Trials@uspto.gov
571-272-7822

Paper 46
Entered: June 4, 2019

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SNAP INC.,
Petitioner,

v.

VAPORSTREAM, INC.,
Patent Owner.

Case IPR2018-00200
Patent 8,886,739 B2

Before JUSTIN T. ARBES, STACEY G. WHITE, and JENNIFER MEYER CHAGNON, *Administrative Patent Judges*.

WHITE, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a)

I. INTRODUCTION

Petitioner, Snap Inc., filed a Petition for *inter partes* review of claims 1 and 4–6 of U.S. Patent No. 8,886,739 B2 (Ex. 1001, "the '739 patent"). Paper 2 ("Pet."). We instituted trial on claims 1 and 4–6 on all asserted grounds of unpatentability. Paper 13 ("Decision"). Patent Owner, Vaporstream, Inc., filed a Patent Owner Response (Paper 25, "PO Resp."), Petitioner filed a Reply (Paper 30, "Reply"), and Patent Owner filed a Sur-Reply (Paper 32, "Sur-Reply"). Patent Owner also filed a Motion to Exclude (Paper 34) to which Petitioner filed an Opposition (Paper 36).

An oral hearing was held on March 27, 2019, and a transcript of the hearing is included in the record. Paper 44 ("Tr.").

We have authority under 35 U.S.C. § 6. This Decision is issued pursuant to 35 U.S.C. § 318(a). For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claims 1 and 4–6 of the '739 patent are unpatentable.

A. Related Matters

The '739 patent is at issue in *Vaporstream, Inc. v. Snap Inc.*, No. 2:17-cv-00220-MLH-KS (C.D. Cal.). Paper 3; Pet. 1. Petitioner has filed at least nine other petitions for *inter partes* review directed to related patents that are owned by Patent Owner. Paper 9.

B. The '739 Patent

The '739 patent is directed to "[a]n electronic messaging system and method with reduced traceability." Ex. 1001, Abstract. As noted in the '739 patent specification, "[t]ypically, an electronic message between two people is not private." *Id.* at 1:53–54. Messages may be intercepted by third parties; logged and archived; or copied, cut, pasted, or printed. *Id.* at 1:54–

58. "This may give a message a 'shelf-life' that is often uncontrollable by the sender or even the recipient." *Id.* at 1:59–60. The challenged claims are directed to a "sender-side" method for reducing traceability of an electronic message. *See id.* at 2:14–22, 18:50–19:12.

Figure 3 of the '739 patent is reproduced below.

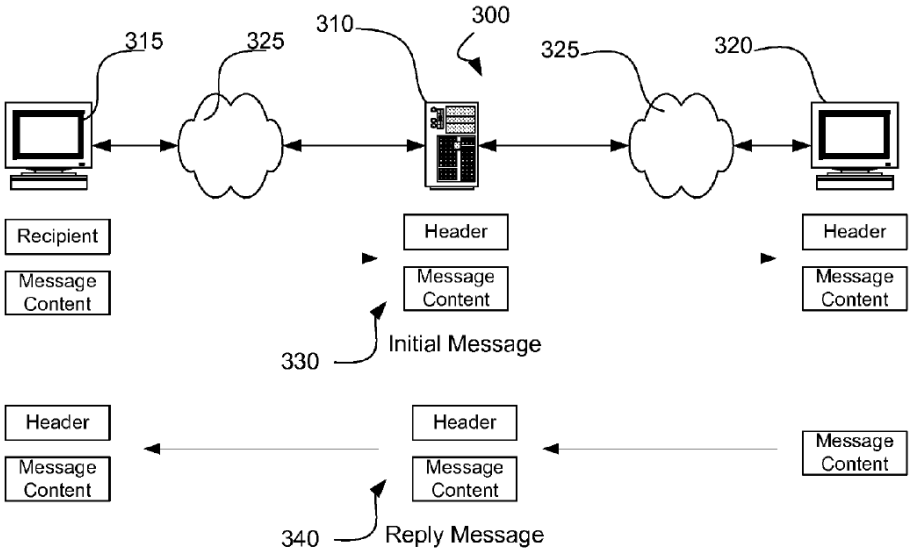

FIG. 3

Figure 3 depicts an example of the '739 patent's messaging system. *Id.* at 10:51–52. System 300 includes user computers 315 and 320 and single server computer 310. *Id.* at 10:52–54. Electronic message 330 is communicated via this system using a method detailed below.

Figure 5 of the ’739 patent is reproduced below.

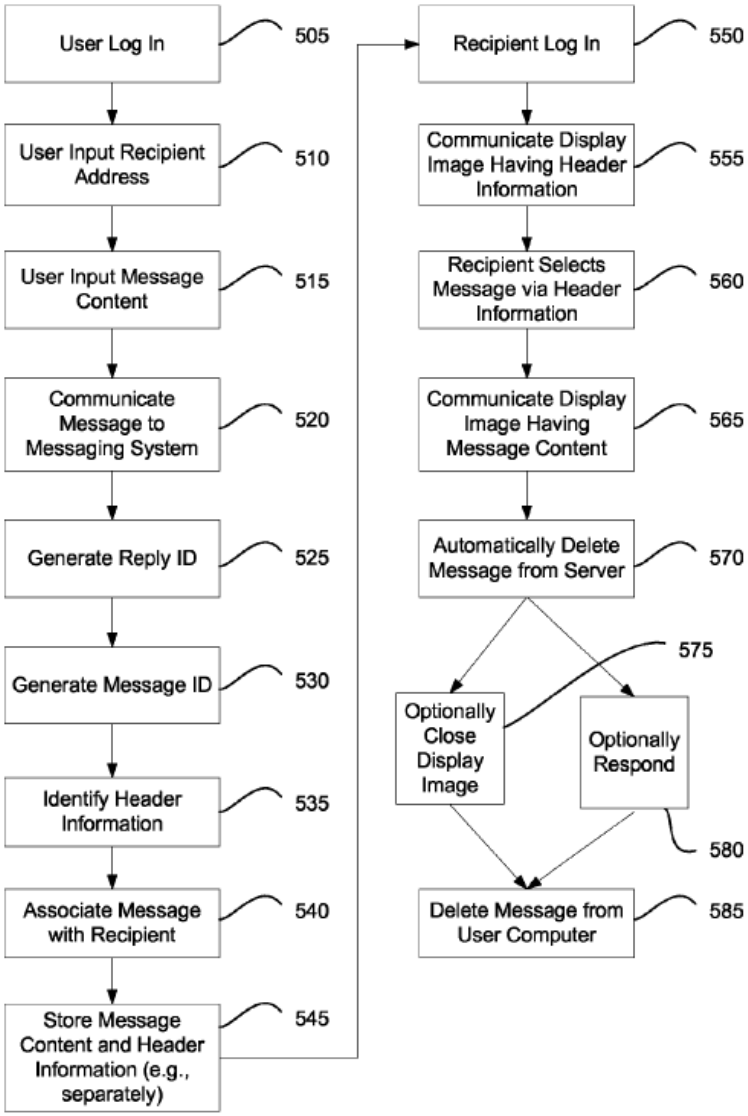

FIG. 5

Figure 5 is a flow chart depicting an exemplary method of the ’739 patent. *Id.* at 3:31–32. In step 510, the user inputs the recipient’s address on a screen. *See id.* at 11:30–35, 11:42–45, Fig. 8. A recipient address identifies a particular desired recipient and may be a unique identifier (e.g., a screen name, a login name, a messaging name, etc.) that has been established for use with this system or it may be a preexisting address such as an email address, Short Message Service (SMS) address, telephone number, or

Blackberry personal identification number. *Id.* at 6:63–7:9. After the recipient address has been entered, the system will proceed to step 515 and display another screen wherein the user may input the content of an electronic message. *Id.* at 11:42–48, Fig. 9. "An electronic message may be any electronic file, data and/or other information transmitted between one or more user computers." *Id.* at 7:39–41. The electronic message may include text, image, video, audio, or other types of data. *Id.* at 7:41–49. In one embodiment, "the recipient address and the message content are entered on separate display screens." *Id.* at 11:48–49. "Separation of the entry of the recipient address and message content further reduces the traceability of an electronic message by, in part, reducing the ability of logging at computer 315" that receives the message, for example, by preventing screenshot logging from capturing the recipient address and message content simultaneously. *Id.* at 9:9–11, 11:51–54.

At step 520, the message content is communicated to the server. *Id.* at 11:61–63. The recipient address is communicated to the server separately from the corresponding message content in order to reduce the ability to intercept the entire message during communication to the server. *Id.* at 11:64–12:1. "[A] correlation (e.g., a non-identifying message ID . . .) may be utilized to associate the two components." *Id.* at 6:58–60. In this regard, "at step 530, system 300 generates a message ID for associating the separated message content and header information [(which includes the recipient address)] of electronic message 330. Server 310 maintains a correspondence between the message content and header information." *Id.* at 12:26–30, 6:46–54; *see also id.* at 13:19–21 ("A message ID [is] used to maintain correspondence between the separated components of electronic

message 330."). The '739 patent describes an example in which the message ID is included both in the Extensible Markup Language (XML) file storing the header information and in the XML file storing the message content. *See id.* at 13:33–14:17.

C. Illustrative Claim

We instituted challenges to independent claim 1 and dependent claims 4–6 of the '739 patent. Claim 1 is illustrative of the claimed subject matter:

> 1. A computer-implemented method of handling an electronic message, the method comprising:
>
> providing a first display and a second display at a sending user device, the first display configured to allow a sending user to associate a first message content including a media component with the electronic message, the second display configured to allow the sending user to input a first recipient address corresponding to the first message content, the first and second displays not being displayed at the same time;
>
> displaying via the first display a first message content including a media component;
>
> receiving via the second display a first recipient address, wherein the first message content including a media component and the first recipient address are not displayed to the sending user at the same time;
>
> associating a message ID with the first message content including a media component, the message ID correlating the first recipient address and the first message content including a media component; and
>
> transmitting the recipient address and the first message content including a media component from the sending user device to a server computer, the first message content including a media component being transmitted to the server computer separately from the recipient address, the first message content including a media component not being accessible by the sending user for display via the sending user device after said transmitting the media component to the server computer.

Id. at 18:50–19:12.

D. Asserted Grounds of Unpatentability

Petitioner, with the support of testimony from Sandeep Chatterjee, Ph.D. (Exs. 1002, 1043), contends that claims 1 and 4–6 of the '739 patent would have been obvious over the teachings of Namias[1], Saffer[2], and Smith[3]; and over the teachings of Namias, Blum[4], Hazel[5], RFC 2821[6], and Boyce[7]. Pet. 3.

E. Person of Ordinary Skill in the Art

On behalf of Petitioner, Dr. Chatterjee opines that a person of ordinary skill in the art would have had "at least a bachelor's degree in software engineering, computer science, or computer engineering with at least two years of experience in the design and implementation of systems for sending and receiving messages over a communications network, such as the Internet (or equivalent degree or experience)." Pet. 4 (citing Ex. 1002 ¶¶ 13–16). Patent Owner's declarant, Kevin Almeroth, Ph.D., "generally agree[s]" with Petitioner's characterization of the person of ordinary skill with the caveat "that such a person of ordinary skill would also have a working knowledge of design principles for software user interfaces. Such knowledge often would be learned in an undergraduate course in Human Computer Interaction (HCI)." Ex. 2009 ¶ 21; *see also* Ex. 2001 ¶ 14 (Patent

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[1] U.S. Patent Pub. 2002/0112005 A1 (Aug. 15, 2002) (Ex. 1003, "Namias").
[2] U.S. Patent Pub. 2003/0122922 A1 (July 3, 2003) (Ex. 1004, "Saffer").
[3] U.S. Patent 6,192,407 B1 (Feb. 20, 2001) (Ex. 1005, "Smith").
[4] Richard Blum, *Postfix* (2001) (Ex. 1010, "Blum").
[5] Philip Hazel, *Exim: The Mail Transfer Agent* (2001) (Ex. 1011, "Hazel").
[6] *Simple Mail Transfer Protocol (SMTP)*, Request for Comments (RFC) 2821, published Apr. 2001 (Ex. 1008, "RFC 2821")).
[7] Jim Boyce, *Microsoft Outlook Version 2002* (2001) (Ex. 1012, "Boyce").

Owner's previous declarant, Michael Shamos Ph.D., also was in general agreement with this description). Dr. Almeroth's caveat is well taken because the '739 patent discusses the design of an interface that purports to reduce issues of traceability. *See, e.g.*, Ex. 1001, 1:46–3:9. In the Institution Decision, we adopted Petitioner's proposed description of the person of ordinary skill in the art. Dec. 7. We have reviewed the full record in this case and based on our analysis, for the purposes of this Decision, adopt Petitioner's description of the person of ordinary skill, with the caveat that such an individual would have had a working knowledge of design principles for software user interfaces, which may be achieved via study of human-computer interaction (HCI).

II. DISCUSSION

A. Claim Construction[8]

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable constructions in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b). "In claim construction, [our reviewing] court gives primacy to the language of the claims, followed by the specification. Additionally, the prosecution history, while not literally within the patent document, serves as intrinsic evidence for purposes of claim construction." *Tempo Lighting, Inc. v. Tivoli, LLC*, 742 F.3d 973, 977 (Fed. Cir. 2014). Otherwise, under the

[8] The recent revisions to our claim construction standard do not apply to this proceeding because the new "rule is effective on November 13, 2018 and applies to all IPR, PGR and CBM petitions filed on or after the effective date." Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51340 (Oct. 11, 2018) (to be codified at 37 C.F.R. § 42).

broadest reasonable construction standard, claim terms are presumed to have their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

Patent Owner seeks construction of the phrase "message content including a media component." PO Resp. 23. Petitioner does not seek express construction of any term of the '739 patent. Pet. 8–9.

Claim 1 recites various limitations pertaining to a "first message content including a media component." For example, claim 1 recites providing a "first display configured to allow a sending user to associate a first message content including a media component with the electronic message," the "first message content including a media component" being displayed at a different time than the "first recipient address," "associating a message ID with the first message content including a media component," and separately transmitting the "recipient address" and "first message content including a media component" such that the "first message content including a media component" is not "accessible by the sending user for display via the sending user device after said transmitting the media component to the server computer."

Patent Owner contends that "'message content including a media component' encompasses media content included in the message via a publicly-accessible [Uniform Resource Locator (URL)]." PO Resp. 25. In support of this construction, Patent Owner relies on a passage from the '739 patent, which states that "a message content of an electronic message may include an attached and/or linked file." Ex. 1001, 7:51–52 (cited at PO Resp. 24). Patent Owner also directs us to testimony from Petitioner's

declarant, Dr. Chatterjee. PO Resp. 25 (citing Ex. 1002 ¶ 100 n.25). Patent Owner characterizes this testimony as "mak[ing] clear [that] passing the actual content and passing a link that provides access to that content, such as a URL, are both examples of 'passing information.'" *Id.* Thus, in Patent Owner's view, the recited "message content including a media component" broadly includes both a URL in a message (linking to content accessible via that URL) and a file attached to the message. *Id.*

Petitioner responds by arguing that "although the specification states that 'message content' may include a 'linked file,' it never states that the *link itself* is 'message content.'" Reply 9. In addition, Petitioner directs us to the specification, which states that "[t]ypically, a message content, such as message content 140 does not include information that in itself identifies the message sender, recipient, *location of the electronic message*, or time/date associated with the electronic message." Ex. 1001, 7:55–59 (cited at Reply 10) (emphasis added). Petitioner explains that "[t]he URL (Uniform Resource Locator) in the proposed combination [of Namias and Saffer] therefore does not qualify as 'message content' because it identifies 'the location of' the video message on the video server in Saffer." Reply 10 (citing Ex. 1004 ¶ 28). According to Petitioner, a person of ordinary skill in the art would "think of a URL as a pointer to content," i.e., "how you get to the content" rather than "the content itself." Tr. 23:12–24:5. In short, Petitioner contends that "[i]t's . . . the file that's the content, not the link itself." *Id*. at 23:6.

We agree with Petitioner's arguments. The specification states that

> [i]n another example, a message content of an electronic message may include embedded information. In another example, a message content of an electronic message may include an

> attached and/or linked file. In such an example with an attached and/or linked file, the attached and/or linked file may be automatically deleted from the messaging system after being viewed by a recipient.

Ex. 1001, 7:49–55. Thus, the specification indicates that message content may be communicated to the user via embedded information, attached files, or linked files. Embedding, attaching, and linking are three ways to provide access to information. As such, the email recipient may gain access to the information or content in a variety of ways, however, the method of providing access is not the same thing as the underlying information or content. In the passage quoted above, privacy may be enhanced by automatically deleting "the attached and/or linked file" from the messaging system after the file is viewed. *Id.* at 7:53–54. The specification makes no provisions for deleting the URL or link to the file, but rather the focus is on the information itself. That information, or "message content," is located in the file itself regardless of the method by which the recipient accesses that information. Contrary to Patent Owner's assertion, Dr. Chatterjee's testimony cited by Patent Owner also supports this conclusion. Dr. Chatterjee testifies that there is a "distinction between transmitting the *actual content* to the recipient in a message, versus transmitting *just a URL* that points to or is an address for the content." Ex. 1002 ¶ 100 n.25 (emphases added). Dr. Chatterjee's testimony makes clear that "actual content" is distinct from "just a URL" that points to the content.

Thus, we determine that that the broadest reasonable interpretation of the phrase "message content including a media component" does not encompass a URL in a message (linked to content accessible via that URL). No further express interpretation is necessary for the purposes of this

Decision. *See, e.g.*, *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd*., 868 F.3d 1013, 1017 (Fed. Cir. 2017*)* ("[W]e need only construe terms 'that are in controversy, and only to the extent necessary to resolve the controversy.'") (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc*., 200 F.3d 795, 803 (Fed. Cir. 1999)).

B. Asserted Obviousness Based on Namias, Saffer, and Smith

Petitioner argues that claims 1 and 4–6 of the '739 patent are unpatentable under 35 U.S.C. § 103(a) as obvious over the teachings of Namias, Saffer, and Smith. Pet. 15–45. Relying on the testimony of Dr. Chatterjee, Petitioner contends that the combined references teach or suggest the subject matter of the challenged claims and that a person having ordinary skill in the art would have combined the teachings of the references in the manner asserted. *Id.*; Ex. 1002 ¶¶ 54–149. Patent Owner, relying on the testimony of Dr. Almeroth, disputes Petitioner's contentions. PO Resp. 25–48. For the reasons described below, we determine Petitioner has established the unpatentability of these claims by a preponderance of the evidence.

1. Overview of Namias

Namias is directed to "[a] method and apparatus for providing a video e-mail kiosk for creating and sending video e-mail messages such as full motion videos or still snapshots." Ex. 1003, Abstract. Namias's video email kiosk comprises a digital processor, a touch-sensitive screen monitor, a digital video camera, a microphone, audio speakers, a credit card acceptor, a cash acceptor, and a digital network communications link. *Id.* ¶ 31. The kiosk displays an inactive screen until a user starts a transaction. *Id.* ¶ 34. Upon activation of the kiosk, a record screen is shown on the kiosk display

and the user may create a video recording or still image from this screen. *Id.* ¶ 35. A preview screen is displayed after the user has recorded a full motion video or still snapshot message. *Id.* ¶ 36.

Figure 4a of Namias is reproduced below.

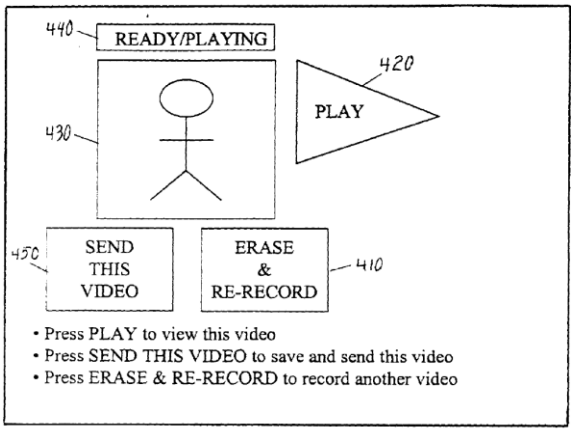

FIG. 4A

Figure 4a depicts "a preview screen that is displayed after a user has recorded a video message." *Id.* ¶ 25. Preview screen 400 allows the user to review the recorded video or still image and decide whether the message is acceptable. *Id.* ¶ 36. If the user is satisfied with the message, then the user may press send button 450 and proceed to address screen 500. *Id.* ¶¶ 37, 40.

Figure 5 of Namias is reproduced below.

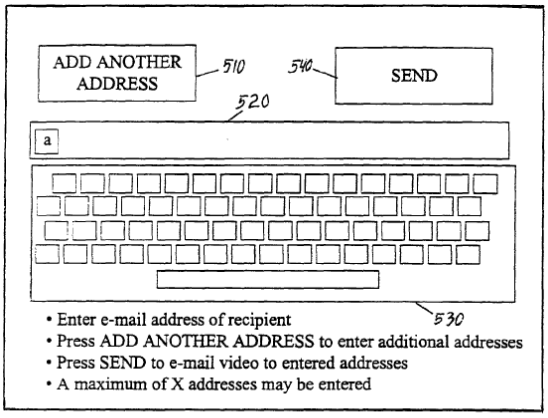

FIG. 5

Figure 5 depicts an address screen in which a user is prompted to enter a recipient's email address. *Id.* ¶ 27. "The address is a unique identifier which instructs routing computers where to send the message." *Id.* ¶ 5. The user presses add address button 510 and then may use a keyboard to input the email address of the recipient. *Id.* ¶ 40. Once the email addresses have been entered, the user may press send button 540 to move to the next step in the process. *Id.*

"[F]inal screen 700 . . . is displayed at the end of the process after payment has been made and the video or photographic e-mail has been sent to the intended recipient or recipients." *Id.* ¶ 42. A final display timer is monitored and upon expiration of the timer the kiosk reverts to the inactive screen display. *Id.* ¶ 68.

2. Overview of Saffer

Saffer describes "[a] computer implemented system and method in which a user can send e-mail messages that include full-motion video and audio (or, alternatively, audio only), along with (if desired) the text messages to an e-mail recipient." Ex. 1004, Abstract. In Saffer, a user composes a message, records a video, and then hits the send button. *Id.* ¶ 4. The sender's computer retrieves a video ID from the server for that compressed video. *Id.* ¶¶ 4, 29, Fig. 3 (step 100). Software on the sender's computer compresses the video and transmits the compressed video to a server. *Id.* ¶¶ 4, 44, Fig. 3 (steps 102, 110). The sender's computer inserts the video ID (with a link or network address to the video server) into an email message, which is then sent to the recipient. *Id.* ¶¶ 4, 46, 47, Fig. 3 (step 112).

3. Overview of Smith

Smith describes "[a] document delivery architecture [that] dynamically generates a private Uniform Resource Locator (URL) to distribute information." Ex. 1005, Abstract. Smith's private URLs ("PURLs") are temporary, dynamically generated URLs that uniquely identify the recipient of a document, the document to be delivered, and optionally may include other delivery parameters. *Id.* at Abstract, 15:8–9. A sender forwards a document to a server and the server temporarily stores the document. *Id.* at 15:29–31. "The server dynamically generates a URL for each intended recipient of the document." *Id.* at 15:31–33. The recipient is sent an email message which includes the PURL. *Id.* at 15:38–41. The recipient uses the PURL and the Web to retrieve the document (or set of documents). *Id.* at 14:48–50, 15:41–42. "PURLS avoid attaching information to e-mail messages to send documents, but rather attach a general reference to a document to be sent, and then enable the recipient to access a document via the reference." *Id.* at 15:12–15. When the recipient accesses the document by using a PURL, a server can intercept the document access request and provide additional services, such as tracking and security. *Id.* at 15:16–19.

4. Analysis of Challenge to Claim 1

First, we evaluate Petitioner's arguments as to how the combination of Namias, Saffer, and Smith teaches the limitations of claim 1, and then we examine Petitioner's contentions as to why a person of ordinary skill in the art would have been motivated to combine the teachings of the references.

a. Preamble

The preamble of independent claim 1 recites a "computer-implemented method of handling an electronic message." Petitioner contends that, to the extent this preamble is a limitation, a person of ordinary skill in the art would have understood Namias to teach this aspect of the claim. Pet. 15–16. Namias describes "providing a video e-mail kiosk for creating and sending video e-mail messages such as full motion videos of still snapshots." *Id.* at 15 (quoting Ex. 1003, Abstract). We agree, for the reasons stated in the Petition.

b. "providing a first display and a second display at a sending user device, the first display configured to allow a sending user to associate a first message content including a media component with the electronic message, the second display configured to allow the sending user to input a first recipient address corresponding to the first message content, the first and second displays not being displayed at the same time"

As recited in claim 1, the first display allows the user to enter message content and the second display allows the user to enter a recipient address. Petitioner contends that the recited first display is taught by Namias's preview screen, which is depicted in Figure 4a. Pet. 17–18. As noted by Petitioner, Namias's preview screen allows the user to manipulate message content by playing, erasing, and re-recording a video message. *Id.* at 18 (citing. Ex. 1003 ¶¶ 36–37). When the user is satisfied with the message, the user may press "SEND THIS VIDEO" to save and send the recorded video or still image. *Id.* (citing Ex. 1003 ¶ 37). Petitioner contends that the recited second display is taught by Namias's address screen, which is depicted in Figure 5. *Id.* at 19–20. "As shown, Figure 5 'allows the user to enter an e-mail address or addresses and thereby designate a recipient or recipients.'" *Id.* at 19 (citing Ex. 1003 ¶¶ 40, 27).

Petitioner relies upon Namias to teach the limitation that the first and second displays are not displayed at the same time. *Id.* at 20. "Namias explains that 'FIG. 5 shows an address screen 500 that is displayed **after** the full motion video or still snapshot message has been satisfactorily recorded,' the satisfactory recording of which uses the previously displayed screen shown in Figure 4A." *Id.* (citing Ex. 1003 ¶ 40).

Patent Owner contends that Namias, as modified by Saffer and Smith, would not have separate displays for message content and address information. PO Resp. 45–48. Patent Owner argues that "both Namias and Saffer have user interfaces for composing video emails. Petitioner offers no reason—other than hindsight—why a [person of ordinary skill in the art] determined to combine Namias and Saffer and having considered the references *as a whole* would choose Namias's user interface over Saffer's user interface." *Id.* at 32. Dr. Almeroth opines that "a [person of ordinary skill in the art] intent on combining Namias with Saffer would almost certainly choose Saffer's single screen email composition display (which is integrated with Saffer and is far more efficient, robust, and less likely to cause navigational trauma) over Namias's multi-screen navigation flow, absent extenuating circumstances." Ex. 2009 ¶ 118.

Petitioner responds by directing us to the Federal Circuit decision in *In re Fulton*, 391 F.3d 1195 (Fed. Cir. 2004). Reply 15. There, the applicant argued that the record before the Board was insufficient to establish that the features of the relied upon reference "are preferred over other alternatives disclosed in the prior art." *Fulton*, 391 F.3d at 1200. Our reviewing court held that "[t]his argument fails because our case law does not require that a particular combination must be the preferred, or the most

desirable, combination described in the prior art in order to provide motivation for the current invention." *Id.* As such, we are tasked with determining "'whether there is something in the prior art as a whole to suggest the *desirability*, and thus the obviousness, of making the combination' not whether there is something in the prior art as a whole to suggest that the combination is the *most desirable* combination available." *Id.* (quoting *In re Beattie*, 974 F.2d 1309, 1311 (Fed. Cir. 1992)).

Petitioner asserts that "while Saffer's interface may offer certain benefits that make it desirable in certain circumstances, Namias's interface likewise provides other advantages that would have motivated a [person of ordinary skill in the art] to use it in a video messaging system." Reply 17 (citing Ex. 1043 ¶ 37). According to Petitioner, the chief advantage of Namias's two-screen interface "is its simplicity." *Id.* Petitioner directs us to testimony from Patent Owner's declarant, Dr. Shamos, wherein he testified that "drawings of Namias show, in an incidental manner, that message content and email addresses are entered on different screens; this is a matter of user interface design *simplification*, and not to achieve reduced traceability." Ex. 2001 ¶ 73 (emphasis added) (cited at Reply 17); *see also id.* ¶ 31 ("The only aspects that Namias has in common with the '739 patent are that Namias discloses (1) sending a media component by email; and (2) separate screens for entering message content and recipient address. However, the reason for the separate screen is not reduced traceability, but to present a *simple* interface to a user who has never used the kiosk before." (emphasis added)); ¶ 74 ("It is true that the drawings [of Namias] illustrate different displays, but this is a matter of user interface design simplification . . . ."). Petitioner asserts that one of ordinary skill in the art

would have recognized "that Namias's multiscreen interface is an example of a well-known user interface technique known as 'wizards.'" Reply 18 (citing Ex. 1043 ¶¶ 39–41). As noted by Dr. Chatterjee,

> a *wizard* is a special form of user assistance that automates a task through a dialog with the user. Wizards help the user accomplish tasks that can be complex and require experience. Wizards can automate almost any task . . . . They are especially useful for complex or infrequent tasks that the user may have difficulty learning or doing.

Ex. 1043 ¶ 40 (quoting Ex. 1048[9], 335–36). According to Petitioner, certain users find it easier to use a simpler interface with fewer options on each page. Tr. 16:8–13 ("[I]t's far easier for them to have a wizard type scenario to walk through the things that they have to do, so that they don't get confused by multiple options on a single page.").

Patent Owner responds by asserting that Petitioner "has not provided any competent evidence that Namias's multi-screen interface is simpler than Saffer's.'" Sur-Reply 18. Patent Owner also contends that arguments regarding the simplicity of Namias's interface and the utility of wizards are untimely because they were first presented in Petitioner's Reply. *Id.*

In light of the evidence and arguments presented on this point, we determine that Petitioner is correct in asserting that one of skill in the art would have understood the combination of Namias with Saffer and Smith to teach separate displays as recited in claim 1. Namias's Figures 4a and 5 are separate displays. Patent Owner concedes as much in its comparison of the multi-screen configuration of Namias with the single screen configuration of Saffer. *See* Sur-Reply 18–19. There, Patent Owner compares Namias's

[9] Theo Mandel, *The Elements of User Interface Design* (1997) ("Mandel").

"sequence of seven separate screens" with "Saffer's single integrated screen." *Id.* at 18. Namias's Figure 5, the recited "second display," is not accessible to the user until after the media content is handled via the "first display" of Figure 4. *See* Ex. 1003 ¶ 40. Thus, Namias's screens perform the recited tasks with the required separation.

We are not persuaded by Patent Owner's argument that one of skill in the art would not have selected Namias's multi-screen interface over Saffer's integrated interface. As Petitioner has pointed out, under Federal Circuit precedent, obviousness "does not require that the motivation be the *best* option, only that it be a *suitable* option from which the prior art did not teach away." *PAR Pharm., Inc. v. TWI Pharms., Inc.*, 773 F.3d 1186, 1197–98 (Fed. Cir. 2014) (citing *Galderma Labs., L.P. v. Tolmar, Inc.*, 737 F.3d 731, 738 (Fed. Cir. 2013)). Here, we are presented with persuasive evidence from Dr. Chatterjee showing that one of skill in the art would have looked to Namias to design a video messaging system that was easy to use. Dr. Chatterjee's opinion is supported by a 1997 reference book, Mandel, discussing the elements of user interface design. *See* Ex. 1043 ¶ 40 (citing Mandel). Indeed, Mandel indicates that wizard-type layouts (like the one disclosed in Namias) are useful because "[i]t is better to have a greater number of simple pages with fewer choices than a smaller number of complex pages with too many options or text." Ex. 1048, 64. Further, as Patent Owner's declarant, Dr. Almeroth, noted, a person of ordinary skill in the art would be versed in user interface design and may have taken undergraduate courses in human-computer interaction (HCI). Ex. 2009 ¶ 21. Thus, Mandel with its focus on "Foundations of User Interface Design," including "understanding . . . how humans read, learn, and think to help

design computers that work within the psychological capabilities and limitations of the people for whom they are designed," would be indicative of the knowledge of a person of ordinary skill at the time of the invention of the '739 patent. *See* Ex. 1048, 1, 17 (emphases omitted).

In addition, we are not persuaded that Petitioner's argument in its Reply is untimely. *See* Reply 16–18 (citing Ex. 1043 ¶¶ 37–40). As described in the Petition, Petitioner relied on Figures 4a and 5 of Namias for the recited separate displays, noting that "the user interface in Namias uses separate displays to solicit the recipient address and message content from the user," and asserted a combination with Saffer for certain claim limitations pertaining to message IDs. Pet. 9, 16–17, 22. Patent Owner argued in response that Petitioner failed to explain why a person of ordinary skill in the art would have chosen "the Namias interface over the Saffer single composition screen." PO Resp. 46. Notably, however, Patent Owner's declarant described Namias's multi-screen format as a "user interface design simplification." Ex. 2001 ¶ 73. Then in its Reply, Petitioner responded to Patent Owner's arguments regarding the desirability of a multi-screen format as opposed to a single-screen format by explaining why Patent Owner is incorrect and further explaining the previous discussion of separate display screens with supporting evidence (such as Mandel) showing how one of ordinary skill in the art would have understood Namias's disclosures. Thus, we are persuaded that this is not an untimely argument, but rather a proper responsive argument that builds upon the existing record. For all of these reasons, we are persuaded that Petitioner has established that the cited art teaches separate displays as recited in claim 1 of the '739 patent.

c. "displaying via the first display a first message content including a media component"

As discussed above, Petitioner contends that Namias's preview screen teaches the recited first display. Claim 1 requires this first display to display message content, which includes a media component. Petitioner relies upon Namias's "image window," which is depicted in Figure 4a to teach this limitation. Pet. 20. As described in Namias, the image window displays the recorded message or still image that is to be sent to a recipient. *Id.* at 20–21 (citing Ex. 1003 ¶ 37, Fig. 4a). We agree, for the reasons stated in the Petition.

d. "receiving via the second display a first recipient address, wherein the first message content including a media component and the first recipient address are not displayed to the sending user at the same time"

As discussed above, Petitioner contends that Namias's address screen teaches the recited second display. Claim 1 requires the second display to display the address of the message's intended recipient and requires that this display not be shown at the same time as the first display, which includes the message content. As described in Namias, the address screen allows the user to enter an email address and this screen is displayed after the user presses the send button on the preview screen. Ex. 1003 ¶ 40. Petitioner's declarant, Dr. Chatterjee, testifies that Namias's "figures make clear that the video or picture message content and the recipient's email address 'are not displayed to the sending user at the same time' at any point during the method of handling a message taught by Namias." Ex. 1002 ¶ 73 (emphases omitted). We agree, for the reasons stated in the Petition.

e. "associating a message ID with the first message content including a media component, the message ID correlating the first recipient address and the first message content including a media component"

According to Petitioner, Saffer and Namias both disclose systems in which a user can send an email message that includes a video. Pet. 22. (citing Ex. 1003 ¶ 42; Ex. 1004, Abstract, ¶¶ 2–3). Petitioner argues that Namias discloses sending the video or picture message, but it does not detail the mechanics of how this occurs. *Id.* In order to provide the necessary implementation details, Petitioner relies upon the disclosures of Saffer to describe the mechanism by which the media content/message is associated with an ID. *Id.* According to Petitioner, Saffer describes the following steps, which are used to effectuate the transmission of a video message:

> (1) The sending device requests and obtains a "video ID" from a video server, which will be used to uniquely identify the recorded video. (Saffer, ¶¶0004, 0029, Figure 3 (Step 100).)
>
> (2) The sending device uses the video ID received in step (1) to rename the video file. (Saffer, ¶¶0004, 0044, Fig. 3 (Step 102).)
>
> (3) The sending device then uploads the renamed video file to the video server for storage. (Saffer, ¶¶0004, 0044, Fig. 3 (Step 110).)
>
> (4) After the upload, the sending device inserts a link into the body of the email message (in the form of a Uniform Resource Locator (URL)), the link including the video ID that identifies the video file on the video server. (Saffer, ¶¶0004, 0046, Fig. 3 (Step 112), ¶0027.)
>
> (5) Finally, the sending device sends the email containing the link (but not containing the previously-uploaded video content) to an email server. (Saffer, ¶¶0004, 0047.)

Pet. 23. Petitioner contends that "[t]he video ID in Saffer discloses the claimed 'message ID' because it is clearly associated with a corresponding video message that was recorded and delivered using the video messaging

service taught by Saffer." *Id.* at 25 (citing Ex. 1004 ¶ 4) (emphasis omitted). Petitioner also asserts that Saffer's video ID correlates the first recipient address and the first message content. *Id.* at 26. According to Petitioner, this limitation is taught by Saffer because the video ID is included in the email message that contains the recipient's email address. *Id.* at 26–27.

Petitioner further relies upon Smith for an additional teaching as to this limitation. Pet. 31. According to Petitioner, "[i]f the Patent Owner were to argue that the content of the message ID itself must explicitly show a correlation between 'the first recipient address and the first message content including a media component,' such a requirement would have been obvious in further view of Smith." *Id.* (emphases omitted).

We agree with Petitioner's arguments as set forth in the Petition.

f. "transmitting the recipient address and the first message content including a media component from the sending user device to a server computer, the first message content including a media component being transmitted to the server computer separately from the recipient address"

According to Petitioner, Namias discloses transmitting the address and the message, but Namias does not describe the transmission mechanism. Pet. 38. Petitioner relies upon Saffer to provide the details necessary to implement this transmission. *Id.* Petitioner provides an annotated version of Figure 1 of Saffer, reproduced below. *Id.* at 41.

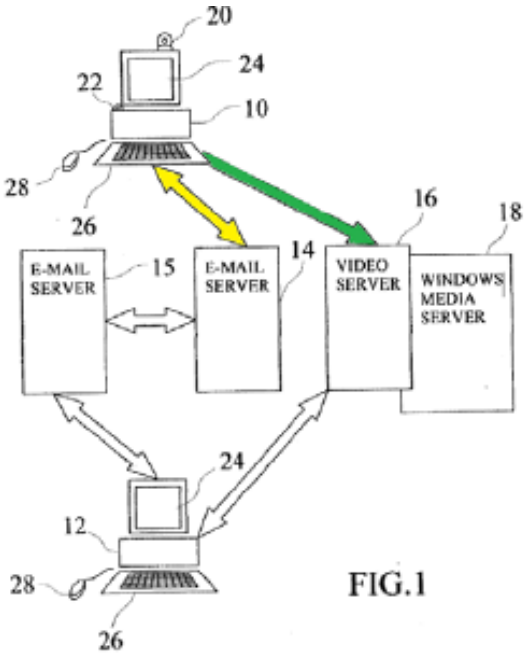

FIG.1

Annotated Figure 1 of Saffer depicts the transmissions sent from Saffer's user device. *Id.* According to Petitioner, "Saffer discloses an embodiment in which the video content is transmitted to a *video server* 16 (in green) and the email message to a *physically separate e-mail server* 15 (in yellow)." *Id.* Specifically, Petitioner asserts that

> Saffer discloses at least two transmissions by the sending user device to transmit the video message: (1) the sending device first uploads the video file to the video server (Step 110) (¶¶0004, 0044; Fig. 3); and after an intervening step (Step 112) (¶¶0004, 0044-46; Fig. 3), (2) the sending device then sends the email message containing the URL and the recipient address (but not the video file) to the email server (¶¶0004, 0047).

Id. at 38. As such, Petitioner argues that the cited art teaches the separate transmission of the address and message content. *Id.* at 39–40. "This is because transmissions (1) and (2) above are transmissions that are separated by an intervening step, and separately convey to the server, respectively, the video content and the recipient address." *Id.* at 40 (emphases omitted). Dr. Chatterjee explains

> that after [1] the video content has been uploaded, there is an intervening step of [2] "then . . . insert[ing] the video ID with a 'link' or network address to the video server into the text or code of the composed e-mail message" before [3] that email message, which contains the recipient's email address in its "To:" field (Saffer, ¶0024), is uploaded.

Ex. 1002 ¶ 126 (emphases omitted). Thus, the transmission of the video content to the video server must occur first in order to be able to generate the link with the video ID that is inserted into the email message (that contains the recipient address), which is later sent to the email server. Petitioner also argues that Saffer teaches a video server and email server that constitute a single physical server. Pet. 39 (citing Ex. 1004 ¶¶ 4 (discussing the upload of compressed video to the video server "which may be the same server as the e-mail server"), 17, claim 5).

Further, as explained above in connection with the "associating" limitation of claim 1, Petitioner asserts that "Smith discloses a system similar to Saffer that uses a URL inserted in an email message to deliver a file to a recipient." *Id.* at 31 (citing Ex. 1005, 14:42–49, 2:24–31, Abstract). Smith describes temporary, dynamically generated private URLs known as PURLs. Ex. 1005, Abstract, 15:8–9. "PURLs enable[] secure document delivery and tracking of document receipt." *Id.* "Petition[er] relies only on Smith's PURL disclosures to show that it would have been obvious to adapt the features of the Smith PURL to the Saffer URL, and relies on Saffer for the transmission of the video message to the server." Pet. 37 n.6.

Patent Owner contends that the combined teachings of the references do not teach or suggest the "transmitting" limitation. PO Resp. 37–44. Specifically, Patent Owner asserts that a person of ordinary skill in the art would have understood that by placing Saffer's URL into the body of an

email message, that email message would now contain both the recipient address and the media content. *Id.* at 38. In addition, even if the URL were not considered to be message content it would undermine the purpose of the claims if the URL and header information were in the same message because it would not allow for the sought reduced traceability. *Id.* at 41. We address each of these arguments in turn.

First, as noted above, we construed the term "message content including a media component" in a manner that excludes a URL in a message (linking to content accessible via that URL) from the definition of the phrase. *See supra* § II.A. Thus, per our construction, Saffer's URL is not message content, but an identifier that provides access to message content that is stored elsewhere (e.g., the video server).

Patent Owner argues that Saffer's system sends a transmission that includes both message content and header information. PO Resp. 38. Patent Owner asserts that Namias is silent as to the transmission of header information and message content and that Saffer includes this information together as depicted in Figures 6 and 7 of Saffer. *Id.* at 43. Petitioner correctly asserts that "Patent Owner ignores how Saffer's technique would be adapted to the Namias system as proposed by Petitioner, and attacks Saffer individually." Reply 8. Petitioner's proposed combination, however, does not rely on Saffer's user interfaces or input methods, but rather it relies upon Namias's multi-screen user interface to provide the inputs to the Saffer transmission system. Petitioner explains that Saffer describes two separate transmissions with an intervening step between the transmissions. Pet. 40. Specifically, Saffer describes uploading the compressed video to a server. *See* Ex. 1002 ¶ 123 (citing Ex. 1004 ¶ 4). Then, the sender's device inserts

the video ID with a link (i.e., a URL) for the uploaded video into an email message before sending the email message as a second transmission that includes the URL to access the video and the remainder of the message. *Id.* Dr. Chatterjee opines that it would have been obvious to exclude the recipient address from the first transmission "because, among other reasons, the information would have served no purpose and it would have been a waste of processing and network bandwidth to transmit it." *Id.* ¶ 124. He further testifies that "one of ordinary skill in the art would have understood that the recipient's email address is not uploaded in the same transmission as the video content because it is not until *later* in the process, when the email message is sent, that the recipient's email address is uploaded." *Id.* In addition, Dr. Chatterjee testifies that one of ordinary skill would not have included the video file in the second transmission because it had already been uploaded and there was no reason to send it a second time. *Id.* Thus, via the testimony of Dr. Chatterjee, Petitioner provides persuasive evidence, supported by evidence in the record, that one of ordinary skill in the art would have understood the cited art to teach the recited separate transmissions.

Second, Patent Owner argues that "[i]f a hacker is able to intercept a message with both the recipient address and a public URL to the media component, the hacker will be able to create a complete record of the message" and thus, the purpose of the claim invention would be frustrated. PO Resp. 41. Petitioner responds by asserting that "this 'purpose' is nowhere recited in the claim." Reply 12. The specification of the '739 patent discusses reduced traceability electronic message systems and methods. *See, e.g.*, Ex. 1001, 1:46–49. None of the challenged claims of

this patent, however, directly references "reduced traceability." In addition, none of the challenged claims mentions traceability at all. *See id.* at 18:50–21:24 (the only reference to traceability is in claims 7 and 16, not challenged in this proceeding, which recite not including information that would provide "a traceable identity of the sender").

Moreover, we agree with Petitioner that Patent Owner "ignores that Petitioner's *proposed combination* . . . includes the Smith reference (entitled '*Private*, Trackable URLs for Directed Document Delivery'), which discloses specific protections against unauthorized access of data through a URL." Reply 12 (citing Ex. 1002 ¶¶ 116–17). As noted above, Smith describes temporary, dynamically generated private URLs known as PURLs. Ex. 1005, Abstract, 15:8–9. As described in Smith, "[e]ach private URL ('PURL') uniquely identifies an intended recipient of a document, the document or set of documents to be delivered, and (optionally) other parameters specific to the delivery process. The intended recipient of a document uses the PURL to retrieve the document." *Id.* at 2:25–31. As such, Smith's system "allows the directed and secure distribution of documents." *Id.* at 3:29–30. Thus, contrary to Patent Owner's arguments, the proposed combination does not include public URLs. Therefore, even if the claims included the "purpose" alleged by Patent Owner, the proposed combination has safeguards by way of Smith's PURLs to provide additional security to the URLs.

For the foregoing reasons, we are persuaded by Petitioner's argument that the combination of Saffer, Namias, and Smith teaches this limitation.

g. "the first message content including a media component not being accessible by the sending user for display via the sending user device after said transmitting the media component to the server computer"

Petitioner relies on Namias to teach this limitation. Pet. 41. As described in Namias, a payment screen is presented to the user after the user has submitted the recipient email address(es) on the address screen. *Id.* (citing Ex. 1003 ¶¶ 28, 41–42, 65–67, 69). After payment has been made, the user is presented with a final screen (Ex. 1003, Fig. 7) that "contains text communicating that the video e-mail message has been sent and the transaction has been completed." Pet. 42 (citing Ex. 1003 ¶ 42). The final screen is displayed for a predetermined amount of time and then, upon the expiration of that time, the kiosk returns to the inactive screen. *Id.* (citing Ex. 1003 ¶ 68). Dr. Chatterjee testifies that

> neither the final screen 700 nor the inactive screen 200 allows a user to 'access[]' the transmitted video or picture content 'for display.' As a practical matter, moreover, it would have been obvious to implement Namias in this fashion because the video and picture content can consume large amounts of data, and thus, would preferably be removed from kiosk storage after they are transmitted as they are no longer needed.

Ex. 1002 ¶ 136 (emphases omitted). We agree with Petitioner's arguments as set forth in the Petition.

h. Motivation to Combine

Petitioner contends that it would have been obvious to combine the teachings of Namias and Saffer, for example, because the combination would have had the predictable result of the message system of Namias handing over control to the transmission method described in Saffer, with various advantages to doing so. Pet. 27. Dr. Chatterjee opines that "[u]nder this combination, therefore, the kiosk in Namias would send the video

message [by] obtaining a video ID from the video server, renaming and uploading the video file to the video server, inserting a URL into the email message body that includes the video ID, and uploading the email message to the email server." Ex. 1002 ¶ 92. Dr. Chatterjee further testifies that Namias does not provide details as to the method of transmission and "[i]t would thus have been obvious that the video message transmission system of Saffer could take over where Namias leaves off, resulting in a combined system that uses the Namias user interface (e.g., Fig. 4A and Fig. 5) for entering the video message content and recipient address, but then uses the technique in Saffer to effectuate the actual transmission of the video message." *Id.* ¶ 95. In addition, Dr. Chatterjee states that one of ordinary skill in the art would have recognized that Saffer's URL-based delivery technique would have improved Namias's use of network bandwidth and storage. *Id.* ¶ 96. According to Dr. Chatterjee, a person of ordinary skill in the art would have understood that replacing the video content in the message with a URL, as disclosed in Saffer, would have provided distinct advantages because URLs are very small and video content can use up large amounts of bandwidth and memory. *Id.* ¶ 98.

In addition, Saffer discloses allowing a user to stream video content that provides the user with quick access to the video without requiring the entire video to be downloaded prior to the start of playback. Pet. 30. According to Dr. Chatterjee, streaming "would have been particularly significant in the context of video, which typically takes up significantly more data than other types of information, and thus, takes longer to transmit over a network." Ex. 1002 ¶ 102. Petitioner also directs us to Saffer's discussion of optimizing the video stream for a recipient "by checking the

recipient's configuration and/or bandwidth capabilities and streaming the video based upon this detected configuration/bandwidth." Ex. 1004 ¶ 22 (cited at Pet. 30).

As to Smith, Dr. Chatterjee opines that Smith discloses a similar, but more advanced URL identifier as compared to the URL technique described in Saffer. Ex. 1002 ¶ 105. Thus, Dr. Chatterjee testifies that one of ordinary skill in the art would have been motivated to improve upon Saffer's technique with Smith's technique, for example, in order to obtain the additional features (such as validating the file and recipient identifiers) recited in Smith. *Id.*

Patent Owner asserts that Petitioner has failed to provide a reason to combine Namias, Saffer, and Smith (PO Resp. 25–30) and Petitioner has failed to consider the references as whole in making this combination (*id.* at 30–37). We address each of these arguments in turn.

First, Patent Owner contends that "Petitioner's stated reason for combining Namias and Saffer is 'network bandwidth and storage are conserved.' . . . But there is no practical scenario where Saffer's link-based email transmission system conserves bandwidth or storage." *Id.* at 26. Further, "[e]ven under Saffer's distribution system, the kiosk in Namias would still have to transmit the recorded video to the video server, requiring use of the bandwidth that was supposedly saved by implementing Saffer." *Id.* (citing Ex. 1004 ¶ 27). Patent Owner also argues that "Petitioner does not identify why the proprietor of the Namias kiosk would be concerned with such bandwidth savings." *Id.* at 28 (citing Pet. 29–31). In the end, according to Patent Owner, bandwidth saving are "only realized if the recipient never watches the video in its entirety." *Id.* (citing Ex. 2009 ¶ 91).

Petitioner responds by asserting that "the combination of Namias and Saffer would have provided significant advantages with respect to at least (1) network bandwidth, (2) storage, and (3) the ability to stream the video message content to the recipient." Reply 1 (citing Pet. 29–31; Ex. 1002 ¶¶ 96–103). In particular, Petitioner contends that Patent Owner has ignored the benefits that would flow from allowing the recipient to stream the video. *Id.* at 2. Dr. Chatterjee explains "that streaming is a beneficial way of delivering video to a recipient that provides benefits over sending a video file as an email attachment." Ex. 1043 ¶ 8. "For example, in a streaming implementation, a user could begin playing back streaming video as the content is being received, rather than having to wait until the entire video file has been received." Ex. 1002 ¶ 102. In addition, streaming techniques "can be 'optimized to stream the video to the recipient computers 12 in a manner that can most easily viewed by the recipient's computers 12.'" *Id.* ¶ 103 (quoting Ex. 1004 ¶ 22). As such, Dr. Chatterjee opines that "[o]ne of ordinary skill in the art would have appreciated that Saffer's streaming delivery technique would have thus allowed a more optimized delivery of video content to the recipient device." *Id.* Dr. Chatterjee also states that "[t]hese benefits apply regardless of whether the recipient watches all, or only part, of the received video content." Ex. 1043 ¶ 8.

