

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

WHATSAPP INC. and FACEBOOK, INC.,
Petitioner,

v.

TRIPLAY, INC.,
Patent Owner.

Case IPR2015-00740
Patent 8,332,475 B2

Before BENJAMIN D. M. WOOD, BRIAN J. McNAMARA, and
FRANCES L. IPPOLITO, *Administrative Patent Judges*.

IPPOLITO, *Administrative Patent Judge*.

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

I. INTRODUCTION

WhatsApp Inc. and Facebook, Inc. (collectively “Petitioner”) filed a Petition on February 14, 2015, requesting an *inter partes* review of claims 1, 6, 9, 12, 17, 18, 23, 28, 37, and 39–42 of U.S. Patent No. 8,332,475 B2 (Ex. 1001, “the ’475 patent”). Paper 1 (“Pet.”). Patent Owner, TriPlay Inc., filed a Preliminary Response to the Petition on May 26, 2015 (Paper 12, “Prelim. Resp.”).

Based on these submissions, we instituted trial as to claims 1, 6, 9, 12, 17, 18, 23, 28, 37, and 39–42 of the ’475 patent on the following grounds:

Reference(s)	Basis	Claim(s) Challenged
Coulombe ¹	§ 103	1, 12, 23, 37, 39, and 41
Coulombe, Druyan, ² and Tittel ³	§ 103	6, 9, 17, 18, 28, 40, and 42

Paper 13 (“Dec. on Inst.”). In our Decision on Institution, we observed that after the filing of the Petition and the Preliminary Response, the United States Court of Appeals for the Federal Circuit issued an opinion in *Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2016) (en banc in relevant part), “which modified the law regarding when to treat a claim recitation as a means-plus-function element under 35 U.S.C. § 112, ¶ 6.” Dec. on Inst. 8 n.4. Additionally, we instructed the parties that

[a]t the initial conference call scheduled on the date indicated in the accompanying Scheduling Order, the parties should be

¹ U.S. Patent App. Pub. No. 2003/0236892 A1, published. Dec. 25, 2003 (Ex. 1003, “Coulombe”).

² US Patent No. 6,928,617 B2, issued Aug. 9, 2005 (Ex. 1004, “Druyan”).

³ Ed Tittel et al., *More HTML for Dummies* (2d ed. 1997) (Ex. 1005, “Tittel”).

prepared to discuss the impact of *Williamson* on this proceeding, including whether the terms “media block” and “access block” of claims 1 and 39, and “block” of claims 9 and 40 of the ‘475 patent should be interpreted as means-plus-function limitations pursuant to 35 U.S.C. 112, sixth paragraph. *See Williamson* at *6–7. The parties also should be prepared to discuss whether additional briefing on the matter is warranted, and, if so, an appropriate briefing schedule.

Id. After the initial conference call on September 24, 2015, our Order summarizing the call noted that

[t]he Scheduling Order requested that the parties come to the initial conference prepared to discuss whether certain terms, such as “media block” and “access block” should be treated as means-plus-function limitations in view of *Williamson v. Citrix Online, LLC*, No. 2013-1130, 2015 WL 3687459 (Fed. Cir. June 16, 2015) (en banc in relevant part). Paper 14, 2–3. During the conference, the parties advised us that they had conferred and were prepared to stipulate that the claims do not recite means-plus-function limitations. **Noting that we may not agree with their conclusion, we asked the parties to address the constructions and the impact of *Williamson* in the Patent Owner Response and the Petitioner Reply.**

Paper 23, 5 (emphasis added). After institution, Patent Owner filed a Patent Owner’s Response (Paper 33, “PO Resp.”), and Petitioner filed a Reply (Paper 39, “Pet. Reply”).

An oral hearing was conducted on May 19, 2016. A transcript of the oral hearing is included in the record. Paper 60 (“Tr.”).

This decision is a Final Written Decision under 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73 as to the patentability of claims 1, 6, 9, 12, 17, 18, 23, 28, 37, and 39–42. For the reasons discussed below, Petitioner has demonstrated by a preponderance of the evidence that claims 1, 6, 9, 12, 17, 18, 23, 28, 37, and 39–42 of the ‘475 patent are unpatentable.

