publication. Therefore, we find that the combined teachings of Mayle and Narayen teach the disputed claim limitations.

(3) Conclusion

In conclusion, we have reviewed the Petition and the supporting evidence, and determine Petitioner has identified how Mayle and Narayen teach or suggest each limitation of challenged claims 13, 24, and 25, and as discussed below, has provided sufficient reasoning for the proposed combination of Mayle and Narayen to reach the methods recited in these claims. We determine the record supports Petitioner's contentions as summarized above and adopt the supported contentions as our own.

c. Independent Claims 35–38

Claims 35 and 38 generally require (i) initiating a transfer of digital content from a client device to a server device, (ii) pre-processing the digital content, and (iii) transmitting a message to the server device for publishing/distribution of pre-processed digital content. Ex. 1001, 12:54–13:10, 13:56–14:14. Claims 36 and 37 generally require (i) receiving a pre-processed group of digital content from a client device, and (ii) distributing the pre-processed digital content by a server device. *Id.* at 13:11–55.

Petitioner contends that Mayle and Narayen, as summarized above, teach or suggest each limitation recited in independent claims 35–38. Pet. 50–54. Patent Owner does not provide separate contentions regarding claims 35–38. PO Resp. 43.

We have reviewed the Petition and the supporting evidence, and determine Petitioner has identified how Mayle and Narayen teach or suggest each limitation of the challenged claims, and has provided sufficient reasoning, as discussed below, for the proposed combination of Mayle and Narayen to reach the devices recited in independent claims 35–38. We determine the record supports Petitioner’s contentions as summarized above and adopt the supported contentions as our own.

d. Dependent Claims 16, 18, 19, 21–23, 40–42, 44–46, and 49

Claims 16, 18, 19, and 21–23 depend from claim 13, while claims 40–42, 44–46, and 49 depend, directly or indirectly, from claim 38. Ex. 1001, 11:18–42, 14:19–41. Petitioner contends that Mayle and Narayen, as summarized above, teach or suggest the limitations recited in each dependent claim. Pet. 54–59. Patent Owner does not provide separate contentions regarding the additional limitations recited in the dependent claims, other than to summarize its contentions that Mayle teaches away from client-side pre-processing to meet the byte count requirements of the server. PO Resp. 43–44.

We have reviewed the Petition and the supporting evidence, and we determine Petitioner has identified how Mayle and Narayen teach or suggest each limitation of the challenged dependent claims 16, 18, 19, 21–23, 40–42, 44–46, and 49, and has provided sufficient reasoning, as discussed below, for the proposed combination of Mayle and Narayen to reach the methods recited in these claims. We determine the record supports Petitioner’s contentions as summarized above and adopt the supported contentions as our own.

e. Obvious to Combine the Teachings of Mayle and Narayen

Petitioner argues that a person of skill in the art would have had reason to combine Mayle and Narayen because “Mayle expressly teaches that its ‘invention can be modified to create . . . an album . . . holding a variety of images in a structured album’” (Ex. 1006, 13:6–43) and can “be adapted to provide additional processing by the client computer of the electronic image data and/or the display” (*id.* at 13:51–53), while “Narayen discloses a system that produces digital photo albums” (Ex. 1007, 6:66–7:13). *See* Pet. 14. According to Petitioner, Mayle teaches that its system can be modified to create a structured album for storing and displaying digital images via the Internet (*see, e.g.*, Ex. 1006, 13:29–46), and Narayen describes a system for creating and uploading albums of digital images via the Internet (*see, e.g.*, Ex. 1007, 6:66–7:13). Pet. 14–15.

Petitioner supports its position with the Declaration of Dr. Clark, who testifies that a person of skill in the art would have been motivated to combine these references because Mayle expressly teaches that it can be modified to incorporate a digital album, as disclosed by Narayen, and such a modification would have been accomplished using known techniques, for example, a program written in the Java programming language, as disclosed in Mayle. *Id.*; Ex. 1003 ¶¶ 51–52 (citing Ex. 1006, 6:62–65). Petitioner further argues (Reply 11) that the testimony of Patent Owner’s Declarant, Dr. Kaliski, supports the conclusion that client side processing could be accomplished using a Java-enabled web browser:

Q: So a person could consider whether processing would be done on the server or on the client with such a Java application?