In its Sur-Reply, Patent Owner argues that "streaming adds no benefit within the context of the claimed invention and the specific combination proposed by Petitioner." Sur-Reply 2. According to Patent Owner, streaming does not save bandwidth or storage because the same video file must be uploaded to the server and then provided to the user. *Id.* at 3–4. "In fact, Saffer's streaming technique actually increases storage requirements, as

streaming requires the video to be stored on the video server indefinitely (in case the recipient wants to view the video in the future)." *Id.* at 4 (citing Ex. 2009 ¶ 95). Dr. Almeroth testifies that implementing Namias's system with streaming "would significantly increase the cost of the system" because it "would require an additional video server with a large storage capacity to store all the videos uploaded by the various video email kiosks." Ex. 2009 ¶ 95.

We disagree with Patent Owner. As outlined above, Petitioner and Dr. Chatterjee provide a rational explanation, supported by evidence in the record, for the combination of the cited references. As we noted previously, under Federal Circuit precedent, obviousness "does not require that the motivation be the *best* option, only that it be a *suitable* option from which the prior art did not teach away." *PAR Pharm.*, 773 F.3d at 1197–98. Here, Petitioner has provided evidence from Saffer and the testimony of Dr. Chatterjee that establishes that one of ordinary skill in the art would have been aware of benefits to streaming video. Patent Owner, for example, does not dispute Petitioner's evidence that a video stream may be optimized for a particular recipient. *See, e.g.*, Ex. 1043 ¶ 8.

Petitioner further argues that "Patent Owner's argument myopically focuses only on the 'first leg' of the transmission from the sending device to the server, and ignores the substantial bandwidth and storage benefits achieved for subsequent transmission from the server to the recipient device." Reply 4. Petitioner contends that one of skill in the art would envision many scenarios in which bandwidth would be saved. Tr. 20:20–21:11. Dr. Chatterjee quotes a reference that noted a benefit of linking the message content with a URL is that "the recipients can decide when and if

they want to receive one or more of the attachments . . . advantageously reducing [either data] traffic resulting from email attachments in general or reducing instantaneous data traffic that typically results from sending an email with an attachment to multiple recipients." Ex. 1002 ¶ 99 (quoting Ex. 1006, 4:24–30). Petitioner describes a scenario in which a video is sent to a large group of recipients and only a small subset wanted to watch the video. Tr. 20:20–21:11. In that situation, bandwidth would be saved because the video would only be provided to the people that wanted to see it, as opposed to sending the video file to the entire group. *Id.* According to Petitioner, "that is a situation that is as plausible, and in fact, probably more likely than the off chance of a viral video that would require multiple viewings." *Id.* at 21:7–8. Thus, Petitioner asserts that the proposed combination would "avoid[] the need to send a potentially large video file to the recipient(s) until they actually have a need or desire to view it." Reply 4 (citing Ex. 1002 ¶¶ 99–100). We are persuaded by Petitioner's argument and evidence. We determine that one of ordinary skill in the art would have seen a benefit to the combination at least in so much as it would have allowed for the optimization of the video playback experience for users in light of the user's particular device and available Internet connection. *See* 1004 ¶ 22.

Second, Patent Owner argues that "Petitioner has cherry-picked certain aspects of various prior art references (while ignoring others) and cobbled them together into an approximation of the '739 claims based only on improper hindsight." PO Resp. 31. Specifically, Patent Owner asserts that one of skill in the art, upon considering the references as a whole, would not select Namias and its multi-screen email composition. *Id.* at 32. Patent Owner argues that Namias's multi-screen is inferior to Saffer's single email

composition screen. We disagree with this argument for reasons discussed above in relation to Petitioner's arguments regarding the recited separate displays. *See supra* § II.B.4.b.

Thus, we determine that one of ordinary skill in the art would have been motivated to use Saffer's techniques to improve the usage of bandwidth in Namias's system and to provide benefits to the end user, such as optimization of video streaming. In addition, we conclude that one of ordinary skill would have looked to Smith to provide predictable improvements to Saffer's URL system, as explained by Petitioner and Dr. Chatterjee. Thus, we find that Petitioner has put forth a sufficient showing as to a motivation to combine Namias, Saffer, and Smith.

i. Conclusion

Petitioner has established that the combination of Namias, Saffer, and Smith teaches all of the limitations of claim 1 and has articulated a sufficient rationale for combining the teachings of the references, with a reasonable expectation of success in making the combination. Accordingly, we determine the information and argument presented demonstrates by a preponderance of the evidence that claim 1 would have been obvious over Namias, Saffer, and Smith.

5. Dependent Claims 4–6

Claims 4–6 depend from claim 1. Petitioner relies on Namias to teach the additional limitations in claims 4–6. Pet. 45–46. Patent Owner does not proffer any additional argument directed to claims 4–6. *See generally* PO Resp.; *see also* Paper 14, 6 ("The patent owner is cautioned that any arguments for patentability not raised in the response will be deemed waived."). We have reviewed Petitioner's contentions and determine that

Petitioner has shown by a preponderance of the evidence that the combination of Namias, Saffer, and Smith renders obvious the claimed subject matter of claims 4–6.

For example, claim 4 depends from claim 1 and further recites that the user device is selected from a group consisting of a personal computer, a workstation, a server, a laptop, a handheld device, a mobile telephone, a personal digital assistant, or any combination thereof. Petitioner relies upon Namias's disclosure that the video email kiosk could be a personal computer or a workstation. Pet. 45 (citing Ex. 1003 ¶¶ 31–32). We find Petitioner's evidence and arguments to be credible, supported by evidence in the record, and sufficient to establish the unpatentability of claim 4 and the other challenged dependent claims. Accordingly, we determine the information provided establishes by a preponderance of the evidence that claims 4–6 would have been obvious over Namias, Saffer, and Smith.

C. Asserted Obviousness Based on Namias, Blum, Hazel, RFC 2821, and Boyce

Petitioner contends that claims 1 and 4–6 of the '739 patent are unpatentable under 35 U.S.C. § 103(a) as obvious over the combination of Namias, Blum, Hazel, RFC 2821, and Boyce. Pet. 46–69. Relying on the testimony of Dr. Chatterjee, Petitioner contends that the combined references teach or suggest the subject matter of the challenged claims and that a person having ordinary skill in the art would have combined the teachings of the references in the manner asserted in the Petition. *Id.*; Ex. 1002 ¶¶ 150–200. Because we determine that claims 1 and 4–6 are unpatentable under § 103(a) as obvious over the combined teachings of

Namias, Saffer, and Smith, we need not separately assess the patentability of these claims under this asserted ground.

III. PATENT OWNER'S MOTION TO EXCLUDE

Patent Owner filed a Motion to Exclude Exhibits 1050 and 1051 as lacking authentication as required by Federal Rule of Evidence 901. Paper 34, 2–3. Exhibits 1050 and 1051 are cited in Dr. Chatterjee's Reply Declaration. Ex. 1043 ¶ 42. We need not determine the admissibility of Exhibits 1050 and 1051 because we do not rely on them in making our determinations here. Thus, Patent Owner's Motion is moot.

IV. CONCLUSION

Petitioner has demonstrated, by a preponderance of the evidence, that, under 35 U.S.C. § 103(a), claims 1 and 4–6 are unpatentable over Namias, Saffer, and Smith. In light of our determination of unpatentability of claims 1 and 4–6, we decline to address whether these claims also are unpatentable under 35 U.S.C. § 103(a) as obvious over Namias, Blum, Hazel, RFC 2821, and Boyce.

V. ORDER

Accordingly, it is:

ORDERED that claims 1 and 4–6 of the '739 patent have been shown to be unpatentable; and

FURTHER ORDERED that Patent Owner's Motion to Exclude is dismissed as moot.

This is a final decision. Parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

PETITIONER:
Heidi Keefe
Andrew mace
Mark Weinstein
Reuben Chen
Yuan Liang
COOLEY LLP
hkeefe@cooley.com
amace@cooley.com
mweinstein@cooley.com
rchen@cooley.com
yliang@cooley.com

PATENT OWNER:
Michael Heim
Douglas Wilson
Blaine Larson
HEIM PAYNE & CHORUSH, LLP
mheim@hpcllp.com
dwilson@hpcllp.com
blarson@hpcllp.com

Jamie Gallagher
BIRCH TREE IP LAW & STRATEGY PLLC
jamie@birchtreeip.com

Trials@uspto.gov
571-272-7822

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SNAP INC.,
Petitioner,

v.

VAPORSTREAM, INC.,
Patent Owner.

Case IPR2018-00312
Patent 9,306,885 B2

Before JUSTIN T. ARBES, STACEY G. WHITE, and JENNIFER MEYER CHAGNON, *Administrative Patent Judges*.

CHAGNON, *Administrative Patent Judge*.

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

I. INTRODUCTION

We have jurisdiction to hear this *inter partes* review under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed herein, we determine that Snap Inc. ("Petitioner") has shown, by a preponderance of the evidence, that claims 1 and 6 ("the challenged claims") of U.S. Patent No. 9,306,885 B2 (Ex. 1001, "the '885 patent") are unpatentable.

A. Procedural History

Petitioner filed a Petition for *inter partes* review of claims 1 and 6 of the '885 patent. Paper 2 ("Pet."). Petitioner provided a Declaration of Sandeep Chatterjee, Ph.D. (Ex. 1002) to support its positions. Vaporstream, Inc. ("Patent Owner") filed a Preliminary Response (Paper 8), supported by the Declaration of Michael Shamos, Ph.D. (Ex. 2001). Pursuant to 35 U.S.C. § 314(a), on June 18, 2018, *inter partes* review was instituted on the following grounds:

whether claims 1 and 6 would have been obvious under 35 U.S.C. § 103(a) in view of Namias[1], PC Magazine[2], Saffer[3], and Smith[4]; and

whether claims 1 and 6 would have been obvious under 35 U.S.C. § 103(a) in view of Namias, PC Magazine, RFC 2821[5], and Hazel[6].

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[1] U.S. Patent Appl. Pub. No. 2002/0112005 A1, published Aug. 15, 2002 (Ex. 1003).

[2] Neil J. Rubenking, *Disabling Print Screen*, P.C. MAGAZINE, Aug. 1988, at 450 ("PC Magazine") (Ex. 1033).

[3] U.S. Patent Appl. Pub. No. 2003/0122922 A1, published July 3, 2003 (Ex. 1004).

[4] U.S. Patent No. 6,192,407 B1, issued Feb. 20, 2001 (Ex. 1005).

See Paper 13 ("Inst. Dec."). Subsequent to institution, Patent Owner filed a Patent Owner Response (Paper 24, "PO Resp."), along with a Declaration of Kevin C. Almeroth, Ph.D. (Ex. 2009) to support its positions. Petitioner filed a Reply (Paper 27, "Pet. Reply") to the Patent Owner Response, along with a Reply Declaration of Dr. Chatterjee (Ex. 1043), and Patent Owner filed a Sur-Reply (Paper 30, "PO Sur-Reply"). Patent Owner filed a Motion to Exclude (Paper 32), to which Petitioner filed an Opposition (Paper 34).

An oral hearing was held on March 27, 2019. A transcript of the hearing is included in the record. Paper 41 ("Tr.").

B. Related Proceedings

The parties indicate that the '885 patent is the subject of the following district court proceeding involving Petitioner and Patent Owner: *Vaporstream, Inc. v. Snap Inc.*, Case No. 2:17-cv-00220-MLH-KS (C.D. Cal.). Pet. 1; Paper 5, 1.

Petitioner filed nine additional petitions for *inter partes* review of various other patents owned by Patent Owner, "each of which claims priority to the same priority application as the '885 patent" (Paper 7, 1): Cases IPR2018-00200, IPR2018-00369, IPR2018-00397, IPR2018-00404, IPR2018-00408, IPR2018-00416, IPR2018-00439, IPR2018-00455, and IPR2018-00458. *See* Paper 7, 1–2; Pet. 1. *Inter partes* review was instituted in each of these proceedings.

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[5] *Simple Mail Transfer Protocol*, Network Working Group, Request for Comments 2821 (J. Klensin ed., AT&T Labs), published April 2001 (Ex. 1008).

[6] PHILIP HAZEL, EXIM: THE MAIL TRANSFER AGENT (2001) (Ex. 1011).

C. The '885 Patent

The '885 patent is titled "Electronic Message Send Device Handling System and Method with Media Component and Header Information Separation," was filed on December 17, 2014[7], and issued April 5, 2016. Ex. 1001, at [22], [45], [54]. The '885 patent relates to an electronic messaging method "with reduced traceability." *Id.* at [57]. The '885 patent notes that "[t]ypically, an electronic message between two people is not private." *Id.* at 2:7–8. For example, messages may be intercepted by third parties; logged and archived; or copied, cut, pasted, or printed. *Id.* at 2:8–12. "This may give a message a 'shelf-life' that is often uncontrollable by the sender or even the recipient." *Id.* at 2:13–14. The challenged claims are directed to an "electronic message send device handling . . . method" for reducing traceability of an electronic message. *See id.* at 1:67–2:3, 2:27–29, 18:58–19:24, 19:45–48.

[7] The '885 patent claims priority, through a chain of continuation applications, to application No. 11/401,148, filed on April 10, 2006, and provisional application No. 60/703,367, filed on July 28, 2005. Ex. 1001, at [60], [63]. The specific priority date of the challenged claims is not at issue in this proceeding, and we need not make any determination in this regard.

Figure 3 of the ’885 patent is reproduced below:

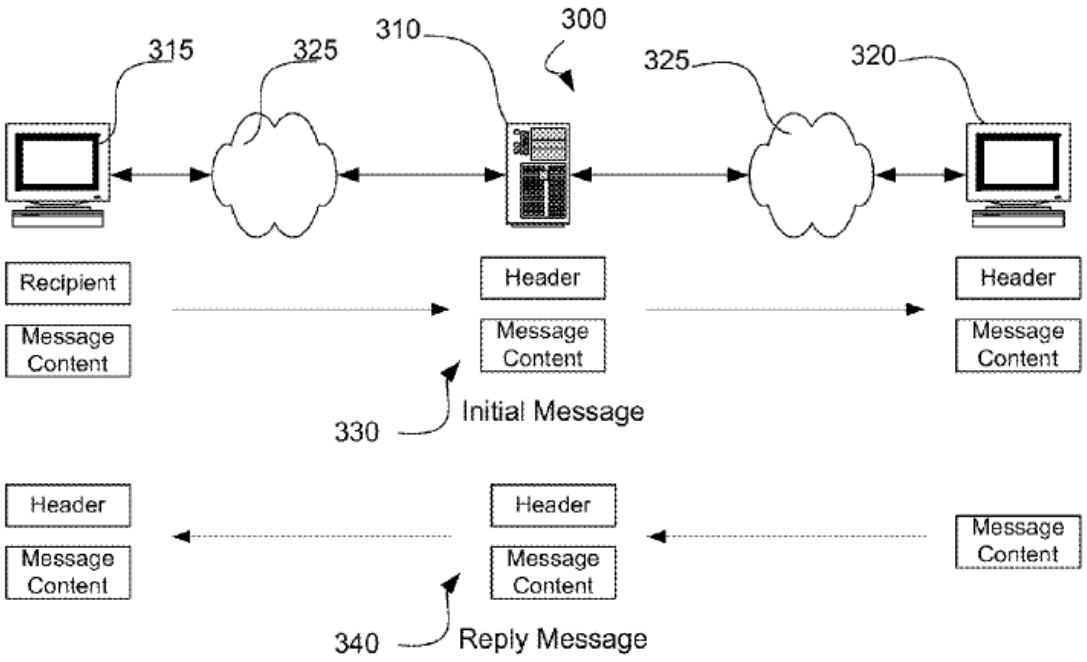

FIG. 3

Figure 3, above, illustrates an example of a messaging system according to the ’885 patent. *Id.* at 10:62–63. System 300 includes user computers 315, 320 and server computer 310, connected via network 325. *Id.* at 10:63–66. Electronic message 330 is communicated via this system using a method detailed below. *Id.* at 10:66–67. Reply electronic message 340 also is illustrated, but is not discussed in further detail herein. *Id.* at 10:67–11:1.

Figure 5 of the ’885 patent is reproduced below:

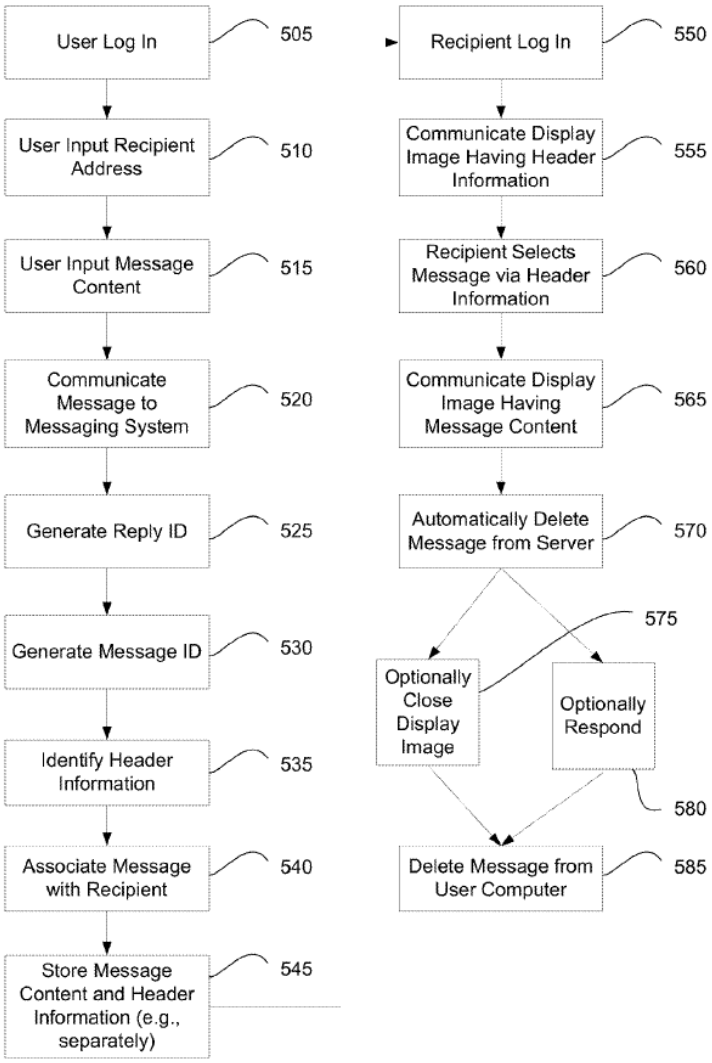

FIG. 5

Figure 5, above, is a flow chart of an exemplary method of the ’885 patent. Ex. 1001, 3:43–44. In step 510, the user inputs a recipient address on a screen. *See id.* at 11:41–45, 11:53–56, Fig. 8. A recipient address identifies a particular desired recipient and “may be a unique identifier (e.g., a screen name, a login name, a messaging name, etc.) established specifically for use with [this] system” or it “may be a pre-established [e-mail] address, text messaging address, instant messaging address, Short Messaging Service

(SMS) address, a telephone number . . . , BLACKBERRY personal identification number (PIN), or the like." *Id.* at 7:7–19.

After the recipient address has been entered, the system will proceed to step 515 and display another screen where the user may input the content of an electronic message. *Id.* at 11:53–60, Fig. 9. "An electronic message may be any electronic file, data and/or other information transmitted between one or more user computers." *Id.* at 7:50–52. The electronic message may include text, image, video, audio, or other types of data. *Id.* at 7:52–60. In one embodiment, "the recipient address and the message content are entered on separate display screens." *Id.* at 11:59–60. This separate entry "further reduces the traceability of an electronic message by, in part, reducing the ability of logging at computer 315," for example, by preventing screenshot logging from capturing the recipient address and message content simultaneously. *Id.* at 9:20–22, 11:62–65.

At step 520, the message content is communicated to server 310. *Id.* at 12:5–8. The recipient address is communicated to the server separately from the corresponding message content, in order to reduce the ability to intercept the entire message during communication to the server. *Id.* at 12:8–12. "[A] correlation (e.g., a non-identifying message ID . . .) may be utilized to associate the two components." *Id.* at 7:2–4. In this regard, "at step 530, system 300 generates a message ID for associating the separated message content and header information [(which includes the recipient address)] of electronic message 330. Server 310 maintains a correspondence between the message content and header information." *Id.* at 12:37–41, 6:57–65; *see also id.* at 13:28–32 ("A message ID [is] used to maintain correspondence between the separated components of electronic message

330."). The '885 patent describes an example in which the message ID is included both in the Extensible Markup Language (XML) file storing the header information and in the XML file storing the message content. *See id.* at 13:43–14:26.

D. Challenged Claims

We instituted review based on challenges to independent claim 1 and dependent claim 6. Claims 1 and 6 of the '885 patent are reproduced below.

> 1. A computer-implemented method of handling an electronic message at a sending user device in a networked environment, the electronic message including an identifier of a recipient and a message content, the sending user device having access to electronic instructions, the electronic instructions being stored at the sending user device and/or at a server computer, the method comprising:
>
> associating a message content including a media component with the electronic message via a first display at a sending user device;
>
> associating an identifier of a recipient with the electronic message via a second display at the sending user device, the first and second displays being generated by the electronic instructions such that the first and second displays are not displayed at the same time via the sending user device, the electronic instructions acting on the displays at the sending user device such that the media component is not displayed with the identifier of a recipient via the second display preventing a single screen capture of both the identifier of a recipient and the media component;
>
> transmitting the message content including a media component from the sending user device to a server computer; and
>
> transmitting the identifier of a recipient from the sending user device to the server computer, said transmitting the message content including a media component and said

> transmitting the identifier of a recipient occurring separately, the identifier of a recipient and the message content including a media component each including a correlation to allow the identifier of a recipient and the message content including a media component to be related to each other at a later time by the server computer.

Ex. 1001, 18:58–19:24.

> 6. A computer-implemented method according to claim 1, wherein the media component includes information selected from the group consisting of an image, video, audio, and any combinations thereof.

Id. at 19:45–48.

II. ANALYSIS

A. Principles of Law

To prevail in its challenges to the patentability of the claims, Petitioner must demonstrate by a preponderance of the evidence that the challenged claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). "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 of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in *inter partes* review).

A claim is unpatentable for obviousness if, to one of ordinary skill in the pertinent art, "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." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting 35 U.S.C. § 103(a)). 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 ordinary skill in the art; and (4) objective evidence of nonobviousness.[8] *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). An obviousness analysis "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 550 U.S. at 418; *accord In re Translogic Tech., Inc.*, 504 F.3d 1249, 1259 (Fed. Cir. 2007). However, Petitioner cannot satisfy its burden of proving obviousness by employing "mere conclusory statements," but "must instead articulate specific reasoning, based on evidence of record" to support an obviousness determination. *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380–81 (Fed. Cir. 2016). Petitioner also must articulate a reason why a person of ordinary skill in the art would have combined the prior art references. *In re NuVasive*, 842 F.3d 1376, 1382 (Fed. 2016).

At this final stage, we determine whether a preponderance of the evidence of record shows that the challenged claims would have been rendered obvious in view of the asserted prior art. We analyze the asserted grounds of unpatentability in accordance with these principles.

[8] The parties have not asserted or otherwise directed our attention to any objective evidence of non-obviousness.

B. Level of Ordinary Skill in the Art

We review the grounds of unpatentability in view of the understanding of a person of ordinary skill in the art at the time of the invention. *Graham*, 383 U.S. at 17. Petitioner contends that a person of ordinary skill in the art would have had "at least a bachelor's degree in software engineering, computer science, or computer engineering with at least two years of experience in the design and implementation of systems for sending and receiving messages over a communications network, such as the Internet (or equivalent degree or experience)." Pet. 4–5 (citing Ex. 1002 ¶¶ 13–16). Patent Owner's declarant, Dr. Almeroth, "generally agree[s]" with Petitioner's characterization of the person of ordinary skill with the caveat "that such a person of ordinary skill would also have a working knowledge of design principles for software user interfaces. Such knowledge often would be learned in an undergraduate course in Human Computer Interaction (HCI)." Ex. 2009 ¶ 21; *see also* Ex. 2001 ¶ 14 (Patent Owner's previous declarant, Dr. Shamos, also was in general agreement with Petitioner's description of one of ordinary skill). We agree, as the '855 patent discusses the design of an interface that purports to reduce the traceability of electronic messages. *See, e.g.*, Ex. 1001, 1:66–3:21. In the Institution Decision, we adopted Petitioner's proposed description of the person of ordinary skill in the art. Inst. Dec. 10–11. Based on the record developed during trial, including our review of the '885 patent and the types of problems and solutions described in the '885 patent and cited prior art, we agree with and adopt Petitioner's description of the person of ordinary skill in the art, with the caveat that such an individual would have had a

working knowledge of design principles for software user interfaces, which may be achieved via study of human-computer interaction (HCI).

C. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable constructions in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b) (2018)[9]. "In claim construction, [our reviewing] court gives primacy to the language of the claims, followed by the specification. Additionally, the prosecution history, while not literally within the patent document, serves as intrinsic evidence for purposes of claim construction." *Tempo Lighting, Inc. v. Tivoli, LLC*, 742 F.3d 973, 977 (Fed. Cir. 2014). Otherwise, under the broadest reasonable construction standard, claim terms are presumed to have their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

Patent Owner seeks construction of the phrase "message content including a media component" and the term "correlation." PO Resp. 22–26. Petitioner does not seek express construction of any term of the '885 patent, but responds to Patent Owner's proposed constructions in its Reply. Pet. 9; Pet. Reply 1, 10–11, 22. For purposes of this Decision, we need only

[9] The recent revisions to our claim construction standard do not apply to this proceeding because the new "rule is effective on November 13, 2018 and applies to all IPR, PGR and CBM petitions filed on or after the effective date." Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (to be codified at 37 C.F.R. § 42).

discuss the construction of the phrase "message content including a media component."[10] *See, e.g., Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) ("[W]e need only construe terms 'that are in controversy, and only to the extent necessary to resolve the controversy.'") (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

Claim 1 recites various limitations pertaining to a "message content including a media component." For example, claim 1 recites "associating a message content including a media component with the electronic message via a first display at a sending user device," "transmitting the message content including a media component from the sending user device to a server computer," where this transmission occurs separately from the "transmi[ssion of] the identifier of a recipient from the sending device to the server computer," and where "the identifier of a recipient and the message content including a media component each includ[e] a correlation to allow the identifier of a recipient and the message content including a media component to be related to each other at a later time by the server computer."

Patent Owner contends that "'message content including a media component' encompasses media content included in the message via a publicly-accessible [Uniform Resource Locator (URL)]." PO Resp. 24. In

[10] We need not interpret "correlation" because Patent Owner's arguments regarding the term pertain only to the asserted ground based on Namias, PC Magazine, RFC 2821, and Hazel, which we do not address in this Decision. *See* PO Resp. 25–26, 50–52; *infra* § II.E. Patent Owner does not dispute Petitioner's contention that the recited "correlation" is taught by the combination of Namias, PC Magazine, Saffer, and Smith. *See* Pet. 38–44; *infra* § II.D.5.f.

support of this construction, Patent Owner relies on a passage from the '855 patent, which states that "a message content of an electronic message may include an attached and/or linked file." Ex. 1001, 7:62–63 (cited at PO Resp. 23). Patent Owner also directs us to testimony from Petitioner's declarant, Dr. Chatterjee. PO Resp. 24 (citing Ex. 1002 ¶ 107 n.23). Patent Owner characterizes Dr. Chatterjee's testimony as "mak[ing] clear [that] passing the actual content and passing a link that provides access to that content, such as a URL, are both examples of 'passing information.'" *Id.* Thus, in Patent Owner's view, the recited "message content including a media component" broadly includes both a URL in a message (linking to content accessible via that URL) and a file attached to the message. *See id.* at 22–24.

Petitioner responds by arguing that "although the specification states that [the] 'message content' may include a 'linked file,' it never states that the *link itself* is 'message content.'" Pet. Reply 10 (internal citations omitted, emphasis Petitioner's). In addition, Petitioner directs us to a further statement in the specification, that "[t]ypically, a message content, such as message content 140 does not include information that in itself identifies the message sender, recipient, *location of the electronic message*, or time/date associated with the electronic message." Ex. 1001, 7:66–8:3 (cited at Pet. Reply 11) (emphasis added). Petitioner explains that "[t]he URL (Uniform Resource Locator) in the proposed combination [of Namias and Saffer] therefore does not qualify as 'message content' because it identifies 'the location of' the video message on the video server in Saffer." Pet. Reply 11 (citing Ex. 1004 ¶ 28). According to Petitioner, a person of ordinary skill in the art would "think of a URL as a pointer to content," i.e., "how you get to

the content" rather than "the content itself." Tr. 23:12–24:5. In short, Petitioner contends that "[i]t's . . . the *file* that's the content, not the link itself." *Id*. at 23:6 (emphasis added).

We agree with Petitioner's arguments. The specification of the '885 patent states that

> [i]n one example, a message content of an electronic message may include embedded information. In another example, a message content of an electronic message may include an attached and/or linked file. In such an example with an attached and/or linked file, the attached and/or linked file may be automatically deleted from the messaging system after being viewed by a recipient.

Ex. 1001, 7:60–66. Thus, the specification indicates that message content may be communicated to the user via embedded information, attached files, or linked files. Embedding, attaching, and linking are three ways to provide access to information. In other words, the email recipient may gain access to the information or content in a variety of ways, however, the method of providing access to information or content is not the same thing as the underlying information or content. In the passage quoted above, privacy may be enhanced by automatically deleting "the attached and/or linked file" from the messaging system after the file is viewed. *Id*. at 7:64–66. The specification makes no provisions for deleting the URL or link to the file, but rather the focus is on the information itself. That information, or "message content," is located in the file itself regardless of the method by which the recipient accesses that information. Contrary to Patent Owner's assertion, Dr. Chatterjee's testimony cited by Patent Owner also supports this conclusion. *See* PO Resp. 24 (citing Ex. 1002 ¶ 107 n.23).

Dr. Chatterjee testifies that there is a "distinction between transmitting the

actual content to the recipient in a message, versus transmitting *just a URL* that points to or is an address for the content." Ex. 1002 ¶ 107 n.23 (emphases added). Dr. Chatterjee's testimony makes clear that "actual content" is distinct from "just a URL" that points to the content.

Thus, we determine that the broadest reasonable interpretation of the phrase "message content including a media component" does not encompass a URL in a message (linked to content accessible via that URL). No further express interpretation of this phrase is necessary for the purposes of this Decision. *See, e.g.*, *Nidec Motor Corp.*, 868 F.3d at 1017.

D. Asserted Obviousness in View of Namias, PC Magazine, Saffer, and Smith

Petitioner contends that claims 1 and 6 are unpatentable under 35 U.S.C. § 103 as obvious in view of Namias, PC Magazine, Saffer, and Smith. Pet. 4, 16–50. Relying on the testimony of Dr. Chatterjee, Petitioner asserts that the combined references teach or suggest the subject matter of the challenged claims and that a person having ordinary skill in the art would have combined the teachings of the references in the manner asserted. *Id.*; Ex. 1002 ¶¶ 52–138. Patent Owner, relying on the testimony of Dr. Almeroth, disputes Petitioner's contentions. PO Resp. 26–50; Ex. 2009 ¶¶ 79–115. For the reasons discussed below, we determine Petitioner has established the unpatentability of these claims by a preponderance of the evidence.

1. Overview of Namias (Ex. 1003)

Namias relates to a "method and apparatus for providing a video e-mail kiosk for creating and sending video e-mail messages such as full

motion videos or still snapshots." Ex. 1003, at [57]. The video e-mail kiosk of Namias includes a digital processor, a touch-sensitive screen monitor, a digital video camera, a microphone, audio speakers, a credit card acceptor, a cash acceptor, and a digital network communications link. *Id.* ¶ 31. The kiosk displays an inactive screen until a user starts a transaction. *Id.* ¶ 34. Upon activation of the kiosk, a record screen is shown on the kiosk display and the user may create a video recording or still image from this screen. *Id.* ¶ 35. A preview screen is displayed after the user has recorded a full motion video or still snapshot message. *Id.* ¶ 36.

Figure 4A of Namias is reproduced below:

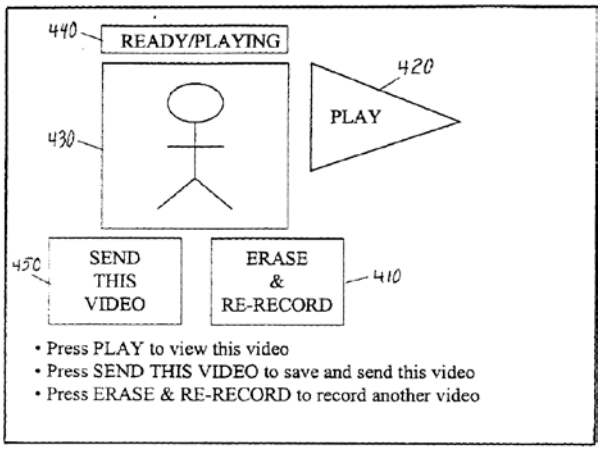

FIG. 4A

Figure 4A, above, illustrates "a preview screen that is displayed after a user has recorded a video message." *Id.* ¶ 25. Preview screen 400 allows the user to review the recorded video or still image and decide whether the message is acceptable. *Id.* ¶ 36. If the user is satisfied with the message, then the user may press send button 450 and proceed to address screen 500. *Id.* ¶¶ 37, 40.

Figure 5 of Namias is reproduced below:

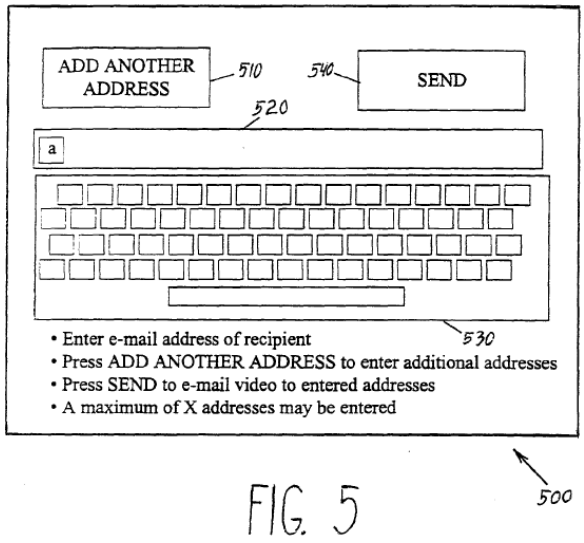

FIG. 5

Figure 5, above, illustrates an address screen on which a user is prompted to enter a recipient's e-mail address. *Id.* ¶ 27. "The address is a unique identifier which instructs routing computers where to send the message." *Id.* ¶ 5. The user presses add address button 510 and then may use a keyboard to input the e-mail address of the recipient. *Id.* ¶ 40. Once the e-mail address(es) have been entered, the user may press send button 540 to move to the next step in the process. *Id.* "[F]inal screen 700 . . . is displayed at the end of the process after payment has been made and the video or photographic e-mail has been sent to the intended recipient or recipients." *Id.* ¶ 42.

2. Overview of Saffer (Ex. 1004)

Saffer relates to a "computer implemented system and method in which a user can send e-mail messages that include full-motion video and audio (or, alternatively, audio only), along with (if desired) the text messages to an e-mail recipient." Ex. 1004, at [57]. In Saffer, a user composes a message, records a video, and then hits the send button. *Id.* ¶ 4.

The sender's computer retrieves a video ID from the server for that compressed video. *Id.* ¶¶ 4, 29, Fig. 3 (step 100). Software on the sender's computer compresses the video and transmits the compressed video to a server. *Id.* ¶¶ 4, 44, Fig. 3 (steps 102, 108). The sender's computer inserts the video ID (with a link or network address to the video server) into an email message, which is then sent to the recipient. *Id.* ¶¶ 4, 46, 47, Fig. 3 (step 112).

3. Overview of Smith (Ex. 1005)

Smith relates to "[a] document delivery architecture [that] dynamically generates a private Uniform Resource Locator (URL) to distribute information." Ex. 1005, at [57]. Smith's private URLs ("PURLs") are temporary, dynamically generated URLs that uniquely identify the recipient of a document, the document to be delivered, and optionally may include other delivery parameters. *Id.* at [57], 15:8–11. A sender forwards a document to a server and the server temporarily stores the document. *Id.* at 15:29–31. "The server dynamically generates a URL for each intended recipient of the document." *Id.* at 15:31–33. The recipient is sent an email message that includes the PURL. *Id.* at 15:38–41. The recipient uses the PURL and the Web to retrieve the document (or set of documents). *Id.* at 14:48–50, 15:41–42. "PURLS avoid attaching information to e-mail messages to send documents, but rather attach a general reference to a document to be sent, and then enable the recipient to access a document via the reference." *Id.* at 15:13–16. When the recipient accesses the document by using a PURL, a server can intercept the document access request and provide additional services, such as tracking and security. *Id.* at 15:16–19.

4. Overview of PC Magazine (Ex. 1033)

PC Magazine refers to an article in PC Magazine, titled *Disabling Print Screen*. Ex. 1033, 450[11]. The article describes how to prevent a user from activating Print Screen functionality. *Id.*

5. Analysis of Petitioner's Challenge to Claim 1

We begin by assessing Petitioner's arguments as to how the combination of Namias, PC Magazine, Saffer, and Smith teaches the limitations of claim 1, and then turn to Petitioner's arguments regarding why a person of ordinary skill in the art would have been motivated to combine the teachings of the references.

a. "A computer-implemented method of handling an electronic message at a sending user device in a networked environment, the electronic message including an identifier of a recipient and a message content, the sending user device having access to electronic instructions, the electronic instructions being stored at the sending user device and/or at a server computer"

Petitioner relies on kiosk 100 of Namias as teaching the claimed "sending user device" and on the video or picture message sent using the kiosk as teaching the claimed "electronic message." Pet. 16–17 (citing Ex. 1002 ¶ 54). Petitioner further contends that Namias discloses including "the recipient's email address (requested from the sender)" and "the (recorded) video or picture content" as part of the video or picture message, thus teaching the claim requirement that "the electronic message includ[es] an identifier of a recipient and a message content." *Id.* at 17 (citing

[11] Citations to Exhibit 1033 are to the original pagination of the magazine.

Ex. 1003, at [57], ¶ 54; Ex. 1002 ¶ 54). According to Petitioner, "because the kiosk in Namias creates, records, and sends the video or picture message, one of ordinary skill would have understood that Namias discloses 'handling an electronic message at a sending user device'" (*id.* (citing Ex. 1002 ¶ 55) (emphasis omitted)); Namias "makes clear" that its method is "[a] computer-implemented method" (*id.* at 17–18 (citing Ex. 1003 ¶¶ 19, 20, 22, 31–33, Fig. 1)); because the kiosk sends the message via e-mail, it is "in a networked environment" (*id.* at 18–19 (citing Ex. 1003 ¶¶ 20, 31–33)); and one of skill in the art would have understood that the processor and memory of Namias's kiosk teaches or suggests at least electronic instructions stored at the kiosk (*id.* at 19–20 (citing Ex. 1003 ¶¶ 20, 31–33; Ex. 1002 ¶¶ 57–58)). We agree, for the reasons stated in the Petition.

b. "associating a message content including a media component with the electronic message via a first display at a sending user device"

Petitioner relies on Namias to teach this limitation. Pet. 20–22. Petitioner points to preview screen 400 of Figure 4A of Namias as teaching the claimed first display, via which message content (i.e., a video) is associated with the electronic message. *Id.* at 20–21 (citing Ex. 1003, at [57], ¶¶ 20, 23–29, 31–32, Figs. 2, 3, 4A, 4B, 5, 6, 7). As described in Namias, preview screen 400 appears after the sender has recorded a video, and allows the user to play the recorded video. Ex. 1003 ¶¶ 25, 36–37; Pet. 21. If the sender is satisfied with the video, pressing "SEND THIS VIDEO" button 450 saves and sends the video. Pet. 22 (citing Ex. 1003 ¶ 37, Fig. 4A; Ex. 1002 ¶ 61). Dr. Chatterjee testifies that "[b]ecause the display in Figure 4A allows the user to save previously input content for

sending via email," Namias discloses this claim limitation. Ex. 1002 ¶ 61 (emphasis omitted); Pet. 22. We agree, for the reasons stated in the Petition.

c. "associating an identifier of a recipient with the electronic message via a second display at the sending user device"

Petitioner relies on Namias to teach this limitation. Pet. 22–23. Petitioner points to address screen 500 of Figure 5 of Namias as teaching the claimed second display, via which an identifier of a recipient (i.e., a recipient's e-mail address) is associated with the electronic message. *Id.* (citing Ex. 1003 ¶¶ 27, 40, Fig. 5; Ex. 1002 ¶ 64). As described in Namias, Figure 5 "allows the user to enter an e-mail address or addresses and thereby designate a recipient or recipients." Ex. 1003 ¶ 40; Pet. 23. The user presses "SEND" button 540 "to email [the] video to [the] entered addresses." Ex. 1003, Fig. 5; Pet. 23. Dr. Chatterjee testifies that these teachings of Namias disclose this claim limitation. Ex. 1002 ¶ 64. We agree, for the reasons stated in the Petition.

d. "the first and second displays being generated by the electronic instructions such that the first and second displays are not displayed at the same time via the sending user device, the electronic instructions acting on the displays at the sending user device such that the media component is not displayed with the identifier of a recipient via the second display preventing a single screen capture of both the identifier of a recipient and the media component"

Petitioner relies on Namias and PC Magazine to teach this limitation. Pet. 24–29. Petitioner contends that a person of ordinary skill in the art would have understood that the electronic instructions stored at the kiosk (discussed *supra* § II.D.5.a) would have generated the first and second displays. *Id.* at 24 (citing Ex. 1003 ¶ 32; Ex. 1002 ¶ 65). Further, according

to Petitioner, "Namias makes clear that the screen corresponding to the 'first display,' shown in Figure 4A, and the screen corresponding to the 'second display,' shown in Figure 5, are not displayed at the same time." *Id.*; *see id.* at 24–25 (citing Ex. 1003 ¶¶ 37, 40, 55, 58; Ex. 1002 ¶¶ 65–70). Petitioner continues, "because the address screen 500 displays only the recipient's email address and not any component of the recorded picture or video, one of ordinary skill would have understood that 'the second display prevent[s] a single screen capture of both the identifier of a recipient and the media component,'" as claimed. *Id.* at 26–27 (citing Ex. 1002 ¶ 74) (emphases omitted); *see also id.* at 25–28 (citing Ex. 1003 ¶¶ 23–29, 31–33, 40, 58–64, Fig. 5; Ex. 1002 ¶¶ 68–70, 74–85; Ex. 1001, 9:18–22, 18:6–9). Further, Petitioner contends that "nothing in Namias suggests that the kiosk even includes 'screen capture' functionality." *Id.* at 28 (citing Ex. 1002 ¶ 85) (emphasis omitted). Petitioner, however, points to PC Magazine as teaching expressly that screen capture functionality, even if present in the kiosk of Namias, could be disabled easily by one of ordinary skill in the art. *Id.* at 28–29 (citing Ex. 1033, 450–451; Ex. 1002 ¶ 86).

Patent Owner contends that Namias, as modified by Saffer, does not teach or suggest that "the first and second displays are not displayed at the same time" (the "separate displays" limitation). PO. Resp. 47–50. Patent Owner argues that "both Namias and Saffer have user interfaces for composing video emails. Petitioner offers no reason—other than hindsight—why a [person of ordinary skill in the art] determined to combine Namias and Saffer and having considered the references *as a whole* would choose Namias's user interface over Saffer's user interface." *Id.* at 33. Dr. Almeroth opines that "a [person of ordinary skill in the art] intent on

combining Namias with Saffer would almost certainly choose Saffer's single screen email composition display (which is integrated with Saffer and is far more efficient, robust, and less likely to cause navigational trauma) over Namias's multi-screen navigation flow, absent extenuating circumstances." Ex. 2009 ¶ 114; PO Resp. 48.

Petitioner responds by directing us to the Federal Circuit decision in *In re Fulton*, 391 F.3d 1195 (Fed. Cir. 2004). Pet. Reply 16. There, the applicant argued that the record before the Board was insufficient to establish that the features of the relied upon reference "are preferred over other alternatives disclosed in the prior art." *Fulton*, 391 F.3d at 1200. Our reviewing court held that "[t]his argument fails because our case law does not require that a particular combination must be the preferred, or the most desirable, combination described in the prior art in order to provide motivation for the current invention." *Id.* As such, we are tasked with determining "'whether there is something in the prior art as a whole to suggest the *desirability*, and thus the obviousness, of making the combination' not whether there is something in the prior art as a whole to suggest that the combination is the *most desirable* combination available." *Id.* (quoting *In re Beattie*, 974 F.2d 1309, 1311 (Fed. Cir. 1992)).

Petitioner asserts that "while Saffer's interface may offer certain benefits that make it desirable in certain circumstances, Namias's interface likewise provides other advantages that would have motivated a [person of ordinary skill in the art] to use it in a video messaging system." Pet. Reply 18 (citing Ex. 1043 ¶ 37). According to Petitioner, the chief advantage of Namias's two-screen interface "is its simplicity." *Id.* Petitioner directs us to testimony from Patent Owner's declarant, Dr. Shamos, wherein he testified

that "drawings of Namias show, in an incidental manner, that message content and email addresses are entered on different screens; this is a matter of user interface design *simplification*, and not to achieve reduced traceability." Ex. 2001 ¶ 82 (emphasis added) (cited at Pet. Reply 18); *see also id.* ¶ 31 ("The only aspects that Namias has in common with the '885 patent are that Namias discloses (1) sending a media component by email; and (2) separate screens for entering message content and recipient address. However, the reason for the separate screen is not reduced traceability, but to present a *simple* interface to a user who has never used the kiosk before." (emphasis added)); ¶ 77 ("It is true that the drawings [of Namias] illustrate different displays, but this is a matter of user interface design simplification . . . ."). Petitioner asserts that one of ordinary skill in the art would have recognized "that Namias's multiscreen interface is an example of a well-known user interface technique known as 'wizards.'" Pet. Reply 19; *see* Ex. 1043 ¶¶ 39–41. As noted by Dr. Chatterjee,

> [a] *wizard* is a special form of user assistance that automates a task through a dialog with the user. Wizards help the user accomplish tasks that can be complex and require experience. Wizards can automate almost any task . . . . They are especially useful for complex or infrequent tasks that the user may have difficulty learning or doing.

Ex. 1043 ¶ 40 (quoting Ex. 1048[12], 335–36). According to Petitioner, certain users find it easier to use a simpler interface with fewer options on each page. Tr. 16:8–13 ("[I]t's far easier for them to have a wizard type scenario to walk through the things that they have to do, so that they don't get confused by multiple options on a single page.").

[12] Theo Mandel, *The Elements of User Interface Design* (1997) ("Mandel"). Citations to Exhibit 1048 are to the original pagination of the book.

Patent Owner responds by asserting that "Petitioner has not provided any competent evidence that Namias's multi-screen interface is simpler than Saffer's." PO Sur-Reply 18. Patent Owner also contends that arguments regarding the simplicity of Namias's interface and the utility of wizards are untimely because they were first presented in Petitioner's Reply. *Id.*

In light of the evidence and arguments presented on this point, we determine that Petitioner is correct in asserting that one of skill in the art would have understood the combination of Namias with Saffer to teach the separate displays limitation of claim 1. Namias's Figures 4a and 5 are separate displays. Patent Owner concedes as much in its comparison of the multi-screen configuration of Namias with the single screen configuration of Saffer. *See* PO Sur-Reply 18–19. There, Patent Owner compares Namias's "sequence of seven separate screens" with "Saffer's single integrated screen." *Id.* at 18. Namias's Figure 5, the recited "second display," is not accessible to the user until after the media content is handled via the "first display" of Figure 4A. *See* Ex. 1003 ¶ 40. Thus, Namias's screens are not displayed at the same time, as recited in claim 1.

We are not persuaded by Patent Owner's argument that one of skill in the art would not have selected Namias's multi-screen interface over Saffer's integrated interface. Under Federal Circuit precedent, obviousness "does not require that the motivation be the *best* option, only that it be a *suitable* option from which the prior art did not teach away." *PAR Pharm., Inc. v. TWI Pharms., Inc.*, 773 F.3d 1186, 1197–98 (Fed. Cir. 2014) (citing *Galderma Labs., L.P. v. Tolmar, Inc.*, 737 F.3d 731, 738 (Fed. Cir. 2013)). Here, we are presented with persuasive evidence from Dr. Chatterjee showing that one of skill in the art would have looked to Namias to design a

video messaging system that was easy to use. Dr. Chatterjee's opinion is supported by a 1997 reference book, Mandel (Ex. 1048), discussing the elements of user interface design. *See* Ex. 1043 ¶ 40 (citing Ex. 1048). Indeed, Mandel indicates that wizard-type layouts (like the one disclosed in Namias) are useful because "[i]t is better to have a greater number of simple pages with fewer choices than a smaller number of complex pages with too many options or text." Ex. 1048, 341 (cited at Ex. 1043 ¶ 40). Further, as Patent Owner's declarant, Dr. Almeroth, noted, a person of ordinary skill in the art would be versed in user interface design and may have taken undergraduate courses in human-computer interaction (HCI). Ex. 2009 ¶ 21. Thus, Mandel with its focus on "Foundations of User Interface Design," including "understanding . . . how humans read, learn, and think to help design computers that work within the psychological capabilities and limitations of the people for whom they are designed," would be indicative of the knowledge of a person of ordinary skill at the time of the invention of the '885 patent. *See* Ex. 1048, Cover, xv (emphases omitted).

In addition, we are not persuaded that Petitioner's argument in its Reply is untimely. *See* Pet. Reply 17–19 (citing Ex. 1043 ¶¶ 36–41). As described in the Petition, Petitioner relies on Figures 4A and 5 of Namias for the separate displays limitation, noting that "the user interface in Namias uses separate displays to solicit the recipient identification and message content from the user." Pet. 10, 24–25. Petitioner's asserted combination with Saffer is for other claim limitations—namely the separate transmissions limitation discussed below (*infra* § II.D.5.e). Patent Owner argues in its Patent Owner Response that Petitioner failed to explain why a person of ordinary skill in the art would have chosen "the Namias interface instead of

the Saffer single composition screen." PO Resp. 48. Then in its Reply, Petitioner responded to Patent Owner's arguments regarding the desirability of a multi-screen format as opposed to a single-screen format by explaining why Patent Owner is incorrect and further explaining the previous discussion of separate display screens with supporting evidence (such as Mandel) showing how one of ordinary skill in the art would have understood Namias's disclosures. Thus, we are persuaded that this is not an untimely argument, but rather a proper responsive argument that builds upon the existing record. For all of these reasons, we are persuaded that Petitioner has established that the cited art teaches the separate displays limitation of claim 1 of the '885 patent.

> *e. "transmitting the message content including a media component from the sending user device to a server computer"; "transmitting the identifier of a recipient from the sending user device to the server computer, said transmitting the message content including a media component and said transmitting the identifier of a recipient occurring separately"*

Petitioner relies on Namias and Saffer to teach these limitations. Pet. 29–38. Petitioner acknowledges that, although "Namias makes clear that the system sends the video or picture message to a recipient," it "does not disclose the detailed mechanics of how [the sending of a video to a recipient] takes place." *Id.* at 29–30 (citing Ex. 1003 ¶ 42). Petitioner relies on Saffer as teaching these details, and in particular as teaching transmitting the message content to the server computer and transmitting the identifier of a recipient to the server computer, such transmitting steps occurring separately, as claimed. *See id.* at 29–34; Ex. 1002 ¶¶ 88–98. According to Petitioner, Saffer, like Namias, teaches a system in which a user can send

video (optionally, along with text) to an e-mail recipient. Pet. 30 (citing Ex. 1004, at [57], ¶¶ 2–3). Petitioner lays out the steps performed by Saffer, after the sender presses the "Send" button, as follows:

> (1) The sending device requests and obtains a "video ID" from a video server, which will be used to uniquely identify the recorded video. (Saffer, ¶¶0004, 0029, Figure 3 (Step 100).)
>
> (2) The sending device uses the video ID received in step (1) to rename the video file. (Saffer, ¶¶0004, 0044, Fig. 3 (Step 102).)
>
> (3) The sending device then uploads the renamed video file to the video server for storage. (Saffer, ¶¶0004, 0044, Fig. 3 (Step 110).)
>
> (4) After the upload, the sending device inserts a link into the body of the email message (in the form of a Uniform Resource Locator (URL)), the link including the video ID that identifies the video file on the video server. (Saffer, ¶¶0004, 0046, Fig. 3 (Step 112), ¶0027.)
>
> (5) Finally, the sending device sends the email containing the link (but not containing the previously-uploaded video content) to an email server. (Saffer, ¶¶0004, 0047.)