A. Related Proceedings

Petitioner indicates that the '475 patent is the subject of a pending United States District Court proceeding captioned *TriPlay, Inc. et al. v. WhatsApp Inc.*, Case No. 1:13-cv-1703-LPS (D. Del. Oct. 15, 2013). Pet. 1. Further, related patent U.S. Patent No. 8,874,677 B2 is the subject of Petitions in IPR2016-00717 and IPR2016-00718.

B. The '475 Patent

The '475 patent is directed generally to electronic messaging between communication devices. Ex. 1001, Abstract. More specifically, the '475 patent describes converting and or adapting formats/layouts of messages to be sent between an origination device and a destination device. *Id.* Referring to Figures 1 and 5, the '475 patent describes messaging system 16 as including access block 21 and media block 23. *Id.* at 12:62–65; 16:18–27. Access block 21 may include users' gateway 211 and third-party applications' gateway 214 that support communication with communication devices and third party applications via corresponding networks. *Id.* at 13:4–7; Fig. 2. For sending a message from an originating device to a destination device, the '475 patent describes media block 23 “configured to select the format and message layout fitting to the destination device and to convert the message accordingly before facilitating its delivery to the destination device.” *Id.* at 16:24–27. Converting includes transcoding the message format and/or adapting the message layout. *Id.* at 16:28–30. Message manager 231 is configured to provide layout adaptation and/or repackaging. *Id.* at 34–37.

As an example of operation, Figure 6 is reproduced below.

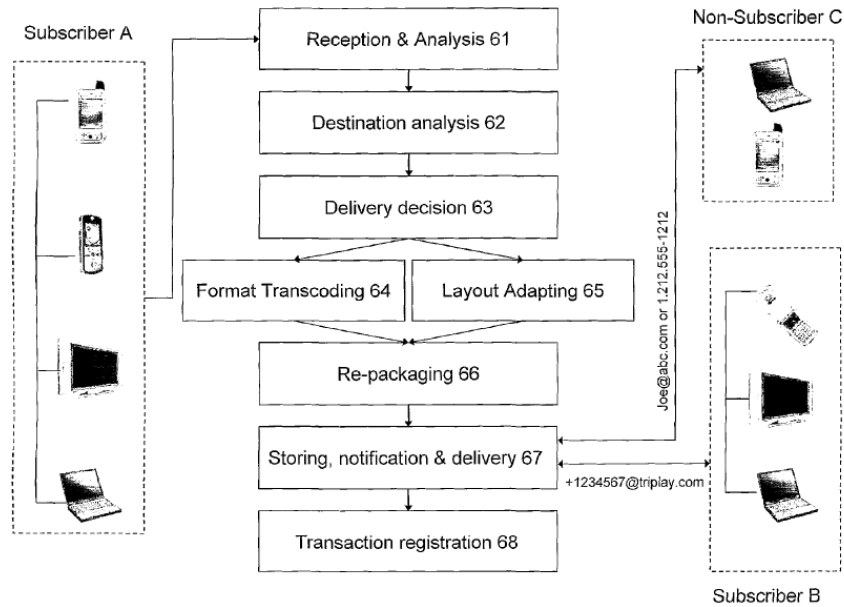


Figure 6

Figure 6 shows a generalized flow diagram of operating messaging system 16. *Id.* at 16:17–19. Messaging system 16 is connected with networks 13, 14 and/or 15 illustrated in Figure 1 in a manner that the message communication originated by the subscriber and/or designated to the subscriber shall pass through messaging system 16. *Id.* at 16:41–46. As shown in Figure 6, Subscriber A composes a message at one of the communication devices assigned and sends the message to Subscriber B and Non-subscriber C. *Id.* at 16:46–49. As the message is originated by the subscriber, it will be re-addressed to messaging system 16. *Id.* at 16:49–51. Messaging system 16 receives the message and analyzes 61 originating and destination addresses comprised in the message. *Id.* at 16:51–53.

If it is found that the destination device is assigned to a subscriber (e.g., per domain name assigned to the subscribers, IP address or other device attribute stored in the database, etc.), the system decides 62 on the destination device, and takes a delivery decision 63 accordingly. Ex. 1001, 16:53–58. The delivery decision comprises delivery instructions with regard

to destination device(s) and/or content and/or format and/or layout of the message to be delivered. *Id.* at 16:63–17:4. In accordance with the delivery decision, the system provides transcoding of the message format 64 and/or adapting layout 65 and appropriate repackaging 66 if necessary (for example, if limitations by communication media and/or destination device, and/or DRM-related instructions or other reasons require deleting or replacing some of the media items comprised in the message). *Id.* at 17:6–12. The converted message and/or notification thereof are delivered 67 to the destination device, and the transaction is registered 68 in the system. *Id.* at 17:13–15. The described process may be provided in a similar manner for several destination devices. *Id.* at 17:16–20.