A: Sure.

Ex. 1017, 73:5–8. Petitioner then cites to Patent Owner’s commercial product, Rimfire, which is accessed with a Java-enabled web browser and performs image pre-processing on a client device. Reply 12.

Patent Owner contends that Petitioner’s obviousness challenges fail, because a person of ordinary skill in the art would not have combined Mayle and Narayen. PO Resp. 21–27. Specifically, Patent Owner argues that (1) the differences between the server-based architecture of Mayle and the client-based architecture of Narayen counsels against Petitioner’s proposed combination and (2) Mayle and Narayen are directed toward different types of albums that solve different problems. *Id.* at 21–22 (citing Ex. 2058 ¶¶ 77–79). According to Patent Owner, Mayle’s family album allows related users to upload images to a server that imposes a structure and creates an album, and once uploaded, users specify a limited number of recipients to receive notice of the album (Ex. 1006, 13:29–46), while Narayen allows a user to select the format of a web page having one or more images and places the images into a media container, which is sent to a server for processing into an HTML page (Ex. 1007, 6:67–7:2). PO Resp. 22 (citing Ex. 2058 ¶ 77). Patent Owner, therefore, contends that Petitioner’s assumption that Mayle and Narayen are “similar devices” is incorrect. *Id.* (citing Pet. 15). Patent Owner concludes that because Narayen and Mayle are based on fundamentally different architectures, a person of ordinary skill in the art would not have been motivated to combine these references. *Id.* at 22–24 (citing Ex. 2058 ¶ 79).

Patent Owner further contends that Petitioner fails to articulate how any alleged “improved features” or “improvements” from Narayen would have been combined with Mayle; instead, according to Patent Owner,

Petitioner merely concludes that a “skilled artisan *could have* applied the improvement of Narayen to the system of Mayle to achieve the predictable result of publishing processed digital images to the Internet in a photo album.” *Id.* at 24 (citing Pet. 15). Patent Owner relies on testimony from Petitioner’s Declarant, Dr. Clark, to support its position. *Id.* Dr. Clark testifies as follows:

Q. What improvements are described from Narayen, in your opinion?

A. I don’t know from memory.

Ex. 2057, 7:6–8.

Q. But -- so it’s your testimony that the improvements that you identified in Paragraph 52, are not described in Paragraph 52 of your expert report?

A. No, it’s--they are not explicitly listed.

Id. at 7:22–25.

Q. But just to be clear, so in your declaration, you didn’t identify any improvements described in Narayen in your expert – in your declaration?

A. I did not list them.

Q. Okay. Can you identify any improvements described in Narayen, as you sit here today?

A. I’m not prepared to do that from memory, no.

Id. at 8:8–16.

Patent Owner argues that Petitioner cannot meet its obviousness burden without articulating the teachings of Narayen and Mayle that are to be combined. PO Resp. 25. According to Patent Owner, unknown “improvements” and “additional image processing tools” would not have motivated a person of ordinary skill in the art to combine these references, especially considering that Narayen does not improve or provide additional image processing tools beyond the image processing functions of the server in Mayle. *Id.* (citing Ex. 2058 ¶¶ 80–81).

Patent Owner then argues that it is improper hindsight to assume that a person of ordinary skill in the art would have redesigned the server-based system of Mayle into a client-based one to implement the album authoring software of Narayen through Java functionality. *Id.* at 25–26. Patent Owner reasons that because Mayle does not teach a Java-enabled browser for creating the structure for an album, perform all image processing for an album, and create an album as alleged by Petitioner, Mayle is not an enabling disclosure permitting one of ordinary skill in the art to implement the Mayle authoring tools in a Java enabled browser. *Id.* at 26 (citing Ex. 2058 ¶ 82). Patent Owner further argues that a person of ordinary skill in the art would not have been motivated to redesign Mayle by incorporating the album authoring tools of Narayen in light of the state of browser functionalities and network limitations in 1999. *Id.* at 26–27 (citing Ex. 2058 ¶ 84). Patent Owner, thus, concludes that a person of skill in the art would not have modified Mayle according to the teachings of Narayen. *Id.* (citing Ex. 2058 ¶ 85).