Pet. 30–31 (citing Ex. 1002 ¶ 89). As noted by Petitioner, "[s]teps (1)-(4) above are illustrated in Figure 3 [of Saffer (reproduced below)], which highlights in yellow Steps 100, 102, 110, and 112 from Saffer." *Id.* at 31.

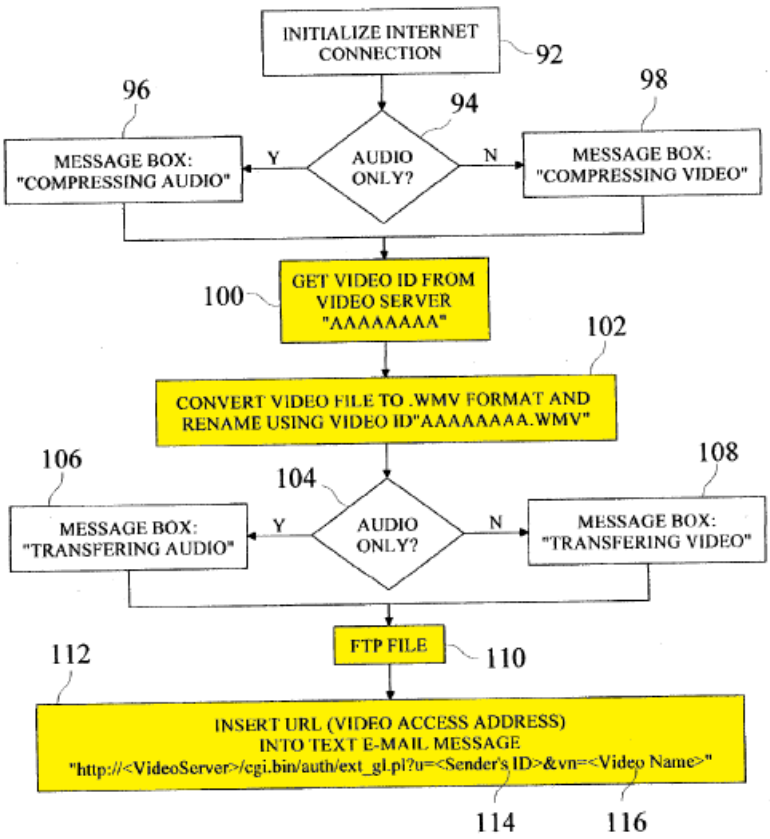

FIG.3

Figure 3 of Saffer, above, with highlighting added by Petitioner (*id.*), illustrates a flow diagram of "sending and compressing a video file to the video server with a unique ID." Ex. 1004 ¶ 9.

Petitioner also relies on Figure 1 of Saffer, an annotated version of which is reproduced below (Pet. 34), to provide further explanation of its position.

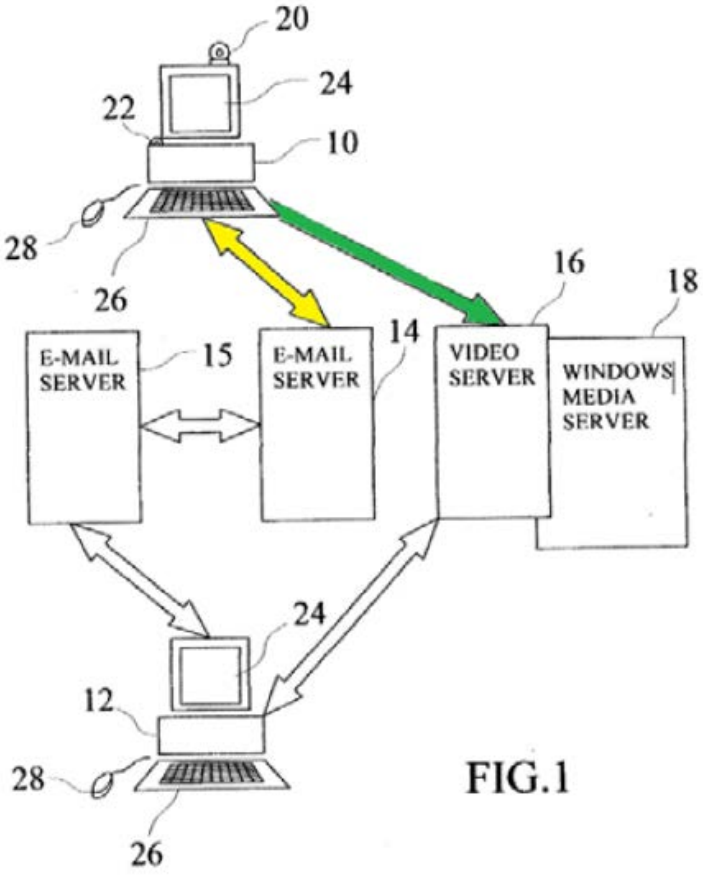

FIG.1

Annotated Figure 1, above, is a block diagram of an exemplary embodiment of Saffer. Ex. 1004 ¶ 7. According to Petitioner, "Saffer discloses an embodiment in which the video content is transmitted to a *video server* 16 (in green) and the email message to a *physically separate e-mail server* 15 (in yellow)." Pet. 34. As noted by Petitioner, the sending device of Saffer sends the e-mail message with the URL and recipient address to the email server, after uploading the video file to the server (i.e., Step 110) *and* after an intervening step of inserting the URL into the e-mail message (i.e.,

Step 112). *Id.* at 31–32 (citing Ex. 1004 ¶¶ 4, 44–47, Fig. 3; Ex. 1002 ¶¶ 90–94). As such, Petitioner argues that the cited art teaches separately transmitting the identifier of a recipient (i.e., the address) and the message content. *Id.* at 33–34. "This is because [the] transmissions . . . are separated by an intervening step, and separately conveyed to the server." *Id.* at 33 (citing Ex. 1002 ¶¶ 94–98) (emphases omitted). Dr. Chatterjee explains

> that after [a] the video content has been uploaded, there is an intervening step of [b] "then . . . insert[ing] the video ID with a 'link' or network address to the video server into the text or code of the composed e-mail message" before [c] that email message, which contains the recipient's email address in its "To:" field (Saffer, Fig. 7, ¶0024), is uploaded.

Ex. 1002 ¶ 94 (emphases omitted). Thus, the transmission of the video content to the video server must occur first in order to be able to generate the link with the video ID that is inserted into the email message (that contains the recipient address), which is later sent to the email server. Petitioner also argues that Saffer teaches a video server and email server that constitute a single physical server. Pet. 32 (citing Ex. 1004 ¶ 4 (discussing the upload of compressed video to the video server "which may be the same server as the e-mail server"), ¶ 17, claim 5).

Patent Owner asserts that the asserted combination does not teach or suggest "transmitting the message content including a media component and . . . transmitting the identifier of a recipient occurring separately" (the "separate transmissions" limitation). PO. Resp. 39–47. Specifically, Patent Owner asserts that a person of ordinary skill in the art would have understood that by placing Saffer's URL into the body of an email message, that email message would now contain both the recipient address and the media content. *Id.* at 40–41. In addition, Patent Owner argues that even if

the URL were not considered to be message content, it would undermine the purpose of the claims if the URL and header information were in the same message because it would not allow for the sought reduced traceability. *Id.* at 43. We address each of these arguments in turn.

First, as noted above, we construe the term "message content including a media component" in a manner that excludes a URL in a message (linking to content accessible via that URL) from the definition of the phrase. *See supra* § II.C. Thus, per our construction, Saffer's URL is not message content, but an identifier that provides access to message content that is stored elsewhere (e.g., the video server).

Patent Owner argues that Saffer's system sends a transmission that includes both message content and header information. PO Resp. 40–41. Patent Owner asserts that Namias is silent as to the transmission of header information and message content and that Saffer includes this information together as depicted in Figures 6 and 7 of Saffer. *Id.* at 45. Petitioner correctly asserts that "Patent Owner ignores how Saffer's technique would be adapted to the Namias system as proposed by Petitioner, and attacks Saffer individually." Pet. Reply 9. Petitioner's proposed combination does not rely on Saffer's user interfaces or input methods, but rather it relies upon Namias's multi-screen user interface to provide the inputs to the Saffer transmission system.[13] Pet. 24–34. Petitioner explains that Saffer describes two separate transmissions with an intervening step between the

[13] Under Petitioner's combination, the message content is "simply the video message content in Namias, with no user-provided text or other content." Pet. 35 n.3; *see* Ex. 1002 ¶ 100. "[T]he only message content the user can input is the actual video or picture data." Pet. 35 n.3 (citing Ex. 1003, Fig. 4A).

transmissions. *Id.* at 33–34. Specifically, Saffer describes uploading the compressed video to a server. *See* Ex. 1002 ¶ 90 (citing Ex. 1004 ¶ 4). Then, the sender's device inserts the video ID with a link (i.e., a URL) for the uploaded video into an email message before sending the email message as a second transmission that includes the URL to access the video and the remainder of the message. *Id.* Dr. Chatterjee opines that it would have been obvious to exclude the recipient address from the first transmission "because, among other reasons, the information would have served no purpose and it would have been a waste of processing and network bandwidth to transmit it." *Id.* ¶ 92. He further testifies that "one of ordinary skill in the art would have understood that the recipient's email address is not uploaded in the same transmission as the video content because it is not until *later* in the process, when the email message is sent, that the recipient's email address is uploaded." *Id.* In addition, Dr. Chatterjee testifies that one of ordinary skill would not have included the video file in the second transmission because it had already been uploaded and there was no reason to send it a second time. *Id.* ¶ 93. Thus, via the testimony of Dr. Chatterjee, Petitioner provides persuasive evidence, supported by evidence in the record, that one of ordinary skill in the art would have understood the cited art to teach the separate transmissions limitation.

Second, Patent Owner argues that "[i]f a hacker is able to intercept a message with both the recipient address and a public URL to the media component, the hacker will be able to create a complete record of the message" and thus, the purpose of the claim invention would be frustrated. PO Resp. 43. Petitioner responds by asserting that "this 'purpose' is nowhere recited in the claim." Pet. Reply 13. The specification of the

'885 patent discusses systems and methods for reducing traceability of an electronic message. *See, e.g.*, Ex. 1001, 3:60–61. Neither of the challenged claims of this patent, however, directly references "reducing traceability." In addition, none of the challenged claims mentions traceability at all. *See id.* at 18:58–22:42 (the only reference to traceability is in claims 8, 15, and 28, not challenged in this proceeding, which recite not including information that would provide "a traceable identity of the sender").[14]

For the foregoing reasons, we are persuaded by Petitioner's argument, supported by evidence in the record, that the combination of Namias and Saffer teaches these limitations.

[14] Moreover, we agree with Petitioner that Patent Owner "ignores that Petitioner's *proposed combination* . . . includes the Smith reference (entitled '*Private*, Trackable URLs for Directed Document Delivery'), which discloses specific protections against unauthorized access of data through a URL." Pet. Reply 13 (citing Ex. 1002 ¶¶ 133–134); *see infra* § II.D.5.f (discussing Petitioner's reliance on the PURLs of Smith). As noted above, Smith describes temporary, dynamically generated private URLs known as PURLs. Ex. 1005, Abstract, 15:8–9. As described in Smith, "[e]ach private URL ('PURL') uniquely identifies an intended recipient of a document, the document or set of documents to be delivered, and (optionally) other parameters specific to the delivery process. The intended recipient of a document uses the PURL to retrieve the document." *Id.* at 2:25–31. As such, Smith's system "allows the directed and secure distribution of documents." *Id.* at 3:29–30. Thus, contrary to Patent Owner's arguments, the proposed combination does not include public URLs. Therefore, even if the challenged claims included the "purpose" alleged by Patent Owner (which we are not persuaded that they do), the proposed combination has safeguards by way of Smith's PURLs to provide additional security to the URLs.

f. "the identifier of a recipient and the message content including a media component each including a correlation to allow the identifier of a recipient and the message content including a media component to be related to each other at a later time by the server computer"

Petitioner relies on Namias, in view of Saffer and Smith, as teaching this claim limitation. *See* Pet. 38–44; Ex. 1002 ¶¶ 118, 120. In particular, Petitioner points to the video ID of Saffer, adapted according to the teachings of Smith, as teaching the claimed correlation. Pet. 38–39. As explained in the Petition, Saffer teaches "renam[ing] the file containing the video message content using the video ID" and "insert[ing] into the body of an e-mail message the video ID with a link." *Id.* at 39–41 (citing Ex. 1004 ¶¶ 4, 9, 20, 29–46, Figs. 3, 8). Petitioner contends

> it would have been obvious in further view of Smith that the video ID in the URL could be further appended with a recipient identifier (such as the recipient's email address), thus establishing a "correlation" between (1) the recipient identifier – coupled to the video ID in the URL – and (2) the video message content – stored in a file named using the video ID.

Id. at 41–42 (citing Ex. 1002 ¶ 118) (emphases omitted); *see also id.* at 42–44 (citing Ex. 1005, at [57], 2:24–34, 9:1–3, 11:21–24, 14:42–53, 15:8–16, 15:37–44, 15:48–58, 16:27–43, 16:55–56, 17:12–29, Fig. 20). Petitioner asserts that "Smith discloses a system similar to Saffer that uses a URL inserted in an email message to deliver a file to a recipient." *Id.* at 42 (citing Ex. 1005, at [57], 2:24–31, 14:42–49). Smith describes temporary, dynamically generated private URLs known as PURLs. Ex. 1005, at [57], 15:8–9. "PURLs enable[] secure document delivery and tracking of document receipt." *Id.* at [57].

According to Petitioner's combination, the video ID (upon which Petitioner relies as teaching the claimed correlation) is coupled both to the message content (i.e., as the name of the file containing the message content) and to the recipient's email address (i.e., in the URL embedded in the email sent to recipient). Pet. 45 (citing Ex. 1002 ¶ 125). Further, the

> recipient's email address ("identifier of a recipient") in the URL and the video message content ("message content including a media component") stored at the server are "related to each other . . . by the server computer" during the subsequent delivery of the video message content from the server to the recipient ("at a later time").

Id. at 47 (emphases omitted); *see id.* at 47–48; Ex. 1002 ¶¶ 128–129.

We agree that Namias, in view of Saffer and Smith, teaches this claim limitation, for the reasons stated in the Petition.

g. Reasons to Combine the Asserted References

Petitioner asserts that the combination of Namias and Saffer, resulting in "the video message system of Namias in which, after the user approves the video message and enters the recipient addresses (using the displays in Figure 4A and 5 of Namias, respectively), the system hands over control to the method of Saffer to transmit the video message to a server using the technique described" in Saffer, would have been a "straightforward combination for a number of reasons." Pet. 35 (citing Ex. 1002 ¶¶ 99, 101). Petitioner contends that it would have been obvious to combine the teachings of Namias and Saffer, for example, because the combination would have had the predictable result of the message system of Namias handing over control to the transmission method described in Saffer, with various advantages to doing so. *Id.* at 34–35. Dr. Chatterjee opines that

"[u]nder this combination, therefore, the recipient's email address and the video (or picture) message content [as entered using the displays in Figures 4A and 5 of Namias] would be transmitted to a server computer separately according to the techniques of Saffer." Ex. 1002 ¶ 99. Dr. Chatterjee further testifies that Namias does not provide details as to the method of transmission and "[i]t would thus have been obvious that the message transmission system of Saffer could take over where Namias leaves off, resulting in a combined system that uses the Namias user interface (e.g., Fig. 4A and Fig. 5) for entering the video message content and recipient address, but then uses the technique in Saffer to effectuate the actual transmission of the video message." *Id.* ¶ 102. In addition, Dr. Chatterjee states that one of ordinary skill in the art would have recognized that Saffer's URL-based delivery technique would have improved Namias's use of network bandwidth and storage. *Id.* ¶ 103. According to Dr. Chatterjee, "[a] person of ordinary skill in the art would have understood that replacing the video content in the message with a URL, as disclosed in Saffer, would have provided distinct advantages" because URLs are "typically only a handful of characters in length" and, thus, the message containing the URL would "consume[] very little network bandwidth and storage," "whereas video content can be quite large." *Id.* ¶ 105.

In addition, Saffer discloses that allowing a user to stream video content provides the user with quick access to the video without requiring the entire video to be downloaded prior to the start of playback. Pet. 37–38; Ex. 1002 ¶¶ 108–110; Ex. 1004 ¶¶ 2, 6, 19, 22. According to Dr. Chatterjee, streaming "would have been particularly significant in the context of video, which typically takes up significantly more data than other types of

information, and thus, takes longer to transmit over a network." Ex. 1002 ¶ 109. Petitioner also directs us to Saffer's discussion of optimizing the video stream for a recipient "by checking the recipient's configuration and/or bandwidth capabilities and streaming the video based upon this detected configuration/bandwidth." Ex. 1004 ¶ 22 (cited at Pet. 37–38).

Patent Owner asserts that Petitioner has failed to provide a reason to combine Namias and Saffer (PO Resp. 26–31) and Petitioner has failed to consider these references as whole in making this combination (*id.* at 31–39).[15] We address each of these arguments in turn.

First, Patent Owner argues that "Petitioner's stated reason for combining Namias and Saffer is 'network bandwidth and storage are conserved.' But . . . there is no practical scenario where Saffer's link-based email transmission system conserves bandwidth or storage." *Id.* at 27 (quoting Pet. 37). Further, "[e]ven under Saffer's distribution system, the kiosk in Namias would still have to transmit the recorded video to the video server, requiring use of the bandwidth that was supposedly saved by implementing Saffer." *Id.* (citing Ex. 1004 ¶ 27). Patent Owner also contends that "Petitioner does not identify why the proprietor of the Namias kiosk would be concerned with such bandwidth savings." *Id.* at 29 (citing Pet. 36–38). In the end, according to Patent Owner, bandwidth saving are "only realized if the recipient never watches the video in its entirety." *Id.* (citing Ex. 2009 ¶ 87).

[15] Patent Owner's arguments against Petitioner's reasons to combine do not address the additional combination with PC Magazine or Smith, apart from a general argument that Petitioner asserts a "complex concoction of prior art teachings from multiple unrelated references" (PO Resp. 3).

Petitioner responds by asserting that "the combination of Namias and Saffer would have provided significant advantages with respect to at least (1) network bandwidth, (2) storage, and (3) the ability to stream the video message content to the recipient." Pet. Reply 2 (citing Pet. 36–38; Ex. 1002 ¶¶ 103–110). In particular, Petitioner contends that Patent Owner has ignored the benefits that would flow from allowing the recipient to stream the video. *Id.* at 2–3. Dr. Chatterjee explains "that streaming is a beneficial way of delivering video to a recipient that provides benefits over sending a video file as an email attachment." Ex. 1043 ¶ 8. "For example, in a streaming implementation, a user could begin playing back streaming video as the content is being received, rather than having to wait until the entire video file has been received." Ex. 1002 ¶ 109. In addition, streaming techniques "can be 'optimized to stream the video to the recipient computers 12 in a manner that can most easily viewed by the recipient's computers 12.'" *Id.* ¶ 110 (quoting Ex. 1004 ¶ 22). As such, Dr. Chatterjee opines that "[o]ne of ordinary skill in the art would have appreciated that Saffer's streaming delivery technique would have thus allowed a more optimized delivery of video content to the recipient device." *Id.* Dr. Chatterjee also states that "[t]hese benefits apply regardless of whether the recipient watches all, or only part, of the received video content." Ex. 1043 ¶ 8.

In its Sur-Reply, Patent Owner argues that "streaming adds no benefit within the context of the claimed invention and the specific combination proposed by Petitioner." PO Sur-Reply 2. According to Patent Owner, streaming does not save bandwidth or storage because the same video file must be uploaded to the server and then provided to the user. *Id.* at 3–4.

According to Patent Owner, "Saffer's streaming technique actually increases storage requirements, as streaming requires the video to be stored on the video server indefinitely (in case the recipient wants to view the video in the future)." *Id.* at 4 (citing Ex. 2009 ¶ 91). Dr. Almeroth testifies that implementing Namias's system with streaming "would significantly increase the cost of the system" because it "would require an additional video server with a large storage capacity to store all the videos uploaded by the various video email kiosks." Ex. 2009 ¶ 91.

We disagree with Patent Owner. As outlined above, Petitioner and Dr. Chatterjee provide a rational explanation, supported by evidence in the record, for the combination of the cited references. As we noted previously, under Federal Circuit precedent, obviousness "does not require that the motivation be the *best* option, only that it be a *suitable* option from which the prior art did not teach away." *PAR Pharm.*, 773 F.3d at 1197–98. Here, Petitioner has provided evidence from Saffer and the testimony of Dr. Chatterjee that establishes that one of ordinary skill in the art would have been aware of benefits to streaming video. Patent Owner, for example, does not dispute Petitioner's evidence that a video stream may be optimized for a particular recipient. *See, e.g.*, Ex. 1043 ¶ 8.

Petitioner further argues that "Patent Owner's argument myopically focuses only on the 'first leg' of the transmission from the sending device to the server, and ignores the substantial bandwidth and storage benefits achieved for subsequent transmission from the *server to the recipient device*." Pet. Reply 4. Petitioner contends that one of skill in the art would envision many scenarios in which bandwidth would be saved. Tr. 20:20–

21:11. Dr. Chatterjee quotes a reference that noted a benefit of linking the message content with a URL:

> the recipients can decide when and if they want to receive one or more of the attachments . . . , advantageously reducing [either data] traffic resulting from email attachments in general or reducing instantaneous data traffic that typically results from sending an email with an attachment to multiple recipients.

Ex. 1002 ¶ 106 (quoting Ex. 1006[16], 4:24–30). Petitioner describes a scenario in which a video is sent to a large group of recipients and only a small subset wanted to watch the video. Tr. 20:20–21:11. In that situation, bandwidth would be saved because the video would only be provided to the people that wanted to see it, as opposed to sending the video file to the entire group. *Id.* According to Petitioner, "that is a situation that is as plausible, and in fact, probably more likely than the off chance of a viral video that would require multiple viewings." *Id.* at 21:7–9. Thus, Petitioner asserts that the proposed combination would "avoid[] the need to send a potentially large video file to the recipient(s) until they actually have a need or desire to view it." Pet. Reply 5 (citing Ex. 1002 ¶¶ 106–107). We are persuaded by Petitioner's argument and evidence. We determine that one of ordinary skill in the art would have seen a benefit to the combination at least in so much as it would have allowed for the optimization of the video playback experience for users in light of the user's particular device and available Internet connection. *See* Ex. 1004 ¶ 22.

Second, Patent Owner argues that "Petitioner has cherry-picked certain aspects of various prior art references (while ignoring others) and

[16] Naick et al., U.S. Patent No. 7,409,425 B2, filed Nov. 13, 2003, issued Aug. 5, 2008.

cobbled them together into an approximation of the '885 claims based only on improper hindsight." PO Resp. 33. Specifically, Patent Owner asserts that one of skill in the art, upon considering the references as a whole, would not select Namias and its multi-screen email composition interface. *Id.* at 35. Patent Owner argues that Namias's multi-screen interface is inferior to Saffer's single email composition screen. We disagree with this argument for reasons discussed above in relation to Petitioner's arguments regarding the separate displays limitation. *See supra* § II.D.5.d.

Thus, we determine that one of ordinary skill in the art would have been motivated to use Saffer's techniques to improve the usage of bandwidth in Namias's system and to provide benefits to the end user, such as optimization of video streaming. Thus, we find that Petitioner has put forth a sufficient showing as to a motivation to combine Namias and Saffer.

As to PC Magazine, Dr. Chatterjee opines that "nothing in Namias . . . suggests that the kiosk even includes 'screen capture' functionality," but that, as evidenced by PC Magazine, "[o]ne of ordinary skill in the art would have been motivated to disable any existing screen capture functionality because . . . the kiosk does not provide any way of accessing or use for the output of a screen capture," and "disabling [any possible screen capture] functionality outright would prevent any accidental and inconsequential triggering of that functionality, which would only unnecessarily divert resources of the kiosk, including memory and processing power, from the kiosk's intended purpose of video messaging." Ex. 1002 ¶¶ 85–86 (cited at Pet. 28–29). We agree with Petitioner for the reasons stated in the Petition.

As to Smith, Dr. Chatterjee opines that Saffer and Smith disclose "very similar techniques for delivering content through the use of URLs

embedded in email messages." Ex. 1002 ¶ 130 (cited at Pet. 48–49). Dr. Chatterjee testifies that one of ordinary skill in the art would have been motivated to improve upon Saffer's use of a video ID by further appending a recipient identifier (as in Smith's PURL), in order to obtain the additional benefits of tracking and security described in Smith. *Id.* ¶ 131 (citing Ex. 1005, at [57], 14:36–41); Pet. 48–49. We conclude that one of ordinary skill would have looked to Smith to provide such improvements to Saffer's URL system, utilized in combination with Namias, as explained by Petitioner and Dr. Chatterjee. We agree with Petitioner for the reasons stated in the Petition.

h. Conclusion

Petitioner has established that the combination of Namias, PC Magazine, Saffer, and Smith teaches all of the limitations of claim 1 and has articulated a sufficient rationale for combining the teachings of the references, with a reasonable expectation of success in making the combination. Accordingly, we determine the information presented demonstrates, by a preponderance of the evidence, that claim 1 would have been obvious over Namias, PC Magazine, Saffer, and Smith.

6. Dependent Claim 6

Claim 6 depends from claim 1. Petitioner relies on Namias to teach the additional limitations of claim 6. Pet. 50. Patent Owner does not include any additional arguments directed to claim 6. *See generally* PO Resp.; *see also* Paper 14, 5 ("The patent owner is cautioned that any arguments for patentability not raised in the response will be deemed waived."). Claim 6 recites "wherein the media component includes information selected from

the group consisting of an image, video, audio, and any combinations thereof." Ex. 1001, 19:45–48. Namias discloses the "e-mail message ha[s] the recorded video and audio segments or snapshot as the body of the message." Ex. 1003 ¶ 33 (cited at Pet. 50). We find Petitioner's evidence and arguments to be credible, supported by evidence in the record, and sufficient to establish the unpatentability of claim 6. Accordingly, we determine the information provided establishes by a preponderance of the evidence that claim 6 would have been obvious over Namias, PC Magazine, Saffer, and Smith.

E. Asserted Obviousness in View of Namias, PC Magazine, RFC 2821, and Hazel

Petitioner contends that claims 1 and 6 are unpatentable under 35 U.S.C. § 103 as obvious in view of Namias, PC Magazine, RFC 2821, and Hazel. Pet. 4, 50–69. Relying on the testimony of Dr. Chatterjee, Petitioner contends that the combined references teach or suggest the subject matter of the challenged claims and that a person having ordinary skill in the art would have combined the teachings of the references in the manner asserted in the Petition. *Id.*; Ex. 1002 ¶¶ 139–171. Because we determine that claims 1 and 6 are unpatentable under § 103(a) as obvious over the combined teachings of Namias, PC Magazine, Saffer, and Smith, we need not separately assess the patentability of these claims under this asserted ground.

III. PATENT OWNER'S MOTION TO EXCLUDE

Patent Owner filed a Motion to Exclude Exhibits 1050 and 1051 as lacking authentication as required by Federal Rule of Evidence 901.

Paper 32, 2–3. Exhibits 1050 and 1051 are cited in Dr. Chatterjee's Reply Declaration. Ex. 1043 ¶ 42. We need not determine the admissibility of Exhibits 1050 and 1051 because we do not rely on them in making our determinations here. Thus, Patent Owner's Motion is moot.

IV. CONCLUSION

Petitioner has demonstrated, by a preponderance of the evidence, that, under 35 U.S.C. § 103(a), claims 1 and 6 are unpatentable over Namias, PC Magazine, Saffer, and Smith. In light of our determination of unpatentability of claims 1 and 6, we decline to address whether these claims also are unpatentable under 35 U.S.C. § 103(a) as obvious over Namias, PC Magazine, RFC 2821, and Hazel.

V. ORDER

Accordingly, it is

ORDERED that claims 1 and 6 of U.S. Patent No. 9,306,885 B2 have been shown to be unpatentable; and

FURTHER ORDERED that Patent Owner's Motion to Exclude is dismissed as moot.

This is a final decision. Parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

PETITIONER:

Heidi L. Keefe
Andrew C. Mace
Mark Weinstein
Reuben Chen
Yuan Liang
COOLEY, LLP
hkeefe@cooley.com
amace@cooley.com
mweinstein@cooley.com
rchen@cooley.com
yliang@cooley.com
SnapVaporstream@cooley.com

PATENT OWNER:

Michael F. Heim
Blaine A. Larson
HEIM PAYNE & CHORUSH, LLP
mheim@hpcllp.com
blarson@hpcllp.com

Douglas R. Wilson
ARMOND WILSON LLP
doug.wilson@armondwilson.com

Jamie T. Gallagher
BIRCH TREE IP LAW & STRATEGY PLLC
jamie@birchtreeip.com

Trials@uspto.gov
571-272-7822

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SNAP INC.,
Petitioner,

v.

VAPORSTREAM, INC.,
Patent Owner.

Case IPR2018-00369
Patent 9,313,155 B2

Before JUSTIN T. ARBES, STACEY G. WHITE, and JENNIFER MEYER CHAGNON, *Administrative Patent Judges*.

CHAGNON, *Administrative Patent Judge*.

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

I. INTRODUCTION

We have jurisdiction to hear this *inter partes* review under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed herein, we determine that Snap Inc. ("Petitioner") has shown, by a preponderance of the evidence, that claims 1–6 and 9 ("the challenged claims") of U.S. Patent No. 9,313,155 B2 (Ex. 1001, "the '155 patent") are unpatentable.

A. Procedural History

Petitioner filed a Petition for *inter partes* review of claims 1–6 and 9 of the '155 patent. Paper 3 ("Pet."). Petitioner provided a Declaration of Sandeep Chatterjee, Ph.D. (Ex. 1002) to support its positions. Vaporstream, Inc. ("Patent Owner") filed a Preliminary Response (Paper 8), supported by the Declaration of Michael Shamos, Ph.D. (Ex. 2001). Pursuant to 35 U.S.C. § 314(a), on July 10, 2018, *inter partes* review was instituted on the following grounds:

whether claims 1, 4, 5, and 9 would have been obvious under 35 U.S.C. § 103(a) in view of Namias[1], Fardella[2], and Stevenson[3];

whether claim 6 would have been obvious under 35 U.S.C. § 103(a) in view of Namias, Fardella, Stevenson, and Ford[4];

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[1] U.S. Patent Appl. Pub. No. 2002/0112005 A1, published Aug. 15, 2002 (Ex. 1003).

[2] U.S. Patent Appl. Pub. No. 2001/0032246 A1, published Oct. 18, 2001 (Ex. 1035).

[3] NANCY STEVENSON, TABLET PCS FOR DUMMIES (2003) (Ex. 1036).

[4] U.S. Patent Appl. Pub. No. 2005/0014493 A1, published Jan. 20, 2005 (Ex. 1037).

whether claim 3 would have been obvious under 35 U.S.C. § 103(a) in view of Namias, Fardella, Stevenson, and Saffer[5];

whether claim 2 would have been obvious under 35 U.S.C. § 103(a) in view of Namias, Fardella, Stevenson, Saffer, and Smith[6];

whether claim 3 would have been obvious under 35 U.S.C. § 103(a) in view of Namias, Fardella, Stevenson, and RFC 2821[7]; and

whether claim 2 would have been obvious under 35 U.S.C. § 103(a) in view of Namias, Fardella, Stevenson, RFC 2821, and Hazel[8].

See Paper 13 ("Inst. Dec.").

Subsequent to institution, Patent Owner filed a Patent Owner Response (Paper 24, "PO Resp."), along with a Declaration of Kevin C. Almeroth, Ph.D. (Ex. 2009) to support its positions. Petitioner filed a Reply (Paper 27, "Pet. Reply") to the Patent Owner Response, along with a Reply Declaration of Dr. Chatterjee (Ex. 1049), and Patent Owner filed a Sur-Reply (Paper 30, "PO Sur-Reply"). Patent Owner filed a Motion to Exclude (Paper 32), to which Petitioner filed an Opposition (Paper 34).

An oral hearing was held on March 27, 2019. A transcript of the hearing is included in the record. Paper 41 ("Tr.").

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[5] U.S. Patent Appl. Pub. No. 2003/0122922 A1, published July 3, 2003 (Ex. 1004).

[6] U.S. Patent No. 6,192,407 B1, issued Feb. 20, 2001 (Ex. 1005).

[7] *Simple Mail Transfer Protocol*, Network Working Group, Request for Comments 2821 (J. Klensin ed., AT&T Labs), published April 2001 (Ex. 1008).

[8] PHILIP HAZEL, EXIM: THE MAIL TRANSFER AGENT (2001) (Ex. 1011).

B. Related Proceedings

The parties indicate that the ’155 patent is the subject of the following district court proceeding involving Petitioner and Patent Owner: *Vaporstream, Inc. v. Snap Inc.*, Case No. 2:17-cv-00220-MLH-KS (C.D. Cal.). Pet. 1; Paper 4, 1.

Petitioner filed nine additional petitions for *inter partes* review of various other patents owned by Patent Owner, “each of which claims priority to the same priority application as the ‘155 patent” (Paper 7, 1): Cases IPR2018-00200, IPR2018-00312, IPR2018-00397, IPR2018-00404, IPR2018-00408, IPR2018-00416, IPR2018-00439, IPR2018-00455, and IPR2018-00458. *See* Paper 7, 1–2; Pet. 1. *Inter partes* review was instituted in each of these proceedings.

C. The ’155 Patent

The ’155 patent is titled “Electronic Message Send Device Handling System and Method with Separation of Message Content and Header Information,” was filed on December 17, 2014[9], and issued April 12, 2016. Ex. 1001, at [22], [45], [54]. The ’155 patent relates to an electronic messaging method “with reduced traceability.” *Id.* at [57]. The ’155 patent notes that “[t]ypically, an electronic message between two people is not private.” *Id.* at 2:7–8. For example, messages may be intercepted by third parties; logged and archived; or copied, cut, pasted, or printed. *Id.* at 2:8–12.

[9] The ’155 patent claims priority, through a chain of continuation applications, to application No. 11/401,148, filed on April 10, 2006, and provisional application No. 60/703,367, filed on July 28, 2005. Ex. 1001, at [60], [63]. The specific priority date of the challenged claims is not at issue in this proceeding, and we need not make any determination in this regard.

"This may give a message a 'shelf-life' that is often uncontrollable by the sender or even the recipient." *Id.* at 2:13–14. The challenged claims are directed to a "computer-implemented method of handling an electronic message" for reducing traceability of an electronic message. *See id.* at 1:66–2:3, 2:27–29, 18:43–19:21, 19:42–45.

Figure 3 of the '155 patent is reproduced below:

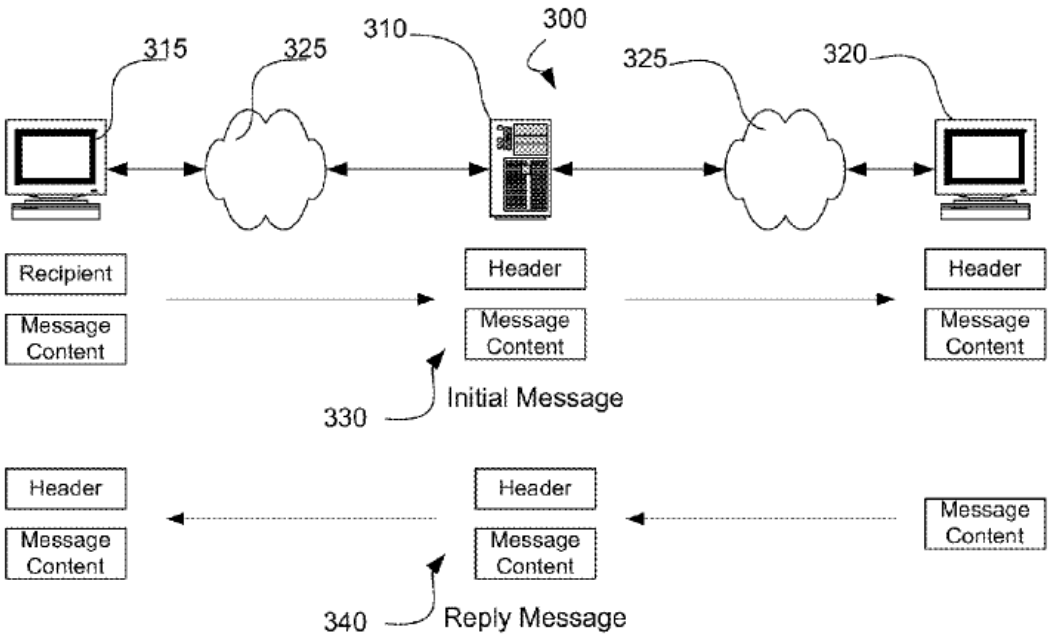


FIG. 3

Figure 3, above, illustrates an example of a messaging system according to the '155 patent. *Id.* at 10:44–45. System 300 includes user computers 315, 320 and server computer 310, connected via network 325. *Id.* at 10:45–48. Electronic message 330 is communicated via this system using a method detailed below. *Id.* at 10:48–49. Reply electronic message 340 also is illustrated, but is not discussed in further detail herein. *Id.* at 10:49–50.

Figure 5 of the ’155 patent is reproduced below:

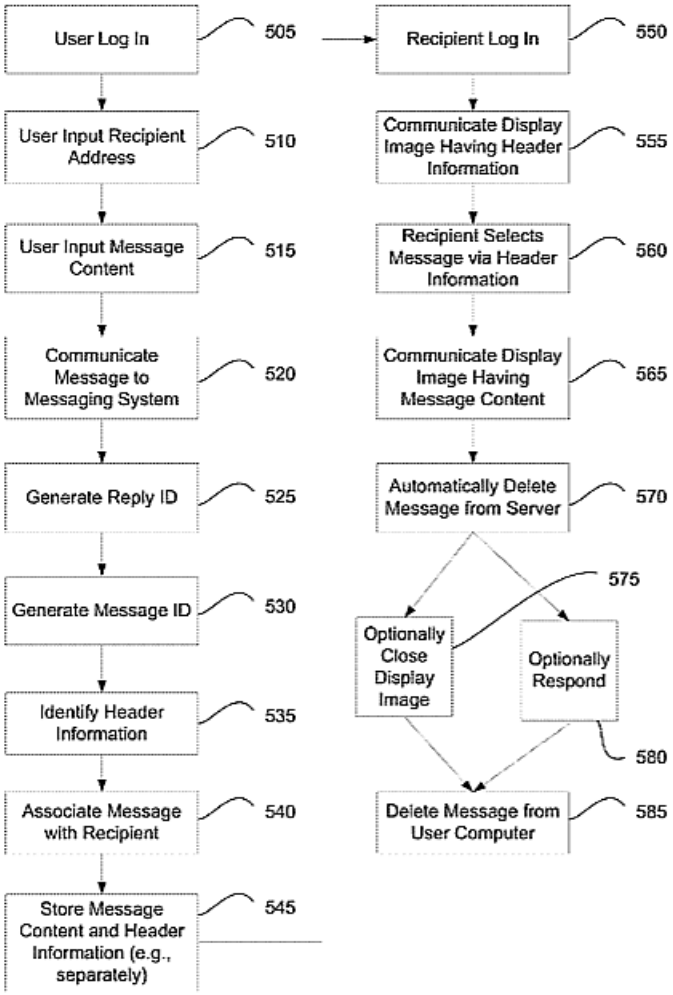


FIG. 5

Figure 5, above, is a flow chart of an exemplary method of the ’155 patent. Ex. 1001, 3:25–26. In step 510, the user inputs a recipient address on a screen. *See id.* at 11:23–27, 11:35–38, Fig. 8. A recipient address identifies a particular desired recipient and “may be a unique identifier (e.g., a screen name, a login name, a messaging name, etc.) established specifically for use with [this] system” or it “may be a pre-established [e-mail] address, text messaging address, instant messaging address, Short Messaging Service

(SMS) address, a telephone number . . . , BLACKBERRY personal identification number (PIN), or the like." *Id.* at 6:56–7:1.

After the recipient address has been entered, the system will proceed to step 515 and display another screen where the user may input the content of an electronic message. *Id.* at 11:35–42, Fig. 9. "An electronic message may be any electronic file, data and/or other information transmitted between one or more user computers." *Id.* at 7:32–34. The electronic message may include text, image, video, audio, or other types of data. *Id.* at 7:34–42. In one embodiment, "the recipient address and the message content are entered on separate display screens." *Id.* at 11:41–42. This separate entry "further reduces the traceability of an electronic message by, in part, reducing the ability of logging at computer 315," for example, by preventing screenshot logging from capturing the recipient address and message content simultaneously. *Id.* at 9:2–4, 11:44–47.

At step 520, the message content is communicated to server 310. *Id.* at 11:54–57. The recipient address is communicated to the server separately from the corresponding message content, in order to reduce the ability to intercept the entire message during communication to the server. *Id.* at 11:57–61. "[A] correlation (e.g., a non-identifying message ID . . .) may be utilized to associate the two components." *Id.* at 6:51–53. In this regard, "at step 530, system 300 generates a message ID for associating the separated message content and header information [(which includes the recipient address)] of electronic message 330. Server 310 maintains a correspondence between the message content and header information." *Id.* at 12:19–23, 6:39–47; *see also id.* at 13:11–13 ("A message ID [is] used to maintain correspondence between the separated components of electronic

message 330.”). The ’155 patent describes an example in which the message ID is included both in the Extensible Markup Language (XML) file storing the header information and in the XML file storing the message content. *See id.* at 13:23–14:7.

D. Illustrative Claims

We instituted review based on challenges to independent claim 1 and dependent claims 2–6 and 9. Claims 1, 2, and 3 of the ’155 patent are reproduced below.

> 1. A computer-implemented method of handling an electronic message at a sending user mobile device in a networked environment, the electronic message including a message content including a media component and a header information that corresponds to the message content including a media component, the method comprising:
>
> providing a plurality of reduced traceability displays via the sending user mobile device using a display generator that acts upon a display element of the sending user mobile device to provide the plurality of reduced traceability displays, the plurality of reduced traceability displays including a first display configured to allow a user of the sending user mobile device to associate a message content including a media component with an electronic message and a second display configured to allow the user to associate an identifier of a recipient with the electronic message, the first display being generated by the display generator such that the first display does not include a display of the identifier of the recipient via the first display such that a single screen capture of both the identifier of a recipient and the media component is prevented;
>
> associating the message content including a media component with the electronic message via the first display at a sending user device;

> associating the identifier of a recipient with the electronic message via the second display at the sending user device, the first and second displays not being displayed at the same time; and
>
> transmitting the message content including a media component and the identifier of a recipient from the sending user device to a server computer.

Ex. 1001, 18:43–19:7.

> 2. A computer-implemented method according to claim 1, wherein the identifier of a recipient and the message content including a media component each include a correlation to allow the identifier of a recipient and the message content including a media component to be related to each other at a later time by the server computer.

Id. at 19:8–13.

> 3. A computer-implemented method according to claim 1, wherein the transmitting the message content including a media component occurs separately from the transmitting the identifier of a recipient.

Id. at 19:14–17.

II. ANALYSIS

A. Principles of Law

To prevail in its challenges to the patentability of the claims, Petitioner must demonstrate by a preponderance of the evidence that the challenged claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). "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 of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in *inter partes* review).

A claim is unpatentable for obviousness if, to one of ordinary skill in the pertinent art, "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." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting 35 U.S.C. § 103(a)). 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 ordinary skill in the art; and (4) objective evidence of nonobviousness.[10] *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). An obviousness analysis "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 550 U.S. at 418; *accord In re Translogic Tech., Inc.*, 504 F.3d 1249, 1259 (Fed. Cir. 2007). However, Petitioner cannot satisfy its burden of proving obviousness by employing "mere conclusory statements," but "must instead articulate specific reasoning, based on evidence of record" to support an obviousness determination. *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380–81 (Fed. Cir. 2016). Petitioner also must articulate a reason

[10] The parties have not asserted or otherwise directed our attention to any objective evidence of non-obviousness.

why a person of ordinary skill in the art would have combined the prior art references. *In re NuVasive*, 842 F.3d 1376, 1382 (Fed. 2016).

At this final stage, we determine whether a preponderance of the evidence of record shows that the challenged claims would have been rendered obvious in view of the asserted prior art. We analyze the asserted grounds of unpatentability in accordance with these principles.

B. Level of Ordinary Skill in the Art

We review the grounds of unpatentability in view of the understanding of a person of ordinary skill in the art at the time of the invention. *Graham*, 383 U.S. at 17. Petitioner contends that a person of ordinary skill in the art would have had "at least a bachelor's degree in software engineering, computer science, or computer engineering with at least two years of experience in the design and implementation of systems for sending and receiving messages over a communications network, such as the Internet (or equivalent degree or experience)." Pet. 5 (citing Ex. 1002 ¶¶ 13–16). Patent Owner's declarant, Dr. Almeroth, "generally agree[s]" with Petitioner's characterization of the person of ordinary skill with the caveat "that such a person of ordinary skill would also have a working knowledge of design principles for software user interfaces. Such knowledge often would be learned in an undergraduate course in Human Computer Interaction (HCI)." Ex. 2009 ¶ 21; *see also* Ex. 2001 ¶ 14 (Patent Owner's previous declarant, Dr. Shamos, generally agreeing with Petitioner's description of one of ordinary skill). We agree, as the '155 patent discusses the design of an interface that purports to reduce the traceability of electronic messages. *See, e.g.*, Ex. 1001, 1:66–3:3. In the Institution Decision, we adopted Petitioner's proposed description of the

person of ordinary skill in the art. Inst. Dec. 11. Based on the record developed during trial, including our review of the '155 patent and the types of problems and solutions described in the '155 patent and the cited prior art, we agree with and adopt Petitioner's description of the person of ordinary skill in the art, with the caveat that such an individual would have had a working knowledge of design principles for software user interfaces, which may be achieved via study of human-computer interaction (HCI).

C. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable constructions in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b) (2018)[11]. "In claim construction, [our reviewing] court gives primacy to the language of the claims, followed by the specification. Additionally, the prosecution history, while not literally within the patent document, serves as intrinsic evidence for purposes of claim construction." *Tempo Lighting, Inc. v. Tivoli, LLC*, 742 F.3d 973, 977 (Fed. Cir. 2014). Otherwise, under the broadest reasonable construction standard, claim terms are presumed to have their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

[11] The recent revisions to our claim construction standard do not apply to this proceeding because the new "rule is effective on November 13, 2018 and applies to all IPR, PGR and CBM petitions filed on or after the effective date." Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (to be codified at 37 C.F.R. § 42).

Patent Owner proposes constructions for the phrases "reduced traceability display" and "message content including a media component," as well as the term "correlation." PO Resp. 24–29. Petitioner does not seek express construction of any term of the '155 patent in the Petition, but responds to Patent Owner's proposed constructions in its Reply. Pet. 7–8; Pet. Reply 1, 12–14, 15–19, 21–23. We discuss each of these claim limitations below. No other constructions are needed for purposes of this Decision. *See, e.g.*, *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) ("[W]e need only construe terms 'that are in controversy, and only to the extent necessary to resolve the controversy.'" (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

1. reduced traceability display

Claim 1 recites "providing a plurality of reduced traceability displays." In the related litigation, Patent Owner proposed that "reduced traceability displays" should be construed as "an arrangement of displays that enables reduced traceability of electronic messages (e.g., by separately displaying identifying information and message content)" (Ex. 1041, 2–3; *see also* Ex. 2003, 15–17 (district court order adopting Patent Owner's proposed construction)), and Petitioner applies this construction in the Petition (*see* Pet. 25–26).

We did not construe "reduced traceability displays" in our Institution Decision. *See* Inst. Dec. 9–10. In the Institution Decision in related Case IPR2018-00408, we adopted the district court's construction for this phrase. *See Snap Inc. v. Vaporstream, Inc.*, Case IPR2018-00408, slip op. at 8–9 (PTAB July 10, 2018) (Paper 10). In that proceeding, the parties did

not dispute our preliminary interpretation of "reduced traceability displays," and we do not perceive any reason or evidence that compels any deviation from that interpretation in this proceeding. *See* PO Resp. 24–25 (referencing the construction in IPR2018-00408). We, thus, adopt the district court's interpretation of "reduced traceability displays" as the broadest reasonable interpretation in light of specification of the '155 patent—namely, "an arrangement of displays that enables reduced traceability of electronic messages (e.g., by separately displaying identifying information and message content)."

2. message content including a media component

The challenged claims recite various limitations pertaining to a "message content including a media component." For example, claim 1 recites a "method of handling an electronic message . . . including a message content including a media component," "a first display configured to allow a user . . . to associate a message content including a media component with an electronic message," "associating the message content including a media component with the electronic message," and "transmitting the message content including a media component and the identifier of a recipient from the sending user device to a user computer." Claim 2 recites that "the identifier of a recipient and the message content including a media component each include a correlation to allow the identifier of a recipient and the message content including a media component to be related to each other at a later time by the server computer." Claim 3 recites that "transmitting the message content including a media component occurs separately from the transmitting the identifier of a recipient."

Patent Owner contends that "'message content including a media component' encompasses media content included in the message via a publicly-accessible [Uniform Resource Locator (URL)]." PO Resp. 27. In support of this construction, Patent Owner relies on a passage from the '155 patent, which states that "a message content of an electronic message may include an attached and/or linked file." Ex. 1001, 7:44–45 (cited at PO Resp. 26). Patent Owner also directs us to testimony from Petitioner's declarant, Dr. Chatterjee. PO Resp. 27 (citing Ex. 1002 ¶ 133 n.28). Patent Owner characterizes Dr. Chatterjee's testimony as "mak[ing] clear [that] passing the actual content and passing a link that provides access to that content, such as a URL, are both examples of 'passing information.'" *Id.* Thus, in Patent Owner's view, the recited "message content including a media component" broadly includes both a URL in a message (linking to content accessible via that URL) and a file attached to the message. *See id.* at 25–27.

Petitioner responds by arguing that "although the specification states that [the] 'message content' may include a 'linked file,' it never states that the *link itself* is 'message content.'" Pet. Reply 13 (emphasis Petitioner's). In addition, Petitioner directs us to a further statement in the specification, that "[t]ypically, a message content, such as message content 140 does not include information that in itself identifies the message sender, recipient, *location of the electronic message*, or time/date associated with the electronic message." Ex. 1001, 7:48–52 (cited at Pet. Reply 13) (emphasis added). Petitioner explains that "[t]he URL (Uniform Resource Locator) in the proposed combination [of Namias and Saffer] therefore does not qualify as 'message content' because it identifies 'the location of' the video message

on the video server in Saffer." Pet. Reply 13–14 (citing Ex. 1004 ¶ 28) (emphasis omitted). According to Petitioner, a person of ordinary skill in the art would "think of a URL as a pointer to content," i.e., "how you get to the content" rather than "the content itself." Tr. 23:12–24:5. In short, Petitioner contends that "[i]t's . . . the *file* that's the content, not the link itself." *Id*. at 23:6 (emphasis added).