As another example, Figure 9 is reproduced below.

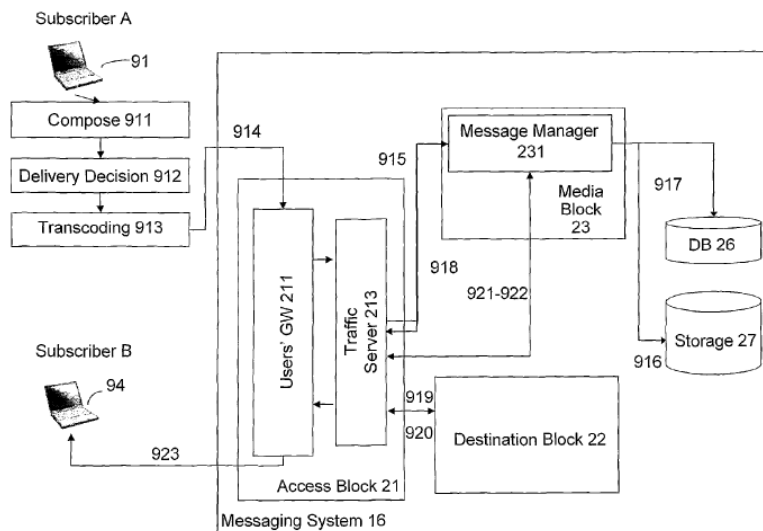


Figure 9

Figure 9 shows a generalized flow diagram of messaging between two subscribers wherein originating device 91 is a PC supporting synchronized multimedia messages and destination device 94 is a PC supporting plain messages only. Ex. 1001, 19:4–8. Subscriber A composes 911 a synchronized multimedia message at originating device 91 to be sent to

subscriber B. *Id.* at 19:8–10. A client at the originating device may be configured to obtain availability information from the messaging system and/or other platform(s), and request the messaging system for information with regard to Subscriber B preferences and/or results of preferred destination device calculations; the messaging system may be configured to provide such information to the client. *Id.* at 19:16–23.

After the client obtains information with regard to the destination device, it takes delivery decision 912 and provides the appropriate transcoding 913, matching (fully or partly) the message to the capabilities of destination device 94 and the communication media. *Id.* at 19:24–28. The converted message is uploaded 914 to messaging system 16 and received via user's gateway 211. *Id.* at 19:28–29.

The '475 patent further describes the use of

a template-based message, said template characterized by at least [a] unique identifier and an initial layout, wherein the system [is] further configured to recognize the unique identifier of the template, and . . . is further configured to adapt, before transmitting, the initial layout of the message in accordance with the recognized unique identifier and displaying capabilities of the destination communication device.

Ex. 1001, 6:5–12.

C. Illustrative Claim

Of the challenged claims, claims 1, 9, 12, 17, 23, 28, 37, 39, 40, 41, and 42 are independent. Claims 1 and 42, reproduced below, are illustrative of the subject matter of the '475 patent:

1. A system for message communication via a communication media between one or more originating communication devices assigned to a sender and one or more destination communication devices assigned to a receiver, the system comprising:

a) an access block configured to receive, directly or indirectly, from at least one originating communication device a message having initial characteristics comprising, at least message format and an initial message layout, and to transmit the message to at least one destination communication device;

b) a media block operatively coupled to said access block and configured to select, before transmitting, at least one message format and a message layout for each of the at least one message formats fitting to each of said at least one destination device, and to then convert at least said initial message layout to the selected message layouts, said selection and conversion being done in accordance with at least one criterion selected from a group comprising:

i) criterion related to message communication capabilities of the destination communication device with regard to message communication capabilities of the originating communication device;

ii) criterion related to message displaying capabilities of the destination communication device with regard to message communication capabilities of the originating communication device; and

iii) criterion related to the communication media.

42. A method of message communication via a messaging system between one or more originating communication devices and one or more destination communication devices, the method comprising:

a) before delivery to a destination communication device, obtaining by the messaging system, a message characterized, at least, by a message format and an initial message layout in the form of a template, said template characterized by at least unique identifier;

b) obtaining information related to said unique identifier; and

c) before delivery to the destination communication device, selecting at least one message format and a message layout for at least one message formats fitting to each of said at least one destination device, and converting the initial layout of the message to the selected message layout, said selection and conversion being done in accordance with at least one

predefined layout corresponding to said unique identifier and to displaying capabilities of the destination communication device.