We have considered all of Patent Owner’s arguments that the Petition fails to provide a proper reason to combine the teachings of Mayle and Narayen for the challenged claims. We do not agree with Patent Owner because Mayle discloses that “the client may be augmented to perform a portion of the processing during interactions with the servers” (Ex. 1006, 3:2–4; *see also id.* at 6:62–65, 13:51–54, 14:2–9 (similar supporting statement regarding augmenting a client device to process files) and Mayle specifically contemplates using its system to create a family picture album (*see id.* at 13:28–45), which is exactly what is taught by Narayen. Additionally, we find Mayle’s explicit instruction that “client computer

software can be implemented in the Java language so as to run within a Java enabled browser” to weigh in favor of a person of ordinary skill in the art to follow this instruction to use the Java language to create a client device system for producing a family picture album.

f. Analysis of Secondary Considerations of Non-Obviousness

As discussed above in Section II.D.3.f., Patent Owner failed to demonstrate a prima facie case of, and the record evidence does not support, a nexus between the claimed invention and any commercial success or industry praise. Patent Owner’s evidence also does not demonstrate a long-felt but unmet need for the claimed invention. We, thus, find that the evidence of objective indicia of nonobviousness is insufficient to overcome the evidence of obviousness over Mayle and Narayen.

g. Conclusion of Analysis Regarding Mayle and Narayen

For the foregoing reasons, and weighing the evidence as a whole, Petitioner has proven by a preponderance of the evidence that Mayle and Narayen teach or at least suggest all elements of challenged claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 of the ’482 patent. We determine the record supports Petitioner’s contentions as summarized above and adopt the supported contentions as our own. Furthermore, we find that understanding Mayle and Narayen’s teachings as it applies to claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 would have been within the level of ordinary skill in the art, as evidenced by the prior art of record. We, therefore, determine that the challenged claims would have been obvious at

the time of the invention, and thus, are unpatentable under 35 U.S.C. § 103 in view of *Mayle and Narayen*.

III. MOTIONS FOR OBSERVATIONS REGARDING DEPOSITION TESTIMONY

Patent Owner's observations are directed to the cross-examination testimony of Mr. Gary L. Frazier. Paper 52. Mr. Frazier was deposed after Patent Owner filed its Preliminary Response. *See Ex. 2075*. We have considered Patent Owner's observations and Petitioner's responses (Paper 58) in rendering our decision, and have accorded the testimony the appropriate weight. *See Obs. 1–15; Obs. Resp. 1–15*.

IV. MOTION TO EXCLUDE EVIDENCE

Petitioner filed a Motion to Exclude Evidence seeking to exclude all or part of Exhibits 2015, 2044, 2045, 2050, 2051, 2058, 2073, and 2074 submitted by Patent Owner. Paper 51. The party moving to exclude evidence bears the burden of proving that it is entitled to the relief requested—namely, that the material sought to be excluded is inadmissible under the Federal Rules of Evidence. *See 37 C.F.R. §§ 42.20(c), 42.62(a)*. Even without excluding this evidence, we have determined that Petitioner has established, based on a preponderance of the evidence, the unpatentability of claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 of the '482 patent. Furthermore, Petitioner's arguments on these items go to the weight to be accorded to the evidence. The Board is capable of determining and assigning the appropriate weight to the evidence. For these reasons, we *deny* Petitioner's motion.

V. CONCLUSION

For the foregoing reasons, we determine Petitioner has shown by a preponderance of the evidence that claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 of the '482 patent would have been obvious in view of both (i) Creamer and Aihara, and (ii) Mayle and Narayen.

VI. ORDER

For the reasons given, it is

ORDERED that, by a preponderance of the evidence, claims 12, 13, 16, 18, 19, 21–25, 35–38, 40–42, 44–46, and 49 of the '482 patent are unpatentable;

FURTHER ORDERED that Petitioner's Motion to Exclude Evidence (Paper 44) is *denied*; 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.

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