We agree with Petitioner's arguments. The specification of the '155 patent states that

> [i]n one example, a message content of an electronic message may include embedded information. In another example, a message content of an electronic message may include an attached and/or linked file. In such an example with an attached and/or linked file, the attached and/or linked file may be automatically deleted from the messaging system after being viewed by a recipient.

Ex. 1001, 7:42–48. Thus, the specification indicates that message content may be communicated to the user via embedded information, attached files, or linked files. Embedding, attaching, and linking are three ways to provide access to information. In other words, the e-mail recipient may gain access to the information or content in a variety of ways; however, the method of providing access to information or content is not the same thing as the underlying information or content. In the passage quoted above, privacy may be enhanced by automatically deleting "the attached and/or linked file" from the messaging system after the file is viewed. *Id.* at 7:46–48. The specification makes no provisions for deleting the URL or link to the file, but rather the focus is on the information itself. That information, or "message content," is located in the file itself regardless of the method by which the recipient accesses that information. Contrary to Patent Owner's

assertion, Dr. Chatterjee's testimony cited by Patent Owner also supports this conclusion. *See* PO Resp. 27 (citing Ex. 1002 ¶ 133 n.28). Dr. Chatterjee testifies that there is a "distinction between transmitting the *actual content* to the recipient in a message, versus transmitting *just a URL* that points to or is an address for the content." Ex. 1002 ¶ 133 n.28 (emphases added). Dr. Chatterjee's testimony makes clear that "actual content" is distinct from "just a URL" that points to the content.

Thus, we determine that the broadest reasonable interpretation of the phrase "message content including a media component" does not encompass a URL in a message (linked to content accessible via that URL). No further express interpretation of this phrase is necessary for the purposes of this Decision. *See, e.g.*, *Nidec Motor Corp.*, 868 F.3d at 1017.

3. correlation

Claim 2 recites "the identifier of a recipient and the message content including a media component *each include a correlation*." In the related litigation, the parties agreed that "correlation" should be construed as "data corresponding to a message used to associate two components of a message." Ex. 2003, 9 (district court order adopting the parties' agreed upon construction); PO Resp. 29.

Here, Patent Owner contends this construction is the proper interpretation of "correlation," and further argues that "both recited message components must include that data." PO Resp. 28–29 (emphasis Patent Owner's). Petitioner notes, first, that "the term 'correlation' is not necessarily limited to 'data' under the [broadest reasonable interpretation] standard still applicable to this proceeding." Pet. Reply 15. Petitioner

further argues that "the district court interpretation of 'correlation' is clearly disclosed by the combination of Saffer and Smith." *Id.*

Based upon our review of the record, we determine that the broadest reasonable interpretation of "correlation" includes at least "data corresponding to a message used to associate two components of a message" (i.e., the agreed upon district court interpretation), and apply that construction in this proceeding. Because we determine Petitioner has shown that the cited combination of references teaches the claimed correlation under this interpretation (*see infra* § II.G.2), we need not decide whether the broadest reasonable interpretation of "correlation" encompasses more than "data corresponding to a message used to associate two components of a message." *See, e.g.*, *Nidec Motor Corp.*, 868 F.3d at 1017.

D. Asserted Obviousness in View of Namias, Fardella, and Stevenson

Petitioner contends that claims 1, 4, 5, and 9 are unpatentable under 35 U.S.C. § 103 as obvious in view of Namias, Fardella, and Stevenson. Pet. 4, 15–32. Relying on the testimony of Dr. Chatterjee, Petitioner asserts that the combined references teach or suggest the subject matter of the challenged claims and that a person having ordinary skill in the art would have combined the teachings of the references in the manner asserted. *Id.*; Ex. 1002 ¶¶ 58–103. Patent Owner, relying on the testimony of Dr. Almeroth, disputes Petitioner's contentions. PO Resp. 29–39; Ex. 2009 ¶¶ 83–98. For the reasons discussed below, we determine Petitioner has established the unpatentability of claims 1, 4, 5, and 9 by a preponderance of the evidence.

1. Overview of Namias (Ex. 1003)

Namias relates to a "method and apparatus for providing a video e-mail kiosk for creating and sending video e-mail messages such as full motion videos or still snapshots." Ex. 1003, at [57]. The video e-mail kiosk of Namias includes a digital processor, a touch-sensitive screen monitor, a digital video camera, a microphone, audio speakers, a credit card acceptor, a cash acceptor, and a digital network communications link. *Id.* ¶ 31. The kiosk displays an inactive screen until a user starts a transaction. *Id.* ¶ 34. Upon activation of the kiosk, a record screen is shown on the kiosk display and the user may create a video recording or still image from this screen. *Id.* ¶ 35. A preview screen is displayed after the user has recorded a full motion video or still snapshot message. *Id.* ¶ 36.

Figure 4A of Namias is reproduced below:

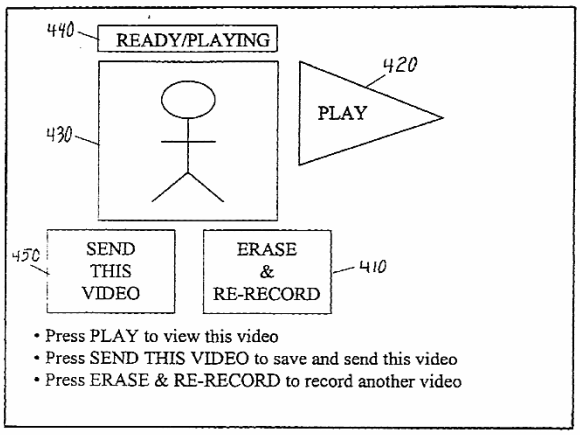


FIG. 4A

Figure 4A, above, illustrates "a preview screen that is displayed after a user has recorded a video message." *Id.* ¶ 25. Preview screen 400 allows the user to review the recorded video or still image and decide whether the message is acceptable. *Id.* ¶ 36. If the user is satisfied with the message,

then the user may press send button 450 and proceed to address screen 500. *Id.* ¶¶ 37, 40.

Figure 5 of Namias is reproduced below:

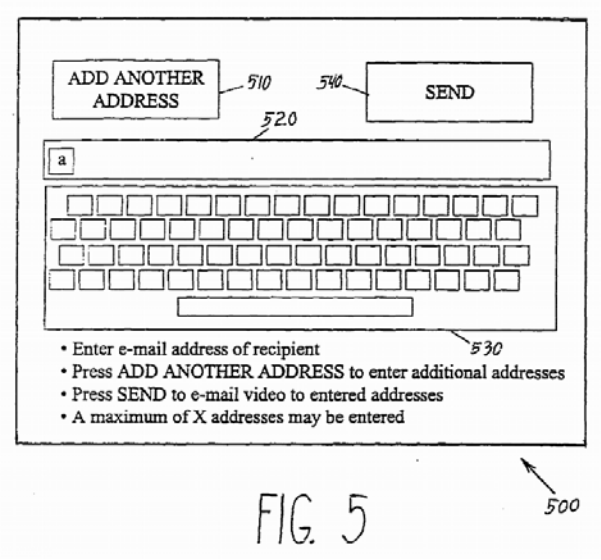


Figure 5, above, illustrates an address screen on which a user is prompted to enter a recipient's e-mail address. *Id.* ¶ 27. "The address is a unique identifier which instructs routing computers where to send the message." *Id.* ¶ 5. The user presses add address button 510 and then may use a keyboard to input the e-mail address of the recipient. *Id.* ¶ 40. Once the e-mail address(es) have been entered, the user may press send button 540 to move to the next step in the process. *Id.* "[F]inal screen 700 . . . is displayed at the end of the process after payment has been made and the video or photographic e-mail has been sent to the intended recipient or recipients." *Id.* ¶ 42.

2. Overview of Fardella (Ex. 1035)

Fardella relates to "[a] method and system for composing and sending a video e-mail from a user to a receiver." Ex. 1035, at [57]. Fardella teaches that the system and method thereof allow a user to "generate moving

and/or still images from a video source, such as a digital camera associated with a sender's personal computer or a stand alone kiosk," and to send a video e-mail to a recipient via a central web server. *Id.* ¶ 13. Fardella teaches an example of software ("Makijam™ kiosk software") that can be used to process the video information on a sender's personal computer. *Id.* ¶ 14.

3. Overview of Stevenson (Ex. 1036)

Stevenson is a reference book titled "Tablet PCs for Dummies." Ex. 1036. In relevant part, Stevenson discloses that Tablet PC is a style of portable computer. *Id.* at 7.[12]

4. Analysis of Petitioner's Challenge to Claim 1

We begin by assessing Petitioner's arguments as to how the combination of Namias, Fardella, and Stevenson teaches the limitations of claim 1, and then turn to Petitioner's arguments regarding why a person of ordinary skill in the art would have been motivated to combine the teachings of the references.

a. "A computer-implemented method of handling an electronic message at a sending user mobile device in a networked environment, the electronic message including a message content including a media component and a header information that corresponds to the message content including a media component"

Petitioner relies on kiosk 100 of Namias as teaching a "sending user . . . device" and on the video or picture message sent using Namias's method as teaching the claimed "electronic message." Pet. 15–16 (citing Ex. 1003,

[12] Citations to Exhibit 1036 are to the original pagination of the book.

at [57], ¶¶ 2, 10–19; Ex. 1002 ¶ 60). Petitioner further contends that Namias discloses including "the (recorded) video or picture content" and "the recipient's email address (requested from the sender)" as part of the video or picture message, thus teaching the claim requirements that the message "includ[es] a message content including a media component" and "a header information that corresponds to the message content including a media component," respectively. *Id.* (citing Ex. 1003, at [57], ¶¶ 5, 11, 19; Ex. 1002 ¶ 60). According to Petitioner, "because Namias creates, records, and sends the video or picture message, one of ordinary skill would have understood that Namias discloses 'handling an electronic message'" (*id.* at 16 (citing Ex. 1002 ¶ 62) (emphasis omitted)); Namias "makes clear" that its method is "[a] computer-implemented method" (*id.* (citing Ex. 1003 ¶¶ 19, 32–33)); and because the kiosk sends the message via e-mail, it is "in a networked environment" (*id.* (citing Ex. 1003, at [57], ¶¶ 4–5, 20, 31–33; Ex. 1002 ¶ 62)).

Petitioner acknowledges that Namias's kiosk is not a "sending user mobile device." Pet. 16 (emphasis Petitioner's). Petitioner asserts that "it would have been obvious in view of Fardella and Stevenson that the method of video messaging disclosed in Namias can be adapted to a Tablet PC." *Id.* (citing Ex. 1002 ¶ 63) (emphases omitted). In particular, Petitioner notes that "Fardella confirms that video messaging software designed for kiosks can also be used with personal computers" and that "Stevenson discloses that personal computers can come in the form of mobile devices known as Tablet PCs." *Id.* at 16–17 (citing Ex. 1035, at [57], ¶ 14; Ex. 1036, 7). According to Petitioner, "it would have been obvious to combine Namias with Fardella and Stevenson . . . resulting in the method of

video (and picture) messaging disclosed in Namias being implemented using a mobile Tablet PC." *Id.* at 17 (citing Ex. 1002 ¶ 64); *see also id.* at 26 (citing Ex. 1002 ¶ 81) (noting that the "precise mechanism by which [a Tablet PC would provide the displays shows in Figures 4A and 5 of Namias to enable video messaging] is an implementation detail well within the capabilities of persons of ordinary skill").

We agree, for the reasons stated in the Petition, that the asserted combination teaches this claim limitation. We address Petitioner's reasons to combine below (*infra* § II.D.4.h).

b. "providing a plurality of reduced traceability displays via the sending user mobile device using a display generator that acts upon a display element of the sending user mobile device to provide the plurality of reduced traceability displays, the plurality of reduced traceability displays including a first display configured to allow a user of the sending user mobile device to associate a message content including a media component with an electronic message and a second display configured to allow the user to associate an identifier of a recipient with the electronic message"

Petitioner relies on Namias to teach this limitation. Pet. 19–26. According to Petitioner, Namias "uses a 'display device capable of displaying video and computer graphics' and a 'processor connected to the display device, . . . capable of . . . generating display output . . . ,'" thereby teaching the claimed "providing . . . displays . . . using a display generator that acts upon a display element . . . to provide the . . . displays." *Id.* at 19–20 (citing Ex. 1003 ¶¶ 20, 23–29, 31–32, Figs. 2–7; Ex. 1002 ¶ 72). Petitioner points to preview screen 400 of Figure 4A of Namias as teaching the claimed first display, which allows a user to associate message content

(i.e., a video) with the electronic message. *Id.* at 21–22 (citing Ex. 1003 ¶¶ 25, 36, 37, Fig. 4A; Ex. 1002 ¶ 74); *see id.* at 28. As described in Namias, preview screen 400 appears after the sender has recorded a video, and allows the user to play the recorded video. Ex. 1003 ¶¶ 25, 36–37; Pet. 22. If the sender is satisfied with the video, pressing "SEND THIS VIDEO" button 450 saves and sends the video. Pet. 22–23 (citing Ex. 1003 ¶ 37, Fig. 4A; Ex. 1002 ¶ 76). Petitioner also contends that "Figure 4A clearly does not display any recipient email addresses." *Id.* at 27 (citing Ex. 1002 ¶ 83). Petitioner further points to address screen 500 of Figure 5 of Namias as teaching the claimed second display, which allows a user to associate an identifier of a recipient (i.e., a recipient's e-mail address) with the electronic message. *Id.* at 23–24 (citing Ex. 1003 ¶¶ 27, 40, Fig. 5; Ex. 1002 ¶ 79); *see id.* at 29. As described in Namias, Figure 5 "allows the user to enter an e-mail address or addresses and thereby designate a recipient or recipients." Ex. 1003 ¶ 40; Pet. 24. The user presses "SEND" button 540 "to e-mail [the] video to [the] entered addresses." Ex. 1003, Fig. 5; Pet. 24.

According to Petitioner, "[t]he 'first display' in Figure 4A and the 'second display' in Figure 5 together qualify as 'a plurality of reduced traceability displays.' This is because . . . Figure 4A and Figure 5 display identifying information and message content separately." Pet. 24–25 (emphasis omitted). In this regard, Petitioner contends that the '155 patent "makes clear that the separate display of identifying information and message content enables reduced traceability." *Id.* at 25 (citing Ex. 1001, 2:18–26, 3:43–50, 8:67–9:4; Ex. 1002 ¶ 80); *see also supra* § II.C.1 (construing "reduced traceability displays" as "an arrangement of displays that enables reduced traceability of electronic messages (e.g., by separately

displaying identifying information and message content)"). Petitioner further contends that "Namias makes clear that the screen corresponding to the 'first display,' shown in Figure 4A, and the screen corresponding to the 'second display,' shown in Figure 5, are not displayed at the same time." Pet. 29; *see id.* at 29–30 (citing Ex. 1003 ¶¶ 37, 40, 55, 58; Ex. 1002 ¶¶ 85–89, 93).

Patent Owner contends that a person of ordinary skill in the art would not have combined Namias with Fardella and Stevenson to obtain separate displays. PO Resp. 31–39. Patent Owner argues that "in all of the[] secondary references . . . , the header information is not displayed separately from the message content," and "Petitioner never addresses the impact of the[] secondary teachings [of Fardella and Stevenson] that header information and message content should be displayed simultaneously." *Id.* at 32. Patent Owner argues that "Petitioner makes no attempt to explain why the combination of [references] would have resulted in a multiple display interface screen [as in Namias], instead of the conventional single composition screen recommended by Stevenson." *Id.* at 37. Dr. Almeroth opines that "a [person of ordinary skill in the art] intent on combining Namias with these other teachings would almost certainly choose the single screen email composition display that is referenced in Stevenson [and other references]. The single screen composition display is far more efficient, robust, and less likely to cause navigational trauma than Namias's multi-screen navigation flow, absent extenuating circumstances." Ex. 2009 ¶ 89; PO Resp. 39.

Petitioner responds by directing us to the Federal Circuit decision in *In re Fulton*, 391 F.3d 1195 (Fed. Cir. 2004). Pet. Reply 4. There, the

applicant argued that the record before the Board was insufficient to establish that the features of the relied upon reference "are preferred over other alternatives disclosed in the prior art." *Fulton*, 391 F.3d at 1200. Our reviewing court held that "[t]his argument fails because our case law does not require that a particular combination must be the preferred, or the most desirable, combination described in the prior art in order to provide motivation for the current invention." *Id.* As such, we are tasked with determining "'whether there is something in the prior art as a whole to suggest the *desirability*, and thus the obviousness, of making the combination' not whether there is something in the prior art as a whole to suggest that the combination is the *most desirable* combination available." *Id.* (quoting *In re Beattie*, 974 F.2d 1309, 1311 (Fed. Cir. 1992)).

Petitioner asserts that "while Stevenson's . . . interface may offer certain benefits that make it desirable in certain circumstances, Namias's interface likewise provides other advantages that would have motivated a person of ordinary skill [in the art] to use it in a video messaging system." Pet. Reply 5 (citing Ex. 1049 ¶ 11). According to Petitioner, the chief advantage of Namias's two-screen interface "is its simplicity." *Id.* Petitioner directs us to testimony from Patent Owner's declarant, Dr. Shamos, wherein he testified that "the reason for the separate screen [in Namias] is not reduced traceability, but to present a *simple* interface to a user who has never used the kiosk before." Ex. 2001 ¶ 32 (emphasis added) (cited at Pet. Reply 5); *see also id.* ¶ 88 ("It is true that the drawings [of Namias] illustrate different displays, but this is a matter of user interface design simplification . . . ."). Petitioner asserts that one of ordinary skill in the art would have recognized "that Namias's multiscreen interface is an

example of a well-known user interface technique known as 'wizards.'" Pet. Reply 5; *see* Ex. 1049 ¶¶ 13–15. As noted by Dr. Chatterjee,

> [a] *wizard* is a special form of user assistance that automates a task through a dialog with the user. Wizards help the user accomplish tasks that can be complex and require experience. Wizards can automate almost any task . . . . They are especially useful for complex or infrequent tasks that the user may have difficulty learning or doing.

Ex. 1049 ¶ 13 (quoting Ex. 1054[13], 335–336). According to Petitioner, certain users find it easier to use a simpler interface with fewer options on each page. Tr. 16:8–13 ("[I]t's far easier for them to have a wizard type scenario to walk through the things that they have to do, so that they don't get confused by multiple options on a single page.").

Patent Owner responds by asserting that "Petitioner has not provided any competent evidence that Namias's multi-screen interface is 'simpler' than Stevenson's." PO Sur-Reply 4. Patent Owner also contends that arguments regarding the simplicity of Namias's interface and the utility of wizards are untimely because they were first presented in Petitioner's Reply. *Id.*

In light of the evidence and arguments presented on this point, we determine that Petitioner has shown that one of ordinary skill in the art would have understood the combination of Namias with Fardella and Stevenson to teach the "plurality of reduced traceability displays" of claim 1. Namias's Figures 4A and 5 are separate displays. Patent Owner concedes as much in its comparison of the multi-screen configuration of Namias with the

[13] THEO MANDEL, THE ELEMENTS OF USER INTERFACE DESIGN (1997) ("Mandel"). Citations to Exhibit 1054 are to the original pagination of the book.

single screen configuration of Saffer. *See* PO Sur-Reply 4–5. There, Patent Owner compares Namias's "sequence of seven separate screens" with Stevenson's "single integrated screen." *Id.* at 5. Namias's Figure 5, the recited "second display," is not accessible to the user until after the media content is handled via the "first display" of Figure 4A. *See* Ex. 1003 ¶ 40. Thus, Namias's screens are not displayed at the same time, thereby meeting the "plurality of reduced traceability displays" limitation of claim 1.

We are not persuaded by Patent Owner's argument that one of ordinary skill in the art would not have selected Namias's multi-screen interface over Stevenson's integrated interface. Under Federal Circuit precedent, obviousness "does not require that the motivation be the *best* option, only that it be a *suitable* option from which the prior art did not teach away." *PAR Pharm., Inc. v. TWI Pharms., Inc.*, 773 F.3d 1186, 1197–98 (Fed. Cir. 2014) (citing *Galderma Labs., L.P. v. Tolmar, Inc.*, 737 F.3d 731, 738 (Fed. Cir. 2013)). Here, we are presented with persuasive evidence from Dr. Chatterjee showing that one of ordinary skill in the art would have looked to Namias to design a video messaging system that was easy to use. Dr. Chatterjee's opinion is supported by a 1997 reference book, Mandel (Ex. 1054), discussing the elements of user interface design. *See* Ex. 1049 ¶ 13 (citing Ex. 1054). Indeed, Mandel indicates that wizard-type layouts (like the one disclosed in Namias) are useful because "[i]t is better to have a greater number of simple pages with fewer choices than a smaller number of complex pages with too many options or text." Ex. 1054, 341 (cited at Ex. 1049 ¶ 13). Further, as Patent Owner's declarant, Dr. Almeroth, noted, a person of ordinary skill in the art would be versed in user interface design and may have taken undergraduate courses in human-computer interaction

(HCI). Ex. 2009 ¶ 21. Thus, Mandel with its focus on "Foundations of User Interface Design," including "understanding . . . how humans read, learn, and think to help design computers that work within the psychological capabilities and limitations of the people for whom they are designed," would be indicative of the knowledge of a person of ordinary skill at the time of the invention of the '155 patent. *See* Ex. 1054, Cover, xv (emphases omitted).

In addition, we are not persuaded that Petitioner's argument in its Reply is untimely. *See* Pet. Reply 5–6. As described in the Petition, Petitioner relies on Figures 4A and 5 of Namias for the "plurality of reduced traceability displays" limitation, noting that "the user interface in Namias uses separate displays to solicit the recipient identifier and message content from the user." Pet. 8, 24–25. Petitioner's asserted combination with Fardella and Stevenson is for other claim limitations—namely that the sending user device is a *mobile* device, discussed above (*supra* § II.D.4.a). Patent Owner argues in its Patent Owner Response that Petitioner failed to explain why a person of ordinary skill in the art would have chosen "to implement the separate interface screens disclosed in Namias" instead of the Stevenson "single email composition screen." PO Resp. 39. Then in its Reply, Petitioner responded to Patent Owner's arguments regarding the desirability of a multi-screen format as opposed to a single-screen format by explaining why Patent Owner is incorrect and further explaining the previous discussion of separate display screens with supporting evidence (such as Mandel) showing how one of ordinary skill in the art would have understood Namias's disclosures. Thus, we are persuaded that this is not an untimely argument, but rather a proper responsive argument that builds upon

the existing record. For all of these reasons, we are persuaded that Petitioner has established that the cited art teaches the "plurality of reduced traceability displays" limitation of claim 1 of the '155 patent.

c. "the first display being generated by the display generator such that the first display does not include a display of the identifier of the recipient via the first display such that a single screen capture of both the identifier of a recipient and the media component is prevented"

Petitioner relies on Namias to teach this limitation. Pet. 27–28. Petitioner asserts that, "because Figure 4A displays only the video message content and not any recipient identifiers, one of ordinary skill would have understood that 'the first display [is] generated by the display generator . . . such that a single screen capture of both the identifier of a recipient and the media component is prevented,'" as claimed. *Id.* at 27 (citing Ex. 1002 ¶ 84) (emphases omitted); Ex. 1002 ¶¶ 85–89. We agree, for the reasons stated in the Petition.

d. "associating the message content including a media component with the electronic message via the first display at a sending user device"

As explained above, Petitioner relies on Figure 4A of Namias to disclose this feature. *See supra* § II.D.4.b; Pet. 28. We agree, for the reasons stated in the Petition.

e. "associating the identifier of a recipient with the electronic message via the second display at the sending user device"

As explained above, Petitioner relies on Figure 5 of Namias to disclose this feature. *See supra* § II.D.4.b; Pet. 29. We agree, for the reasons stated in the Petition.

f. "the first and second displays not being displayed at the same time"

As explained above, Petitioner relies on Namias to disclose this feature—namely, Namias's teaching that Figures 4A and 5 are not displayed at the same time. *See supra* § II.D.4.b; Pet. 29–30. We agree, for the reasons stated in the Petition.

g. "transmitting the message content including a media component and the identifier of a recipient from the sending user device to a server computer"

Petitioner relies on Namias as teaching this limitation. Pet. 30–31. Petitioner asserts that "although Namias does not describe in detail the mechanics of transmission to a server computer, one of ordinary skill would have understood and found it obvious that the method in Namias includes 'transmitting the message content including a media component and the identifier of a recipient from the sending user device to a server computer,'" as recited in claim 1. *Id.* at 30 (citing Ex. 1002 ¶ 95) (emphasis omitted); *see also* Ex. 1003 ¶¶ 32–33 (describing that processor 110 forms an e-mail message with the recorded video and transmits the e-mail message over the digital network). Dr. Chatterjee testifies that "[i]t was fundamental knowledge to persons of ordinary skill that email messages are routinely transmitted from the sending device to an email server, where they are then routed to other servers on their way to the recipient, or stored while awaiting retrieval by the recipient." Ex. 1002 ¶ 95 (cited at Pet. 30–31). We agree, for the reasons stated in the Petition.

h. Reasons to Combine the Asserted References

As discussed above, Petitioner contends that the "method of video messaging disclosed in Namias can be adapted to a Tablet PC." Pet. 16 (citing Ex. 1002 ¶ 63). Relying on Fardella and Stevenson, Petitioner notes that "video messaging software designed for kiosks can also be used with personal computers" and "personal computers can come in the form of mobile devices known as Tablet PCs." *Id.* at 16–17 (citing Ex. 1035, at [57], ¶¶ 14, 15; Ex. 1036, 7). Petitioner contends that, "[a]lthough Namias uses a kiosk, Namias makes clear that the kiosk's messaging functionalities are enabled by software running on a computer, which can be an off-the shelf 'personal computer (PC).'" *Id.* at 17 (citing Ex. 1003 ¶¶ 32–33). Dr. Chatterjee testifies that "[a]dapting the video messaging technique described in Namias to a Tablet PC, a particular form of a personal computer, would thus have been technologically straightforward, and a person of ordinary skill would have had every expectation of success." Ex. 1002 ¶ 65 (cited at Pet. 17).

Petitioner provides several reasons one of skill in the art would have been motivated to adapt Namias's method to a Tablet PC. Pet. 17–19. For example, because "Tablet PCs are 'portable,' 'lightweight,' and 'sleek'" (*id.* at 18 (citing Ex. 1036, 7)), adapting the messaging technique of Namias to a Tablet PC "provides all the advantages of mobile computing and mobile messaging" (*id.* (citing Ex. 1036, 8, 271; Ex. 1002 ¶ 66)). Petitioner further contends that "[o]ne of ordinary skill in the art would have . . . appreciated that Tablet PCs facilitate the ability to send video and picture messages with ease on the go." *Id.* (citing Ex. 1002 ¶ 67); *see* Ex. 1036, 222, 242. Finally, Petitioner contends that the touchscreen capabilities and simplicity of the

user interface in Namias are "particularly suitable for Tablet PCs." Pet. 18–19 (citing Ex. 1003 ¶ 32, Figs. 3–5; Ex. 1036, 9, 15, 271; Ex. 1002 ¶¶ 68–69).

Patent Owner asserts that "[t]he only motivation provided by Petitioner and its expert to assemble these teachings . . . is the stated desire to develop a system that could be implemented on a tablet PC." PO Resp. 30 (citing Pet. 17–18). Patent Owner "disputes that this [alleged motivation] constitutes a *reason* to combine the references as required by *KSR*." *Id.* Further, Patent Owner contends that none of Petitioner's stated rationales (i.e., the "portability, lightweight nature, and sleekness" of tablet PCs) benefit Namias's kiosk-based system, which has "no need for portability." PO Sur-Reply 2.

Patent Owner also contends that "when considering the prior art *as a whole*, a [person of ordinary skill in the art] would not be motivated to use Namias's kiosk interface to design a message exchange system for mobile devices that reduces traceability of those messages." PO Resp. 30–31 (citing Ex. 2009 ¶¶ 83–87). According to Patent Owner, "Petitioner has failed to show a logical reason why a skilled artisan would combine [the asserted references] to design a reduced traceability message exchange system for mobile devices." *Id.* at 31.

Petitioner replies that "Patent Owner's argument revolves around the assertion that 'kiosks are not mobile.'" Pet. Reply 3 (quoting Ex. 2009 ¶ 84). As noted by Petitioner,

> Petitioner's mapping of Namias, Fardella and Stevenson does not rely on physically transforming a kiosk into a Tablet PC. Namias and Fardella both disclose kiosk software that could also run on an off-the-shelf personal computer. The Petition

> detailed the compelling motivations to use a Tablet PC instead of a personal computer to run that software.

Id. (internal citations omitted). We agree. The Petition clearly includes reasons that one of ordinary skill in the art would have been motivated to use the messaging technique of Namias on a Tablet PC—namely, portability and ease of use. *See* Pet. 16–19; Ex. 1002 ¶¶ 65–69. Namias broadly discloses that the processor of its kiosk can be "any type of general purpose computer, such as a personal computer (PC) [or] mini-computer." Ex. 1003 ¶¶ 31–32. The challenged claims are directed to methods of handling an electronic message, rather than to a system in a particular environment. Petitioner's asserted theory of unpatentability is that a person of ordinary skill in the art would have been able and motivated, based on the teachings of Fardella and Stevenson, to modify the method of video messaging disclosed in Namias to use a different sending *device*, namely a Tablet PC instead of, for example, a kiosk personal computer. *See* Pet. 16–17 (citing Ex. 1002 ¶¶ 63–64).

With regard to Patent Owner's arguments regarding "reduced traceability," we note that the challenged claims require only "providing a plurality of reduced traceability displays," which is met "e.g., by separately displaying identifying information and message content." *See supra* § II.C.1. As discussed above (*supra* § II.D.4.b), Namias's messaging technique teaches this claim feature.

We determine that one of ordinary skill in the art would have been motivated to adapt the messaging technique of Namias to a Tablet PC, based on the teachings of Fardella and Stevenson, to provide benefits, such as portability and ease of use. Thus, we find that Petitioner has put forth a sufficient showing as to a motivation to combine Namias, Fardella, and Stevenson.

i. Conclusion

Petitioner has established that the combination of Namias, Fardella, and Stevenson teaches all of the limitations of claim 1 and has articulated a sufficient rationale for combining the teachings of the references, with a reasonable expectation of success in making the combination. Accordingly, we determine the information presented demonstrates, by a preponderance of the evidence, that claim 1 would have been obvious over Namias, Fardella, and Stevenson.

5. Dependent Claims 4, 5, and 9

Claims 4, 5, and 9 depend from claim 1. Petitioner relies on Namias to teach the additional limitations of these claims. Pet. 31–32; Ex. 1002 ¶¶ 96–103. Patent Owner does not include any additional arguments directed to claims 4, 5, and 9. *See generally* PO Resp.; *see also* Paper 14, 5–6 ("The patent owner is cautioned that any arguments for patentability not raised in the response will be deemed waived."). We find Petitioner's evidence and arguments in the Petition to be credible, supported by evidence in the record, and sufficient to establish the unpatentability of claims 4, 5, and 9. Accordingly, we determine the information provided establishes, by a preponderance of the evidence, that claims 4, 5, and 9 would have been obvious over Namias, Fardella, and Stevenson.

E. Asserted Obviousness in View of Namias, Fardella, Stevenson, and Ford

Petitioner contends that claim 6 is unpatentable under 35 U.S.C. § 103 as obvious in view of Namias, Fardella, Stevenson, and Ford. Pet. 4, 33–35. Relying on the testimony of Dr. Chatterjee, Petitioner asserts that the

combined references teach or suggest the subject matter of the challenged claim and that a person having ordinary skill in the art would have combined the teachings of the references in the manner asserted. *Id.*; Ex. 1002 ¶¶ 104–111. Patent Owner's arguments against this ground are combined with its arguments against Petitioner's asserted ground as to claim 1. *See* PO Resp. 29–39. For the reasons discussed above, and the additional reasons discussed below, we determine Petitioner has established the unpatentability of claim 6 by a preponderance of the evidence.

1. Overview of Ford (Ex. 1037)

Ford relates to "[a] method of wireless data exchange with automatic delivery confirmation including . . . a deleting step for deleting the wireless data message." Ex. 1037, at [57]. In particular, Ford teaches the "automatic deletion of [a] wireless data message stored on a wireless device after confirmation of the successful storage of that data on a remote server," thus freeing up memory space. *Id.* ¶¶ 28–29, 36.

2. Analysis of Petitioner's Challenge

Claim 6 depends from claim 1, and recites "wherein the media component is no longer on the sending user device after said transmitting the message content and the recipient address." Ex. 1001, 19:27–30. Petitioner relies on Ford as teaching this additional claim limitation. *See* Pet. 33–35. In particular, Petitioner relies on Ford's teaching of "automatic deletion of wireless data message stored on a wireless device after confirmation of the successful storage of that data on a remote server." Ex. 1037 ¶ 28; Pet. 33 (citing Ex. 1037 ¶¶ 28–29, 36, 39, 41–42, 44–45, 47; Ex. 1002 ¶¶ 106–107). Petitioner argues that one of ordinary skill in the art would have been

motivated to incorporate Ford's deletion technique into the method taught by Namias (as modified by Fardella and Stevenson). Pet. 33–35. Reasons Petitioner provides for the combination include (1) Ford's process is similar to that of Namias and the combination, thus, would have been technologically straightforward to a person of ordinary skill in the art (*id.* at 34 (citing Ex. 1037 ¶¶ 42, 45, 49, 52–54; Ex. 1002 ¶ 109)); and (2) automatic deletion is an improvement over manual deletion because "manual deletion 'is slow and requires the user's attention and skill'" and successful receipt of the message prior to deletion is "uncertain," whereas automatic deletion is "simple, more automatic and reliable" (*id.* at 34–35 (citing Ex. 1037 ¶¶ 5–6, 8, 36, 48; Ex. 1002 ¶ 111)).

As noted, Patent Owner's arguments against this ground are combined with its arguments against the obviousness of claim 1, discussed above. *See* PO Resp. 29–39; *supra* § II.D.4. In particular, Patent Owner argues that in Ford, like Stevenson, "the header information is not displayed separately from the message content as required in claim 1," and thus the combination does not teach the recited "plurality of reduced traceability displays," in claim 1. PO Resp. 32. However, as discussed above (*supra* § II.D.4.b), Petitioner relies on Namias to teach this claim limitation and we agree that it does so. Patent Owner's arguments against combining the references also are not persuasive, for the reasons discussed above. *See supra* § II.D.4.h. Patent Owner does not present separate arguments related to the additional limitation recited in claim 6. *See generally* PO Resp. We find Petitioner's evidence and arguments to be credible, supported by evidence in the record, and sufficient to establish the unpatentability of claim 6. Accordingly, we determine the information provided establishes, by a preponderance of the

evidence, that claim 6 would have been obvious over Namias, Fardella, Stevenson, and Ford.

F. Asserted Obviousness in View of Namias, Fardella, Stevenson, and Saffer

Petitioner contends that claim 3 is unpatentable under 35 U.S.C. § 103 as obvious in view of Namias, Fardella, Stevenson, and Saffer. Pet. 4, 35–44. Relying on the testimony of Dr. Chatterjee, Petitioner asserts that the combined references teach or suggest the subject matter of the challenged claim and that a person having ordinary skill in the art would have combined the teachings of the references in the manner asserted. *Id.*; Ex. 1002 ¶¶ 112–139. Patent Owner, relying on the testimony of Dr. Almeroth, disputes Petitioner's contentions. PO Resp. 40–56, 61; Ex. 2009 ¶¶ 99–137. For the reasons discussed below, we determine Petitioner has established the unpatentability of claim 3 by a preponderance of the evidence.

1. Overview of Saffer (Ex. 1004)

Saffer relates to a "computer implemented system and method in which a user can send e-mail messages that include full-motion video and audio (or, alternatively, audio only), along with (if desired) the text messages to an e-mail recipient." Ex. 1004, at [57]. In Saffer, a user composes a message, records a video, and then hits the send button. *Id.* ¶ 4. The sender's computer retrieves a video ID from the server for that compressed video. *Id.* ¶¶ 4, 29, Fig. 3 (step 100). Software on the sender's computer compresses the video and transmits the compressed video to a server. *Id.* ¶¶ 4, 44, Fig. 3 (steps 102, 108). The sender's computer inserts the video ID (with a link or network address to the video server) into an

e-mail message, which is then sent to the recipient. *Id.* ¶¶ 4, 46, 47, Fig. 3 (step 112).

2. Analysis of Petitioner's Challenge

Claim 3 depends from claim 1, and recites "wherein the transmitting the message content including a media component occurs separately from the transmitting the identifier of a recipient." Ex. 1001, 19:15–18. Petitioner relies on Namias (as modified by Fardella and Stevenson) and Saffer to teach these limitations. Pet. 35–44. Petitioner acknowledges that, although "Namias satisfies 'transmitting the message content including the media component' and 'transmitting the identifier of a recipient'" (*see supra* § II.D.4.g), it "does not expressly disclose that these two transmissions 'occur[] separately.'" Pet. 36 (emphases omitted). Petitioner relies on Saffer as teaching that these transmitting steps occur separately, as claimed. *See id.* at 35–44; Ex. 1002 ¶¶ 114–124. According to Petitioner, Saffer, like Namias, teaches a system in which a user can send video to an e-mail recipient. Pet. 36 (citing Ex. 1004, at [57], ¶¶ 2–3, 25, Fig. 6). Petitioner lays out the steps performed by Saffer, after the sender presses the "Send" button, as follows:

> (1) The sending device requests and obtains a "video ID" from a video server, which will be used to uniquely identify the recorded video. (Saffer, ¶¶0004, 0029, Figure 3 (Step 100).)
>
> (2) The sending device uses the video ID received in step (1) to rename the video file. (Saffer, ¶¶0004, 0044, Fig. 3 (Step 102).)
>
> (3) The sending device then uploads the renamed video file to the video server for storage. (Saffer, ¶¶0004, 0044, Fig. 3 (Step 110).)

(4) After the upload, the sending device inserts a link into the body of the email message (in the form of a Uniform Resource Locator (URL)), the link including the video ID that identifies the video file on the video server. (Saffer, ¶¶0004, 0046, Fig. 3 (Step 112), ¶0027.)

(5) Finally, the sending device sends the email containing the link (but not containing the previously-uploaded video content) to an email server. (Saffer, ¶¶0004, 0047.)

Pet. 36–37 (citing Ex. 1002 ¶ 115). As noted by Petitioner, "[s]teps (1)-(4) above are illustrated in Figure 3 [of Saffer (reproduced below)], which highlights in yellow Steps 100, 102, 110, and 112 from Saffer." *Id.* at 37.

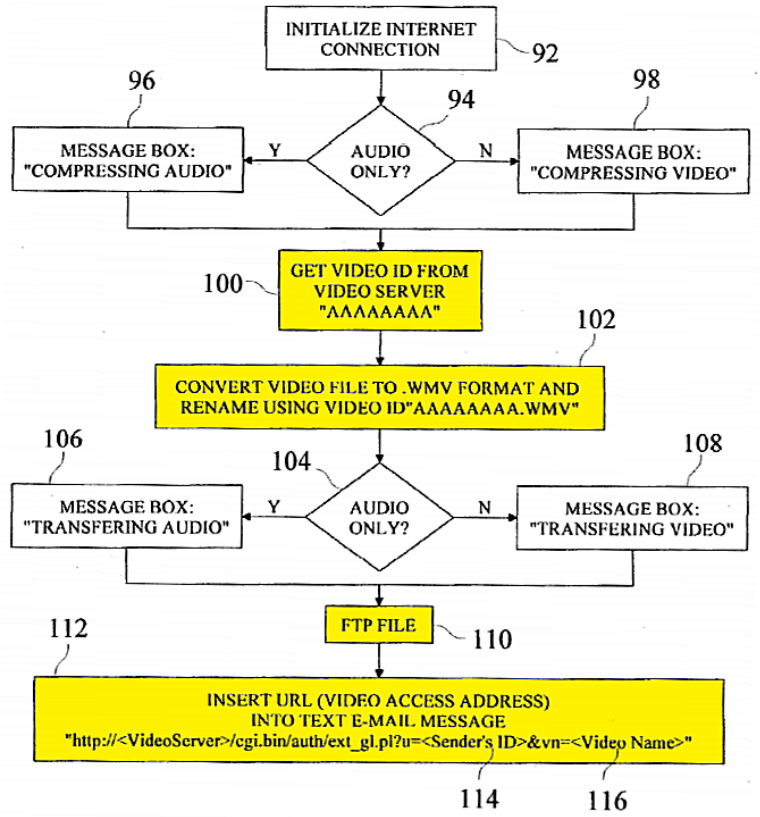
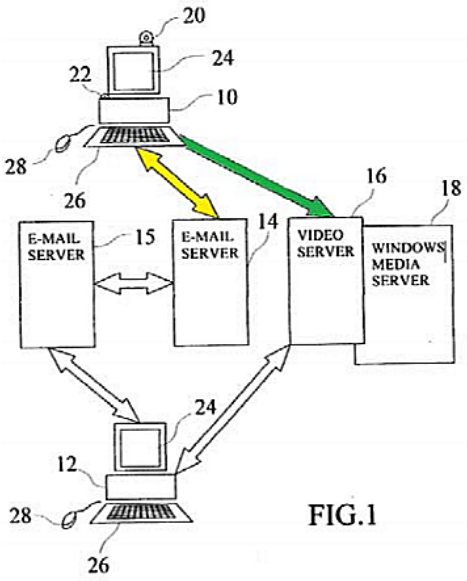


FIG.3

Figure 3 of Saffer, above, with highlighting added by Petitioner (Pet. 38), illustrates a flow diagram of "sending and compressing a video file to the video server with a unique ID." Ex. 1004 ¶ 9.

Petitioner also relies on Figure 1 of Saffer, an annotated version of which is reproduced below (Pet. 41), to provide further explanation of its position.



Annotated Figure 1, above, is a block diagram of an exemplary embodiment of Saffer. Ex. 1004 ¶ 7. According to Petitioner, "Saffer discloses an embodiment in which the video content is transmitted to a *video server* 16 (in green) and the email message to a *physically separate e-mail server* 15 (in yellow)." Pet. 41. As noted by Petitioner, the sending device of Saffer sends the e-mail message with the URL and recipient address to the e-mail server, after uploading the video file to the video server (i.e., Step 110) *and* after an intervening step of inserting the URL into the e-mail message (i.e., Step 112). *Id.* at 38–39 (citing Ex. 1004 ¶¶ 4, 44–47, Fig. 3; Ex. 1002 ¶¶ 116–120). As such, Petitioner argues that the cited art teaches separately transmitting the identifier of a recipient (i.e., the address) and the message content. *Id.* at 39–41. This is because the "transmissions . . . are separated by an intervening step, and separately conveyed to the server." *Id.* at 39–40 (citing Ex. 1002 ¶¶ 120–124) (emphases omitted). Dr. Chatterjee explains

> that after [a] the video content has been uploaded, there is an intervening step of [b] "then . . . insert[ing] the video ID with a 'link' or network address to the video server into the text or code of the composed e-mail message" before [c] that email message, which contains the recipient's email address in its "To:" field (Saffer, Fig. 7, ¶0024), is uploaded.

Ex. 1002 ¶ 120 (emphases omitted). Thus, the transmission of the video content to the video server must occur first in order to be able to generate the link with the video ID that is inserted into the e-mail message (that contains the recipient address), which is later sent to the e-mail server. Petitioner also argues that Saffer teaches a video server and e-mail server that constitute a single physical server. Pet. 39 (citing Ex. 1004 ¶ 4 (discussing the upload of compressed video to the video server "which may be the same server as the e-mail server"), ¶ 17, claim 5).

Patent Owner argues that the asserted combination does not teach or suggest "wherein the transmitting the message content including a media component occurs separately from the transmitting the identifier of a recipient" (the "separate transmissions" limitation). PO. Resp. 49–56. Specifically, Patent Owner asserts that a person of ordinary skill in the art would have understood that by placing Saffer's URL into the body of an e-mail message, that e-mail message would now contain both the recipient address and the media content. *Id.* at 50–51. In addition, Patent Owner argues that even if the URL were not considered to be message content, it would undermine the purpose of the claims if the URL and header information were in the same message because it would not allow for the sought reduced traceability. *Id.* at 53. We address each of these arguments in turn.

First, as noted above, we construe the term "message content including a media component" in a manner that excludes a URL in a message (linking to content accessible via that URL) from the definition of the phrase. *See supra* § II.C.2. Thus, per our construction, Saffer's URL is not message content, but an identifier that provides access to message content that is stored elsewhere (e.g., the video server).

Patent Owner argues that Saffer's system sends a transmission that includes both message content and header information. PO Resp. 50–51. Patent Owner asserts that Namias is silent as to the transmission of header information and message content and that Saffer includes this information together as depicted in Figures 6 and 7 of Saffer. *Id.* at 55–56. Petitioner correctly asserts that "Patent Owner ignores how Saffer's technique would be adapted to the Namias system as proposed by Petitioner, and attacks Saffer individually." Pet. Reply 12. Petitioner's proposed combination does not rely on Saffer's user interfaces or input methods, but rather it relies upon Namias's multi-screen user interface to provide the inputs to the Saffer transmission system.[14] Pet. 35–41. Petitioner explains that Saffer describes two separate transmissions with an intervening step between the transmissions. *Id.* at 39–41. Specifically, Saffer describes uploading the compressed video to a server. *See* Ex. 1002 ¶ 116 (citing Ex. 1004 ¶ 4). Then, the sender's device inserts the video ID with a link (i.e., a URL) for the uploaded video into an e-mail message before sending the e-mail message as a second transmission that includes the URL to access the video

[14] Under Petitioner's combination, the message content is "simply the video message content in Namias, with no user-provided text or other content." Pet. 42 n.7. "[T]he only message content the user can input is the actual video or picture data." *Id.* (citing Ex. 1003, Fig. 4A).

and the remainder of the message. *Id.* Dr. Chatterjee opines that it would have been obvious to exclude the recipient address from the first transmission "because, among other reasons, the information would have served no purpose and it would have been a waste of processing and network bandwidth to transmit it." *Id.* ¶ 118. He further testifies that "one of ordinary skill in the art would have understood that the recipient's email address is not uploaded in the same transmission as the video content because it is not until *later* in the process, when the email message is sent, that the recipient's email address is uploaded." *Id.* In addition, Dr. Chatterjee testifies that one of ordinary skill would not have included the video file in the second transmission because it had already been uploaded and there was no reason to send it a second time. *Id.* ¶ 119. Thus, via the testimony of Dr. Chatterjee, Petitioner provides persuasive evidence, supported by evidence in the record, that one of ordinary skill in the art would have understood the cited art to teach the separate transmissions limitation.

Second, Patent Owner argues that "[i]f an unauthorized third party intercepts a message containing both the recipient address and a publicly-accessible URL to the media component, that entity will be able to create a complete record of the message" and thus, the purpose of the claim invention would be frustrated. PO Resp. 53. Petitioner responds by asserting that "this 'purpose' is nowhere recited in the claim." Pet. Reply 14. The specification of the '155 patent discusses systems and methods for reducing traceability of an electronic message. *See, e.g.*, Ex. 1001, 3:42–43. The challenged claims, however, require only "providing a plurality of reduced traceability displays," which is met

"e.g., by separately displaying identifying information and message content." *See supra* § II.C.1; *see also* Ex. 1001, 18:43–22:54 (the only other references to traceability are in unchallenged independent claims 14 and 27, which similarly recite "a plurality of reduced traceability displays," and in claims 11, 16, and 37, also not challenged in this proceeding, which recite not including information that would provide "a traceable identity of the sender"). As discussed above, Namias's messaging technique teaches the claimed "plurality of reduced traceability displays."[15] *See supra* § II.D.4.b.

For the foregoing reasons, we are persuaded by Petitioner's argument, supported by evidence in the record, that the combination of Namias (as modified by Fardella and Stevenson) and Saffer teaches this limitation.

As to reasons to combine, Petitioner asserts that the combination of Namias (as modified by Fardella and Stevenson) and Saffer, resulting in "a messaging process in which, after the user approves the video (or picture) message and enters the recipient address using the displays in Figures 4A and 5 of Namias, respectively, the system hands over control to the method of Saffer to transmit the video message to a server using the technique described" in Saffer, would have been a "straightforward combination for a number of reasons." Pet. 41–42 (citing Ex. 1002 ¶¶ 125, 127).
Dr. Chatterjee opines that "[u]nder this combination, therefore, the recipient's email address and the video (or picture) message content

[15] Patent Owner also argues that, with the additional combination with Saffer, a person of ordinary skill "would almost certainly have chosen Saffer's single screen email composition display screen (which is integrated with Saffer and is far more efficient, robust, and less likely to cause navigational trauma) over Namias's multi-screen navigation flow." PO Resp. 61. For the reasons discussed above with respect to the combination with Stevenson, this argument is not persuasive. *See supra* § II.D.4.b.

[as entered using the displays in Figures 4A and 5 of Namias] would be transmitted to a server computer separately according to the techniques of Saffer." Ex. 1002 ¶ 125. Dr. Chatterjee further testifies that Namias does not provide details as to the method of transmission and "[i]t would thus have been obvious that the message transmission system of Saffer could take over where Namias leaves off, resulting in a combined system that uses the Namias user interface (e.g., Fig. 4A and Fig. 5) for entering the video message content and recipient address, but then uses the technique in Saffer to effectuate the actual transmission of the video message." *Id.* ¶ 128. In addition, Dr. Chatterjee states that one of ordinary skill in the art would have recognized that Saffer's URL-based delivery technique would have improved Namias's use of network bandwidth and storage. *Id.* ¶ 129. According to Dr. Chatterjee, "[a] person of ordinary skill in the art would have understood that replacing the video content in the message with a URL, as disclosed in Saffer, would have provided distinct advantages" because URLs are "typically only a handful of characters in length" and, thus, the message containing the URL would "consume[] very little network bandwidth and storage," "whereas video content can be quite large." *Id.* ¶ 131.

In addition, Saffer discloses that allowing a user to stream video content provides the user with quick access to the video without requiring the entire video to be downloaded prior to the start of playback. Pet. 43–44; Ex. 1002 ¶¶ 134–136; Ex. 1004 ¶¶ 2, 6, 19, 22. According to Dr. Chatterjee, streaming "would have been particularly significant in the context of video, which typically takes up significantly more data than other types of information, and thus, takes longer to transmit over a network." Ex. 1002

¶ 135. Petitioner also directs us to Saffer's discussion of optimizing the video stream for a recipient "by checking the recipient's configuration and/or bandwidth capabilities and streaming the video based upon this detected configuration/bandwidth." Ex. 1004 ¶ 22 (cited at Pet. 43–44).

Patent Owner asserts that Petitioner has failed to provide a reason to combine Namias and Saffer (PO Resp. 40–44) and Petitioner has failed to consider these references as whole in making this combination (*id.* at 45–49). We address each of these arguments in turn.

First, Patent Owner argues that "Petitioner's stated reason for combining Namias and Saffer is 'network bandwidth and storage are conserved.' But . . . there is no practical scenario where Saffer's link-based email transmission system conserves bandwidth or storage." *Id.* at 40 (quoting Pet. 43). Further, "[e]ven in Saffer's distribution system, the kiosk in Namias would still have to transmit the video to the server, requiring use of the bandwidth that was supposedly saved by implementing Saffer." *Id.* at 41 (citing Ex. 1004 ¶ 27). Patent Owner also contends that "Petitioner does not identify why the proprietor of the Namias kiosk would be concerned with such bandwidth savings." *Id.* at 42 (citing Pet. 43–44). In the end, according to Patent Owner, bandwidth saving are "only realized if the recipient never watches the video in its entirety." *Id.* (citing Ex. 2009 ¶¶ 107–108).