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are given their broadest reasonable construction in light of the Specification of the patent in which they appear. See 37 C.F.R. § 42.100(b); *Office Patent Trial Practice Guide*, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131 (2016) (concluding the broadest reasonable construction “regulation represents a reasonable exercise of the rulemaking authority that Congress delegated to the Patent Office.”).

1. Block Terms (claims 1, 6, 9, 39, and 40)

By way of background, several of the challenged claims recite the term “block,” “access block,” and/or “media block,” which we refer to collectively as “block terms.” For example, claim 9 provides in its entirety

[a] **block** configured to obtain a message having a layout based on a template, said message characterized, at least, by a message format and an initial message layout and to be communicated between one or more originating communication devices assigned to a sender and one or more destination communication devices assigned to a receiver, said template characterized by at least a unique identifier, wherein said block is further configured to obtain information related to said unique identifier, and to select a message layout and convert the initial layout of the message to the selected message layout in accordance with at least one predefined layout corresponding to said unique identifier and displaying capabilities of the destination communication device before the message is transmitted.

Emphasis added. In the Petition, Petitioner provides constructions for “access block,” “media block,” and “block,” but does not argue these terms are means-plus-function limitations. Pet. 13–15. Nonetheless, in the Petition, Petitioner reserves the right to argue that the “block” terms are “governed by 35 U.S.C. § 112(f) using the different claim construction standards applicable in litigation.” *Id.* at 13–14 n. 3.

Given that the *Williamson* decision issued *after* the Petition and Preliminary Response were filed, we instructed the parties to address the impact of the *Williamson* decision on the claim construction of the “block” terms recited in the challenged claims. Dec. on Inst. 8 n. 4; see Paper 14, 2–3. At the initial conference, the parties proposed to stipulate that the “block” terms are *not* means-plus-function limitations. Paper 23, 5. At that same conference, we reminded the parties that we may not agree with their proposed construction and, further, instructed the parties to “address the constructions [of the “block” terms] and the impact of *Williamson* in the Patent Owner Response and the Petitioner Reply.” Paper 23, 5; Tr. 14:2–15.

Contrary to our express instructions, neither party has meaningfully addressed the *Williamson* decision or the construction of the “block” terms in the Patent Owner’s Response or Petitioner’s Reply. The Petitioner’s Reply is entirely silent on this issue. See Pet. Reply; Tr. 14:16–19. While the Patent Owner’s Response offers more, in the form of a *single* footnote citing several paragraphs of Dr. Surati’s testimony, the Patent Owner’s Response also relies on the parties’ stipulation that the “block” terms are not means-plus-function limitations. See PO Resp. 25 n.1; See Tr. 27:18–28:14.

Based on the complete record, we consider the parties’ “stipulation” to be nonresponsive to the instructions provided in our Order to “address the constructions [of the “block” terms] and the impact of *Williamson* in the

Patent Owner Response and the Petitioner Reply.” Paper 23, 5. At the oral hearing, Petitioner stated

for the purposes of this proceeding, the parties stipulated that, in fact, could be read as its broadest reasonable interpretation to include that hardware and software. Again, it’s for *efficiency* as well to make sure that these claims can be determined together, rising and falling based on the prior art that’s at issue here because otherwise we would have a situation where some claims, because they didn’t use the word “block,” would be before the Court here and other claims would not and would have to simply be sent back down to the District Court.

Tr. 10:13–20 (emphasis added). Although “efficiency” is certainly a consideration in an *inter partes* review, we do not agree with the parties that a “stipulation” in our circumstances complied with the instructions in our Order. See Paper 23, 5. Moreover, we note that, in general, a party’s refusal (in this case repeated refusal) to comply with our instructions not only hampers our ability to develop a clear record, but demonstrates an abject disregard for the rules by which the Board seeks to conduct a just, speedy, inexpensive, and fair review.