Petitioner responds by asserting that the combination of Namias and Saffer "would have provided significant advantages with respect to at least (1) network bandwidth, (2) storage, and (3) the ability to stream the video message content to the recipient." Pet. Reply 6–7 (citing Pet. 29–31; Ex. 1002 ¶¶ 96–103). In particular, Petitioner contends that Patent Owner

has ignored the benefits that would flow from allowing the recipient to stream the video. *Id.* at 7–8. Dr. Chatterjee explains "that streaming is a beneficial way of delivering video to a recipient that provides benefits over sending a video file as an email attachment." Ex. 1049 ¶ 17. "For example, in a streaming implementation, a user could begin playing back streaming video as the content is being received, rather than having to wait until the entire video file has been received." Ex. 1002 ¶ 135. In addition, streaming techniques "can be 'optimized to stream the video to the recipient computers 12 in a manner that can most easily viewed by the recipient's computers 12.'" *Id.* ¶ 136 (quoting Ex. 1004 ¶ 22). As such, Dr. Chatterjee opines that "[o]ne of ordinary skill in the art would have appreciated that Saffer's streaming delivery technique would have thus allowed a more optimized delivery of video content to the recipient device." *Id.* Dr. Chatterjee also states that "[t]hese benefits apply regardless of whether the recipient watches all, or only part, of the received video content." Ex. 1049 ¶ 17.

In its Sur-Reply, Patent Owner argues that "streaming adds no benefit within the context of the claimed invention and the specific combination proposed by Petitioner." PO Sur-Reply 6. According to Patent Owner, streaming does not save bandwidth or storage because the same video file must be uploaded to the server and then provided to the user. *Id.* at 7–8. According to Patent Owner, "Saffer's streaming technique actually increases storage requirements, as streaming requires the video to be stored on the video server indefinitely (in case the recipient wants to view the video in the future)." *Id.* at 8 (citing Ex. 2009 ¶ 111). Dr. Almeroth testifies that implementing Namias's system with streaming "would significantly increase

the cost of the system" because it "would require an additional video server with a large storage capacity to store all the videos uploaded by the various video email kiosks." Ex. 2009 ¶ 111.

We disagree with Patent Owner. As outlined above, Petitioner and Dr. Chatterjee provide a rational explanation, supported by evidence in the record, for the combination of the cited references. As we noted previously, under Federal Circuit precedent, obviousness "does not require that the motivation be the *best* option, only that it be a *suitable* option from which the prior art did not teach away." *PAR Pharm.*, 773 F.3d at 1197–98. Here, Petitioner has provided evidence from Saffer and the testimony of Dr. Chatterjee that establishes that one of ordinary skill in the art would have been aware of benefits to streaming video. Patent Owner, for example, does not dispute Petitioner's evidence that a video stream may be optimized for a particular recipient. *See, e.g.*, Ex. 1049 ¶ 17.

Petitioner further argues that "Patent Owner's argument myopically focuses only on the 'first leg' of the transmission from the sending device to the server, and ignores the substantial bandwidth and storage benefits achieved for subsequent transmission from the *server to the recipient device*." Pet. Reply 8. Petitioner contends that one of skill in the art would envision many scenarios in which bandwidth would be saved. Tr. 20:20–21:11. Dr. Chatterjee quotes a reference that noted a benefit of linking the message content with a URL:

> the recipients can decide when and if they want to receive one or more of the attachments . . . , advantageously reducing [either data] traffic resulting from email attachments in general or reducing instantaneous data traffic that typically results from sending an email with an attachment to multiple recipients.

Ex. 1002 ¶ 132 (quoting Ex. 1006[16], 4:24–30). Petitioner describes a scenario in which a video is sent to a large group of recipients and only a small subset wanted to watch the video. Tr. 20:20–21:11. In that situation, bandwidth would be saved because the video would only be provided to the people that wanted to see it, as opposed to sending the video file to the entire group. *Id.* According to Petitioner, "that is a situation that is as plausible, and in fact, probably more likely than the off chance of a viral video that would require multiple viewings." *Id.* at 21:7–9. Thus, Petitioner asserts that the proposed combination would "avoid[] the need to send a potentially large video file to the recipient(s) until they want to view it." Pet. Reply 8 (citing Ex. 1002 ¶¶ 99–100). We are persuaded by Petitioner's argument and evidence. We determine that one of ordinary skill in the art would have seen a benefit to the combination at least in so much as it would have allowed for the optimization of the video playback experience for users in light of the user's particular device and available Internet connection. *See* Ex. 1004 ¶ 22.

Second, Patent Owner argues that "Petitioner has cherry-picked certain aspects of various prior art references (while ignoring others) and cobbled them together into an approximation of the '155 [patent] claims based only on improper hindsight." PO Resp. 45. Specifically, Patent Owner asserts that one of ordinary skill in the art, upon considering the references as a whole, would not select Namias and its multi-screen e-mail composition. *Id.* at 47. Patent Owner argues that Namias's multi-screen interface is inferior to Saffer's single e-mail composition screen interface.

[16] Naick et al., U.S. Patent No. 7,409,425 B2, filed Nov. 13, 2003, issued Aug. 5, 2008.

See also id. at 61 (arguing that the asserted combination does not teach or suggest separate displays). This argument is similar to the argument Patent Owner made with respect to the single screen e-mail composition display of Stevenson, and we disagree with this argument for reasons discussed above. *See supra* § II.D.4.b.

Thus, we determine that one of ordinary skill in the art would have been motivated to use Saffer's techniques to improve the usage of bandwidth in Namias's system and to provide benefits to the end user, such as optimization of video streaming. Thus, we find that Petitioner has put forth a sufficient showing as to a motivation to combine Namias (as modified by Fardella and Stevenson) and Saffer.

3. Conclusion

Petitioner has established that the combination of Namias, Fardella, Stevenson, and Saffer teaches all of the limitations of claim 3 and has articulated a sufficient rationale for combining the teachings of the references, with a reasonable expectation of success in making the combination. Accordingly, we determine the information presented demonstrates, by a preponderance of the evidence, that claim 3 would have been obvious over Namias, Fardella, Stevenson, and Saffer.

G. Asserted Obviousness in View of Namias, Fardella, Stevenson, Saffer, and Smith

Petitioner contends that claim 2 is unpatentable under 35 U.S.C. § 103 as obvious in view of Namias, Fardella, Stevenson, Saffer, and Smith. Pet. 4, 45–57. Relying on the testimony of Dr. Chatterjee, Petitioner asserts that the combined references teach or suggest the subject matter of the

challenged claim and that a person having ordinary skill in the art would have combined the teachings of the references in the manner asserted. *Id.*; Ex. 1002 ¶¶ 140–163. Patent Owner, relying on the testimony of Dr. Almeroth, disputes Petitioner's contentions. PO Resp. 40–49, 56–61; Ex. 2009 ¶¶ 99–123, 135–144. For the reasons discussed below, we determine Petitioner has established the unpatentability of claim 2 by a preponderance of the evidence.

1. Overview of Smith (Ex. 1005)

Smith relates to "[a] document delivery architecture [that] dynamically generates a private Uniform Resource Locator (URL) to distribute information." Ex. 1005, at [57]. Smith's private URLs ("PURLs") are temporary, dynamically generated URLs that uniquely identify the recipient of a document, the document to be delivered, and optionally may include other delivery parameters. *Id.* at [57], 15:8–11. A sender forwards a document to a server and the server temporarily stores the document. *Id.* at 15:29–31. "The server dynamically generates a URL for each intended recipient of the document." *Id.* at 15:31–33. The recipient is sent an e-mail message that includes the PURL. *Id.* at 15:38–41. The recipient uses the PURL and the Web to retrieve the document (or set of documents). *Id.* at 14:48–50, 15:41–42. "PURLS avoid attaching information to e-mail messages to send documents, but rather attach a general reference to a document to be sent, and then enable the recipient to access a document via the reference." *Id.* at 15:13–16. When the recipient accesses the document by using a PURL, a server can intercept the document access request and provide additional services, such as tracking and security. *Id.* at 15:16–19.

2. Analysis of Petitioner's Challenge

Claim 2 depends from claim 1, and recites "wherein the identifier of a recipient and the message content including a media component each include a correlation to allow the identifier of a recipient and the message content including a media component to be related to each other at a later time by the server computer." Ex. 1001, 19:8–13. Petitioner relies on Namias (as modified by Fardella and Stevenson), in view of Saffer and Smith, as teaching this claim limitation. *See* Pet. 45–55; Ex. 1002 ¶¶ 140–163. In particular, Petitioner points to the video ID of Saffer, adapted according to the teachings of Smith, as teaching the claimed correlation. Pet. 45. As explained in the Petition, Saffer teaches "renaming the file containing the video message content using the video ID" and "inserting into an email a URL that includes the video ID." *Id.* at 50 (citing Ex. 1004, Fig. 7); *see id.* at 45–47; Ex. 1004 ¶¶ 4, 9, 20, 29–46, Figs. 3, 8. Petitioner contends

> it would have been obvious in further view of Smith that the video ID in the URL could be further appended with a recipient identifier (such as the recipient's email address), thus establishing a "correlation" between (1) the recipient identifier – coupled to the video ID in the URL – and (2) the video message content – stored in a file named using the video ID.

Pet. 47–48 (citing Ex. 1002 ¶ 145) (emphases omitted); *see also id.* at 48–50 (citing Ex. 1005, at [57], 2:24–34, 9:1–3, 11:21–24, 14:42–53, 15:8–16, 15:37–44, 15:48–58, 16:27–43, 16:55–56, 17:12–29, Fig. 20). Petitioner asserts that "Smith discloses a system similar to Saffer that uses a URL inserted in an email message to deliver a file to the intended recipient." *Id.* at 48 (citing Ex. 1005, at [57], 2:24–31, 14:42–49). Smith describes

temporary, dynamically generated private URLs known as PURLs. Ex. 1005, at [57], 15:8–9. "PURLs enable[] secure document delivery and tracking of document receipt." *Id.* at [57].

According to Petitioner's combination, the video ID (upon which Petitioner relies as teaching the claimed correlation) is coupled both to the message content (i.e., as the name of the file containing the message content) and to the recipient's e-mail address (i.e., in the URL embedded in the e-mail sent to recipient). Pet. 51 (citing Ex. 1002 ¶ 152). Further, the

> recipient's email address ("identifier of a recipient") in the URL and the video message content ("message content including a media component") stored at the server are "related to each other . . . by the server computer" during the subsequent delivery of the video message content from the server to the recipient ("at a later time").

Id. at 52 (emphases omitted); *see id.* at 51–53; Ex. 1002 ¶¶ 155–156.

Patent Owner argues that Petitioner's cited combination does not teach the claimed correlation.[17] PO Resp. 56–59. In particular, Patent Owner argues that "the claimed correlation must be included in ***both*** the recipient identifier and the message content." *Id.* at 56 (emphasis Patent Owner's). According to Patent Owner, "Saffer's video ID (*e.g.*, 'jxvTSgpc') appended with a recipient's email address (*e.g.*, 'wsolomon@connectmail.com') as per Smith" "appears only in the message content section of Saffer and is not incorporated in the recipient identifier portion of the message (*i.e.*, as part of the header information)." *Id.* at 57–

[17] Patent Owner also relies on the same arguments discussed above with respect to claim 3 and the combination of Namias and Saffer. *See* PO Resp. 40–49, 61. For the same reasons discussed above, those arguments are not persuasive as to claim 2. *See supra* § II.F.2.

58. Patent Owner contends that in Petitioner's proposed combination, "the modified video ID is not stored with the recipient identifier information, [but instead] the recipient identifier information is included with the correlation." *Id.* at 59.

Petitioner responds that the claim language does not require the "'correlation' be physically stored alongside both the message content and recipient identifier," but instead "merely requires that the recipient identifier and the message content 'each include a correlation,' and says nothing about storage of the correlation, let alone how or where it must be stored." Pet. Reply 17–18 (emphases omitted). Petitioner continues that the "claim does not preclude a single piece of data from serving as the correlation for both the recipient identifier and the message content." *Id.*

We agree with Petitioner that the video ID of Petitioner's combination is "data (*e.g.*, 'jxvTSgpc') that 'corresponds to a message' because it identifies the file name of the video message content stored at the server." *Id.* at 16 (citing Pet. 47). Further, we agree that

> [t]he "video ID" is also "used to associate two components of a message" because . . . it allows the video message content at the server (the message content "component") to be retrieved after the user views the header information (e.g., recipient email address and sender email address) delivered via an email containing the URL (the message header "component"), by activating the URL.

Id. (citing Pet. 47–48, 51–53). The claim does not require more. *See supra* § II.C.3 (construing "correlation" as "data corresponding to a message used to associate two components of a message"). We note also that Patent Owner's arguments are closely tied to its argument that the URL of Saffer includes message content. *See* PO Sur-Reply 18; PO Resp. 57–58.

However, as discussed above (*supra* §§ II.C.2, II.F.2), Saffer's URL is *not* message content.

Patent Owner also argues that "Petitioner has presented no evidence that any header information with recipient identifier (whether in Saffer or Saffer + Smith) 'includes' any videoID correlation." PO Sur-Reply 18–19. The claim, however, does not include any requirement with respect to header information including a correlation. The claim only requires "the identifier of a recipient" to "include a correlation," and we find that the references teach the limitation for the reasons stated above.

We also disagree with Patent Owner's assertion that Petitioner's Reply advances a "new theory" that relies only on Saffer's video ID as the claimed "correlation." *Id.* at 16 (citing Pet. Reply 15–16). The Petition relies on Saffer's video ID as teaching the correlation – the video ID being (1) coupled to the recipient identifier in the URL (i.e., in the URL of Saffer as modified by Smith to include a recipient identifier), and (2) used in the file name for storing the message content. Pet. 47–48; *see also id.* at 51 ("Under this combination with Saffer and Smith, as noted, 'the identifier of a recipient and the message content including a media component each include a correlation' that is established by the video ID. This is because the video ID is coupled to the video message content transmitted from the sending device to the server – as the name of the file containing the video message content – and the same video ID is also coupled to the recipient's e-mail address separately transmitted to the server – in the URL embedded in the e-mail. This mapping of the 'correlation' limitation using the video ID comports with the '155 patent specification." (internal citations omitted, emphases omitted)); Inst. Dec. 35 ("According to Petitioner's combination,

the video ID (upon which Petitioner relies as teaching the claimed correlation) is coupled both to the message content (i.e., as the name of the file containing the message content) and to the recipient's email address (i.e., in the URL embedded in the email sent to recipient)." (emphasis added)).

For the foregoing reasons, we are persuaded by Petitioner's argument, supported by evidence in the record, that the combination of Namias (as modified by Fardella and Stevenson), Saffer, and Smith teaches this limitation.

As to reasons to combine, Dr. Chatterjee opines that Saffer and Smith disclose "very similar techniques for delivering content through the use of URLs embedded in email messages." Ex. 1002 ¶ 157 (cited at Pet. 53–54). Dr. Chatterjee testifies that one of ordinary skill in the art would have been motivated to improve upon Saffer's use of a video ID by further appending a recipient identifier (as in Smith's PURL), in order to obtain the additional benefits of tracking and security described in Smith. *Id.* ¶ 158 (citing Ex. 1005, at [57], 14:36–41); Pet. 54.

Patent Owner argues that Petitioner has not identified a reason to modify the video ID of Saffer with the teachings of Smith. PO Resp. 59–61. Patent Owner further argues that Petitioner's combination "flies in the face of the reduced traceability required in the '155 [patent] claims." *Id.* at 60.

We are persuaded that one of ordinary skill would have looked to Smith to provide the noted improvements to Saffer's URL system, utilized in combination with Namias (as modified by Fardella and Stevenson), as explained by Petitioner and Dr. Chatterjee. With regard to Patent Owner's arguments regarding "reduced traceability," we note that the challenged

claims require only "providing a plurality of reduced traceability displays," which is met "e.g., by separately displaying identifying information and message content." *See supra* § II.C.1. As discussed above (*supra* § II.D.4.b), Namias's messaging technique teaches this claim feature. The claims include no other requirement for reduced traceability.

For the foregoing reasons, we find that Petitioner has put forth a sufficient showing as to a motivation to further combine Namias (as modified by Fardella and Stevenson) and Saffer with Smith.

3. Conclusion

Petitioner has established that the combination of Namias, Fardella, Stevenson, Saffer, and Smith teaches all of the limitations of claim 2 and has articulated a sufficient rationale for combining the teachings of the references, with a reasonable expectation of success in making the combination. Accordingly, we determine the information presented demonstrates, by a preponderance of the evidence, that claim 2 would have been obvious over Namias, Fardella, Stevenson, Saffer, and Smith.

H. Asserted Obviousness in View of Namias, Fardella, Stevenson, and RFC 2821 (Claim 3), and Further in View of Hazel (Claim 2)

Petitioner contends that claim 3 is unpatentable under 35 U.S.C. § 103 as obvious in view of Namias, Fardella, Stevenson, and RFC 2821, and claim 2 is unpatentable under § 103 as obvious in view of Namias, Fardella, Stevenson, RFC 2821, and Hazel. Pet. 4, 57–70. Relying on the testimony of Dr. Chatterjee, Petitioner contends that the combined references teach or suggest the subject matter of these claims and that a person having ordinary skill in the art would have combined the teachings of the references in the

manner asserted in the Petition. *Id.*; Ex. 1002 ¶¶ 164–207. Because we determine that claim 3 is unpatentable under § 103 as obvious in view of Namias, Fardella, Stevenson, and Saffer, and that claim 2 is unpatentable under § 103 as obvious in view of Namias, Fardella, Stevenson, Saffer, and Smith, we need not separately assess the patentability of these claims under these asserted grounds.

III. PATENT OWNER'S MOTION TO EXCLUDE

Patent Owner filed a Motion to Exclude Exhibits 1056 and 1057 as lacking authentication as required by Federal Rule of Evidence 901. Paper 32, 1–2. Exhibits 1056 and 1057 are cited in Dr. Chatterjee's Reply Declaration. Ex. 1049 ¶ 16. We need not determine the admissibility of Exhibits 1056 and 1057 because we do not rely on them in making our determinations here. Thus, Patent Owner's Motion is moot.

IV. CONCLUSION

Petitioner has demonstrated, by a preponderance of the evidence, that, under 35 U.S.C. § 103(a), claims 1, 4, 5, and 9 are unpatentable over Namias, Fardella, and Stevenson; claim 6 is unpatentable over Namias, Fardella, Stevenson, and Ford; claim 3 is unpatentable over Namias, Fardella, Stevenson, and Saffer; and claim 2 is unpatentable over Namias, Fardella, Stevenson, Saffer, and Smith. In light of our determination of unpatentability of claims 2 and 3, we decline to address whether these claims also are unpatentable under 35 U.S.C. § 103(a) as obvious over Namias, Fardella, Stevenson, and RFC 2821 (claim 3), and Hazel (claim 2).

V. ORDER

Accordingly, it is

ORDERED that claims 1–6 and 9 of U.S. Patent No. 9,313,155 B2 have been shown to be unpatentable; and

FURTHER ORDERED that Patent Owner's Motion to Exclude is dismissed as moot.

This is a final decision. Parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

PETITIONER:

Heidi L. Keefe
Andrew C. Mace
Mark Weinstein
Reuben Chen
Yuan Liang
COOLEY, LLP
hkeefe@cooley.com
amace@cooley.com
mweinstein@cooley.com
rchen@cooley.com
yliang@cooley.com
SnapVaporstream@cooley.com

PATENT OWNER:

Michael F. Heim
Blaine A. Larson
HEIM PAYNE & CHORUSH, LLP
mheim@hpcllp.com
blarson@hpcllp.com

Douglas R. Wilson
ARMOND WILSON LLP
doug.wilson@armondwilson.com

Jamie T. Gallagher
BIRCH TREE IP LAW & STRATEGY PLLC
jamie@birchtreeip.com

Trials@uspto.gov
571-272-7822

Paper 38
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SNAP INC.,
Petitioner,

v.

VAPORSTREAM, INC.,
Patent Owner.

Case IPR2018-00404
Patent 8,935,351 B2

Before JUSTIN T. ARBES, STACEY G. WHITE, and JENNIFER MEYER CHAGNON, *Administrative Patent Judges*.

ARBES, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a)

I. BACKGROUND

Petitioner Snap Inc. filed a Petition (Paper 2, "Pet.") requesting *inter partes* review of claims 1, 5, 6, 9, 11, and 12 of U.S. Patent No. 8,935,351 B2 (Ex. 1001, "the '351 patent") pursuant to 35 U.S.C. § 311(a). On July 10, 2018, we instituted an *inter partes* review of all challenges raised in the Petition. Paper 11 ("Dec. on Inst."). Patent Owner Vaporstream, Inc. subsequently filed a Patent Owner Response (Paper 22, "PO Resp."), Petitioner filed a Reply (Paper 26, "Reply"), and Patent Owner filed a Sur-Reply (Paper 29, "Sur-Reply"). An oral hearing was held on March 27, 2019, and a transcript of the hearing is included in the record (Paper 36, "Tr.").

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a). For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claims 1, 5, 6, 9, 11, and 12 are unpatentable.

A. Related Proceedings

The parties indicate that the '351 patent is the subject of the following district court proceeding involving Petitioner and Patent Owner: *Vaporstream, Inc. v. Snap Inc.*, Case No. 2:17-cv-00220-MLH-KS (C.D. Cal.). *See* Pet. 1; Paper 4, 1. Petitioner filed nine additional petitions for *inter partes* review of various related patents owned by Patent Owner in Cases IPR2018-00200, IPR2018-00312, IPR2018-00369, IPR2018-00397, IPR2018-00408, IPR2018-00416, IPR2018-00439, IPR2018-00455, and IPR2018-00458. *See* Pet. 1–2; Paper 4, 1–3. *Inter partes* review was instituted in each of these proceedings.

B. The '351 Patent

The '351 patent discloses "[a]n electronic messaging system and method with reduced traceability." Ex. 1001, Abstract. The '351 patent notes that "[t]ypically, an electronic message between two people is not private." *Id.* at col. 1, ll. 53–54. For example, messages may be intercepted by third parties; logged and archived; or copied, cut, pasted, or printed. *Id.* at col. 1, ll. 54–59. "This may give a message a 'shelf-life' that is often uncontrollable by the sender or even the recipient." *Id.* at col. 1, ll. 59–60. As such, according to the '351 patent, there was "a demand for a system and method for reducing the traceability of electronic messages." *Id.* at col. 2, ll. 6–8. Figure 3 of the '351 patent is reproduced below.

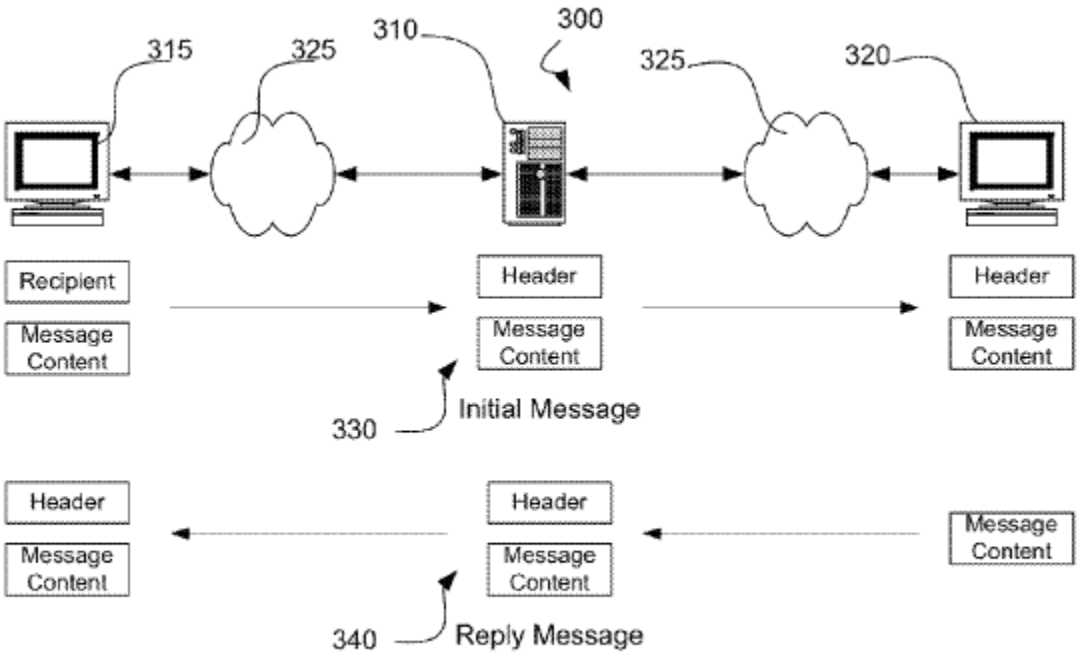

FIG. 3

Figure 3 above depicts system 300 for communicating electronic message 330 from user computer 315 to user computer 320 over network 325 using server 310. *Id.* at col. 10, ll. 51–56. "An electronic message may be any

electronic file, data, and/or other information transmitted between one or more user computers." *Id.* at col. 7, ll. 39–41. The electronic message may include text, image, video, audio, or other types of data. *Id.* at col. 7, ll. 41–49.

Figure 5 of the '351 patent is reproduced below.

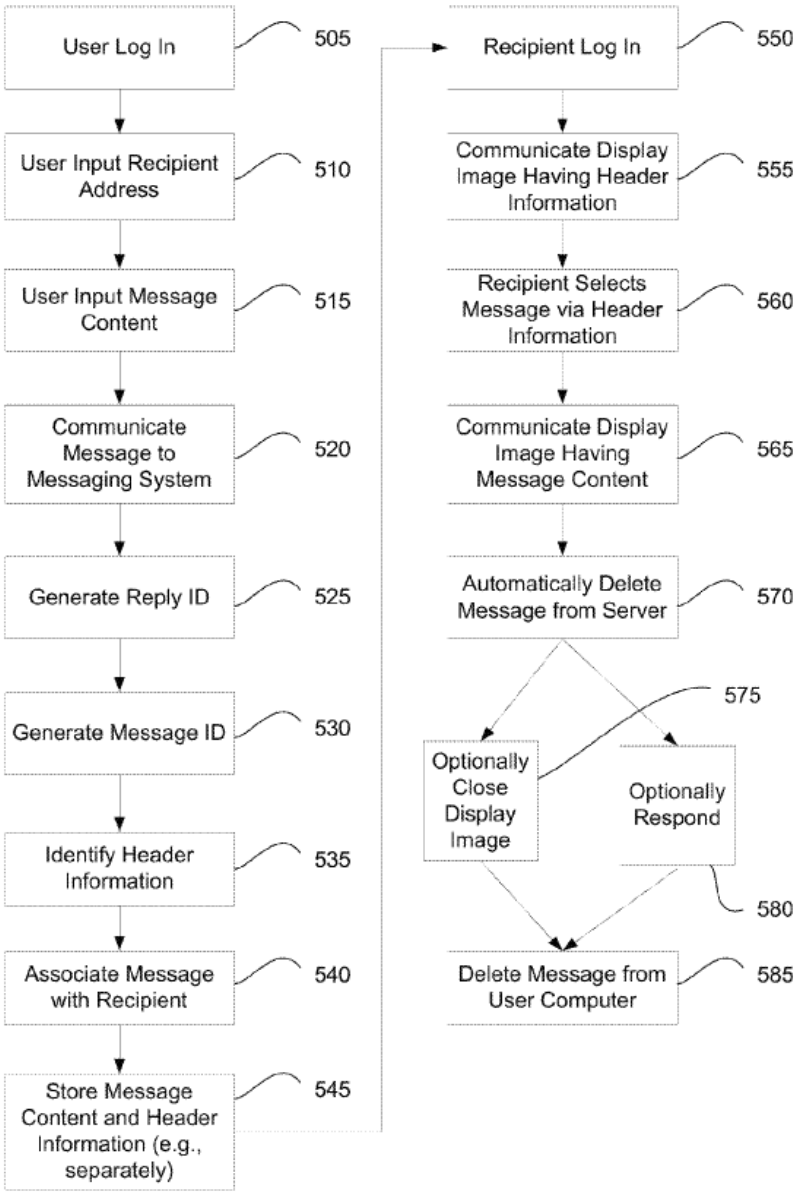

FIG. 5

Figure 5 depicts the process by which the electronic message is sent from the first user computer and received by the second user computer. *Id.* at col. 10, l. 66–col. 11, l. 1. At steps 510–520, the user inputs a recipient address (e.g., a unique identifier, such as an email address) and message content, using separate screens provided by the server computer, and the message is communicated from the user computer to the server. *Id.* at col. 11, l. 26–col. 12, l. 15, Figs. 8, 9. The server then performs various actions to process the message at steps 525–545. *Id.* at col. 12, l. 16–col. 14, l. 17. For example, the server identifies header information (e.g., information that "identifies the sending user, recipient user, location of the electronic message, [or] timing of [the] electronic message") separate from the content of the message itself and generates a message ID associated with the header information and message content. *Id.* at col. 12, ll. 26–38, col. 13, ll. 19–21 ("A message ID [is] used to maintain a correspondence between the separated components of electronic message 330."). The '351 patent describes an example in which the message ID is included both in an Extensible Markup Language (XML) file storing the header information and in an XML file storing the message content. *Id.* at col. 13, l. 27–col. 14, l. 17.

To retrieve the message, the recipient first logs in to the system at step 550. *Id.* at col. 14, ll. 18–20. At step 555, the server communicates to the recipient user computer a display image showing header information for multiple messages. *Id.* at col. 14, ll. 24–40, Fig. 10. For example, the display image may show a display name and date/time for each message, but not show the content itself for any of the messages. *Id.* In one embodiment, the header information may include "a sequence number (ex: 1, 2, 3, etc.) assigned to each electronic message," where each sequence number is

associated with a corresponding message ID for the respective message. *Id.* at col. 14, ll. 45–56. At step 560, the user selects one of the electronic messages to be displayed by, for example, selecting a "read" link displayed with the respective header information. *Id.* at col. 14, ll. 57–60. At step 565, the server communicates to the recipient user computer a display image with the content of the chosen message (but not header information for the message). *Id.* at col. 15, ll. 13–22, Fig. 11. At step 570, the message is automatically and permanently deleted from the server at a predetermined time. *Id.* at col. 15, ll. 39–41. At step 575, the user closes the display image, returns to the message listing, or chooses to respond to the message. *Id.* at col. 16, ll. 28–34. At step 585, the message content is automatically deleted from the recipient user computer after viewing. *Id.* at col. 16, ll. 37–45. According to the '351 patent, displaying header information and message content separately, and automatically deleting message content, reduce the traceability of electronic messages. *Id.* at col. 3, l. 48–col. 4, l. 3.

C. Illustrative Claim

Claim 1 of the '351 patent recites:

> 1. A computer-implemented method of handling an electronic message, the method comprising:
>
> receiving at a recipient user device a first header information corresponding to a first message content that includes a media component;
>
> providing a first display via the recipient user device, the first display including the first header information in a message list, the first display not displaying the media component;
>
> receiving at the recipient user device the first message content including the media component, wherein the first message content including the media component is associated

with a unique message ID that correlates the first message content including the media component with the first header information;

receiving a selection by the recipient user via the first display, the selection directed to a portion of the message list corresponding to the first header information;

in response to the selection, providing a second display via the recipient user device, the second display displaying the first message content including the media component without displaying a username associated with the first header information; and

automatically deleting the first message content including the media component at a predetermined amount of time after being displayed such that after the second display is terminated from view, the first message content including the media component is no longer available to the recipient user.

D. Prior Art

The pending grounds of unpatentability in the instant *inter partes* review are based on the following prior art:

U.S. Patent No. 7,356,564 B2, filed Jan. 9, 2002, issued Apr. 8, 2008 (Ex. 1014, "Hartselle");

U.S. Patent No. 7,054,905 B1, filed Mar. 30, 2000, issued May 30, 2006 (Ex. 1005, "Hanna");

U.S. Patent No. 5,958,005, issued Sept. 28, 1999 (Ex. 1006, "Thorne");

U.S. Patent Application Publication No. 2005/0021803 A1, published Jan. 27, 2005 (Ex. 1003, "Wren"); and

U.S. Patent Application Publication No. 2003/0152203 A1, published Aug. 14, 2003 (Ex. 1004, "Berger").

E. Pending Grounds of Unpatentability

The instant *inter partes* review involves the following grounds of unpatentability:

References	Basis	Claim(s) Challenged
Wren, Berger, and Thorne	35 U.S.C. § 103(a)[1]	1, 5, 6, and 11
Wren, Berger, Thorne, and Hartselle	35 U.S.C. § 103(a)	9
Wren, Berger, Thorne, and Hanna	35 U.S.C. § 103(a)	12

II. ANALYSIS

A. Claim Interpretation

According to the rules applicable to this proceeding, we interpret claims in an unexpired patent using the "broadest reasonable construction in light of the specification of the patent in which [they] appear[]." 37 C.F.R. § 42.100(b) (2017).[2] Under this standard, we interpret claim terms using

[1] The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) ("AIA"), amended 35 U.S.C. § 103. Because the challenged claims of the '351 patent have an effective filing date before the effective date of the applicable AIA amendment, we refer to the pre-AIA version of 35 U.S.C. § 103.

[2] The Petition in this proceeding was filed on December 27, 2017, prior to the effective date of the rule change that replaces the broadest reasonable interpretation standard with the federal court claim interpretation standard. *See* Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340, 51,340 (Oct. 11, 2018) (amending 37 C.F.R. § 42.100(b) effective November 13, 2018).

"the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification." *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). "Under a broadest reasonable interpretation, words of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification and prosecution history." *TriVascular, Inc. v. Samuels*, 812 F.3d 1056, 1062 (Fed. Cir. 2016); *see Tempo Lighting, Inc. v. Tivoli, LLC*, 742 F.3d 973, 977 (Fed. Cir. 2014) ("In claim construction, [our reviewing] court gives primacy to the language of the claims, followed by the specification. Additionally, the prosecution history, while not literally within the patent document, serves as intrinsic evidence for purposes of claim construction.").

In the Decision on Institution, based on the record at the time, we preliminarily interpreted "correlates" in claim 1 to mean "associates." Dec. on Inst. 8–9. The parties agreed on this interpretation in the related litigation and the district court adopted it. Ex. 2002, 8–9. Patent Owner argues in its Response that we should maintain our preliminary interpretation, Petitioner does not argue otherwise in its Reply, and we do not perceive any reason or evidence that compels any deviation from the preliminary interpretation. *See* PO Resp. 6. We adopt the previous analysis for purposes of this Decision.

In addition, Patent Owner seeks interpretation of the phrase "message content that includes a media component." *Id.* at 7–11. Petitioner does not seek express interpretation of any term of the '351 patent, but responds to Patent Owner's proposed interpretation in its Reply. Reply 17–21.

Claim 1 recites various limitations pertaining to a "message content that includes a media component." For example, claim 1 recites "receiving at a recipient user device a first header information corresponding to a first message content that includes a media component," "receiving at the recipient user device the first message content including the media component," "providing a second display . . . displaying the first message content including the media component," and "automatically deleting the first message content including the media component at a predetermined amount of time after being displayed."

The district court construed the phrase to mean "message content that includes sound and/or visual information and does not include header information." Ex. 2002, 22–24. Patent Owner argues that we should adopt the district court's construction "with the understanding that it includes message content that is attached to the email or linked via publicly accessible [Uniform Resource Locator (URL)]." PO Resp. 10–11. According to Patent Owner, "'message content' encompasses a URL that provides the access path to media content." *Id.* at 7. In support of its proposed interpretation, Patent Owner relies on a passage from the Specification of the '351 patent stating that "a message content of an electronic message may include an attached and/or linked file." Ex. 1001, col. 7, ll. 39–52 (cited at PO Resp. 8). Patent Owner also directs us to testimony from Petitioner's declarant, Sandeep Chatterjee, Ph.D., in a different *inter partes* review involving a patent related to the '351 patent. PO Resp. 8–9 (citing Ex. 2010 ¶ 100 n.25). Patent Owner characterizes Dr. Chatterjee's testimony as "mak[ing] clear [that] passing the actual content and passing a link that provides access to that content, such as a

URL, are both examples of 'passing information,'" and "[t]he same is true of 'message content.'" *Id.* Thus, in Patent Owner's view, the recited "message content including a media component" broadly includes both a URL in a message (linking to content accessible via that URL) and a file attached to the message. *See id.* at 7–11.

Petitioner responds by arguing that although "the [S]pecification states that [the] 'message content' may include a 'linked file,' it never states that the *link itself* is 'message content.'" Reply 18. In addition, Petitioner directs us to a further statement in the Specification that "[t]ypically, a message content, such as message content 140 does not include information that in itself identifies the message sender, recipient, *location of the electronic message*, or time/date associated with the electronic message." Ex. 1001, col. 7, ll. 55–59 (cited at Reply 18–19) (emphasis added). Petitioner explains that "[t]he URL . . . in the proposed combination [of Wren, Berger, Thorne, and Hanna] does not qualify as 'message content' because it identifies 'the location of' the video message on the server in Hanna." Reply 19 (citing Ex. 1005, col. 5, ll. 26–28). According to Petitioner, a person of ordinary skill in the art would "think of a URL as a pointer to content," i.e., "how you get to the content" rather than "the content itself." Tr. 23:12–24:5. In short, Petitioner contends that "[i]t's . . . the *file* that's the content, not the link itself." *Id*. at 23:6 (emphasis added).

We agree with Petitioner's arguments. The Specification of the '351 patent states that

> [i]n one example, a message content of an electronic message may include embedded information. In another example, a message content of an electronic message may include an attached and/or linked file. In such an example with an attached

> and/or linked file, the attached and/or linked file may be automatically deleted from the messaging system after being viewed by a recipient.

Ex. 1001, col. 7, 49–55. Thus, the Specification indicates that message content may be communicated to the user via embedded information, attached files, or linked files. Embedding, attaching, and linking are three ways to provide access to information. In other words, the email recipient may gain access to the information or content in a variety of ways; however, the method of providing access to information or content is not the same thing as the underlying information or content. In the passage quoted above, privacy may be enhanced by automatically deleting "the attached and/or linked file" from the messaging system after the file is viewed. *Id.* at col. 7, ll. 52–55. The Specification makes no provisions for deleting the URL or link to the file, but rather the focus is on the information itself. That information, or "message content," is located in the file itself regardless of the method by which the recipient accesses that information. Contrary to Patent Owner's assertion, Dr. Chatterjee's testimony cited by Patent Owner also supports this conclusion. *See* PO Resp. 8–9 (citing Ex. 2010 ¶ 100 n.25). Dr. Chatterjee testifies that there is a "distinction between transmitting the *actual content* to the recipient in a message, versus transmitting *just a URL* that points to or is an address for the content." Ex. 2010 ¶ 100 n.25 (emphases added). Dr. Chatterjee's testimony makes clear that "actual content" is distinct from "just a URL" that points to the content.

Thus, we determine that the broadest reasonable interpretation of the phrase "message content that includes a media component" does not encompass a URL in a message (linked to content accessible via that URL).

No further express interpretation of this phrase is necessary for purposes of this Decision. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) ("Because we need only construe terms 'that are in controversy, and only to the extent necessary to resolve the controversy,' we need not construe [a particular claim limitation] where the construction is not 'material to the . . . dispute.'" (citations omitted)).

B. Principles of Law

To prevail in challenging claims 1, 5, 6, 9, 11, and 12 of the '351 patent, Petitioner must demonstrate by a preponderance of the evidence that the claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d).

A claim is unpatentable for obviousness if, to one of ordinary skill in the pertinent art, "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." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting 35 U.S.C. § 103(a)). The question of obviousness is resolved on the basis of underlying factual determinations, including "the scope and content of the prior art"; "differences between the prior art and the claims at issue"; and "the level of ordinary skill in the pertinent art."[3] *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

[3] Additionally, secondary considerations, such as "commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy." *Graham*, 383 U.S. at 17–18. Patent Owner, however, has not presented any such evidence.

A patent claim "is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." *KSR*, 550 U.S. at 418. An obviousness determination requires finding "both 'that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.'" *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1367–68 (Fed. Cir. 2016) (citation omitted); *see KSR*, 550 U.S. at 418 (for an obviousness analysis, "it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does").
A petitioner's assertion of obviousness "cannot employ mere conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness." *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016) (citing *KSR*, 550 U.S. at 418).

C. Level of Ordinary Skill in the Art

Petitioner argues that a person of ordinary skill in the art at the time of the '351 patent "would have possessed at least a bachelor's degree in software engineering, computer science, or computer engineering with at least two years of experience in the design and implementation of systems for sending and receiving messages over a communications network, such as the Internet (or equivalent degree or experience)," relying on testimony from its declarant, Dr. Chatterjee. Pet. 5–6 (citing Ex. 1002 ¶¶ 13–15). Patent Owner does not propose a different level of ordinary skill in the art in its

Response. Patent Owner's declarant, Kevin C. Almeroth, Ph.D., "generally agree[s]" with Petitioner's characterization of the person of ordinary skill in the art, with the caveat that "such a person of ordinary skill would also have a working knowledge of design principles for software user interfaces. Such knowledge often would be learned in an undergraduate course in Human Computer Interaction (HCI)." Ex. 2009 ¶ 21. We agree, as the '351 patent describes the design of a software user interface that purportedly provides for reduced traceability of electronic messages. *See, e.g.*, Ex. 1001, Abstract, col. 1, l. 44–col. 3, l. 9. Based on the record developed during trial, including our review of the '351 patent and the types of problems and solutions described in the '351 patent and cited prior art, we agree with and adopt Petitioner's assessment of the level of ordinary skill in the art, with the caveat that such an individual would have had a working knowledge of design principles for software user interfaces, which may be achieved via study of human-computer interaction (HCI).

D. Obviousness Ground Based on Wren, Berger, and Thorne (Claims 1, 5, 6, and 11)

1. Wren

Wren describes "a multimedia video messaging system that provides an end-user with the ability to record and send arbitrary-length audio and video content" as "audiovisual messages that are automatically addressed to recipients based on one-touch activation." Ex. 1003, Abstract, ¶ 2. The sending user (referred to in Wren as the "end-user") "initiate[s] the method from a menu, address-book or an active voice or audio call screen" on the user's device (e.g., a mobile phone). *Id.* ¶¶ 10, 23. For example, the device

may provide the end-user with a "Send" option, which "will auto-compose the message [to the desired recipient(s)] based on parameters submitted to the method from the point of initiation" or "may prompt the user for the to: address that will typically be a phone number or e-mail address, subject text and body text." *Id.* ¶ 29. The device then sends the movie message in one of two ways. *Id.* ¶¶ 11, 29. If the video is less than a certain size, it is sent as an attachment to the message. *Id.* ¶ 11. If the video is above that size, however, "the video and audio streams to a remote disk that is available on the world-wide web and a message is created and sent with a [Uniform Resource Identifier (URI)[4]] to the streamed media embedded in the body of the message." *Id.* "When the message is received, an end-user can click on the attachment or the URI to play the video and audio." *Id.*

Figures 9A–9C of Wren are "an illustration of the end-user experience receiving the one-touch message with a compatible mobile phone or [personal computer (PC)] with a compatible e-mail client." *Id.* ¶ 22.

[4] Dr. Chatterjee explains that a URI is a "sequence of characters that identifies a resource," the most common example of which is a URL, and "[t]he terms URL and URI are often used interchangeably when the resource being identified is accessible over the Internet, as is the case in Wren." Ex. 1002 ¶ 33 n.5.

Figures 9A and 9B of Wren are reproduced below.

FIG 9A

FIG 9B

Figure 9A depicts "a notification of a new message," and Figure 9B depicts "a view of the Movie once the user selects play from a new message notification." *Id.* ¶ 32. Wren also includes Figure 9C, which is reproduced below.

FIG 9C

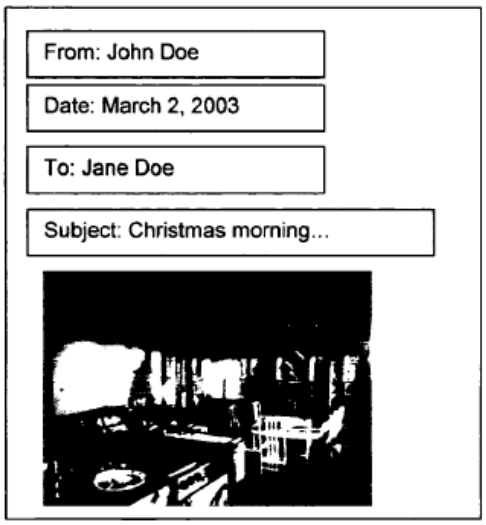

Figure 9C depicts "an e-mail message containing the Movie." *Id.*

2. Berger

Berger describes a unified messaging (UM) system where a user can access different types of messages (e.g., voicemail, email, facsimile, video) from a remote UM messaging server with a "seamless user interface"

presented on a mobile phone. Ex. 1004 ¶¶ 1, 28. The messaging server converts data as necessary (e.g., text to speech, and vice versa) so that it can be accessed and provided to the user. *Id.* ¶¶ 1–4, 28–30. Figure 4 of Berger is reproduced below.

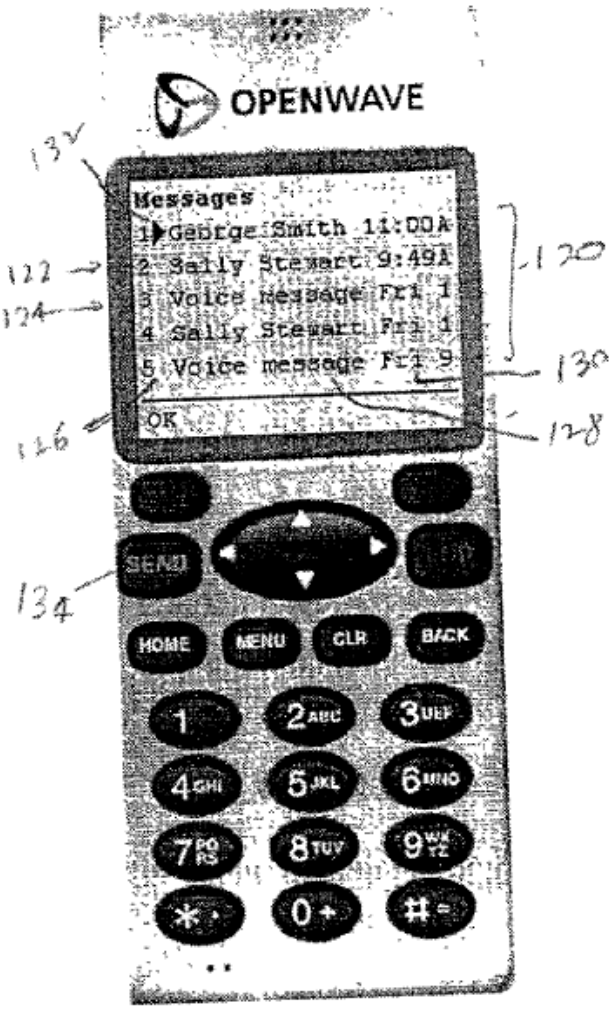

Figure 4 depicts list of available messages 120 displayed on the user's mobile phone, including email messages 122 and voice messages 124. *Id.* ¶ 41. The list is provided to the user's phone as "a web page, in a markup language compatible with the requesting device," and displayed as "hyperlinked messages." *Id.* The user selects a particular message by

moving cursor 132 up and down and pressing SEND button 134. *Id.* ¶ 42. Upon doing so, the phone's browser sends a Hypertext Transfer Protocol (HTTP) request to the messaging server, and the messaging server performs any necessary conversion of the message and "deliver[s] . . . the message (in the form of a web page, using HTTP) to the phone" for display to the user. *Id.* ¶¶ 43–44. Berger discloses that each message has an associated message number (displayed as 1–5 in Figure 4 above), which is included in each hyperlink of the displayed list and the HTTP request from the phone. *Id.* ¶¶ 45–57.

3. Thorne

Thorne describes a method of "communicating data text messages, such as E-Mail, between computers connected to a network while providing selectable degrees of security for each message." Ex. 1006, Abstract. In relevant part, Thorne describes starting a timer when an "E-Mail message is opened and the text displayed," determining whether a "maximum display time has been exceeded," and, if so, closing the message display and "delet[ing] and purg[ing]" the message. *Id.* at col. 10, ll. 35–38, col. 11, ll. 5–11, Fig. 5B (steps 548, 550, and 564). "This feature is provided in order to [e]nsure that a user does not bring the message up and leave it displayed for hours." *Id.* at col. 10, ll. 38–40.

4. Claim 1

Petitioner explains in detail how Wren, Berger, and Thorne teach all of the limitations of claim 1, relying on the testimony of Dr. Chatterjee as support. *See* Pet. 21–53 (citing Ex. 1002). Petitioner relies on Wren for the

majority of the limitations of claim 1. Petitioner argues that Wren teaches a computer-implemented method of handling an "electronic message" (i.e., movie message) comprising (1) receiving, at a "recipient user device" (i.e., the recipient's mobile phone), a "first header information" (i.e., sender identification ("Jane Doe") and time ("9:30AM")) corresponding to a "first message content that includes a media component" (i.e., video); (2) providing a "first display" via the recipient user device including the first header information but "not displaying the media component" (i.e., the screen display shown in Figure 9A, which does not show the video); (3) receiving the first message content including the media component at the recipient user device; (4) receiving a "selection" by the recipient user via the first display (i.e., the user selecting "Play" on the screen display shown in Figure 9A); and (5) "in response to the selection," providing a "second display" via the recipient user device with the message content including the media component "without displaying a username associated with the first header information" (i.e., the screen display shown in Figure 9B, which does not show a username). *Id.* at 21–26, 30–31, 44–45, 47–48.

We note that unlike certain claims in patents related to the '351 patent, claim 1 does not recite that the displays are "reduced traceability displays" or that all identifying information and message content for the message are displayed separately. In other words, claim 1 of the '351 patent may be satisfied as long as the first display includes "a first header information" but does not display "a media component" that is included in the second display, and the second display includes "a first message content" including the media component but does not display "a username associated with the first header information." By contrast, the

challenged claims of the patents involved in Cases IPR2018-00397 and IPR2018-00408 recite "reduced traceability displays," which we interpreted in those *inter partes* reviews to mean "an arrangement of displays that enables reduced traceability of electronic messages (e.g., by separately displaying identifying information and message content)." *See* IPR2018-00397, Paper 10, 8–9; IPR2018-00408, Paper 10, 8–9.

Petitioner relies on Berger for two limitations of claim 1. First, claim 1 recites that the first display "includ[es] the first header information in a message list" and that the recipient user makes a "selection" that is "directed to a portion of the message list corresponding to the first header information." Because Wren displays only a single message at a time, Petitioner relies on Berger for these limitations, citing the list of messages shown in Figure 4 of Berger, which displays "header information" for individual messages and allows the user to select a particular message by moving the cursor. Pet. 26–28, 44–48 & n.3. Petitioner explains that in the asserted combination, "Figure 9A of Wren (the 'first display') would be further adapted to display a message list containing multiple messages, each item in the list listing header information as disclosed in Berger." *Id.* at 28 (emphases omitted).

Second, claim 1 recites that "the first message content including the media component is associated with a unique message ID that correlates the first message content including the media component with the first header information." As explained above, we interpret "correlates" to mean associates. *See supra* Section II.A. According to Petitioner and Dr. Chatterjee, a person of ordinary skill in the art would have understood that Wren must correlate the header information and message content

because, when the user selects "Play" on the screen with the header information shown in Figure 9A, Wren plays the video corresponding to that information, as shown in Figure 9B. Pet. 30–32 (citing Ex. 1002 ¶ 67). Petitioner acknowledges, though, that Wren does not disclose a "unique message ID" that correlates the two components, and thus also relies on Berger. *Id.* at 32–39. Specifically, Petitioner contends that in Berger, a message number is "associated with each row of displayed header information" and included in the URL used to retrieve the message. *Id.* at 32–37. Petitioner also cites Berger's alternative embodiment that combines the message number and user ID into a single cryptographic hash value that is similarly included in the URL. *Id.* at 34–35, 37–38. Petitioner argues that the message number, either (1) alone, (2) in combination with the user ID, or (3) combined with the user ID as a cryptographic hash value, is a "unique message ID" as claimed because it is "uniquely associated with a specific message content stored at the server and used to identify the appropriate message content to be delivered to the recipient, thus correlating that message content with the corresponding displayed header information." *Id.* at 32–38 (citing Ex. 1002 ¶¶ 73–74). We agree with Petitioner's analysis on all three bases.

Petitioner further explains why a person of ordinary skill in the art would have been able and motivated to modify Wren's system based on the teachings of Berger. *Id.* at 28–30, 39–44, 46. Petitioner argues that both references teach similar techniques for delivering message content and presenting that content on a mobile phone with a small screen, and an ordinarily skilled artisan would have viewed "the ability to display and allow selection from among a multiplicity of received messages," rather than

displaying one message at a time, as a "distinct improvement" to the system of Wren. *Id.* at 28–30.

Petitioner relies on Thorne for the final limitation of claim 1, "automatically deleting the first message content including the media component at a predetermined amount of time after being displayed such that after the second display is terminated from view, the first message content including the media component is no longer available to the recipient user," citing Thorne's teaching of automatic deletion after a "maximum display time." *Id.* at 48–50 (citing Ex. 1006, col. 10, ll. 35–45, col. 11, ll. 5–12). Petitioner contends that an ordinarily skilled artisan would have been motivated to incorporate such a feature, for example, to "improve the confidentiality of movie messages received using the system of Wren." *Id.* at 50–53.

Petitioner's analysis for each of the limitations of claim 1, and explanation why a person of ordinary skill in the art would have been motivated to combine the references' teachings, are supported by the testimony of Dr. Chatterjee and persuasive. *See* Pet. 21–53; Ex. 1002 ¶¶ 48–96. Patent Owner makes two arguments with respect to claim 1, which we do not agree with for the reasons explained below.

a. Response Limitation

Patent Owner argues that the combination of Wren and Berger does not teach "in response to the selection, providing a second display via the recipient user device, the second display displaying the first message content including the media component" (the "response" limitation). PO Resp.

20–36 (citing Ex. 2009 ¶¶ 52, 61); Sur-Reply 3–15. Specifically, Patent Owner contends that Petitioner has not met its burden to show that a person of ordinary skill in the art would have combined the teachings of Wren and Berger in a manner that results in the response limitation. PO Resp. 25–26.[5] We begin by restating the particular combination articulated by Petitioner in the Petition, and then address Patent Owner's arguments.

Petitioner asserts that a person of ordinary skill in the art would have combined the teachings of Wren and Berger in the following manner: (1) Figure 9A of Wren would be adapted to display a "message list" with header information for multiple messages (rather than for just one message, as in Wren), relying on Berger's disclosure of a list of available messages, and (2) the user would select a message by selecting particular header information in the message list, citing Berger's disclosure of user selection

[5] Patent Owner's position is that "[e]ven assuming there was a motivation to combine Berger with Wren, which Patent Owner does not concede, Petitioner has failed to show that the combination of references discloses or suggests [the response limitation]." PO Resp. 25. Patent Owner, however, does not explain why Petitioner's stated reasons why a person of ordinary skill in the art would have been motivated to combine the references' teachings are incorrect or insufficient. *See* Reply 5. Nor does Patent Owner's declarant, Dr. Almeroth, provide any testimony in that regard. As explained above, we find those reasons, supported by the testimony of Dr. Chatterjee, to be persuasive. *See, e.g.*, Pet. 28–30, 39–44, 46, 50–53; Ex. 1002 ¶¶ 61–65, 77–83, 93–96. Thus, the question we must resolve is whether an ordinarily skilled artisan would have combined the references in the *way* that Petitioner asserts (to accomplish the two claim limitations disputed by Patent Owner).

by moving a cursor up and down and pressing a button. Pet. 26–28, 46–48 & n.3 (citing Ex. 1004 ¶¶ 41–42, Fig. 4).[6]

First, Patent Owner argues that Petitioner "assumes without explanation that the selection of a message from the Berger list would lead directly to Wren Figure 9B," but this would require "remov[ing] a key aspect of each reference: the Play button in Wren's Figure 9A and 'the message' referenced in Berger's paragraph 43." PO Resp. 25–29, 34–35 (arguing that without "use of the 'Play' button, there is no mechanism disclosed to launch . . . video playback software" or view text of the message in Petitioner's proposed combination). As explained above, Petitioner's proposed combination is premised on modifying Wren's method based on the teachings of Berger, not the reverse. Thus, to the extent Patent Owner contends that Petitioner must show a rationale for the reverse modification, we disagree. *See id.* at 21–22 (incorrectly asserting that "Petitioner is

[6] In its Reply, Petitioner provides a modified version of Figure 9A of Wren "to better visualize the combination described in the Petition." Reply 2. Notably, the modified figure removes certain text present in Figure 9A (e.g., "New Movie," "From:," "Time:," "Length: 5 minutes") and adds text from Figure 4 of Berger (e.g., "Messages," "George Smith") as well as entirely new text (e.g., "Joe Schmoe 8:11 AM," "Tyler Smith 2:57 AM") not present in either reference. *See id.* Although Petitioner explained generally in the Petition how a person of ordinary skill in the art would have combined the references' teachings, it did not discuss any of those specific modifications. For example, it is unclear why a person of ordinary skill in the art, when combining Wren with Berger to show multiple messages in a "message list," would keep some individual components of Figure 9A but remove others, as Petitioner contends. For purposes of this Decision, we do not rely on any of Petitioner's arguments or Dr. Chatterjee's testimony pertaining to the modified figure specifically. *See id.* at 2–3, 8–9; Ex. 1049 ¶¶ 6, 11; 37 C.F.R. § 42.23(b) (a reply "may only respond to arguments raised in the corresponding . . . patent owner response").

effectively arguing that it would have been obvious to modify Wren to display messages in a list as per Berger, *and* it would also have been obvious to modify Berger to play an attached or appended movie without displaying any header information when selecting a message from the Berger list"), 25–29, 33.

We also do not agree with Patent Owner that modifying Wren (based on the teachings of Berger) to display a "message list" would have required removing the "Play" button shown in Figure 9A. *See* Reply 8–9. Activating the "Play" button is a *selection* made by the recipient, and causes the transition from the screen shown in Figure 9A for a particular message to the screen shown in Figure 9B where the video for that message is displayed. *See* Ex. 1003 ¶ 32 (Figure 9B "shows a view of the Movie once the user *selects* play from a new message notification" (emphasis added)); Pet. 31–32 (explaining that the recipient device in Wren is able to "identify the movie message content that corresponds to the displayed header information"), 44–45 (arguing that Wren teaches a "selection" directed to what is shown in Figure 9A); PO Resp. 34 ("The Play button causes video playback software to be initiated on the user's computer that then operates to play back the transmitted video on the user's screen."). Similarly, Berger discloses the user making a "select[ion]" by moving a cursor and activating a button, or similar functionality:

> The user may then select (88) any of the messages for review by moving a cursor 132 up and down to reach the message of interest and then pressing the SEND button 134. A variety of other techniques could be used to enable the user to select a message, including a touchscreen or pointing device, available on some mobile devices.

Ex. 1004 ¶ 42; *see* Pet. 45–46. We are persuaded that a person of ordinary skill in the art reading Wren and Berger together would have extended the display of Figure 9A to multiple messages, and permitted the user to navigate between the messages and use the "Play" button to select one for display of an associated video, as Petitioner asserts.[7]

Second, Patent Owner argues in a number of places in its papers that Berger fails to teach displaying message content in response to a selection from a message list, as recited in claim 1. *See, e.g.*, PO Resp. 21 ("the Berger disclosure does not teach displaying only message content in response to the selection of a message from a message list"), 29–30 ("Berger does not disclose separate display of message content"); Sur-Reply 6. These arguments attacking Berger individually are not persuasive. *See In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) ("Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references."). Again, Petitioner's obviousness analysis is premised on a combination of Wren and Berger, where Wren's Figure 9A is modified to display a list of messages and permit selection of one of those messages for display as in

[7] Patent Owner argues that Petitioner's theory in this proceeding is inconsistent with an argument it made in Case IPR2018-00408 involving a related patent, specifically that in a combination of Wren, Berger, and Hanna, "pressing the 'Play' button on Figure 9A would activate the URL and retrieve the movie message content." PO Resp. 32–33 (quoting Ex. 2011, 59) (emphasis omitted); Sur-Reply 9. We do not view Petitioner's arguments as inconsistent, at least because the claim language being addressed in Case IPR2018-00408 pertained to the "second display" and what happens after it is provided (i.e., deletion of the message content), not a "first display" including a "message list," as recited in claim 1 of the '351 patent. *See* Ex. 2011, 58–59.

Figure 9B. We consider the references as a whole, but the fact that Berger lacks a feature taught by Wren does not mean automatically that the analysis is improper.

Third, Patent Owner argues that a person of ordinary skill in the art would have understood that "getting from a list of email messages (such as that depicted in Figure 4 of Berger) to playing media content attached to an email was at least a two-step process," and "Petitioner does not explain . . . why the selection of a message from a list would jump straight to playing an attachment to an email rather than displaying the email itself, in direct contradiction of both Wren and Berger." PO Resp. 33. Patent Owner contends that because Wren's Figure 1 only involves a single message,

> [i]f Wren's interface were implemented with another interface that provided a message list, then the recipient would have already selected the specific message from a list of messages before Figure 9A of Wren was displayed. In other words, two steps are still required after a message is selected from the Berger message list in both Berger and in Wren in order for message content to be displayed. In the case of Wren, the most logical progression would have been to display Figure 9A of Wren after a message is selected so that the information included in Figure 9A could be displayed consistent with the Wren (and Berger) teachings.

Sur-Reply 7. We disagree that the two-step process described by Patent Owner would have been the "most logical progression" for a person of ordinary skill in the art. To the contrary, as Petitioner correctly points out, Figures 9A and 9B of Wren "show[] a direct transition from the display of message header information (in Figure 9A) to the display of the video message content (in Figure 9B)." *See* Reply 10 (citing Ex. 1003 ¶ 32; Ex. 1049 ¶ 16). They also depict a mechanism for "select[ion]" by the user to move from one screen to a screen showing associated message content.

See Ex. 1003 ¶ 32. Petitioner's analysis, therefore, is consistent with Wren's disclosure.

Further, to the extent Patent Owner's argument is that a two-step process would have been preferable over Petitioner's proposed combination, *In re Fulton*, 391 F.3d 1195 (Fed. Cir. 2004), is instructive. *See* Reply 11 n.4. In that case, the applicant argued that the record before the Board was insufficient to establish that the features of the relied upon reference "are preferred over other alternatives disclosed in the prior art." *Fulton*, 391 F.3d at 1200. Our reviewing court held that "[t]his argument fails because our case law does not require that a particular combination must be the preferred, or the most desirable, combination described in the prior art in order to provide motivation for the current invention." *Id.* As such, we are tasked with determining "'whether there is something in the prior art as a whole to suggest the *desirability*, and thus the obviousness, of making the combination,' not whether there is something in the prior art as a whole to suggest that the combination is the *most desirable* combination available." *Id.* (quoting *In re Beattie*, 974 F.2d 1309, 1311 (Fed. Cir. 1992)).

We find that the combination of Wren and Berger teaches the response limitation of claim 1.

b. Unique Message ID Limitation

Patent Owner argues that the combination of Wren and Berger does not teach a "unique message ID that correlates the first message content including the media component with the first header information" (the "unique message ID" limitation). PO Resp. 36–39 (citing Ex. 2009 ¶¶ 52, 69); Sur-Reply 16–19. Patent Owner points out that when the user selects a

particular email message in Berger, the phone retrieves "the entire email message" (i.e., both message content and header information), not just message content. PO Resp. 37–39. Thus, the alleged "unique message ID" in Berger (i.e., message number, message number and user ID, or cryptographic hash value included in the URL) does not correlate "first message content" with "first header information" according to Patent Owner. *Id.* Patent Owner further argues that the Specification of the '351 patent "makes clear that a message ID is used when the header information and message content are stored separately." Sur-Reply 17–18 (citing Ex. 1001, col. 7, ll. 64–66, col. 13, ll. 19–21).

Patent Owner's arguments are not commensurate with the scope of the claim. Claim 1 requires only that the first message content be associated with a "unique message ID that correlates the first message content including the media component with the first header information." The claim does not include any further limitations with respect to the "unique message ID" or how it is applied. Nor is there any language in the claim requiring that the first message content and first header information be stored or transmitted separately; claim 1 only requires that they be "receiv[ed] at [the] recipient user device." Indeed, dependent claim 12 recites that the first header information and first message content are communicated over a network "separately."[8] Dependent claim 16 also recites that the media component and first header information are "kept separated during communication from the server computer to the recipient

[8] Petitioner challenges claim 12 in a different ground addressed below, relying on a combination with Hanna for the separate transmission limitation. *See infra* Section II.F.

user device." The presence of these limitations requiring separate transmission supports Petitioner's view that there is no such requirement in claim 1. *See* Reply 15–16; *Nazomi Comm'cns, Inc. v. ARM Holdings, PLC*, 403 F.3d 1364, 1370 (Fed. Cir. 2005) ("The concept of claim differentiation 'normally means that limitations stated in dependent claims are not to be read into the independent claim from which they depend.'" (citation omitted)). Further, the parties agree that claim 1 does not require the "unique message ID" to *only* be associated with the first message content. *See* Reply 15 n.5; Sur-Reply 17. Rather, the "unique message ID" correlates the first message content with the first header information, and in that way is associated with both.

Regardless, though, Petitioner's position is that the combination of Wren and Berger, not Berger alone, teaches the unique message ID limitation. *See* Pet. 30–44 ("This limitation is . . . satisfied by Wren in combination with Berger." (emphases omitted)). Petitioner relies on Wren as teaching both "first header information" (i.e., sender identification and time) and "first message content that includes a media component" (i.e., video shown in Figure 9B), and argues that they are correlated with each other in Wren because the recipient device transitions from the screen shown in Figure 9A to the screen shown in Figure 9B when the user selects "Play." *Id.* at 24, 30–32. According to Petitioner and Dr. Chatterjee, a person of ordinary skill in the art would have understood from that transition that "the movie message content would have been correlated with the header information so the phone could identify the movie message content that corresponds to the displayed header information." *Id.* at 32 (citing Ex. 1002 ¶ 67).

Wren, however, does not disclose using a "unique message ID" to achieve that correlation. *Id.* Petitioner argues that doing so would have been obvious based on a combination with Berger, which teaches a message number for a message being displayed with header information for the message and included in the URL used to retrieve the message. *Id.* at 32–39; *see, e.g.*, Ex. 1004 ¶¶ 52–53 (disclosing that "the message server must have a way to 'remember' . . . which message the user wants to access," and one way to do so is to "embed, in the URLs included in the list provided from the server to the browser, the information needed to . . . identify the desired message," where "[t]he server knows the user's ID and the message identifier when it assembles the list to be sent to the browser"). Thus, as argued by Petitioner, the combination of Wren and Berger

> would have predictably resulted in the mobile phone user interface of Wren (as shown in Figure 9A and Figure 9B) in which the movie message content is associated with a unique message ID (such as the message number or hash in Berger) that correlates the movie content (as shown in Figure 9B) with the message header information (as shown in Figure 9A).

Pet. 39 (citing Ex. 1002 ¶ 77). Further, when displaying multiple messages in a list in the proposed combination, there would "need[] to be some way to connect each of the header information shown in the message list with the underlying message content," and it would have been obvious to use a "unique message ID" like the message number in Berger "to allow the recipient device in Wren to retrieve the movie message content that corresponds to the selected header information." *Id.* at 40 (citing Ex. 1002 ¶ 79).

We agree with Petitioner and Dr. Chatterjee that Wren teaches correlating "first header information" and "first message content that

includes a media component" but does not disclose the specific mechanism for doing so, Berger teaches one such mechanism as a "unique message ID" included in a URL, and a person of ordinary skill in the art would have been motivated to modify Wren's method based on Berger to use a "unique message ID." Patent Owner's arguments based on the fact that Berger alone retrieves the entire message using the alleged "unique message ID" do not address the combined teachings of Wren and Berger as asserted by Petitioner and are not persuasive. We find that the combination of Wren and Berger teaches the unique message ID limitation of claim 1.

c. Conclusion

For the reasons set forth by Petitioner and explained above, we are persuaded that Wren, Berger, and Thorne collectively teach all of the limitations of claim 1, and that a person of ordinary skill in the art would have had reason to combine the references' teachings to achieve the method recited in the claim and would have had a reasonable expectation of success in doing so. Petitioner has proven, by a preponderance of the evidence, that claim 1 would have been obvious based on Wren, Berger, and Thorne under 35 U.S.C. § 103(a).

5. Claims 5, 6, and 11

Claims 5, 6, and 11 depend from claim 1. Petitioner explains how the limitations of dependent claims 5, 6, and 11 are taught by the combination of Wren, Berger, and Thorne, with supporting testimony from Dr. Chatterjee. *See* Pet. 53–56; Ex. 1002 ¶¶ 97–105. Claim 5 recites that "the recipient user device is a device selected from the group consisting of a personal computer,

a workstation computer, a server computer, a laptop computer, a handheld device, a mobile telephone, a personal digital assistant, and any combinations thereof." Petitioner argues that Wren teaches a "mobile telephone" as the recipient device. Pet. 53 (citing Ex. 1003 ¶ 22). Claim 6 recites that "the media component includes information selected from the group consisting of an image, video, audio, and any combinations thereof." Petitioner argues that Wren teaches a movie message containing "video" and "audio." *Id.* (citing Ex. 1003 ¶ 8). Claim 11 recites that "providing a first display includes displaying information representing electronic messages available for viewing." Petitioner argues that in the combination of Wren and Berger described above for claim 1, the first display would include header information in a message list representing "actual electronic messages that can be viewed upon user selection." *Id.* at 53–56 (citing Ex. 1002 ¶ 103). Patent Owner does not argue separately dependent claims 5, 6, and 11 in its Response. PO Resp. 20–39. We have reviewed Petitioner's contentions and supporting evidence, including the testimony of Dr. Chatterjee, and are persuaded that Petitioner has proven, by a preponderance of the evidence, that dependent claims 5, 6, and 11 would have been obvious based on Wren, Berger, and Thorne under 35 U.S.C. § 103(a), for the reasons stated by Petitioner.

E. Obviousness Ground Based on Wren, Berger, Thorne, and Hartselle (Claim 9)

Petitioner contends that claim 9 is unpatentable over Wren, Berger, Thorne, and Hartselle under 35 U.S.C. § 103(a). Pet. 56–60. Claim 9 depends from claim 1, and recites that "providing a second display includes

preventing screenshot logging at the recipient user device from capturing the media component and the first header information simultaneously." Petitioner argues that because the screen shown in Figure 9B of Wren does not include any header information, any "screenshot logging" would not capture header information. *Id.* at 56–58. Additionally, Petitioner relies on Hartselle's teaching of preventing *all* screenshot logging when using a messaging application. *Id.* at 58 (citing Ex. 1014, col. 7, ll. 6–10, col. 9, l. 67–col. 10, l. 7). Petitioner argues that a person of ordinary skill in the art would have been motivated to prevent screenshot logging, for example, to "improve the confidentiality of movie messages received using . . . Wren's system." *Id.* at 58–60 (citing Ex. 1014, col. 1, ll. 24–37, 56–61; Ex. 1002 ¶¶ 111–114). Patent Owner does not argue separately dependent claim 9 in its Response, only disputing Petitioner's contentions with respect to parent claim 1. PO Resp. 39–40. We have reviewed Petitioner's contentions and supporting evidence, including the testimony of Dr. Chatterjee, and are persuaded that Petitioner has proven, by a preponderance of the evidence, that dependent claim 9 would have been obvious based on Wren, Berger, Thorne, and Hartselle under 35 U.S.C. § 103(a), for the reasons stated by Petitioner.

F. Obviousness Ground Based on Wren, Berger, Thorne, and Hanna (Claim 12)

Petitioner contends that claim 12 is unpatentable over Wren, Berger, Thorne, and Hanna under 35 U.S.C. § 103(a). Pet. 60–72. Claim 12 depends from claim 1, and recites that "the first header information and the first message content are received at the recipient user device via a network,

wherein the first header information and the first message content are communicated over the network separately."

Petitioner argues that the recipient device in Wren receives "first header information" (i.e., sender identification and time) and "first message content that includes a media component" (i.e., video shown in Figure 9B) via a "network" (e.g., the Internet), but acknowledges that "Wren does not disclose the detailed mechanics of how the movie message . . . is transmitted from the server to the recipient's mobile phone." *Id.* at 60–61. Petitioner thus relies on both Berger and Hanna as teaching the recited separate transmission, including arguments with respect to both references. *Id.* at 61–66. We agree with Petitioner with respect to combining the teachings of Hanna with those of the other references discussed above in connection with parent claim 1, and therefore, need not address Petitioner's additional arguments regarding Berger.

Hanna teaches a system that replaces the file attachment in an email message with a URL to the file on a server, where the recipient then uses the URL to retrieve the file. *Id.* at 62 (citing Ex. 1005, col. 2, ll. 3–5, 55–57, col. 5, ll. 1–12, 26–28, 39–40, 57–66). Petitioner contends that, based on the combined teachings of the references,

> the header information in Wren (such as the sender name and date/time shown in Figure 9A) [would be] sent separately from the message content (the movie message shown in Figure 9B). This is because a message is initially sent from the server to the recipient device that does not include an attachment containing the movie message content – that message instead includes only the header information and a URL as disclosed in . . . Hanna, the URL identifying the location of the movie message content on a server. The recipient's mobile phone can later retrieve the movie message content (as shown in Figure 9B of Wren) from the

> server using the URL in a separate transmission according to the technique[] of . . . Hanna. Under this scenario, therefore, the header information is communicated separately from the movie message content.

Id. at 63 (emphases omitted). Petitioner argues that a person of ordinary skill in the art would have been motivated to make such a combination, for example, to provide better message tracking, asserting that "Hanna explains that its technique of replacing an email attachment with a URL prior to delivery provides superior message tracking because the system can log the recipient's request to retrieve the message content stored on the server, thus providing proof of receipt." *Id.* at 66–72 (citing Ex. 1002 ¶ 127; Ex. 1005, col. 6, ll. 1–5). Petitioner's arguments regarding the asserted combination with Hanna are supported by the testimony of Dr. Chatterjee. *See, e.g.*, Ex. 1002 ¶¶ 118, 120, 124–136.

Patent Owner responds that the asserted combination does not teach the limitation that "the first header information and the first message content are communicated over the network separately" (the "separate transmission" limitation) because "the email message including a publicly-accessible URL link to media content falls within the scope of 'message content' under the proper construction of that term." PO Resp. 40–51 (citing Ex. 2009 ¶¶ 52, 61, 73–75, 77–79, 81, 83–84); Sur-Reply 20–23. In other words, "[t]ransmitting a public URL *to the linked file* does not transmit the header information and message content separately" according to Patent Owner. Sur-Reply 21. As explained above, however, we disagree with Patent Owner's proposed interpretation of "message content that includes a media component" and instead interpret the term to exclude a URL in a message (linking to content accessible via that URL). *See supra* Section II.A. Thus,

per our interpretation, Hanna's URL is not message content, but an identifier that provides access to message content that is stored elsewhere (i.e., on a server) and would be transmitted separately from the header information in Petitioner's proposed combination.

Patent Owner also challenges certain aspects of Dr. Chatterjee's testimony. First, Patent Owner argues that Dr. Chatterjee is "internally inconsistent" in (1) opining that message content is transmitted separately in the proposed combination because Hanna's linked file is stored on a server and transmitted separately, and also (2) testifying during cross-examination that the linked file is not "part of that message that's being sent." PO Resp. 42–43 (citing Ex. 2012, 87:22–88:24, 92:7–13) (emphasis omitted).
We disagree. Reading Dr. Chatterjee's cross-examination statements in context with the surrounding testimony, it is clear that he was referring to Hanna's teaching of storing the file on a server and sending a URL so that the user may access it later (as opposed to sending the file itself), which is consistent with his declaration testimony about the asserted combination. *See, e.g.*, Ex. 2012, 87:22–88:4 ("[W]hat Hanna does is that it tears off the attachment, stores it, and then sends the email with the URL in it. It doesn't send that file that it tore off."), 90:2–13 ("[The linked file is] not being transmitted. That's the whole purpose of Hanna, that it's saying that I'm going to chop the attachment off, put it somewhere else, put a URL to where I put it, and then send the message on. So I think Hanna makes it pretty clear that that thing that it chopped off is not also being sent again. It's being chopped off and put somewhere into a server somewhere."), 91:11–92:15 (agreeing that "Hanna describes replacing that attachment with

a URL link to that attachment on the server"); Ex. 1002 ¶¶ 118, 120; Ex. 1049 ¶¶ 23–24.

Second, Patent Owner argues that "Dr. Chatterjee's opinion that the separate transmission limitation covers transmission of an email with a publicly-accessible link to a video such that the entirety of the email is accessible from a single interception eliminates the fundamental purpose of the claimed invention and simply cannot be correct." PO Resp. 45 (citing Ex. 2012, 96:4–17); Sur-Reply 20 (arguing that "providing a hyper-link to a file allows a hacker to access the file merely by clicking on that link"). Petitioner responds by asserting that "this 'purpose' is nowhere recited in the claim." Reply 20. We agree. The Specification of the '351 patent describes systems and methods for reducing traceability of an electronic message, but claim 12 does not include any express limitation regarding reduced "traceability." *See*, *e.g.*, Ex. 1001, col. 3, ll. 48–49. In addition, none of the challenged claims mention traceability at all. The only references to traceability are in claim 3, not challenged in this proceeding, which recites not including information that would provide "a traceable identity of the sender," and claim 18, also not challenged in this proceeding, which recites "[a] system for reducing traceability of an electronic message" in the preamble. Further, even if claim 12 included the "purpose" alleged by Patent Owner, Hanna "disclose[s] specific protections against unauthorized access of message content through a URL." *See* Reply 20–21; Ex. 1049 ¶ 29; Ex. 1005, col. 5, ll. 62–67 (explaining that user authentication, via "any of a number of authentication mechanisms, such as a password, a shared secret, public key cryptography and/or digital certificates," may be required before the user can receive the attachment referenced by the URL).

For the foregoing reasons, we are persuaded by Petitioner's argument, supported by evidence in the record, that the combination of Wren, Berger, Thorne, and Hanna teaches the separate transmission limitation of claim 12. We have reviewed Petitioner's contentions and supporting evidence, including the testimony of Dr. Chatterjee, and are persuaded that Petitioner has proven, by a preponderance of the evidence, that dependent claim 12 would have been obvious based on Wren, Berger, Thorne, and Hanna under 35 U.S.C. § 103(a), for the reasons stated by Petitioner.

III. ORDER

Petitioner has demonstrated, by a preponderance of the evidence, that claims 1, 5, 6, and 11 are unpatentable over Wren, Berger, and Thorne, that claim 9 is unpatentable over Wren, Berger, Thorne, and Hartselle, and that claim 12 is unpatentable over Wren, Berger, Thorne, and Hanna, under 35 U.S.C. § 103(a).

In consideration of the foregoing, it is hereby:

ORDERED that claims 1, 5, 6, 9, 11, and 12 of the '351 patent have been shown to be unpatentable.

This is a final decision. Parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

PETITIONER:

Heidi L. Keefe
Andrew C. Mace
Mark R. Weinstein
Reuben Chen
Yuan Liang
COOLEY LLP
hkeefe@cooley.com
amace@cooley.com
mweinstein@cooley.com
rchen@cooley.com
yliang@cooley.com

PATENT OWNER:

Douglas R. Wilson
ARMOND WILSON LLP
doug.wilson@armondwilson.com

Michael F. Heim
Blaine A. Larson
HEIM PAYNE & CHORUSH, LLP
mheim@hpcllp.com
blarson@hpcllp.com

Jamie T. Gallagher
BIRCH TREE IP LAW & STRATEGY PLLC
jamie@birchtreeip.com

Trials@uspto.gov
571.272.7822

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SNAP INC.,
Petitioner,

v.

VAPORSTREAM, INC.,
Patent Owner.

Case IPR2018-00458
Patent 9,313,156 B2

Before STEPHEN C. SIU, JUSTIN T. ARBES, and STACEY G. WHITE, *Administrative Patent Judges*.

Opinion of the Board filed by *Administrative Patent Judge* WHITE.

Opinion Concurring filed by *Administrative Patent Judge* SIU.

FINAL WRITTEN DECISION
Determining All Challenged Claims Unpatentable
Denying Patent Owner's Motion to Amend
35 U.S.C. § 318(a)

I. INTRODUCTION

We have jurisdiction to hear this *inter partes* review under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed herein, we determine that Snap Inc. ("Petitioner") has shown, by a preponderance of the evidence, that claims 1–3 and 6–8 ("the challenged claims") of U.S. Patent No. 9,313,156 B2 (Ex. 1001, "the '156 patent") are unpatentable.

A. Procedural History

Petitioner requested *inter partes* review of the challenged claims. Paper 2 ("Petition"). Petitioner provided a Declaration of Sandeep Chatterjee, Ph.D. (Ex. 1002) to support its positions. Vaporstream, Inc. ("Patent Owner") filed a Patent Owner Preliminary Response, supported by the Declaration of Michael Shamos, Ph.D. (Ex. 2001). Paper 9. Based on our review of these submissions, we instituted a trial on all of Petitioner's challenges as described in the Petition. Paper 10 ("Dec."). Petitioner contends the challenged claims are unpatentable under 35 U.S.C. § 103 on the following specific grounds (Pet. 5):

References	Claim(s) Challenged
Namias[1], PC Magazine[2], Saffer[3], and Smith[4]	1, 2, and 6–8
Namias, PC Magazine, RFC 2821[5], and Hazel[6]	1, 2 and 6–8
Namias, PC Magazine, Ford[7], Saffer and Smith	3
Namias, PC Magazine, Ford, RFC 2821, and Hazel	3

Patent Owner filed a Patent Owner Response (Paper 18, "PO Resp.") along with a Declaration of Kevin C. Almeroth, Ph.D. (Ex. 2009), Petitioner filed a Reply (Paper 24, "Reply") along with a Reply Declaration of Dr. Chatterjee (Ex. 1043), and Patent Owner filed a Sur-Reply (Paper 26, "Sur-Reply"). Patent Owner also filed a Motion to Amend (Paper 19, "MTA") to which Petitioner filed an Opposition (Paper 23, "MTA Opp."), Patent Owner filed a Reply (Paper 27, "MTA Reply"), and Petitioner filed a Sur-Reply (Paper 33, "MTA Sur-Reply").

An oral hearing was held on April 17, 2019, and a transcript of the hearing is included in the record (Paper 39, "Tr.").

[1] U.S. Patent Appl. Pub. No. 2002/0112005 A1, published Aug. 15, 2002 (Ex. 1003).

[2] Neil J. Rubenking, *Disabling Print Screen*, P.C. MAGAZINE, Aug. 1988, at 450 ("PC Magazine") (Ex. 1033).

[3] U.S. Patent Appl. Pub. No. 2003/0122922 A1, published July 3, 2003 (Ex. 1004).

[4] U.S. Patent No. 6,192,407 B1, issued Feb. 20, 2001 (Ex. 1005).

[5] *Simple Mail Transfer Protocol*, Network Working Group, Request for Comments 2821 (J. Klensin ed., AT&T Labs), April 2001 (Ex. 1008).

[6] PHILIP HAZEL, EXIM: THE MAIL TRANSFER AGENT (2001) (Ex. 1011).

[7] U.S. Patent Application Publication No. 2005/0014493 A1, published January 20, 2005 (Ex. 1035, "Ford").

B. Related Proceedings

The parties indicate that the '156 patent is the subject of the following district court proceeding involving Petitioner and Patent Owner: *Vaporstream, Inc. v. Snap Inc.*, Case No. 2:17-cv-00220-MLH-KS (C.D. Cal.). Pet. 1; Paper 4, 1.

Petitioner filed nine additional petitions for *inter partes* review of various other patents owned by Patent Owner, "each of which is related to the '156 patent and claims priority to the same priority application as the '156 patent" (Paper 4, 1–2): Cases IPR2018-00200, IPR2018-00369, IPR2018-00312, IPR2018-00397, IPR2018-00404, IPR2018-00408, IPR2018-00416, IPR2018-00439, and IPR2018-00455. *See* Paper 4, 1–2; Pet. 1. *Inter partes* review was instituted in each of these proceedings and final written decisions have issued[8] for each of these cases.

C. The '156 Patent

The '156 patent is titled "Electronic Message Send Device Handling System and Method with Separated Display and Transmission of Message Content and Header Information," was filed on December 17, 2014[9], and issued April 12, 2016. Ex. 1001. The '156 patent relates to an electronic messaging method "with reduced traceability." *Id.* at [57]. The '156 patent

[8] At this time, some of the final written decisions have been appealed to the U.S. Court of Appeals for the Federal Circuit.

[9] The '885 patent claims priority, through a chain of continuation applications, to Application No. 11/401,148, filed on April 10, 2006, and Provisional Application No. 60/703,367, filed on July 28, 2005. Ex. 1001, at [60], [63]. The specific priority date of the challenged claims is not at issue in this proceeding, and we need not make any determination in this regard.

notes that "[t]ypically, an electronic message between two people is not private." *Id.* at 2:7–8. For example, messages may be intercepted by third parties; logged and archived; or copied, cut, pasted, or printed. *Id.* at 2:8–12. "This may give a message a 'shelf-life' that is often uncontrollable by the sender or even the recipient." *Id.* at 2:13–14. The challenged claims are directed to an "electronic message send device handling . . . method" for reducing traceability of an electronic message. *See id.* at 1:67–2:3, 2:27–29, 18:58–19:24, 19:45–48.

Figure 3 of the '156 patent is reproduced below.

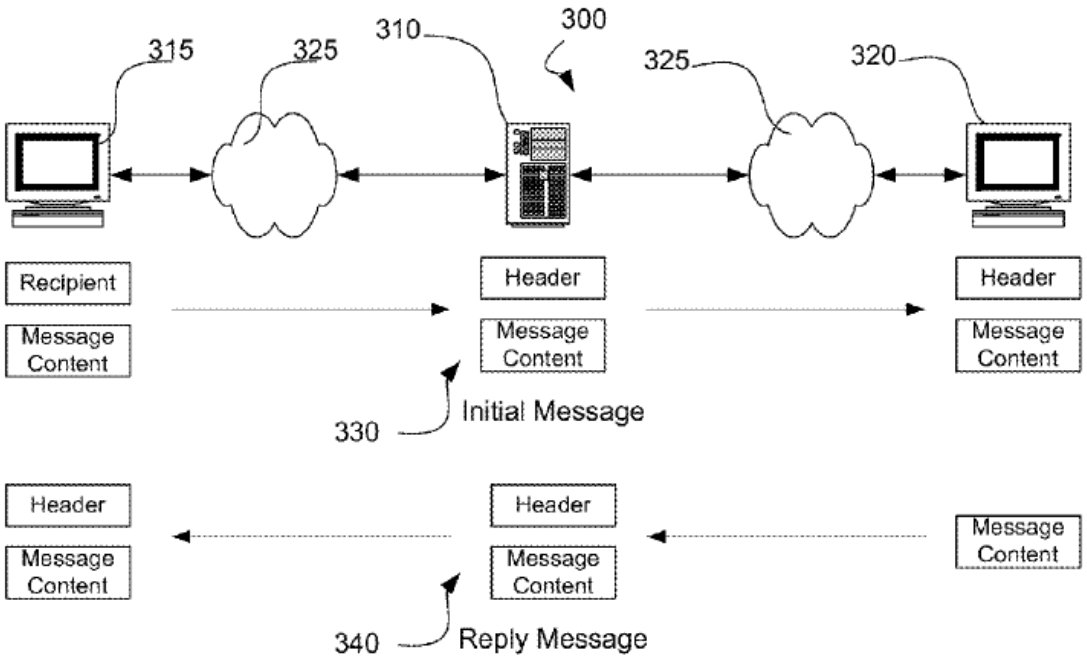

FIG. 3

Figure 3, above, illustrates an example of a messaging system according to the '156 patent. *Id.* at 10:67–11:1. System 300 includes user computers 315, 320 and server computer 310, connected via network 325. *Id.* at 11:1–4. Electronic message 330 is communicated via this system using a method

detailed below. *Id.* at 11:4–5. Reply electronic message 340 also is illustrated, but is not discussed in further detail herein. *Id.* at 11:5–6.

Figure 5 of the '156 patent is reproduced below.

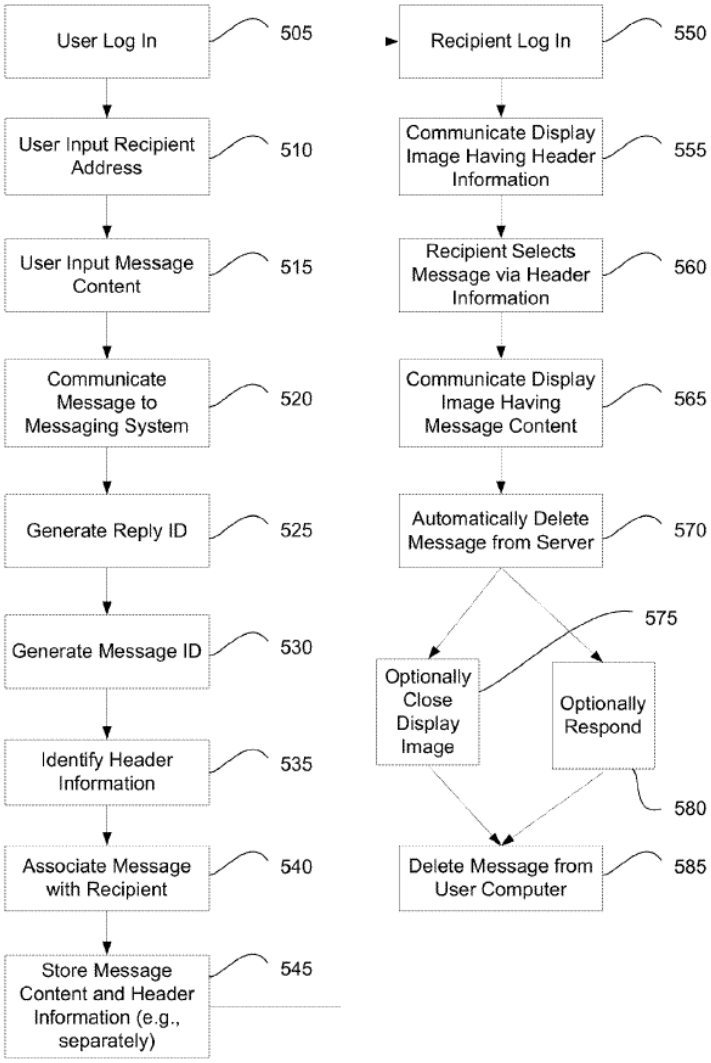

FIG. 5

Figure 5, above, is a flow chart of an exemplary method of the '156 patent. *Id.* at 3:47–48. In step 510, the user inputs a recipient address on a screen. *See id.* at 11:49–50, Fig. 8. A recipient address identifies a particular desired recipient and "may be a unique identifier (e.g., a screen name, a login name, a messaging name, etc.) established specifically for use with [this] system"

or it "may be a pre-established [e-mail] address, text messaging address, instant messaging address, Short Messaging Service (SMS) address, a telephone number . . . , BLACKBERRY personal identification number (PIN), or the like." *Id.* at 7:12–24.

After the recipient address has been entered, the system will proceed to step 515 and display another screen where the user may input the content of an electronic message. *Id.* at 11:58–60, Fig. 9. "An electronic message may be any electronic file, data, and/or other information transmitted between one or more user computers." *Id.* at 7:55–57. The electronic message may include text, image, video, audio, or other types of data. *Id.* at 7:57–64. In one embodiment, "the recipient address and the message content are entered on separate display screens." *Id.* at 11:64–65. This separate entry "further reduces the traceability of an electronic message by, in part, reducing the ability of logging at computer 315," for example, by preventing screenshot logging from capturing the recipient address and message content simultaneously. *Id.* at 9:20–27, 12: 2–3.

At step 520, the message content is communicated to server 310. *Id.* at 12:10–12. The recipient address is communicated to the server separately from the corresponding message content, in order to reduce the ability to intercept the entire message during communication to the server. *Id.* at 12:13–17. "[A] correlation (e.g., a non-identifying message ID . . .) may be utilized to associate the two components." *Id.* at 7:7–9. In this regard, "at step 530, system 300 generates a message ID for associating the separated message content and header information [(which includes the recipient address)] of electronic message 330. Server 310 maintains a correspondence between the message content and header information." *Id.* at 12:42–46; *see*

also id. at 13:34–37 ("A message ID [is] used to maintain a correspondence between the separated components of electronic message 330."). The '156 patent describes an example in which the message ID is included both in the Extensible Markup Language (XML) file storing the header information and in the XML file storing the message content. *See id.* at 13:43–14:31.

D. Challenged Claims

We instituted review of claims 1–3 and 6–8 of the '156 patent of which claim 1 is independent. Claim 1 of the '156 patent is illustrative of the claimed subject matter and is reproduced below.

> 1. A computer-implemented method of handling an electronic message at a sending user device in a networked environment, the electronic message including a header information and a message content, the sending user device having access to electronic instructions, the electronic instructions being stored at the sending user device and/or at a server computer, the method comprising:
>
> associating a message content including a media component with the electronic message via a first display at a sending user device;
>
> associating an identifier of a recipient with the electronic message via a second display at the sending user device, the first and second displays being generated by the electronic instructions such that the first and second displays are not displayed at the same time via the sending user device, the identifier of a recipient being part of a header information for the electronic message, the electronic instructions acting on the displays at the sending user device such that the header information is not displayed with the media component via the first display preventing a single screen capture of both the identifier of a recipient and the media component;
>
> transmitting the message content including a media component from the sending user device to a server computer; and

> transmitting the identifier of a recipient from the sending user device to the server computer, said transmitting the message content including a media component and said transmitting the identifier of a recipient occurring separately, the identifier of a recipient and the message content including a media component each including a correlation to allow the identifier of a recipient and the message content including a media component to be related to each other at a later time by the server computer.

Ex. 1001, 18:64–19:31.

II. ANALYSIS

A. Principles of Law

To prevail in its challenges to the patentability of the claims, Petitioner must demonstrate by a preponderance of the evidence that the challenged claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). "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 of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in *inter partes* review).

A claim is unpatentable for obviousness if, to one of ordinary skill in the pertinent art, "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." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting 35 U.S.C. § 103(a)). 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 ordinary skill in the art; and (4) objective evidence of nonobviousness.[10] *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). An obviousness analysis "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 550 U.S. at 418; *accord In re Translogic Tech., Inc.*, 504 F.3d 1249, 1259 (Fed. Cir. 2007). Petitioner, however, cannot satisfy its burden of proving obviousness by employing "mere conclusory statements," but "must instead articulate specific reasoning, based on evidence of record" to support an obviousness determination. *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380–81 (Fed. Cir. 2016). Petitioner also must articulate a reason why a person of ordinary skill in the art would have combined the prior art references. *In re NuVasive*, 842 F.3d 1376, 1382 (Fed. 2016).

At this final stage, we determine whether a preponderance of the evidence of record shows that the challenged claims would have been obvious in view of the asserted prior art. We analyze the asserted grounds of unpatentability in accordance with these principles.

B. Level of Ordinary Skill in the Art

We review the grounds of unpatentability in view of the understanding of a person of ordinary skill in the art at the time of the

[10] The parties have not asserted or otherwise directed our attention to any objective evidence of non-obviousness.

invention. *Graham*, 383 U.S. at 17. Petitioner contends that a person of ordinary skill in the art would have had "at least a bachelor's degree in software engineering, computer science, or computer engineering with at least two years of experience in the design and implementation of systems for sending and receiving messages over a communications network, such as the Internet (or equivalent degree or experience)." Pet. 6 (citing Ex. 1002 ¶¶ 13–15). Patent Owner's declarant, Dr. Almeroth, "generally agree[s]" with Petitioner's characterization of the person of ordinary skill with the caveat "that such a person of ordinary skill would also have a working knowledge of design principles for software user interfaces. Such knowledge often would be learned in an undergraduate course in Human Computer Interaction (HCI)." Ex. 2009 ¶ 21; *see also* Ex. 2001 ¶ 14 (Patent Owner's previous declarant, Dr. Shamos, also was in general agreement with Petitioner's description of one of ordinary skill). We agree, as the '156 patent discusses the design of an interface that purports to reduce the traceability of electronic messages. *See, e.g.*, Ex. 1001, 1:66–3:21. Based on the full record, including our review of the '156 patent and the types of problems and solutions described in the '156 patent and cited prior art, we agree with and adopt Petitioner's description of the person of ordinary skill in the art, with the caveat that such an individual would have had a working knowledge of design principles for software user interfaces, which may be obtained via study of human-computer interaction (HCI).

C. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable constructions in light of the specification of the patent in which they appear. *See* 37 C.F.R.

§ 42.100(b) (2018)[11]. "In claim construction, [our reviewing] court gives primacy to the language of the claims, followed by the specification. Additionally, the prosecution history, while not literally within the patent document, serves as intrinsic evidence for purposes of claim construction." *Tempo Lighting, Inc. v. Tivoli, LLC*, 742 F.3d 973, 977 (Fed. Cir. 2014). Otherwise, under the broadest reasonable construction standard, claim terms are presumed to have their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *Translogic*, 504 F.3dat 1257.

Patent Owner seeks construction of the phrase "message content including a media component" and the term "correlation." PO Resp. 23–25. Petitioner does not seek express construction of any term of the '156 patent, but responds to Patent Owner's proposed constructions in its Reply. Pet. 7. For purposes of this Decision, we need only discuss the construction of the phrase "message content including a media component." [12] *See, e.g.*, *Nidec*

[11] The recent revisions to our claim construction standard do not apply to this proceeding because the new "rule is effective on November 13, 2018 and applies to all IPR, PGR and CBM petitions filed on or after the effective date." Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (codified at 37 C.F.R. § 42.100 (2019)).

[12] As to the term "correlation," Petitioner acknowledges that in the district court proceeding, the parties agreed that the term should be construed to mean "data corresponding to a message used to associate two components of a message." Reply 16; *see* PO Resp. 27 (citing Ex. 2003, 9). Petitioner, however, asserts that in this proceeding a broader construction would be appropriate due to the different claim construction standard applicable to this *inter partes* review. Reply 16–17. Regardless, Petitioner asserts that "the district court interpretation of 'correlation' is clearly disclosed by the combination of Saffer and Smith based on the reasoning in the Petition." *Id.*

Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd., 868 F.3d 1013, 1017 (Fed. Cir. 2017) ("[W]e need only construe terms 'that are in controversy, and only to the extent necessary to resolve the controversy.'") (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

Claim 1 recites various limitations pertaining to a "message content including a media component." For example, claim 1 recites "associating a message content including a media component with the electronic message via a first display at a sending user device," "transmitting the message content including a media component from the sending user device to a server computer," where this transmission occurs separately from the "transmi[ssion of] the identifier of a recipient from the sending user device to the server computer," and where "the identifier of a recipient and the message content including a media component each includ[es] a correlation to allow the identifier of a recipient and the message content including a media component to be related to each other at a later time by the server computer."

Patent Owner contends that "'message content including a media component' encompasses media content included in the message via a publicly-accessible [Uniform Resource Locator (URL)]." PO Resp. 25. In support of this construction, Patent Owner relies on a passage from the '156 patent, which states that "a message content of an electronic message may include an attached and/or linked file." Ex. 1001, 7:55–8:1 (cited at

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at 17. As discussed in § II.D.5.f, we determine that the cited art teaches the required "correlation" even under Patent Owner's proposed construction. Thus, we need not provide an express construction of the term.

PO Resp. 24). Patent Owner also directs us to testimony from Petitioner's declarant, Dr. Chatterjee. PO Resp. 25 (citing Ex. 1002 ¶ 112 n.25). Patent Owner characterizes Dr. Chatterjee's testimony as "mak[ing] clear [that] passing the actual content and passing a link that provides access to that content, such as a URL, are [both] examples of 'passing information.'" *Id.* Thus, in Patent Owner's view, the recited "message content including a media component" broadly includes both a URL in a message (linking to content accessible via that URL) and a file attached to the message. *See id.* at 23–25.

Petitioner responds by arguing that although "the specification states that [the] 'message content' may include a 'linked file,' it never states that the *link itself* is 'message content.'" Reply 8 (internal citations omitted, emphasis Petitioner's). In addition, Petitioner directs us to a further statement in the specification, that "[t]ypically, a message content, such as message content 140 does not include information that in itself identifies the message sender, recipient, *location of the electronic message*, or time/date associated with the electronic message." Ex. 1001, 8:4–8 (cited at Reply 8–9) (emphasis added). Petitioner explains that "[t]he URL (Uniform Resource Locator) in the proposed combination [of Namias and Saffer] therefore does not qualify as 'message content' because it identifies 'the location of' the video message on the video server in Saffer." Reply 9 (citing Ex. 1004 ¶ 28).

We agree with Petitioner's arguments. The specification of the '156 patent states that

> [i]n one example, a message content of an electronic message may include embedded information. In another example, a message content of an electronic message may include an

> attached and/or linked file. In such an example with an attached and/or linked file, the attached and/or linked file may be automatically deleted from the messaging system after being viewed by a recipient.

Ex. 1001, 7:65–8:4. Thus, the specification indicates that message content may be communicated to the user via embedded information, attached files, or linked files. Embedding, attaching, and linking are three ways to provide access to information. In other words, the email recipient may gain access to the information or content in a variety of ways, however, the method of providing access to information or content is not the same thing as the underlying information or content. In the passage quoted above, privacy may be enhanced by automatically deleting "the attached and/or linked file" from the messaging system after the file is viewed. *Id.* at 8:1–4. The specification makes no provisions for deleting the URL or link to the file, but rather the focus is on the information itself. That information, or "message content," is located in the file itself regardless of the method by which the recipient accesses that information. Contrary to Patent Owner's assertion, Dr. Chatterjee's testimony cited by Patent Owner also supports this conclusion. *See* PO Resp. 25 (citing Ex. 1002 ¶ 112 n.25).
Dr. Chatterjee testifies that there is a "distinction between transmitting the *actual content* to the recipient in a message, versus transmitting *just a URL* that points to or is an address for the content." Ex. 1002 ¶ 112 n.25 (emphases added). Dr. Chatterjee's testimony makes clear that "actual content" is distinct from "just a URL" that points to the content.

Thus, we determine that the broadest reasonable interpretation of the phrase "message content including a media component" does not encompass a URL in a message (linked to content accessible via that URL). No further

express interpretation of this phrase is necessary for the purposes of this Decision. *See, e.g.*, *Nidec*, 868 F.3d at 1017.

D. Asserted Obviousness in View of Namias, PC Magazine, Saffer, and Smith (and Ford)

Petitioner contends that claims 1, 2, and 6–8 are unpatentable under 35 U.S.C. § 103 as obvious over Namias, PC Magazine, Saffer, and Smith, and claim 3 is unpatentable under 35 U.S.C. § 103 as obvious over Namias, PC Magazine, Saffer, Smith, and Ford. Pet. 5. Relying on the testimony of Dr. Chatterjee, Petitioner asserts that the combined references teach or suggest the subject matter of the challenged claims and that a person having ordinary skill in the art would have combined the teachings of the references in the manner asserted. *Id.*; Ex. 1002. Patent Owner, relying on the testimony of Dr. Almeroth, disputes Petitioner's contentions. PO Resp. 27–69; Ex. 2009. For the reasons discussed below, we determine Petitioner has established the unpatentability of these claims by a preponderance of the evidence.

1. Overview of Namias (Ex. 1003)

Namias relates to a "method and apparatus for providing a video e-mail kiosk for creating and sending video e-mail messages such as full motion videos or still snapshots." Ex. 1003, at [57]. The video e-mail kiosk of Namias includes a digital processor, a touch-sensitive screen monitor, a digital video camera, a microphone, audio speakers, a credit card acceptor, a cash acceptor, and a digital network communications link. *Id.* ¶ 31. The kiosk displays an inactive screen until a user starts a transaction. *Id.* ¶ 34. Upon activation of the kiosk, a record screen is shown on the kiosk display

and the user may create a video recording or still image from this screen. *Id.* ¶ 35. A preview screen is displayed after the user has recorded a full motion video or still snapshot message. *Id.* ¶ 36.

Figure 4A of Namias is reproduced below.

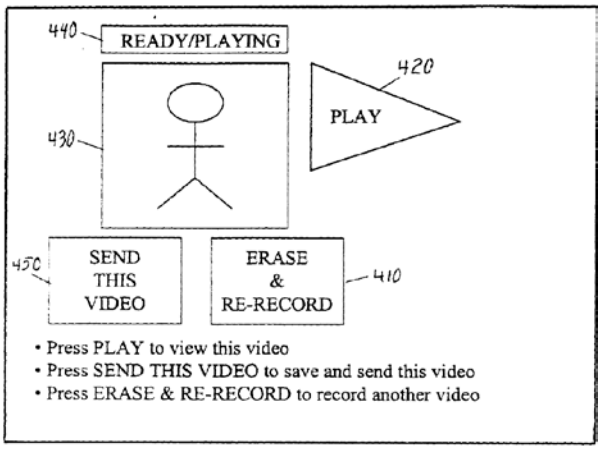

FIG. 4A

Figure 4A, above, illustrates "a preview screen that is displayed after a user has recorded a video message." *Id.* ¶ 25. Preview screen 400 allows the user to review the recorded video or still image and decide whether the message is acceptable. *Id.* ¶ 36. If the user is satisfied with the message, then the user may press send button 450 and proceed to address screen 500. *Id.* ¶¶ 37, 40.

Figure 5 of Namias is reproduced below.

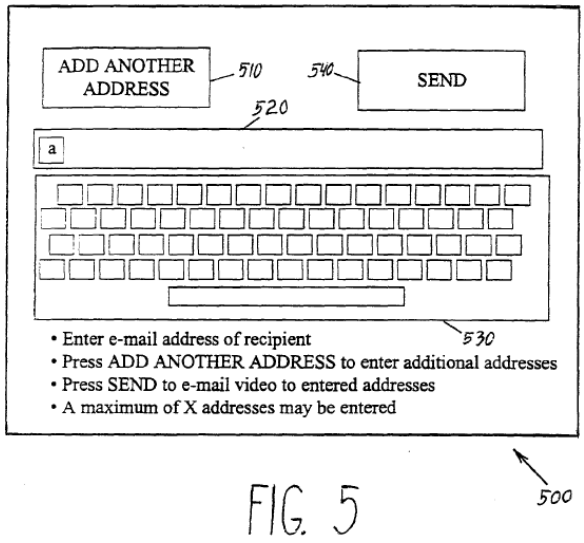

FIG. 5

Figure 5, above, illustrates an address screen on which a user is prompted to enter a recipient's e-mail address. *Id.* ¶ 27. "The address is a unique identifier which instructs routing computers where to send the message." *Id.* ¶ 5. The user presses add address button 510 and then may use a keyboard to input the e-mail address of the recipient. *Id.* ¶ 40. Once the e-mail address(es) have been entered, the user may press send button 540 to move to the next step in the process. *Id.* "[F]inal screen 700 . . . is displayed at the end of the process after payment has been made and the video or photographic e-mail has been sent to the intended recipient or recipients." *Id.* ¶ 42.

2. Overview of Saffer (Ex. 1004)

Saffer relates to a "computer implemented system and method in which a user can send e-mail messages that include full-motion video and audio (or, alternatively, audio only), along with (if desired) the text messages to an e-mail recipient." Ex. 1004, at [57]. In Saffer, a user composes a message, records a video, and then hits the send button. *Id.* ¶ 4.

The sender's computer retrieves a video ID from the server for that compressed video. *Id.* ¶¶ 4, 29, Fig. 3 (step 100). Software on the sender's computer compresses the video and transmits the compressed video to a server. *Id.* ¶¶ 4, 44, Fig. 3 (steps 102, 108). The sender's computer inserts the video ID (with a link or network address to the video server) into an email message, which is then sent to the recipient. *Id.* ¶¶ 4, 46, 47, Fig. 3 (step 112).

3. Overview of Smith (Ex. 1005)

Smith relates to "[a] document delivery architecture [that] dynamically generates a private Uniform Resource Locator (URL) to distribute information." Ex. 1005, at [57]. Smith's private URLs ("PURLs") are temporary, dynamically generated URLs that uniquely identify the recipient of a document, the document to be delivered, and optionally may include other delivery parameters. *Id.* at [57], 15:8–11. A sender forwards a document to a server and the server temporarily stores the document. *Id.* at 15:29–31. "The server dynamically generates a URL for each intended recipient of the document." *Id.* at 15:31–33. The recipient is sent an email message that includes the PURL. *Id.* at 15:38–41. The recipient uses the PURL and the Web to retrieve the document (or set of documents). *Id.* at 14:48–50, 15:41–42. "PURLS avoid attaching information to e-mail messages to send documents, but rather attach a general reference to a document to be sent, and then enable the recipient to access a document via the reference." *Id.* at 15:13–16. When the recipient accesses the document by using a PURL, a server can intercept the document access request and provide additional services, such as tracking and security. *Id.* at 15:16–19.

4. Overview of PC Magazine (Ex. 1033)

PC Magazine refers to an article in PC Magazine, titled *Disabling Print Screen*. Ex. 1033, 450.[13] The article describes how to prevent a user from activating Print Screen functionality. *Id.*

5. Analysis of Petitioner's Challenge to Claim 1

We begin by assessing Petitioner's arguments as to how the combination of Namias, PC Magazine, Saffer, and Smith teaches the limitations of claim 1, and then turn to Petitioner's arguments regarding why a person of ordinary skill in the art would have been motivated to combine the teachings of the references.

a. "A computer-implemented method of handling an electronic message at a sending user device in a networked environment, the electronic message including a header information and a message content, the sending user device having access to electronic instructions, the electronic instructions being stored at the sending user device and/or at a server computer"

Petitioner relies on kiosk 100 of Namias to teach the claimed "sending user device" and on the video or picture message sent using the kiosk as teaching the claimed "electronic message." Pet. 14–18 (citing Ex. 1002 ¶ 57, 59–62). Petitioner further contends that Namias discloses including "the recipient's email address (requested from the sender)" and "the (recorded) video or picture content" as part of the video or picture message, thus teaching the claim requirement that the electronic message "also includes 'a header information' that takes the form of at least the recipient's

[13] Citations to Exhibit 1033 are to the original pagination of the magazine.

email address (requested from the sender)." *Id.* at 14–15 (citing Ex. 1003, at [57], ¶ 54; Ex. 1002 ¶ 57) (emphasis omitted). According to Petitioner, "[b]ecause the kiosk in Namias creates, records, and sends the video or picture message, one of ordinary skill would have understood that Namias discloses 'handling an electronic message at a sending user device'" (*id.* at 15 (citing Ex. 1002 ¶ 59) (emphasis omitted)); Namias "makes clear" that its method is "[a] computer-implemented method" (*id.* at 15–16 (citing Ex. 1003 ¶¶ 19, 20, 22, 31–33, Fig. 1)); because the kiosk sends the message via e-mail, it is "in a networked environment" (*id.* at 16 (citing Ex. 1003 ¶¶ 20, 31–33)); and one of skill in the art would have understood that the processor and memory of Namias's kiosk teaches or suggests electronic instructions stored at the kiosk (*id.* at 16–17 (citing Ex. 1003 ¶¶ 20, 31–33; Ex. 1002 ¶¶ 61–62)). We agree, and adopt Petitioner's rationale as stated in the Petition. Pet. 14–18.

b. "associating a message content including a media component with the electronic message via a first display at a sending user device"

Petitioner relies on Namias to teach this limitation. Pet. 18–20. Petitioner points to preview screen 400 of Figure 4A of Namias as teaching the claimed first display, via which message content (i.e., a video) is associated with the electronic message. *Id.* at 18–19 (citing Ex. 1003, at [57], ¶¶ 20, 23–29, 31–32, Figs. 2, 3, 4A, 4B, 5, 6, 7). As described in Namias, preview screen 400 appears after the sender has recorded a video, and allows the user to play the recorded video. Ex. 1003 ¶¶ 25, 36–37; Pet. 19. If the sender is satisfied with the video, pressing "SEND THIS VIDEO" button 450 saves and sends the video. Pet. 19–20 (citing Ex. 1003

¶ 37, Fig. 4A; Ex. 1002 ¶ 65). Dr. Chatterjee testifies that "[b]ecause the display in Figure 4A allows the user to save previously input content for sending via email," Namias discloses this claim limitation. Ex. 1002 ¶ 65 (emphasis omitted); Pet. 20. We agree, and adopt Petitioner's rationale as stated in the Petition. *Id.* at 18–20.

c. "associating an identifier of a recipient with the electronic message via a second display at the sending user device"

Petitioner relies on Namias to teach this limitation. Pet. 20–21. Petitioner points to address screen 500 of Figure 5 of Namias as teaching the claimed second display, via which an identifier of a recipient (i.e., a recipient's e-mail address) is associated with the electronic message. *Id.* (citing Ex. 1003 ¶¶ 27, 40, Fig. 5; Ex. 1002 ¶ 66). As described in Namias, Figure 5 "allows the user to enter an e-mail address or addresses and thereby designate a recipient or recipients." Ex. 1003 ¶ 40; Pet. 21. The user presses "SEND" button 540 "to email [the] video to [the] entered addresses." Ex. 1003, Fig. 5; Pet. 21. Dr. Chatterjee testifies that these teachings of Namias disclose this claim limitation. Ex. 1002 ¶ 67. We agree, and adopt Petitioner's rationale as stated in the Petition. Pet. 20–21.

d. "the first and second displays being generated by the electronic instructions such that the first and second displays are not displayed at the same time via the sending user device, the identifier of a recipient being part of a header information for the electronic message, the electronic instructions acting on the displays at the sending user device such that the header information is not displayed with the media component via the first display preventing a

single screen capture of both the identifier of a recipient and the media component"

Petitioner relies on Namias and PC Magazine to teach this limitation. Pet. 22–27. Petitioner contends that a person of ordinary skill in the art would have understood that the electronic instructions stored at the kiosk (discussed *supra* § II.D.5.a) would have generated the first and second displays. *Id.* at 22 (citing Ex. 1003 ¶ 32; Ex. 1002 ¶ 69). Further, according to Petitioner, "Namias makes clear that the screen corresponding to the 'first display,' shown in Figure 4A, and the screen corresponding to the 'second display,' shown in Figure 5, are not displayed at the same time." *Id.*; *see id.* at 22–23 (citing Ex. 1003 ¶¶ 37, 40, 55, 58; Ex. 1002 ¶¶ 70–74). Petitioner continues, "the 'header information for the electronic message' also corresponds to at least the recipient's email address" and "the preview screen 400 ('first display') clearly does not show the recipient's email address ('header information')" while "'the second display prevent[s] a single screen capture of both the identifier of a recipient and the media component,'" as claimed. *Id.* at 23–25 (citing Ex. 1002 ¶ 77) (emphases omitted); *see also id.* at 24–26 (citing Ex. 1003 ¶¶ 23–29, 31–33, 40, 58–64, Fig. 5; Ex. 1002 ¶¶ 72–74, 80–90; Ex. 1001, 9:18–22, 18:6–9). Further, Petitioner contends that "nothing in Namias suggests that the kiosk even includes 'screen capture' functionality." *Id.* at 26 (citing Ex. 1002 ¶ 90) (emphasis omitted). Petitioner, however, points to PC Magazine as teaching expressly that screen capture functionality, even if present in the kiosk of Namias, could be disabled easily by one of ordinary skill in the art. *Id.* at 26–27 (citing Ex. 1033, 450–451; Ex. 1002 ¶ 91).

Patent Owner contends that Namias, as modified by Saffer, does not teach or suggest that "the first and second displays are not displayed at the same time" (the "separate displays" limitation). PO. Resp. 52–55. Patent Owner argues that

> Petitioner has failed to demonstrate that the combination of Namias with Saffer would include separate displays. . . . [A person of ordinary skill in the art] intent on combining Namias with Saffer, looking at the entirety of those references, would almost certainly choose Saffer's single email composition display screen (which is integrated with Saffer and is far more efficient, robust, and less likely to cause navigational trauma) over Namias's multi-screen navigation flow, absent some specific design application . . . But Petitioner has not identified any reason, such as a particular design application, that would reasonably lead a skilled artisan to select the Namias interface instead of the Saffer single composition screen.

Id. at 53 (citing Ex. 2009 ¶¶ 126–27). Dr. Almeroth opines that "a [person of ordinary skill in the art] intent on combining Namias with Saffer would almost certainly choose Saffer's single screen email composition display (which is integrated with Saffer and is far more efficient, robust, and less likely to cause navigational trauma) over Namias's multi-screen navigation flow, absent extenuating circumstances." Ex. 2009 ¶ 126; PO Resp. 53.

Petitioner responds by directing us to the Federal Circuit decision in *In re Fulton*, 391 F.3d 1195 (Fed. Cir. 2004). Reply 6–7. There, the applicant argued that the record before the Board was insufficient to establish that the features of the relied upon reference "are preferred over other alternatives disclosed in the prior art." *Fulton*, 391 F.3d at 1200. Our reviewing court held that "[t]his argument fails because our case law does not require that a particular combination must be the preferred, or the most desirable, combination described in the prior art in order to provide

motivation for the current invention." *Id.* As such, we are tasked with determining "'whether there is something in the prior art as a whole to suggest the *desirability*, and thus the obviousness, of making the combination' not whether there is something in the prior art as a whole to suggest that the combination is the *most desirable* combination available." *Id.* (quoting *In re Beattie*, 974 F.2d 1309, 1311 (Fed. Cir. 1992)).

Petitioner asserts that "while Saffer's interface may offer certain benefits that make it desirable in certain circumstances, Namias's interface likewise provides other advantages that would have motivated [a person of ordinary skill in the art] to use it in a video messaging system." Reply 15 (citing Ex. 1043 ¶¶ 37–8). According to Petitioner, the chief advantage of Namias's two-screen interface "is its simplicity." *Id.* Patent Owner's declarant, Dr. Shamos, testified that "drawings of Namias show, in an incidental manner, that message content and email addresses are entered on different screens; this is a matter of user interface design *simplification*, and not to achieve reduced traceability." Ex. 2001 ¶ 82 (emphasis added); *see also id.* ¶ 31 ("The only aspects that Namias has in common with the '156 patent are that Namias discloses (1) sending a media component by email; and (2) different screens for entering message content and recipient address. However, the reason for Namias's different screens is not reduced traceability, but to present a *simple* interface to a user who has never used the kiosk before." (emphasis added)); *id.* ¶ 80 ("It is true that the drawings [of Namias] illustrate different displays, but this is a matter of user interface design simplification . . . ."). Petitioner asserts that one of ordinary skill in the art would have recognized "that Namias's multiscreen interface is an

example of a well-known user interface technique known as 'wizards.'" Reply 16; *see* Ex. 1043 ¶¶ 40–43. As noted by Dr. Chatterjee,

> [a] *wizard* is a special form of user assistance that automates a task through a dialog with the user. Wizards help the user accomplish tasks that can be complex and require experience. Wizards can automate almost any task . . . . They are especially useful for complex or infrequent tasks that the user may have difficulty learning or doing.

Ex. 1043 ¶ 41 (quoting Ex. 1048[14], 335–36).

Patent Owner responds by asserting that "Petitioner has not provided any competent evidence that Namias's multi-screen interface is simpler than Saffer's." PO Sur-Reply 18. Patent Owner also contends that arguments regarding the simplicity of Namias's interface and the utility of wizards are untimely because they were first presented in Petitioner's Reply. *Id.*

In light of the evidence and arguments presented on this point, we determine that Petitioner is correct in asserting that one of skill in the art would have understood the combination of Namias with Saffer to teach the separate displays limitation of claim 1. Namias's Figures 4a and 5 are separate displays. Patent Owner concedes as much in its comparison of the multi-screen configuration of Namias with the single screen configuration of Saffer. *See* PO Sur-Reply 18–19. There, Patent Owner compares Namias's "sequence of seven separate screens" with "Saffer's single integrated screen." *Id.* at 18. Namias's Figure 5, the recited "second display," is not accessible to the user until after the media content is handled via the "first

[14] Theo Mandel, THE ELEMENTS OF USER INTERFACE DESIGN (1997) ("Mandel"). Citations to Exhibit 1048 are to the original pagination of the book.

display" of Figure 4A. *See* Ex. 1003 ¶ 40. Thus, Namias's screens are not displayed at the same time, as recited in claim 1.

We are not persuaded by Patent Owner's argument that one of skill in the art would not have selected Namias's multi-screen interface over Saffer's integrated interface. Under Federal Circuit precedent, obviousness "does not require that the motivation be the *best* option, only that it be a *suitable* option from which the prior art did not teach away." *PAR Pharm., Inc. v. TWI Pharms., Inc.*, 773 F.3d 1186, 1197–98 (Fed. Cir. 2014) (citing *Galderma Labs., L.P. v. Tolmar, Inc.*, 737 F.3d 731, 738 (Fed. Cir. 2013)). Here, we are presented with persuasive evidence from Dr. Chatterjee showing that one of skill in the art would have looked to Namias to design a video messaging system that was easy to use. Dr. Chatterjee's opinion is supported by a 1997 reference book, Mandel (Ex. 1048), discussing the elements of user interface design. *See* Ex. 1043 ¶ 41 (citing Ex. 1048). Indeed, Mandel indicates that wizard-type layouts (like the one disclosed in Namias) are useful because "[i]t is better to have a greater number of simple pages with fewer choices than a smaller number of complex pages with too many options or text." Ex. 1048, 341 (cited at Ex. 1043 ¶ 41). Further, as Patent Owner's declarant, Dr. Almeroth, noted, a person of ordinary skill in the art would be versed in user interface design and may have taken undergraduate courses in human-computer interaction (HCI). Ex. 2009 ¶ 21. Thus, Mandel with its focus on "Foundations of User Interface Design," including "understanding . . . how humans read, learn, and think to help design computers that work within the psychological capabilities and limitations of the people for whom they are designed," would be indicative

of the knowledge of a person of ordinary skill at the time of the invention of the '156 patent. *See* Ex. 1048, Preface, xv (emphases omitted).

In addition, we are not persuaded that Petitioner's argument in its Reply is untimely. *See* Reply 15–16 (citing Ex. 1043 ¶¶ 38–43). As described in the Petition, Petitioner relies on Figures 4A and 5 of Namias for the separate displays limitation, noting that "the user interface in Namias uses separate displays to solicit the recipient identification and message content from the user." Pet. 8, 22–23. Petitioner's asserted combination with Saffer is for other claim limitations—namely the separate transmissions limitation discussed below (*infra* § II.D.5.e). Patent Owner argues in its Patent Owner Response that Petitioner failed to explain why a person of ordinary skill in the art would have chosen "the Namias interface instead of the Saffer single composition screen." PO Resp. 53. Then in its Reply, Petitioner responded to Patent Owner's arguments regarding the desirability of a multi-screen format as opposed to a single-screen format by explaining why Patent Owner is incorrect and further explaining the previous discussion of separate display screens with supporting evidence (such as Mandel) showing how one of ordinary skill in the art would have understood Namias's disclosures. Thus, we are persuaded that this is not an untimely argument, but rather a proper responsive argument that builds upon the existing record. For all of these reasons, we are persuaded that Petitioner has established that the cited art teaches the separate displays limitation of claim 1 of the '156 patent.

e. "transmitting the message content including a media component from the sending user device to a server computer"; "transmitting the identifier of a recipient from the sending user device to the server computer, said

> *transmitting the message content including a media component and said transmitting the identifier of a recipient occurring separately"*

Petitioner relies on Namias and Saffer to teach these limitations. Pet. 28–37. Petitioner acknowledges that, although "Namias makes clear that the system sends the video or picture message to a recipient," it "does not disclose the detailed mechanics of how [the sending of a video to a recipient] takes place." *Id.* at 28 (citing Ex. 1003 ¶ 42). Petitioner relies on Saffer as teaching these details, and in particular as teaching transmitting the message content to the server computer and transmitting the identifier of a recipient to the server computer, such transmitting steps occurring separately, as claimed. *See id.* at 28–33; Ex. 1002 ¶¶ 94–99, 103. According to Petitioner, Saffer, like Namias, teaches a system in which a user can send video (optionally, along with text) to an e-mail recipient. Pet. 28 (citing Ex. 1004, at [57], ¶¶ 2–3). Petitioner lays out the steps performed by Saffer, after the sender presses the "Send" button, as follows:

> (1) The sending device requests and obtains a "video ID" from a video server, which will be used to uniquely identify the recorded video. (Saffer, ¶¶0004, 0029, Figure 3 (Step 100).)
>
> (2) The sending device uses the video ID received in step (1) to rename the video file. (Saffer, ¶¶0004, 0044, Fig. 3 (Step 102).)
>
> (3) The sending device then uploads the renamed video file to the video server for storage. (Saffer, ¶¶0004, 0044, Fig. 3 (Step 110).)
>
> (4) After the upload, the sending device inserts a link into the body of the email message (in the form of a Uniform Resource Locator (URL)), the link including the video ID that identifies the video file on the video server. (Saffer, ¶¶0004, 0046, Fig. 3 (Step 112), ¶0027.)

(5) Finally, the sending device sends the email containing the link (but not containing the previously-uploaded video content) to an email server. (Saffer, ¶¶0004, 0047.)

Pet. 28–29 (citing Ex. 1002 ¶ 94). As noted by Petitioner, "[s]teps (1)-(4) above are illustrated in Figure 3 [of Saffer (reproduced below)], which highlights in yellow Steps 100, 102, 110, and 112 from Saffer." *Id.* at 29 (emphases omitted).

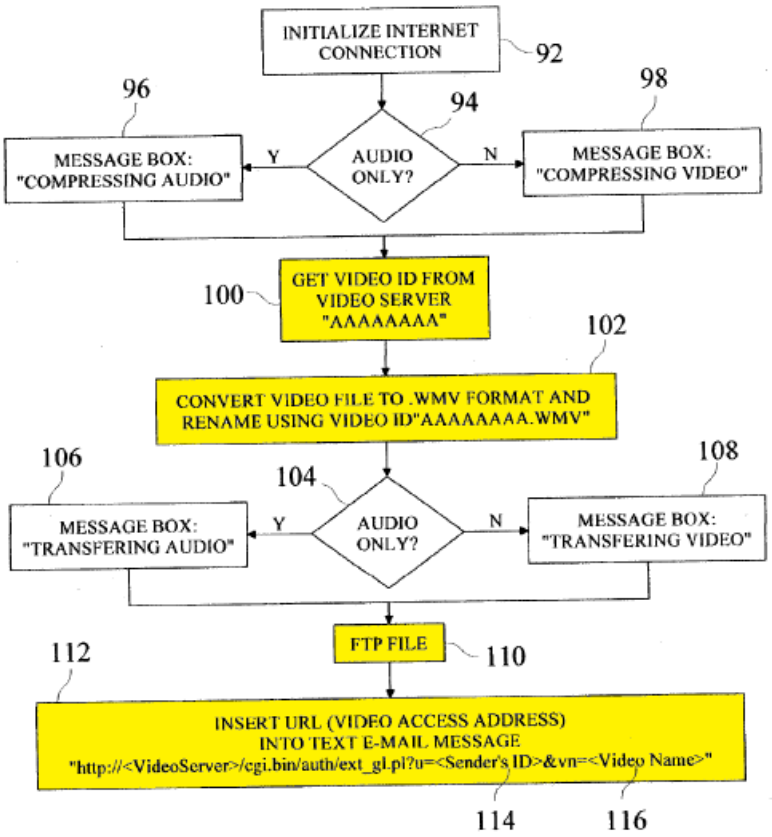

FIG.3

Figure 3 of Saffer, above, with highlighting added by Petitioner (*id.*), illustrates a flow diagram of "sending and compressing a video file to the video server with a unique ID." Ex. 1004 ¶ 9.

Petitioner also relies on Figure 1 of Saffer, an annotated version of which is reproduced below (Pet. 33), to provide further explanation of its position.

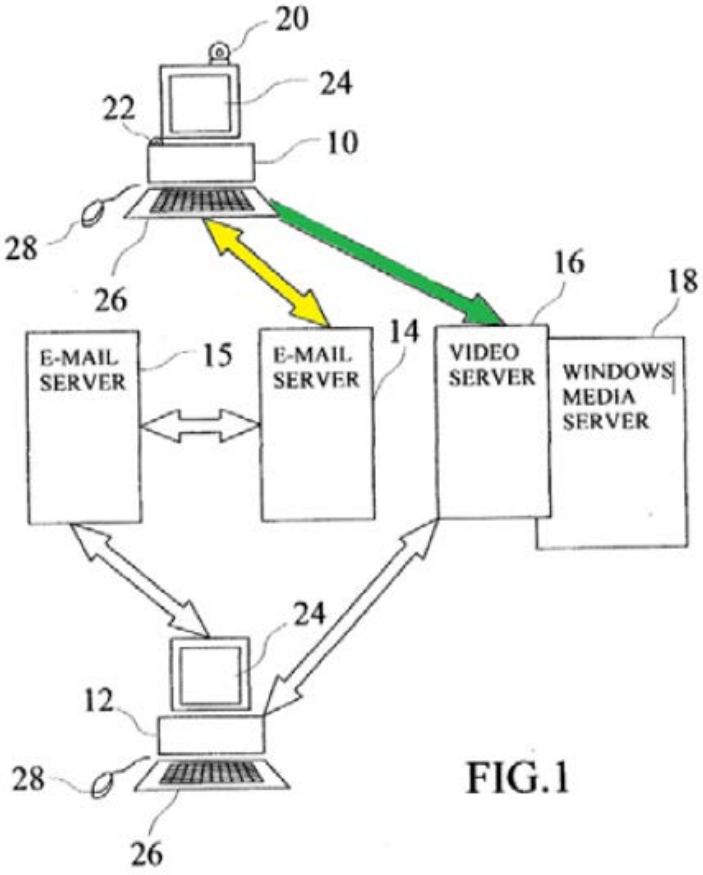

FIG.1

Annotated Figure 1, above, is a block diagram of an exemplary embodiment of Saffer. Ex. 1004 ¶ 7. According to Petitioner, "Saffer discloses an embodiment in which the video content is transmitted to a *video server* 16 (in green) and the email message to a *physically separate e-mail server* 15 (in yellow)." Pet. 33. As noted by Petitioner, the sending device of Saffer sends the e-mail message with the URL and recipient address to the e-mail server, after uploading the video file to the server (i.e., Step 110) *and* after an intervening step of inserting the URL into the e-mail message (i.e.,

Step 112). *Id.* at 30–31 (citing Ex. 1004 ¶¶ 4, 44–47, Fig. 3; Ex. 1002 ¶¶ 95–99). As such, Petitioner argues that the cited art teaches separately transmitting the identifier of a recipient (i.e., the address) and the message content. *Id.* at 32–33. "This is because [the] transmissions . . . are separated by an intervening step, and separately conveyed to the server." *Id.* at 32 (citing Ex. 1002 ¶¶ 99–103) (emphases omitted). Dr. Chatterjee explains

> that after [a] the video content has been uploaded, there is an intervening step of [b] "then . . . insert[ing] the video ID with a 'link' or network address to the video server into the text or code of the composed e-mail message" before [c] that email message, which contains the recipient's email address in its "To:" field (Saffer, Fig. 7, ¶0024), is uploaded.

Ex. 1002 ¶ 99 (emphases omitted). Thus, the transmission of the video content to the video server must occur first in order to be able to generate the link with the video ID that is inserted into the email message (that contains the recipient address), which is later sent to the email server. Petitioner also argues that Saffer teaches a video server and email server that constitute a single physical server. Pet. 31 (citing Ex. 1004 ¶ 4 (discussing the upload of compressed video to the video server "which may be the same server as the e-mail server"), ¶ 17, claim 5).

Patent Owner asserts that the asserted combination does not teach or suggest "transmitting the message content including a media component and . . . transmitting the identifier of a recipient occurring separately" (the "separate transmissions" limitation). PO Resp. 45–52. Specifically, Patent Owner asserts that a person of ordinary skill in the art would have understood that by placing Saffer's URL into the body of an email message, that email message would now contain both the recipient address and the media content. *Id.* at 50–51. In addition, Patent Owner argues that even if

the URL were not considered to be message content, it would undermine the purpose of the claims if the URL and header information were in the same message because it would not allow for the sought reduced traceability. *Id.* at 51. We address each of these arguments in turn.

First, as noted above, we construe the term "message content including a media component" in a manner that excludes a URL in a message (linking to content accessible via that URL) from the definition of the phrase. *See supra* § II.C. Thus, per our construction, Saffer's URL is not message content, but an identifier that provides access to message content that is stored elsewhere (e.g., the video server).

Patent Owner argues that Saffer's system sends a transmission that includes both message content and header information. PO Resp. 46. Patent Owner asserts that Namias is silent as to the transmission of header information and message content and that Saffer includes this information together as depicted in Figures 6 and 7 of Saffer. *Id.* at 45. Petitioner correctly asserts that "Patent Owner ignores how Saffer's technique would be adapted to the Namias system as proposed by Petitioner, and attacks Saffer individually." Reply 7. Petitioner's proposed combination does not rely on Saffer's user interfaces or input methods, but rather it relies upon Namias's multi-screen user interface to provide the inputs to the Saffer transmission system.[15] Pet. 23–33. Petitioner explains that Saffer describes two separate transmissions with an intervening step between the

[15] Under Petitioner's combination, the message content is "simply the video message content in Namias, with no user-provided text or other content." Pet. 34 n.4; *see* Ex. 1002 ¶ 100. "[T]he only message content the user can input is the actual video or picture data." Pet. 34 n.4 (citing Ex. 1003, Fig. 4A).

transmissions. *Id.* at 32–33. Specifically, Saffer describes uploading the compressed video to a server. *See* Ex. 1002 ¶ 95 (citing Ex. 1004 ¶ 4). Then, the sender's device inserts the video ID with a link (i.e., a URL) for the uploaded video into an email message before sending the email message as a second transmission that includes the URL to access the video and the remainder of the message. *Id.* Dr. Chatterjee opines that it would have been obvious to exclude the recipient address from the first transmission "because, among other reasons, the information would have served no purpose and it would have been a waste of processing and network bandwidth to transmit it." *Id.* ¶ 97. He further testifies that "one of ordinary skill in the art would have understood that the recipient's email address is not uploaded in the same transmission as the video content because it is not until *later* in the process, when the email message is sent, that the recipient's email address is uploaded." *Id.* In addition, Dr. Chatterjee testifies that one of ordinary skill would not have included the video file in the second transmission because it had already been uploaded and there was no reason to send it a second time. *Id.* ¶ 98. Thus, via the testimony of Dr. Chatterjee, Petitioner provides persuasive evidence, supported by evidence in the record, that one of ordinary skill in the art would have understood the cited art to teach the separate transmissions limitation.

Second, Patent Owner argues that "[i]f a party is able to access a transmitted message with both the recipient address and a public URL to the media component, that party will be able to create a complete record of the message" and thus, the asserted combination would "fail[] to achieve the very purpose of the claimed invention." PO Resp. 43–44. Petitioner responds by asserting that "this 'purpose' is nowhere recited in the claim."

Reply 10. The specification of the '156 patent discusses systems and methods for reducing traceability of an electronic message. *See, e.g.*, Ex. 1001, 3:64–65. The challenged claims of this patent, however, do not directly reference "reducing traceability." In addition, none of the challenged claims mentions traceability at all. *See id.* at 18:64–22:53 (the only reference to traceability is in claims 9, 16, and 31, not challenged in this proceeding, which recite not including information that would provide "a traceable identity of the sender").[16]

For the foregoing reasons, we are persuaded by Petitioner's argument, supported by evidence in the record, that the combination of Namias and Saffer teaches these limitations.

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[16] Moreover, we agree with Petitioner that Patent Owner "ignores that Petitioner's *proposed combination* . . . includes the Smith reference (entitled 'Private, Trackable URLs for Directed Document Delivery'), that discloses specific protections against unauthorized access of data through a URL." Reply 10 (citing Ex. 1002 ¶¶ 138–139); *see infra* § II.D.5.f (discussing Petitioner's reliance on the PURLs of Smith). As noted above, Smith describes temporary, dynamically generated private URLs known as PURLs. Ex. 1005, Abstract, 15:8–9. As described in Smith, "[e]ach private URL ('PURL') uniquely identifies an intended recipient of a document, the document or set of documents to be delivered, and (optionally) other parameters specific to the delivery process. The intended recipient of a document uses the PURL to retrieve the document." *Id.* at 2:25–31. As such, Smith's system "allows the directed and secure distribution of documents." *Id.* at 3:29–30. Thus, contrary to Patent Owner's arguments, the proposed combination does not include public URLs. Therefore, even if the challenged claims included the "purpose" alleged by Patent Owner (which we are not persuaded that they do), the proposed combination has safeguards by way of Smith's PURLs to provide additional security to the URLs.

f. "the identifier of a recipient and the message content including a media component each including a correlation to allow the identifier of a recipient and the message content including a media component to be related to each other at a later time by the server computer"

Petitioner relies on Namias, in view of Saffer and Smith, as teaching this claim limitation. *See* Pet. 37–43. In particular, Petitioner points to the video ID of Saffer, adapted according to the teachings of Smith, as teaching the claimed correlation. *Id.* at 37–38. As explained in the Petition, Saffer teaches "renam[ing] the file containing the video message content using the video ID" and "insert[ing] into the body of an e-mail message the video ID with a link." *Id.* at 38–40 (citing Ex. 1004 ¶¶ 4, 9, 20, 29–46, Figs. 3, 8). Petitioner contends

> it would have been obvious in further view of Smith that the video ID in the URL could be further appended with a recipient identifier (such as the recipient's email address), thus establishing a "correlation" between (1) the recipient identifier – coupled to the video ID in the URL – and (2) the video message content – stored in a file named using the video ID.

Id. at 40–41 (citing Ex. 1002 ¶ 123) (emphases omitted); *see also id.* at 41–43 (citing Ex. 1005, at [57], 2:24–34, 9:1–3, 11:21–24, 14:42–53, 15:8–16, 15:37–44, 15:48–58, 16:27–43, 16:55–56, 17:12–29, Fig. 20). Petitioner asserts that "Smith discloses a system similar to Saffer that uses a URL inserted in an email message to deliver a file to the intended recipient." *Id.* at 41 (citing Ex. 1005, at [57], 2:24–31, 14:42–49). Smith describes temporary, dynamically generated private URLs known as PURLs. Ex. 1005, at [57], 15:8–9. "PURLs enable[] secure document delivery and tracking of document receipt." *Id.* at [57].

According to Petitioner's combination, the video ID (upon which Petitioner relies as teaching the claimed correlation) is coupled both to the message content (i.e., as the name of the file containing the message content) and to the recipient's email address (i.e., in the URL embedded in the email sent to recipient). Pet. 44 (citing Ex. 1002 ¶ 130). Further, the

> recipient's email address ("identifier of a recipient") in the URL and the video message content ("message content including a media component") stored at the server are "related to each other . . . by the server computer" during the subsequent delivery of the video message content from the server to the recipient ("at a later time").

Id. at 46 (emphases omitted); *see id.* at 46–47; Ex. 1002 ¶ 133.

Patent Owner asserts that the cited art fails to teach the claimed correlation. PO Resp. 47–52. According to Patent Owner, "Petitioner's alleged 'correlation' (the video ID 'jxvTSgpc' adapted to include the recipient's email address wsolomon@connectmail.com) appears only in the message content section of Saffer and is not incorporated in the recipient identifier portion of the message (*i.e.*, as part of the header information)." *Id.* at 49.

Petitioner argues that claim 1 does not require that "the 'correlation' be physically stored alongside both the message content and recipient identifier." Reply 19 (citing Ex. 2009 ¶ 121 (Dr. Almeroth's testimony that the proposed combination fails because the video ID is not stored with the recipient identifier)). Petitioner asserts that the claim only requires that the recipient identifier and message content include a correlation, with no limitation as to where that correlation is stored. *Id.* According to Petitioner, "[t]he claim does not preclude a single piece of data from serving as the correlation for both the recipient identifier and the message content." *Id.*

Petitioner further argues that claim 1 is unpatentable even under Patent Owner's view as to the scope of the recited "correlation." *Id.* at 19–20. According to Petitioner, "[t]he combination of Saffer and Smith would have resulted in a system in which the URL of Saffer . . . includes the video ID and, *directly following the video ID*, the recipient identifier such as the recipient email address." *Id.* at 20. Dr. Chatterjee testifies that "the video ID in the URL – which is analogous to the store item identifier in Smith – would be further appended with a recipient identifier such as the recipient's email address (*e.g.*, <http://[...]jxvTSgpc-wsolomon@connectmail.com>)."[17] Ex. 1002 ¶ 129 (in this example, "jxvTSgpc" is the video ID and "wsolomon@connectmail.com" is the recipient ID). Smith describes an exemplary PURL, http://posta.tumbleweed.com/cgi/posta.dll?pu=0-233-33982-FIAAAV4. Pet. 42 (citing Ex. 1005, 16:21–26). As disclosed in Smith, "the PURL includes a store item identifier ('233') immediately followed by a recipient identifier ('33982')." *Id.* (citing Ex. 1005, 16:27–38) (emphases omitted). Thus, Petitioner's proposed modification uses the PURL structure of Smith with the video ID of Saffer in place of Smith's store item identifier, and the email address of Saffer in place of Smith's recipient identifier.

Dr. Chatterjee further opines that "[t]he video ID in Saffer is clearly very similar to the 'message ID' described in the '156 patent because like the 'message ID,' the video ID is associated with a corresponding video message recorded and delivered using the video messaging service taught by Saffer." *Id.* ¶ 131. Finally, Dr. Chatterjee opines that the proposed

[17] As described in Smith, the "store item identifier uniquely identifies which document a given recipient desires to obtain." Ex. 1005, 16:49–51.

"mapping of the 'correlation' limitation is also similar to an embodiment in the '156 [patent] specification where the message ID is coupled to header information stored in one XML file, and the same message ID is also coupled to the message content stored in a separate XML file." *Id.* ¶ 132 (citing Ex. 1001, 13:42–14:31). Dr. Chatterjee also states that it is "a general understanding in the field of computing that coupling the same identifier to two different pieces of information establishes a 'correlation' between them." *Id.* (citing Ex. 1034, A-131).

Patent Owner asserts that this is a new theory proffered for the first time on Reply. Sur-Reply 20. Specifically, Patent Owner asserts that Petitioner is no longer relying upon Smith's recipient identifier. *Id.* We disagree with that assertion. Petitioner is relying on both Saffer and Smith for this limitation. *See e.g.*, Pet. 37–43; Reply 17 (arguing that the claimed "'correlation' is clearly disclosed by the combination of Saffer and Smith based on the reasoning in the Petition"). As described above, Smith is relied upon expressly, in combination with Saffer, to provide the structure for the correlation. Thus, we are not persuaded that Petitioner is advocating a new theory that excludes Smith.

Patent Owner also argues that Petitioner's assertions fail because "Saffer's video ID is not included in the header information containing the recipient identifier." Sur-Reply 20. This argument, however, does not address the teachings of Smith as applied to Saffer. As noted above, Smith provides the structure for the URL that is transmitted with the header information. *See* Pet. 42 (citing Ex. 1005, 16:21–26). Dr. Chatterjee persuasively explains that "the combination of Saffer and Smith would have resulted in a system in which the URL of Saffer . . . includes the video ID

and, *right next to it*, the recipient identifier such as the recipient email address." Ex. 1043 ¶ 48. Specifically, he testified that "the video ID in the URL – which is analogous to the store item identifier in Smith – would be further appended with a recipient identifier such as the recipient's email address (e.g., <http://[...]jxvTSgpc-wsolomon@connectmail.com>29) by the kiosk." Ex. 1002 ¶ 129 (citing Ex. 1005, 16:21–59, Ex. 1004, Fig. 7). We credit this testimony, which is consistent with the disclosures of the references, and are persuaded that one of ordinary skill in the art would have viewed the disclosures of Smith and Saffer together as teaching the recited correlation through their discussion of the PURL that includes both the recipient information and the item identifier.

We agree that Namias, in view of Saffer and Smith, teaches this claim limitation, for the reasons stated in the Petition.

g. Reasons to Combine the Asserted References

Petitioner asserts that the combination of Namias and Saffer, resulting in "the video message system of Namias in which, after the user approves the video message and enters the recipient addresses (using the displays in Figure 4A and 5 of Namias, respectively), the system hands over control to the method of Saffer to transmit the video message to a server using the technique described" in Saffer, would have been a "straightforward combination for a number of reasons." Pet. 33–34 (citing Ex. 1002 ¶¶ 104, 106–107). Petitioner contends that it would have been obvious to combine the teachings of Namias and Saffer, for example, because the combination would have had the predictable result of the message system of Namias handing over control to the transmission method described in Saffer, with various advantages to doing so. *Id.* at 33–34. Dr. Chatterjee opines that

"[u]nder this combination, therefore, the recipient's email address and the video (or picture) message content [as entered using the displays in Figures 4A and 5 of Namias] would be transmitted to a server computer separately according to the techniques of Saffer." Ex. 1002 ¶ 104. Dr. Chatterjee further testifies that Namias does not provide details as to the method of transmission and "[i]t would thus have been obvious that the message transmission system of Saffer could take over where Namias leaves off, resulting in a combined system that uses the Namias user interface (*e.g.*, Fig. 4A and Fig. 5) for entering the video message content and recipient address, but then uses the technique in Saffer to effectuate the actual transmission of the video message." *Id.* ¶ 107. In addition, Dr. Chatterjee states that one of ordinary skill in the art would have recognized that Saffer's URL-based delivery technique would have improved Namias's use of network bandwidth and storage. *Id.* ¶ 108. According to Dr. Chatterjee, "[a] person of ordinary skill in the art would have understood that replacing the video content in the message with a URL, as disclosed in Saffer, would have provided distinct advantages" because URLs are "typically only a handful of characters in length" and, thus, the message containing the URL would "consume[] very little network bandwidth and storage," "whereas video content can be quite large." *Id.* ¶ 110.

In addition, Saffer discloses that allowing a user to stream video content provides the user with quick access to the video without requiring the entire video to be downloaded prior to the start of playback. Pet. 35–36; Ex. 1002 ¶¶ 111–114; Ex. 1004 ¶¶ 2, 6, 19, 22. According to Dr. Chatterjee, streaming "would have been particularly significant in the context of video, which typically takes up significantly more data than other types of

information, and thus, takes longer to transmit over a network." Ex. 1002 ¶ 114. Petitioner also directs us to Saffer's discussion of optimizing the video stream for a recipient "by checking the recipient's configuration and/or bandwidth capabilities and streaming the video based upon this detected configuration/bandwidth." Ex. 1004 ¶ 22 (cited at Pet. 35–36).

Patent Owner asserts that Petitioner has failed to provide a reason to combine Namias and Saffer (PO Resp. 27–32) and Petitioner has failed to consider these references as whole in making this combination (*id.* at 32–40).[18] We address each of these arguments in turn.

First, Patent Owner argues that "Petitioner's stated reason for combining Namias and Saffer is 'network bandwidth and storage are conserved.' But . . . there is no practical scenario where Saffer's link-based email transmission system conserves bandwidth or storage." *Id.* at 28 (quoting Pet. 35). Further, "[e]ven under Saffer's distribution system, the kiosk in Namias would still have to transmit the recorded video to the video server, requiring use of the bandwidth that was supposedly saved by implementing Saffer." *Id.* (citing Ex. 1004 ¶ 27). Patent Owner also contends that "Petitioner does not identify why the proprietor of the Namias kiosk would be concerned with such bandwidth savings." *Id.* at 29 (citing Pet. 34–37). In the end, according to Patent Owner, bandwidth savings are "only realized if the recipient never watches the video in its entirety." *Id.* at 30 (citing Ex. 2009 ¶¶ 92–93).

[18] Patent Owner's arguments against Petitioner's reasons to combine do not address the additional combination with PC Magazine or Smith, apart from a general argument that Petitioner asserts four- and five-reference combinations (PO Resp. 4).

Petitioner responds by asserting that "the combination of Namias and Saffer would have provided significant advantages with respect to at least (1) network bandwidth, (2) storage, and (3) the ability to stream the video message content to the recipient." Reply 1 (citing Pet. 35–37; Ex. 1002 ¶¶ 108–115). In particular, Petitioner contends that Patent Owner has ignored the benefits that would flow from allowing the recipient to stream the video. *Id.* at 1–2. Dr. Chatterjee explains that streaming is a beneficial way of delivering video to a recipient that provides benefits over sending a video file as an email attachment. *See, e.g.*, Ex. 1043 ¶ 9. "For example, in a streaming implementation, a user could begin playing back streaming video as the content is being received, rather than having to wait until the entire video file has been received." Ex. 1002 ¶ 114. In addition, streaming techniques "can be 'optimized to stream the video to the recipient computers 12 in a manner that can most easily [be] viewed by the recipient's computers 12.'" *Id.* ¶ 115 (quoting Ex. 1004 ¶ 22). As such, Dr. Chatterjee opines that "[o]ne of ordinary skill in the art would have appreciated that Saffer's streaming delivery technique would have thus allowed a more optimized delivery of video content to the recipient device." *Id.*

In its Sur-Reply, Patent Owner argues that "streaming adds no benefit within the context of the claimed invention and the specific combination proposed by Petitioner." PO Sur-Reply 2. According to Patent Owner, streaming does not save bandwidth or storage because the same video file must be uploaded to the server and then provided to the user. *Id.* at 3–4. According to Patent Owner, "Saffer's streaming technique actually increases storage requirements, as streaming requires the video to be stored on the video server indefinitely (in case the recipient wants to view the video in the

future)." *Id.* at 5 (citing Ex. 2009 ¶ 96). Dr. Almeroth testifies that implementing Namias's system with streaming "would significantly increase the cost of the system" because it "would require an additional video server with a large storage capacity to store all the videos uploaded by the various video email kiosks." Ex. 2009 ¶ 96.

We disagree with Patent Owner. As outlined above, Petitioner and Dr. Chatterjee provide a rational explanation, supported by evidence in the record, for the combination of the cited references. As we noted previously, under Federal Circuit precedent, obviousness "does not require that the motivation be the *best* option, only that it be a *suitable* option from which the prior art did not teach away." *PAR Pharm.*, 773 F.3d at 1197–98. Here, Petitioner has provided evidence from Saffer and the testimony of Dr. Chatterjee that establishes that one of ordinary skill in the art would have been aware of benefits to streaming video. Patent Owner, for example, does not dispute Petitioner's evidence that a video stream may be optimized for a particular recipient. *See, e.g.*, Ex. 1002 ¶ 114–115; Ex. 1043 ¶ 9.

Petitioner further argues that "Patent Owner's argument myopically focuses only on the 'first leg' of the transmission from the sending device to the server, and ignores the substantial bandwidth and storage benefits achieved for subsequent transmission from the *server to the recipient device*." Reply 3. Dr. Chatterjee quotes a reference that noted a benefit of linking the message content with a URL:

> the recipients can decide when and if they want to receive one or more of the attachments . . . , advantageously reducing [either data] traffic resulting from email attachments in general or reducing instantaneous data traffic that typically results from sending an email with an attachment to multiple recipients.

Ex. 1002 ¶ 111 (quoting Ex. 1006[19], 4:24–30). Petitioner asserts that the proposed combination would "avoid[] the need to send a potentially large video file to the recipient(s) until they actually have a need or desire to view it." Reply 3–4 (citing Ex. 1002 ¶¶ 111–112). We are persuaded by Petitioner's argument and evidence. We determine that one of ordinary skill in the art would have seen a benefit to the combination at least in so much as it would have allowed for the optimization of the video playback experience for users in light of the user's particular device and available Internet connection. *See* Ex. 1004 ¶ 22.

Second, Patent Owner argues that "Petitioner has cherry-picked certain aspects of various prior art references (while ignoring others) and cobbled them together into an approximation of the '156 [patent] claims based on improper hindsight." PO Resp. 33. Specifically, Patent Owner asserts that one of skill in the art, upon considering the references as a whole, would not select Namias and its multi-screen email composition interface. *Id.* at 34, 36. Patent Owner argues that Namias's multi-screen interface is inferior to Saffer's single email composition screen. We disagree with this argument for reasons discussed above in relation to Petitioner's arguments regarding the separate displays limitation. *See supra* § II.D.5.d.

Thus, we determine that one of ordinary skill in the art would have been motivated to use Saffer's techniques to improve the usage of bandwidth in Namias's system and to provide benefits to the end user, such as

[19] Naick et al., U.S. Patent No. 7,409,425 B2, filed Nov. 13, 2003, issued Aug. 5, 2008.

optimization of video streaming. Thus, we find that Petitioner has put forth a sufficient showing as to a motivation to combine Namias and Saffer.

As to PC Magazine, Dr. Chatterjee opines that "nothing in Namias . . . suggests that the kiosk even includes 'screen capture' functionality," but that, as evidenced by PC Magazine, "[o]ne of ordinary skill in the art would have been motivated to disable any existing screen capture functionality because . . . the kiosk does not provide any way of accessing or use for the output of a screen capture," and "disabling [any possible screen capture] functionality outright would prevent any accidental and inconsequential triggering of that functionality, which would only unnecessarily divert resources of the kiosk, including memory and processing power, from the kiosk's intended purpose of video messaging." Ex. 1002 ¶¶ 90, 91 (cited at Pet. 26–27). We agree with Petitioner for the reasons stated in the Petition.

As to Smith, Dr. Chatterjee opines that Saffer and Smith disclose "very similar techniques for delivering content through the use of URLs embedded in email messages." Ex. 1002 ¶ 135 (cited at Pet. 47–48). Dr. Chatterjee testifies that one of ordinary skill in the art would have been motivated to improve upon Saffer's use of a video ID by further appending a recipient identifier (as in Smith's PURL), in order to obtain the additional benefits of tracking and security described in Smith. *Id.* ¶ 136 (citing Ex. 1005, at [57], 14:36–41); Pet. 48–49. We conclude that one of ordinary skill would have looked to Smith to provide such improvements to Saffer's URL system, utilized in combination with Namias, as explained by Petitioner and Dr. Chatterjee. We agree with Petitioner for the reasons stated in the Petition.

h. Conclusion

Petitioner has established that the combination of Namias, PC Magazine, Saffer, and Smith teaches all of the limitations of claim 1 and that a person of ordinary skill in the art would have had reason to combine their teachings in the manner asserted. Accordingly, we determine the information presented demonstrates, by a preponderance of the evidence, that claim 1 is unpatentable.

6. Dependent Claims 2, 3 and 6–8

Claims 2, 3 and 6–8 depend from claim 1. Petitioner relies on Namias, PC Magazine, Saffer, and Smith to teach the limitations of claims 2 and 6–8. Pet. 49–51. Petitioner relies on Namias, PC Magazine, Saffer, Smith, and Ford to teach the limitations of claim 3. *Id.* at 51–54. Patent Owner does not include any additional arguments directed to these claims. *See generally* PO Resp.; *see also* Paper 11, 5 ("Patent Owner is cautioned that any arguments for patentability not raised in the response will be deemed waived."). We are persuaded by Petitioner's allegations as to claims 2, 3, and 6–8.

For example, claim 2 depends from claim 1 and further recites "wherein the media component is not displayed via the second display with the identifier of a recipient." Ex. 1001, 19:32–34. Petitioner relies upon Namias to teach this limitation. Pet. 49. Specifically, Petitioner directs us to Namias's Figure 5, which depicts a screen in which a user may enter an email address. *Id.* The recipient email address is displayed in display window 520 of Figure 5, but there is no component of the screen for displaying the media component. *Id.* We find Petitioner's arguments and evidence to be persuasive and we find that Petitioner has established by a

preponderance of the evidence the unpatentability of claim 2. We are similarly persuaded as to Petitioner's challenges to claims 6–8. *Id.* at 50. Petitioner has established by a preponderance of the evidence the unpatentability of claims 6–8.

As to claim 3, that claim also depends from claim 1 and further recites "wherein the media component is no longer on the sending user device after said transmitting the message content and the recipient address." Petitioner relies on Ford to teach that the media component is no longer on the sending device after the message has been transmitted. *Id.* at 51. Ford is a U.S. patent application publication titled "Apparatus and Method of Wireless Data Exchange with Automatic Delivery Confirmation." Ex. 1035, at [54]. As described in Ford, "after the message data has been successfully transmitted to the server, the message data, which can include picture and video content, is automatically deleted from the sending device." Pet. 51 (citing Ex. 1035 ¶ 28 ("[I]t is an object of the present embodiment of the invention to provide for the automatic deletion of [a] wireless data message stored on a wireless device after confirmation of the successful storage of that data on a remote server.")). Petitioner asserts that one of ordinary skill in the art would have been motivated to combine Ford with Namias because automatic deletion would conserve memory space. *Id.* at 52–53. We are persuaded by Petitioner's argument and evidence and we find that Petitioner has established by a preponderance of the evidence the unpatentability of dependent claim 3 over Namias, PC Magazine, Saffer, Smith, and Ford.

E. Asserted Obviousness in View of Namias, PC Magazine, RFC 2821, and Hazel (and Ford)

Petitioner contends that claims 1, 2 and 6–8 are unpatentable under 35 U.S.C. § 103 as obvious in view of Namias, PC Magazine, RFC 2821, and Hazel and claim 3 is unpatentable under 35 U.S.C. § 103 as obvious in view of Namias, PC Magazine, RFC 2821, Hazel, and Ford. Pet. 5, 56–71. Relying on the testimony of Dr. Chatterjee, Petitioner contends that the combined references teach or suggest the subject matter of the challenged claims and that a person having ordinary skill in the art would have combined the teachings of the references in the manner asserted in the Petition. *Id.*; Ex. 1002. Because we determine that claims 1, 2 and 6–8 are unpatentable under § 103(a) as obvious over the combined teachings of Namias, PC Magazine, Saffer, and Smith, and claim 3 is unpatentable under § 103(a) as obvious over the combined teachings of Namias, PC Magazine, Saffer, Smith, and Ford, we need not separately assess the patentability of these claims under the additional asserted grounds.

III. CONTINGENT MOTION TO AMEND

Patent Owner filed a contingent Motion to Amend original claims 1 and 2 and replace them with proposed substitute claims 34 and 35. MTA 1 ("Contingent upon the Board finding claim 1 unpatentable, Patent Owner respectfully requests that the Board substitute claims 34–35 for challenged claims 1–2."). We have determined that original claims 1 and 2 of the '156 patent have been shown to be unpatentable by a preponderance of the evidence; therefore, we proceed to address Patent Owner's contingent Motion to Amend.

In an *inter partes* review, amended claims are not added to a patent as of right, but rather must be proposed as a part of a motion to amend. 35 U.S.C. § 316(d). We first must determine whether the motion to amend meets the statutory and regulatory requirements set forth in 35 U.S.C. § 316(d) and 37 C.F.R. § 42.121. Specifically, we must determine whether (1) the amendment responds to a ground of unpatentability involved in the trial; (2) the amendment does not seek to enlarge the scope of the claims of the patent or introduce new subject matter; (3) the amendment proposes a reasonable number of substitute claims; and (4) the proposed claims are supported in the original disclosure. 37 C.F.R. § 42.121; *Lectrosonics, Inc. v. Zaxcom, Inc.*, Case IPR2018-01129 (PTAB Feb. 25, 2019) (Paper 15) (precedential).

Patent Owner "does not bear the burden of persuasion to demonstrate the patentability of [the proposed] substitute claims." *Lectrosonics*, slip op. at 4 (citing *Aqua Prods. Inc. v. Matal*, 872 F.3d 1290 (Fed. Cir. 2017); *Bosch Auto. Serv. Sols. LLC v. Iancu*, 878 F.3d 1027 (Fed. Cir. 2017)). "Rather, as a result of the current state of the law and [U.S. Patent and Trademark Office] rules and guidance, the burden of persuasion will ordinarily lie with the petitioner to show that any proposed substitute claims are unpatentable by a preponderance of the evidence." *Id*.

A. Requirements Under 35 U.S.C. § 316(d) and 37 C.F.R. § 42.121

Patent Owner asserts that proposed substitute claims 1 and 2 are responsive to an asserted ground of unpatentability (MTA 1–2), do not enlarge the scope of the originally issued claims (*id.* at 3), constitute a reasonable number of substitute claims (*id.* at 3), and are supported by the original specification (as well as the parent applications) (*id.* at 4–13).

Petitioner does not dispute Patent Owner's contentions on these points. *See generally* MTA Opp.

We have reviewed Patent Owner's arguments and cited evidence, and determine that Patent Owner has met the requirements of 35 U.S.C. § 316(d), 37 C.F.R. § 42.121(a)(2)(ii), and 37 C.F.R. § 42.121(a)(3). Patent Owner proposes a single substitute claim for each original claim, and therefore, meets the requirement for a reasonable number of substitute claims. *See* 37 C.F.R. § 42.121(a)(3); *see also Lectrosonics*, slip op. at 4 ("There is a rebuttable presumption that a reasonable number of substitute claims per challenged claim is one (1) substitute claim."). Further, based on the citations to Application Nos. 14/572,932 (Ex. 2021, 508–49, the application from which the '156 patent issued) and 11/401,148 (Ex. 2025, 452–92, the application at the start of the chain of continuation applications to which the '156 patent claims priority)[20] provided in the Motion, we find sufficient written description support for Patent Owner's proposed substitute claims. *See* MTA 1–13. Thus, we determine that the contingent Motion to Amend meets the requirements of 35 U.S.C. § 316(d), 37 C.F.R. § 42.121(a)(2)(ii), and 37 C.F.R. § 42.121(a)(3).

As explained below, Petitioner has proven, by a preponderance of the evidence based on the entirety of the record, that proposed substitute claims 34 and 35 are unpatentable under 35 U.S.C. § 103(a).

[20] Application Nos. 14/572,932 and 11/401,148 are substantially identical. Our review did not reveal, nor did Petitioner assert, any break in the priority chain between these applications.

B. Obviousness of Proposed Substitute Independent Claim 34

As a replacement for independent claim 1, Patent Owner proposes claim 34. MTA 4–6. Proposed substitute independent claim 34 is reproduced below with annotations showing amendments to original claim 1:

> 34. A computer-implemented method of handling an electronic message at a sending user device in a networked environment, the electronic message including a header information and a message content, the sending user device having access to electronic instructions, the electronic instructions being stored at the sending user device and/or at a server computer, the method comprising:
>
> associating a message content including a media component with the electronic message via a first display at a sending user device;
>
> associating an identifier of a recipient with the electronic message via a second display at the sending user device, the first and second displays being generated by the electronic instructions such that the first and second displays are not displayed at the same time via the sending user device, the identifier of a recipient being part of a header information for the electronic message, the electronic instructions acting on the displays at the sending user device such that the header information is not displayed with the media component via the first display preventing a single screen capture of both the identifier of a recipient and the media component **and, if the message content includes a text, preventing a single screen capture of both the identifier of a recipient and the text**;
>
> transmitting the message content including a media component from the sending user device to a server computer; and
>
> transmitting the identifier of a recipient from the sending user device to the server computer, said transmitting the message content including a media component and said transmitting the identifier of a recipient occurring separately, **such that if the message content includes a text, each of the text and the**

> **media component are transmitted separately from the identifier of a recipient and wherein the transmitted message content does not contain an identifier of a recipient,** the identifier of a recipient and the message content including a media component each including a correlation to allow the identifier of a recipient and the message content including a media component to be related to each other at a later time by the server computer.

Id. at i–ii (Claims Appendix).

The new language added to proposed substitute claim 34 recites steps that occur "if the message content includes a text." *See* MTA Reply 1 ("Substitute claim 34 contains two new limitations that are triggered 'if the message content includes a text . . . .'").[21] Petitioner asserts that these proposed amendments are not limiting if the condition precedent (the inclusion of text) is not met. MTA Opp. 2–3 (citing *In re Johnston*, 435 F.3d 1381, 1384 (Fed. Cir. 2006)). Thus, according to Petitioner, proposed substitute claim 34 would have been obvious over Namias, PC Magazine, Smith, and Saffer for the same reasons as claim 1. *Id.* at 3.

Patent Owner responds by arguing that "[w]hen Saffer's transmission system is used to transmit Namias's video emails (as per the Petition at 28–37), the message content in the transmitted email will necessarily 'include[] a text,' thereby triggering both conditions." MTA Reply 1–2 (emphasis omitted). Thus, Patent Owner's argument is not that the conditions must be

[21] We note that there appears to be an additional amendment to claim 34, the deletion of the article "a" in the phrase "the identifier of a recipient being part of ~~a~~ header information for the electronic message." MTA 5, i (Claims Appendix). Patent Owner provides no argument or discussion of this amendment. In addition, Patent Owner states that it is seeking to amend the claims to add two limitations, with no mention of any deletions. *Id.* at 2.

met to satisfy the proposed substitute claim, but rather that the combination applied to the claim would not render the claim obvious because that combination necessarily would include text.

Patent Owner acknowledges that "the Namias kiosk first uploads the video (which does not include any text) to Saffer's video server." MTA Reply 2. Patent Owner goes on to argue that

> Saffer's video server then sends Namias's video kiosk a *textual* 'video ID' corresponding to that uploaded video. Namias's video kiosk then will 'insert [that *textual*] video ID along with a [*textual*] URL or link to the video server into the code and/*or text* of the e-mail message. Finally, Namias's video kiosk will transmit to email server the email containing both (1) the header information with the recipient identifier and (2) the media content with the *textual* URL link and video ID that allows the recipient to view the video.

Id. (quoting Ex. 1004 ¶ 27) (internal citations omitted). Thus, Patent Owner asserts that "[t]his email necessarily contains the claimed 'message content that includes a text'—at least the *textual* URL link and video ID, as shown in Saffer Fig. 8." *Id.* at 2. Further Patent Owner contends that "[a]ny combination that eliminates the textual message body would make Saffer inoperable and/or unsuitable for its intended purpose." *Id.* at 3.

Petitioner contends and we agree that this argument mischaracterizes what Petitioner asserts in the prior art to be the claimed "message content." *See* MTA Sur-Reply 2. As we determined above, the broadest reasonable interpretation of the phrase "message content including a media component" does not encompass a URL in a message. *Supra* § II.C. Thus, the URL link, which includes the video ID, would not constitute "message content that includes a text." In addition, Petitioner contends that

> [t]he plain language of substitute claim 34 makes clear that the two new limitations are only triggered 'if ***the*** message content includes a text,' with "the message content" referring back to the earlier step of claim 34 reciting, "associating **a** message content, including a media component, with the electronic message via a first display at a sending user device.

MTA Sur-Reply 1. Petitioner asserts that "[t]he 'message content' that can potentially trigger the contingent limitation, therefore, is the same message content that was associated with the electronic message via the 'first display.'" *Id.* (emphasis omitted). Petitioner relies on Namias's video message as the message content and Namias's video message does not include text. *See* MTA Reply 2 (Patent Owner acknowledging that Namias's video message does not include text). Therefore, we determine that the proposed Namias, PC Magazine, Saffer, and Smith combination does not "necessarily" include text within the message content, as Patent Owner contends.

This leaves us to analyze proposed substitute claim 34 in light of the combined teachings of Namias, PC Magazine, Saffer, and Smith – which is a combination that does not necessarily include text. Typically, the prior art need not describe conditional steps set forth in a method claim if, after giving the claim its broadest reasonable construction, the method as claimed does not invoke them. *See Cybersettle, Inc. v. Nat'l Arbitration Forum, Inc.*, 243 F. App'x 603, 607 (Fed. Cir. 2007) ("It is of course true that method steps may be contingent. If the condition for performing a contingent step is not satisfied, the performance recited by the step need not be carried out in order for the claimed method to be performed."). Proposed substitute claim 34 is broad enough to cover a method which does not include text. *See In re Johnston*, 435 F.3d 1381, 1384 (Fed. Cir. 2006) ("[O]ptional elements do

not narrow the claim because they can always be omitted."). This is true because the plain language of the claim includes the conditional word "if" and, as Patent Owner acknowledges, these "two new limitations . . . are triggered 'if the message content includes a text.'" MTA Reply 1; *see Ex parte Schulhauser*, Appeal 2013-007847, 2016 WL 6277792, at *2–6 (PTAB Apr. 28, 2016) (precedential) (interpreting similar "if" conditional language in a method claim). Therefore, because the inclusion of text is a conditional event that may not occur (the message content may be, for example, just a video without text), the text is optional. As such, the prior art does not need to disclose the two proposed amendments in order to meet the limitations of proposed substitute claim 34.

For the foregoing reasons, we agree with Petitioner that proposed substitute claim 34 would have been obvious over Namias, PC Magazine, Saffer, and Smith for the same reasons discussed above with respect to claim 1. Therefore, Petitioner has established, by a preponderance of the evidence, that proposed substitute claim 34 is unpatentable under 35 U.S.C. § 103(a) over Namias, PC Magazine, Saffer, and Smith.

C. Definiteness/Obviousness of Proposed Substitute Claim 35

Patent Owner proposes substitute claim 35 as a replacement for original claim 2. MTA 2–3. Proposed substitute claim 35 is reproduced below with annotations showing amendments:

> 35. A computer-implemented method according to claim **34[1]**,
> wherein the media component is not displayed via the second display with the identifier of a recipient**,**
> **wherein the message content includes a text, and said text is not displayed via the second display with the identifier of a recipient; and**

wherein said correlation does not identify a recipient and is not message content.

Id. at ii (Claims Appendix). Proposed substitute claim 35 depends from proposed substitute claim 34 and recites further limitations as to the handling of a message content that includes text. Petitioner makes several arguments as to the unpatentability of this proposed substitute claim. First, Petitioner asserts that the phrase "wherein said correlation . . . is not message content" is indefinite under 35 U.S.C. § 112. MTA Opp. 5–11. Second, Petitioner contends that proposed substitute claim 35 would have been obvious under 35 U.S.C. § 103(a) over Namias, PC Magazine, Saffer, Smith, Frey,[22] and Sadun.[23] *Id.* at 12–23. We address these arguments in turn.

Petitioner asserts that "wherein said correlation . . . is not message content" is an indefinite claim limitation because it lacks proper antecedent basis. *Id.* at 5. There is no article in front of the term "message content." According to Petitioner, the claim is unclear as to whether it is referring to the message content recited in proposed substitute claim 34 or some other message content. *Id.* at 5–6. We are not persuaded by this argument.

Whether this claim, despite its lack of explicit antecedent basis for "message content," nonetheless has a reasonably ascertainable meaning must be decided in context. *See Energizer Holdings, Inc. v. Int'l Trade Comm'n*, 435 F.3d 1366, 1370 (Fed. Cir. 2006). "Claim definiteness is analyzed 'not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing

[22] International Patent Application Publication No. WO 00/58850, published October 5, 2000 (Ex. 1052, "Frey").
[23] Erica Sadun, DIGITAL VIDEO ESSENTIALS (2003) (Ex. 1053, "Sadun").

the ordinary level of skill in the pertinent art.'" *Id.* (quoting *In re Moore*, 439 F.2d 1232, 1235 (1971)). Patent Owner asserts that one of ordinary skill in the art would have understood the lack of an article to preface the "message content" to mean that the correlation could not be message content of any kind (not just the specific message content of claim 34). MTA Reply 4. We find that Patent Owner's argument goes too far because claim 35 is not directed to "message content of any kind." Claim 34 is directed to a method of handling an electronic message. The first step of claim 34 associates "a message content" with "the electronic message." MTA i (Claims Appendix). Claim 35 recites a method "according to claim 34." As such, we determine that one of ordinary skill in the art would have understood claim 35 to be further addressing the handling of the electronic message of claim 34. As noted, claim 34's electronic message is associated with "a message content" and our review of the record provides us with no evidence that one of ordinary skill in the art would have disassociated the only recited message content from the recited electronic message. We determine that one of ordinary skill in the art would have understood claim 35 to be referring to the message content associated with the electronic message of claim 34. Therefore, we do not find claim 35 to be indefinite due to a lack of antecedent basis for "message content."

Next, Petitioner asserts that claim 35 would have been obvious over the grounds previously asserted[24] against claim 1 with the addition of Frey

[24] Petitioner relies on both its challenges based on Namias, PC Magazine, Saffer, and Smith; and Namias, PC Magazine, RFC 2821, and Hazel. We did not reach Petitioner's challenge based on Namias, PC Magazine, RFC 2821, and Hazel and likewise need not refer to that challenge in our discussion of the patentability of proposed substitute claim 35.

and Sadun. Petitioner asserts and we agree that claim 35 requires the satisfaction of the conditional limitations of claim 34 because it triggers those limitations due to its requirement that "the message content includes a text." MTA Opp. 12. Above, we provided a full discussion of Petitioner's assertion that claim 1 would have been obvious over Namias, Saffer, PC Magazine, and Smith. *Supra* § II.D. We address herein the proposed amended limitations and Petitioner's assertions as to why claim 35 including those limtiations would have been obvious over that combination of references with Frey and Sadun.

Frey is directed to "an improved interactive photo kiosk for creating, storing and distributing electronic images, audio messages, and text messages electronically." Ex. 1052, 3:11–13. One of the objects of Frey is "to have a device which can create an electronic image of the user and to which the user can selectively add textual messages, audio data, and other visual images to the electronic image." *Id.* at 2:5–7. As described in Frey, "the user can transmit the electronic image created, as well as any added text message, audio data, and other visual image, via electronic transmission, such as over the Internet." *Id.* at 2:8–10. Frey's CPU obtains an image for a photo greeting and then "informs the user via the monitor and/or speaker that the user has the option of adding a banner to the image or having no banner added to the image." *Id.* at 6:11–12. If selected, the banner is superimposed on the image and may be composed of predetermined text (e.g., "Having A Great Vacation") or user created text. *Id.* at 6:12–18. Frey discloses "combining said electronic image, said optional banner message, said optional text message, and said optional audio message into one electronic file" before transmission. *Id.* at 16:2–5.

Sadun is a book titled "Digital Video Essentials: Shoot, Transfer, Edit, Share." Ex. 1053. This textbook "offers a complete introduction to video filming and production." *Id.* at 19. Petitioner directs us to Sadun's discussion of "[o]verlay[ing] text and pictures." *Id.* at 24. Specifically, Sadun describes that "VideoStudio's Overlay and Title steps allow you to add text, images, or video to display over your footage." *Id.* at 36.

Petitioner's allegations may be summarized as follows: Petitioner relies upon the disclosures of Namias, PC Magazine, Saffer, and Smith to teach the elements of proposed substitute claim 35 (and its independent claim proposed substitute claim 34) that are the same as claim 1. MTA Opp. 12. Petitioner supplements those disclosures discussed above with disclosures from Frey and Sadun. Specifically, Petitioner argues that "it would have been obvious in view of Frey and Sadun to adapt Figure 4A of Namias ('first display') to allow a text banner to be added or overlaid on top of the video (or picture) message content." *Id.* at 13 (emphases omitted). Petitioner points out that Frey and Namias are both directed to photo kiosks, but that Frey has the additional feature of being able to add text to the picture as a banner or an overlay prior to transmission. *Id.* at 13–14 (quoting Ex. 1052, 6:3–7:6). Petitioner further argues that "Sadun makes clear that superimposing text onto a video was a basic video-editing technique that had been offered by existing commercial software." *Id.* at 15 (citing Ex. 1053, 24). As such, Petitioner asserts that the combination of Namias, Frey, and Sadun would lead one of ordinary skill in the art to adapt Namias's first display (Fig. 4a) such that text would be "allow[ed] . . . to be overlaid onto the video (or picture) message content, and thereby associated with the video (or picture) message." *Id.*

Petitioner further argues that the disclosures of Frey and Sadun would have taught one of ordinary skill in the art to save the combined video and text into a single file prior to transmission. *Id.* at 20–21 (citing Ex. 1053, 157; Ex. 1052, 16:2–5; 15:15–16). Thus, Petitioner asserts that the cited references would have taught one of ordinary skill in the art to transmit the text and data as a single file in order to simplify the transmission such that the manner of transmission would not be dependent upon the contents of the files being transmitted. *Id.* at 21. In other words, transmissions would be the same regardless of whether text was included with the message. According to Petitioner, another advantage of combining the text and video into a single file prior to transmission would be that the viewing experience of the recipient would be the same regardless of whether text was included. *Id.* Petitioner's arguments are supported by the testimony of Dr. Chatterjee. *See* Ex. 1043 ¶¶ 77–100.

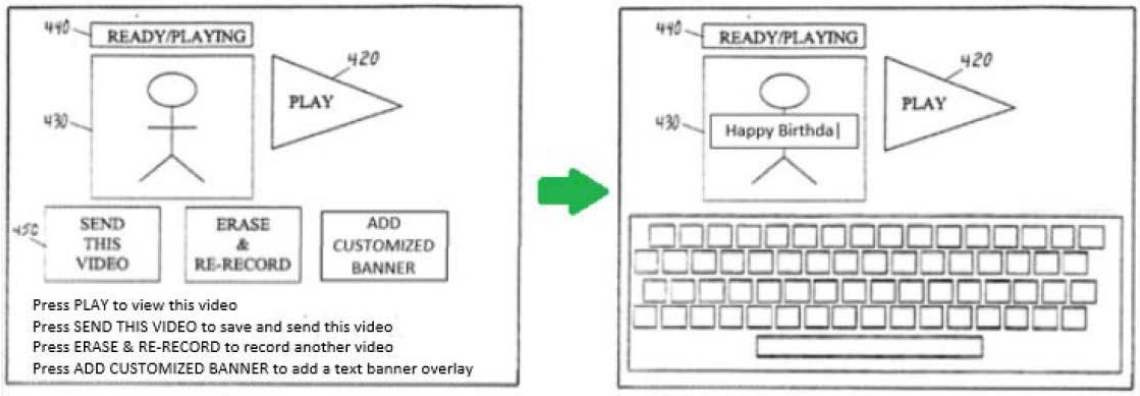
In response to Petitioner's assertions, Patent Owner repeats several of its arguments that were considered in relation to the analysis of Petitioner's challenge to claim 1. First, Patent Owner asserts that several of the references (including Saffer and Frey) include a unified email that transmits both the message content and the recipient identifier together. MTA Reply 7–8. As discussed above in conjunction with claim 1, however, Petitioner is relying on Namias to teach the recited separate displays and relying on Saffer to teach the recited separate transmissions. *See supra* § II.D.5.e. The additional modification here is that Petitioner also is relying on Frey and Sadun to teach that the video message could include overlaid text. MTA Opp. 20. Contrary to Patent Owner's assertion, however, Frey's disclosure of a unified email that includes both the recipient information and message

content does not teach away or otherwise take away from teachings relied upon from Saffer. As discussed above, Saffer discloses a method by which a video ID is obtained from the server, the video is renamed using that video ID, the renamed video is uploaded to the server, the sending device inserts a link to the uploaded video (URL) into an email, and then finally the sending device sends the email containing the link (but not the content) to an email server. Pet. 28–29; Ex. 1004 ¶¶ 4, 27, 29, 44, Fig. 3. Petitioner is relying on this process to teach the recited separate transmissions. Petitioner's assertion with respect to proposed substitute claim 35 is that the video and text are combined into a single file and that file is then transmitted per Saffer's method. MTA Opp. 20–21. Thus, we are persuaded that the cited art teaches the recited separate transmissions.

Next, Patent Owner contends that the cited art fails to teach a "correlation." MTA Reply 8–9. Here, Patent Owner relies on the same arguments discussed above in relation to claim 1. *Id.* at 9 (stating that Saffer's video ID is not the recited correlation and then citing Patent Owner's Response and Sur-Reply). We do not find this argument to be persuasive for the same reasons discussed above. *See supra* § II.D.5.f. For the same reasons discussed above, we determine that Petitioner has shown sufficiently that the cited art teaches the recited correlation. *Id.*

Finally, Patent Owner asserts that a person of ordinary skill in the art would not have combined the references in the manner proposed by Petitioner. MTA Reply 5–7. Petitioner contends that it would have been obvious to combine Namias, Frey, and Sadun because "[t]he combination would have predictably resulted in the messaging system of Namias in which the screen shown in Figure 4A is adapted to allow text to be overlaid

onto the video (or picture) message content, and thereby associated with the video (or picture) message, according to the techniques of Frey and Sadun." MTA Opp. 16. Dr. Chatterjee annotated Namias's Figure 4A to show what the interface of the combined system would look like (*id.*).



Above are the annotated Figures 4A of Namias as prepared by Dr. Chatterjee. Ex. 1043 ¶ 87. "On the left, Figure 4A of Namias is shown as being adapted to include a button to 'ADD CUSTOMIZED BANNER.' Upon pressing that button, as shown on the right, Figure 4A transitions to allow a text banner (e.g., 'Happy Birthday') to be added on top of the video content." *Id*. Petitioner argues that one of ordinary skill in the art would have been motivated to provide users with the option to add banner text (as taught by Sadun and Frey) to Namias's video in order to make for "a more compelling and powerful message." MTA Opp. 17 (citing Ex. 1043 ¶ 88).

Patent Owner contends that Petitioner's need for a six-reference combination in order to assert that this claim is unpatentable speaks to the high degree of hindsight being applied by Petitioner. MTA Reply 5. Patent Owner argues that any alleged simplicity to be gained from Namias's screens is lost due to the additional elements added to the screen as proposed by Dr. Chatterjee. *Id.* at 6. Patent Owner also asserts that there is no

support for Petitioner's contention that adding text makes the message more powerful and compelling. *Id.*

Petitioner responds by asserting that the benefits of combining image and text are undisputed. MTA Sur-Reply 6–7. Petitioner further asserts that "adding text overlay functionality to Figure 4A of Namias does not necessarily detract from its simplicity," but rather only augments existing editing functions. *Id.* at 7.

We are persuaded that Petitioner has shown sufficiently that one of ordinary skill in the art would have been motivated to combine the cited references. We agree that the combination of references would have entailed applying known methods and obtaining predictable results. *See* MTA Opp. 16. Sadun is an introductory textbook in the field of video editing and production. Ex. 1053, 19. Thus, we are persuaded that this is the sort of text that one of ordinary skill in the art would turn to in order to determine functionality that should be provided in the video messaging system. Namias itself recognizes that text is the traditional form for email communication and it sought to provide a method of communication that was not "confined to textual or other limited communications." *See* Ex. 1003 ¶¶ 6, 9. As such, we are persuaded that one of ordinary skill in the art would have been motivated to improve upon the messaging of Namias by adding overlaid text capabilities per Frey and Sadun.

In view of the foregoing, we determine that Petitioner has demonstrated by a preponderance of the evidence that the subject matter of proposed substitute claim 35 would have been obvious over Namias, PC Magazine, Saffer, Smith, Frey, and Sadun.

D. Asserted Unpatentability of Proposed Substitute Claims Under § 101

As discussed above, we find that Petitioner has established by a preponderance of the evidence the unpatentability of proposed substitute claims 34 and 35 as obvious over the cited art. In light of that determination, we do not address Petitioner's assertions of unpatentability under 35 U.S.C. § 101.

IV. CONCLUSION

Petitioner has demonstrated, by a preponderance of the evidence, that, under 35 U.S.C. § 103(a), claims 1, 2, and 6–8 are unpatentable over Namias, PC Magazine, Saffer, and Smith and claim 3 is unpatentable over Namias, PC Magazine, Ford, Saffer, and Smith. In light of our determination of unpatentability of claims 1–3 and 6–8, we decline to address whether these claims also are unpatentable under 35 U.S.C. § 103(a) as obvious over Namias, PC Magazine, RFC 2821, and Hazel (claims 1, 2, and 6–8) or over Namias, PC Magazine, Ford, RFC 2821, and Hazel (claim 3). Petitioner also has established by a preponderance of the evidence the unpatentability of Patent Owner's proposed substitute claims 34 and 35.

V. ORDER

Accordingly, it is

ORDERED that claims 1–3 and 6–8 of U.S. Patent No. 9,313,156 B2 have been shown to be unpatentable; and

FURTHER ORDERED that Patent Owner's Motion to Amend is *denied.*

This is a final decision. Parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

Trials@uspto.gov
571-272-7822

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SNAP INC.,
Petitioner,

v.

VAPORSTREAM, INC.,
Patent Owner.

Case IPR2018-00458
Patent 9,313,156 B2

Before STEPHEN C. SIU, JUSTIN T. ARBES, and STACEY G. WHITE, *Administrative Patent Judges*.

Opinion Concurring filed by *Administrative Patent Judge* SIU.

I join the majority in its conclusion that Petitioner has demonstrated by a preponderance of the evidence that claims 1, 2, and 6–8 are unpatentable under 35 U.S.C. § 103(a) over Namias, PC Magazine, Saffer, and Smith and claim 3 is unpatentable under 35 U.S.C. § 103(a) over Namias, PC Magazine, Ford, Saffer, and Smith. I write separately to provide logical reasoning supporting this conclusion.

Petitioner argues that the combination of Namias, PC Magazine, Saffer, and Smith discloses or suggests claim limitations recited in claim 1. I agree with Petitioner for at least the reasons set forth in the Decision on Institution. *See, e.g.*, Paper 10, 9–27. For example, as Petitioner points out,

Namias discloses "screens provided by the kiosk during its operation" including a "preview screen . . . that appears after the sender has recorded a video" (a "first display") and a '"preview screen 400' that appears after the sender has recorded a video.'" (i.e., a "second display"). Pet. 18–19 (citing Ex. Namias ¶¶ 23–29, Figs. 2, 3, 4A, 4B, 5, 6, 7). Hence, based at least on Namias, one of ordinary skill in the art would have understood that it was known in the prior art to have provided at least a "first" and a "second" display. I agree with Petitioner.

Patent Owner argues that Namias and Saffer fail to disclose a first display and a (separate) second display, as recited in claim 1, because Saffer discloses a "single email composition display screen" that is "far more efficient, robust, and less likely to cause navigational trauma" than "Namias's multi-screen navigation flow" such that "a skilled artisan [would not] select the Namias interface." PO Resp. 53. In other words, Patent Owner argues that it would not have been obvious to one of skill in the art to have provided a first and second display, as disclosed by Namias, because a single display disclosed by Saffer is supposedly better. I am not persuaded by Patent Owner's argument at least because even assuming that a single display of Saffer provided certain advantages over the first and second display of Namias, as Patent Owner contends, a disclosure of a single display by Saffer does not negate the disclosure of Namias. In other words, one of skill in the art would have known the practice of providing a first and second display (of Namias) and would not have become unaware of such a practice merely because Saffer allegedly discloses an alternative use of a single display. Nor does Patent Owner assert or demonstrate persuasively that either one of Namias or Saffer discourages the use of multiple displays.

On the contrary, Namias, at least, explicitly discloses the use of multiple displays.

Petitioner argues that Namias and Saffer discloses transmitting message content separately from transmitting an identifier of a recipient. In particular, Petitioner argues that Saffer discloses a "sending device [that] uploads [a] video file to the video server" and that "[a]fter the upload, the sending device inserts a link [or URL] into the body of the email message" and "sends the email containing the link (but not containing the previously-uploaded video content) to an email server." Pet. 28–29. I agree with Petitioner.

Patent Owner argues that the combination of Namias and Saffer fails to disclose transmitting message content and transmitting the identifier of a recipient separately, as recited in claim 1 (PO Resp. 40), because Saffer discloses transmitting "both the recipient's email address and a public URL . . . to access a video," that a URL must be "message content" because the '156 patent supposedly discloses "that a linked file may qualify as message content," and that "[a]ny reasonable interpretation of 'message content including a media component' must encompass what the '156 specification expressly discloses is included . . . includ[ing] linked content, such as a video file accessible via Saffer's URL." PO Resp. 41–43 (citing Ex. 1001, 7:66–8:1 – "message content . . . may include . . . [a] linked file"). In other words, Patent Owner argues that Namias and Saffer disclose transmitting an identifier of a recipient with a URL and that a URL, according to Patent Owner, is "message content" such that the identifier of a recipient is transmitted with (and not separate from) "message content."

I am not persuaded by Patent Owner's arguments at least because Patent Owner does not argue persuasively that a "URL" must include or be characterized as "message content." Contrary to Patent Owner's contention, the '156 patent discloses an example in which "message content . . . may include" a linked file and does not disclose that "message content" is defined by including a URL. Even assuming that the '156 patent discloses that message content must include a linked file (it does not), one of skill in the art would have understood that a "URL" (or Universal Resource Locator) identifies (or "locates") a file (i.e., a "linked file") and is not the linked file itself.

Claim 1 recites that the identifier of a recipient and the message content each including a correlation. Petitioner argues that Saffer discloses an email message to a recipient with a URL that includes a "video ID," the "video ID" being the name of a corresponding video file that contains content. Pet. 38–41. Hence, Saffer discloses that the content (i.e., video) includes a correlation (i.e., a "video ID" or name of the video file).

Petitioner also argues that Smith, like Saffer, discloses an email message to a recipient with a URL and that the URL contains a "store item identifier" (i.e., a correlation for content) and a "recipient identifier 333" (i.e., an identifier of a recipient). Pet. 41–43. Hence, Saffer and Smith both disclose sending an email message to a recipient, the email message containing a URL that identifies message or video content (i.e., a URL containing a video ID) and Smith further discloses that one of skill in the art would have understood that the URL may also include an identifier that identifies the recipient (i.e., an identifier of a recipient) such that the

identifier of a recipient (or URL) includes a correlation (e.g., "store item identifier"). I agree with Petitioner.

Patent Owner argues that a "correlation" is "data corresponding to a message used to associate two components of a message" and that Namias, Saffer, and Smith fail to disclose the identifier of a recipient and the message content "each including a correlation," as recited in claim 1, because, according to Patent Owner, "the '156 specification does not teach that the correlation (*e.g.*, message ID in the '156 Patent) is a hyperlink." PO Resp. 43 (citing Ex. 1001, 8:17–21). In other words, Patent Owner argues that the claimed "correlation" must not include a URL. I am not persuaded by Patent Owner's argument because claim 1 does not recite that the "correlation" must not be a "URL." Also, contrary to Patent Owner's contention, the '156 patent discloses "a variety" of examples of a "correlation" but does not disclose that a "correlation" must not be a "URL." Ex. 1001, 8:17–20.

Patent Owner argues that Saffer and Smith fails to disclose a "correlation" that is "stored with the recipient identifier information." PO Resp. 50. Hence, Patent Owner appears to argue that the combination of Saffer and Smith fails to disclose that the identifier of a recipient includes a "correlation," as recited in claim 1. I disagree with Patent Owner for at least the reasons set forth by Petitioner and discussed above. For example, as Petitioner explains and as discussed above, Smith discloses a "URL" containing a "recipient identifier" (and "store item identifier"). Patent Owner does not explain a sufficient difference between the "recipient identifier" of Smith and the claimed "identifier of a recipient."

Petitioner argues that it would have been obvious to one of ordinary skill in the art to combine the teachings of Namias and Saffer at least because not only are Namias and Saffer "analogous references in the same field" that both disclose "methods for recording and sending video messages using email," but also, that the combination of the known feature of using a first and second display (e.g., "the Namias user interface (*e.g.*, Fig. 4A and Fig. 5)") with the known feature of "effectuat[ing] the actual transmission and delivery of the video message" using a Video ID (Saffer) would have resulted in no more than the predictable and expected result of using a user interface to effectuate transmission and delivery of a message with a Video ID. Pet. 33–35. "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 416 (2007). In addition, Petitioner enumerates various known advantages of using a "URL-based delivery technique" (e.g., Saffer or Namias) in transmitting messages with a first and second display (e.g., Namias). Pet. 35–36.

Patent Owner argues that it would not have been obvious to combine the teachings of Namias and Saffer because "there is no practical scenario where Saffer's link-based email transmission system conserves bandwidth or storage," "Namias would . . . have to transmit . . . recorded video to the video server, requiring use of . . . bandwidth," "there is no bandwidth reduction or storage savings" by "[r]eplacing Saffer's sender device with Namias's video email kiosk," "bandwidth savings [from the combination of Namias and Saffer] . . . is only realized if the recipient never watches the video in its entirety," and that "a person skilled in the art . . . designing a message exchange system that transfers media content using less bandwidth"

would not "look to Namias as a piece of that solution" and that there is "no reason – other than hindsight – why" one of skill in the art "would choose Namias's user interface over Saffer's user interface." PO Resp. 28–31, 33–34. In other words, Patent Owner argues that it would not have been obvious to one of skill in the art to have combined the teachings of Namias and Saffer because doing so would not result in a savings in bandwidth usage and because one of skill in the art would have chosen to use Saffer's user interface over the user interfaces of Namias.

I am not persuaded by Patent Owner's arguments at least because, as previously discussed, it would have been obvious to one of skill in the art to have combined a known use of first and second displays (Namias) with the known process of transmitting data responsive to user input in a display to achieve a known, predictable, and expected result of data transmission in response to input via displays regardless of the degree of savings in bandwidth usage or whether or not one of skill in the art would have arguably preferred one alternative of display screens over another. In other words, as previously explained, a known and obvious procedure (the use of first and second displays) does not become unknown or non-obvious merely because of the presence of a disclosure of an alternative embodiment.

To the extent that Patent Owner argues that it would not have been obvious to one of ordinary skill in the art to have bodily incorporated the display of Saffer into the system of Namias (or vice versa), I note that "The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference . . . Rather, the test is what the combined teachings of those references would have

suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

Patent Owner argues that bodily incorporating the user interface of Saffer into the system of Namias (or vice versa) does not constitute bodily incorporation of elements because, according to Patent Owner, "Patent Owner is not arguing that Saffer's entire system must be bodily incorporated into Namias's system" but is merely arguing that "if a skilled artisan were motivated to combine Namias and Saffer . . . he or she would look to the entirety of those references, and would logically choose Saffer's single email composition display screen . . . over Namias's less capable multiple email composition display screens." PO Resp. 38–39. In other words, Patent Owner argues that bodily incorporating the user interface of Saffer into the system of Namias (or vice versa) is not bodily incorporation because Saffer's user interface is somehow superior to that of Namias. I am not persuaded by Patent Owner's arguments at least because, even assuming that the user interface of Saffer is somehow preferred over the user interface of Namias, bodily incorporating a display of one system (e.g., the displays of Namias) into another system (e.g., the system of Saffer) is still bodily incorporation of elements of one reference into another even if one of the displays is better than the other for some reason.

Petitioner argues that it would have been obvious to one of ordinary skill in the art to have combined the teachings of Saffer and Smith because, not only are "Smith, Namias, and Saffer . . . analogous references in the same field of delivering content by using email [and] . . . similar techniques for delivering content using URLs," but also using "the recipient identifier" of Smith in the URL of Saffer would enable the user to "identify the specific

recipient," among other potential benefits. Pet. 47–48. I also agree with Petitioner that it would have been obvious to one of skill in the art to have combined the known feature of sending an email to a recipient that includes a URL containing an identifier of data content (i.e., "video ID") (either one of Saffer or Smith) with the known feature of including a "recipient identifier" in a URL (e.g., Saffer) to achieve the predictable and expected result of sending an email containing a URL (Saffer and/or Smith) that identifies data content intended for a recipient (Saffer and/or Smith) and an identifier for the recipient to receive the data content (Smith). "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 416 (2007).

Patent Owner argues that it would not have been obvious to one of ordinary skill in the art to have combined the teachings of Saffer and Smith because "providing a recipient identifier in the message ID of the '156 Patent flies directly in the face of the '156 disclosure," including a recipient identifier "with Saffer's URL" would supposedly be disadvantageous, and "appending the recipient identifier to the video ID at the sending user is inconsistent with the teachings of Smith." PO Resp. 50–51. I am not persuaded by Patent Owner's argument at least because I do not agree with Patent Owner that Petitioner's explanation pertaining to combinability of the disputed references "flies directly in the face of the '156 disclosure." Nor does Patent Owner explain any plausible substantive disadvantages of "including a recipient identifier" in a URL (e.g., Smith includes a recipient identifier in a URL and does not disclose any specific disadvantages of doing so) or explain any specific "inconsistencies" with "appending the

recipient identifier" in a URL. For example, Smith "appends" the recipient identifier in a URL and does not disclose any specific "inconsistencies" in doing so.

To the extent that Patent Owner argues that it would not have been obvious to one of ordinary skill in the art to have bodily incorporated the URL or "recipient identifier" of Smith into a URL of Saffer, I would note that "The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference . . . Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

Petitioner further argues that claims 2 and 6–8, which depend from claim 1, are unpatentable under 35 U.S.C. § 103(a) over Namias, PC Magazine, Saffer, and Smith and claim 3 is unpatentable under 35 U.S.C. § 103(a) over Namias, PC Magazine, Saffer, Smith, and Ford. Pet. 49–54. I agree. Patent Owner does not provide additional arguments in support of claims 2, 3, and 6–8 or arguments with respect to Ford.

The above discussion addresses all the claims on appeal and are dispositive, rendering it unnecessary to reach the propriety of any remaining contentions. *See Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423 (Fed. Cir. 1984); *see also Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999). *See also In re Gleave*, 560 F.3d 1331, 1338 (Fed. Cir. 2009).

Hence, I would conclude that Petitioner has demonstrated by a preponderance of the evidence that the challenged claims are unpatentable for at least the reasons set forth in the concurrence.

MOTION TO AMEND

I join the majority in its ultimate denial of Patent Owner's motion to amend. I write separately to provide logical reasoning supporting this denial.

Patent Owner filed a contingent motion to substitute claims 1 and 2 with proposed claims 34 and 35, respectively, if claim 1 is found unpatentable. Paper 19.

Regarding Petitioner's proposed obviousness challenge of proposed claims 34 and 35, Patent Owner argues that Namias and Saffer fail to disclose "header information having a recipient identifier," as recited in substitute claim 34 (corresponding to original claim 1). Paper 19, 14. Hence, Patent Owner argues that Namias and Saffer fail to disclose "the identifier of a recipient being part of a header information," as recited in claim 34 (and original claim 1). This issue was previously addressed. For example, as Petitioner previously explained, Namias discloses a "recipient's email address" corresponding to the claimed "identifier of a recipient." Pet. 23. I am not persuaded by Patent Owner's argument.

Patent Owner argues that Namias and Saffer fail to disclose "message content having text" and Namias fails to "permit a user to enter message content with 'text,' as recited in substitute claims 34–35." Paper 19, 14. Claim 35 recites "message content includes a text." I am not persuaded that Namias and Saffer fail to at least suggest this feature. Namias discloses that message content "traditionally" included "text messages," that "any type of digital information" was "capable of" being transmitted" "including digital audio, graphics, and video," and further explains the goal of including "video clips and messages on the Internet" and "video communication" to

"expand" "network capabilities" "as a method of personal communication." Ex. 1003 ¶¶ 6–9. Given that transmitting message content with "text messages" was already known and practiced in the art and that the goal of Namias is to "expand" methods of "personal communication" by *including* additional forms of message content, such as "video communication," it would have been obvious to one of skill in the art to have transmitted message content including any known form of data such as "video communication" or "text."

Even assuming that Namias does not explicitly disclose that the "video" being transmitted must include "text," given that it was previously known to transmit "text" in message content and the desire to "expand" (and not limit) communication capabilities, it would have been obvious to *include* additional known forms of message content (i.e., add video) and not to have *excluded* known forms of message content (which would defeat efforts to "expand" communication capabilities).

Saffer further confirms that it would have been obvious to one of ordinary skill in the art to include video in message content and not to exclude previous forms of message content (such as text). For example, Saffer discloses a system "in which a user can send . . . full-motion video and audio . . . , along with (if desired) the text messages to an e-mail recipient." Ex. 1004, Abstract. In other words, Saffer confirms that it would have been known to one of ordinary skill in the art that message content may include different types of content, including video or text (or audio).

Patent Owner argues that "Saffer displays both [header information and message content] simultaneously" and "does not separately transmit header information and message content with text (as per claims 34–35)."

Paper 19, 15. As previously discussed, I am not persuaded by Patent Owner that the combination of Namias and Saffer fails to disclose transmitting header information (e.g., an identifier of a recipient) and message content separately or that message content may include text. See previous discussion above.

Patent Owner argues that "Saffer fails to disclose a 'correlation' that neither identifies a recipient and is not message content as per substitute claim 35." Paper 19, 15. As previously discussed, I disagree with Patent Owner that the combination of Namias, Saffer, and Smith fails to disclose a "correlation." To the extent that Patent Owner now argues that Saffer alone fails to disclose a "correlation," I note that the proposed ground of unpatentability is based on the combination of Namias, Saffer, and Smith and not on Saffer in isolation.

Petitioner argues that claim 35 (and claim 34 from which claim 35 depends) is also unpatentable over the combination of Namias, PC Magazine, Saffer, Smith, Frey, [25] and Sadun.[26] Paper 23, 12–23. Claim 35 recites message content includes a text, and the text is not displayed via the second display. Petitioner argues, for example, that Namias discloses a "first display," that Frey discloses "capture of an image" and "allows a text message banner to be added to the captured image," and that Sadun discloses "that superimposing text onto a video was a basic video-editing technique that had been offered by existing commercial software." Paper 23, 13–15 (citing Frey 6:3–7:6, Ex. 1053, Fig. 7.13, 24, 36, 37).

[25] WO 00/58850, Published October 5, 2000 (Exhibit 1052, "Frey").
[26] Sadun, Erica, "Digital Video Essentials," 2003 (Exhibit 1053, "Sadun").

Petitioner further argues that it would have been obvious to one of ordinary skill in the art to have combined the teachings of Namias, Frey, and Sadun because "Namias, Frey, and Sadun are all analogous references" and because "[t]he combination would have predictably resulted in [a] messaging system . . . [that] allow[s] text to be overlaid onto the video (or picture) message content." Paper 23, 16. Petitioner further argues that it would have been obvious to one of ordinary skill in the art to have combined the teachings of Namias, Frey, and Sadun to achieve various benefits (e.g., "make for a more compelling and powerful message," "add humor to the sender's message," or "market forces . . . [to] adapt a text overlay feature"). Paper 23, 17–18.

Patent Owner argues that it would not have been obvious to one of ordinary skill in the art to have combined the known feature of providing header information and a media component in first and second displays that are not displayed at the same time (e.g., Namias) and the known feature of providing text in the media component (e.g., Frey, Sadun, or Namias) to achieve the predictable and expected result of "allowing text to be overlaid onto the video (or picture) message content" because, according to Patent Owner, such a combination "flies in the face of the alleged 'simplicity' . . . [alleged to be] motivation." Paper 27, 6. However, contrary to Patent Owner's contention, demonstrating obviousness of combining references does not require a showing of "simplicity" of the combination of references.

In addition, even assuming that "simplicity" is somehow required, as Petitioner points out, "the banner in Frey is 'text' message content that gets superimposed on the . . . image" (Paper 23, 14) and "Sadun makes clear that superimposing text onto a video was a basic video-editing technique that had

been offered by existing commercial software." Paper 23, 14–15. Petitioner and Patent Owner do not indicate that Frey also discloses that superimposing "text" on message content is "complex" (or not "simple"). Nor does Sadun disclose that a "basic video-editing technique" of "superimposing text onto a video" was "complex" (or not "simple"). One of skill in the art would have understood that a "basic" technique would not have been overly "complex" in relation to the level of skill in the art, the technique being "basic."

Patent Owner argues that it would not have been obvious to one of ordinary skill in the art to have combined the teachings of Frey or Sadun with those of Namias because there is "nothing in Namias regarding the inclusion of any textual messages" and that "adding text emphasizes Petitioner's hindsight-driven approach." Paper 27, 6. I am not persuaded by Patent Owner's argument at least because Petitioner relies on the combination of Namias and Frey or Sadun and not on Namias in isolation. Also, as noted above, Namias discloses that transmitting text messages was known in the art. *See, e.g.*, Ex. 1003 ¶ 6 (". . . traditionally used for text messages, e-mail is capable of transferring any type of digital information, including digital audio, graphics, and video").

Patent Owner argues that Frey fails to disclose "separate transmissions." Paper 27, 7–8. However, Petitioner bases the proposed ground of unpatentability on the combination of Namias, Frey, and Saffer (among other references) and not on Frey in isolation. I am not persuaded by Patent Owner's argument.

Hence, I agree with Petitioner that proposed claims 34 and 35 are unpatentable under 35 U.S.C. § 103 as obvious over Namias, PC Magazine, Saffer, and Smith with or without the combination of Frey and/or Sadun.

In addition, Petitioner argues that proposed claim 35 recites "message content," which lacks antecedent basis. Paper 23, 5–11. As Petitioner points out, claim 34 recites a message content and claim 35, which depends from claim 34 recites "message content." In the absence of antecedent basis, the "message content" recited in claim 35 may or may not be the same "message content" recited in claim 34. I would agree with Petitioner that "message content," as recited in claim 35 lacks antecedent basis.

In addition, claim 34 recites that the identifier of a recipient and the message content including a media component each including a correlation. Hence, claim 34 recites that the identifier of a recipient includes a correlation and the message content also includes a correlation. Claim 35, which depends from claim 34 recites "said correlation." It is unclear to which correlation recited in claim 34 "said correlation" of claim 35 refers.

For at least these reasons, I would also agree with Petitioner that claim 35 is unpatentable under 35 U.S.C. § 112, second paragraph as indefinite.

The above discussion addresses all the claims subject to Patent Owner's Motion to Amend and are dispositive, rendering it unnecessary to reach the propriety of any remaining proposed grounds. *See Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423 (Fed. Cir. 1984); *see also Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999). *See also In re Gleave*, 560 F.3d 1331, 1338 (Fed. Cir. 2009).

Hence, I would deny Patent Owner's motion to amend for at least the reasons set forth in the concurrence.

For PETITIONER:

Heidi Keefe
Andrew Mace
COOLEY LLP
hkeefe@cooley.com
amace@cooley.com

For PATENT OWNER:

Michael Heim
Blaine Larson
HEIM PAYNE & CHORUSH, LLP
mheim@hpcllp.com
blarson@hpcllp.com

Douglas Wilson
ARMOND WILSON LLP
doug.wilson@armondwilson.com

Jamie Gallagher
BIRCH TREE IP LAW & STRATEGY PLLC
jamie@birchtreeip.com