Nonetheless, having considered the entire record, we determine that the terms “access block,” “media block,” and “block” (recited in claims 1, 6, 9, 39, and 40) do not require our express determination of whether these terms are means-plus-function limitations for the purposes of this Decision. The *Williamson* decision overruled cases that previously stated the absence of the word “means” in a claim term established a heightened “strong” presumption that § 112 ¶ 6 did not apply. *Williamson*, 792 F.3d at 1348–49. Nevertheless, a presumption still applies to non-means terms and the Federal Circuit has instructed that it “will apply the presumption as we have done prior to *Lighting World*, without requiring any heightened evidentiary

showing and expressly overrule[s] the characterization of that presumption as ‘strong.’” *Id.* at 1349. On the facts before us, neither party has attempted to rebut this presumption with regard to the “block” terms recited in claims 1, 6, 9, and 40. Moreover, to the extent that either party has addressed the construction of these terms, Patent Owner, at least, included the following single footnote in its Patent Owner’s Response:

The Board did ask the parties to be prepared to address during the initial conference call “whether the terms ‘media block’ and ‘access block’ of claims 1 and 39, and ‘block’ of claims 9 and 40 of the ‘475 patent should be interpreted as means-plus-function limitations pursuant to 35 U.S.C. 112, sixth paragraph.” Prior to the initial conference call, the parties stipulated that, under the broadest reasonable interpretation, these terms should not be construed as means-plus-function limitations, but rather they should be defined consistent with the constructions proposed by Petitioner in the Petition. Indeed, as set forth in the accompanying Declaration of Dr. Surati, a POSITA would understand that the terms “media block” and “access block” are structural elements. (Dr. Surati Decl. ¶¶ 96-104).

PO Resp. 25 n.1. With regard to Dr. Surati’s declaration, we observe that he testifies that a person having ordinary skill in the art would understand “block” to refer to “specially constructed hardware or selectively activated or reconfigured general purpose computers.” Ex. 2002 ¶ 99. Dr. Surati further testifies that the Specification of the ’475 patent describes the “component descriptions and relationships of ‘access block and ‘media block.’” *Id.* ¶ 102 (citing Ex. 1001, 13:4–7, 13:17–18, 14:45–55, 14:59–62, 16:21–39, Figs. 3, 6–10). Dr. Surati additionally testifies that Figure 8 of the ’475 patent describes the manner in which the components perform claimed functions. *Id.* ¶ 103. Additionally, in addressing claim construction at the oral hearing, Patent Owner referred to the passages quoted and cited in Dr.

Surati's declaration. Tr. 25:1–26:10. Thus, based on the entire record in this proceeding, neither party has argued or otherwise provided evidence to rebut the presumption that “block” is not a means-plus-function limitation.

Further, we determine that the structures of these “block” terms are not in dispute among the parties. With regard to its unpatentability challenges, Petitioner points to the software and hardware disclosed in Coulombe, Druyan, and Tittel as teaching or suggesting the “access block,” “media block,” and “block” limitations recited in the challenged claims. See Pet. 21 (“The ‘access block’ in Coulombe corresponds to the ‘SIP Proxy/Registrar’ (12) shown in Figure 1, above. The SIP Proxy/Registrar (12) is a combination of hardware (one or more servers) and software. (Coulombe, ¶ 0092 (‘The software is written in C and runs under Linux OS.’), ¶ 0093 (‘SIP proxy/registrar servers’)); *see id.* at 23–33 (relying on Coulombe’s disclosure of a Message Adaptation Engine as teaching a “media block.”). In its response, Patent Owner does not argue that the cited references fail to teach the structure required by the “block” terms, but, instead contends that the identified components in the references (e.g., Coulombe’s Message Adaptation Engine) lack the functionality required by claims 1, 6, 9, and 40. See PO Resp. 33–35 (arguing that Coulombe’s Message Adaptation Engine does not “select” a format and layout).

Additionally, we observe that while the structures of the “block” terms are not in controversy in our proceeding, the opposite is true in the related district court matter. After the oral hearing in this proceeding took place on May 19, 2016, Patent Owner requested the opportunity to “formally inform” the Board of a “Report and Recommendation” (Ex. 3001) issued in the related district court proceeding currently pending in the United States District Court for the District of Delaware. Patent Owner’s request is

unnecessary because we are aware of the related district court matter, as indicated by Patent Owner's Mandatory Notices and our discussion at the oral hearing. Paper 7, 2; Tr. 24–26; see Ex. 3001. Nonetheless, our review of the Report and Recommendation does not change our determination based on the record in our proceeding. In particular, Judge Burke noted that in the district court

[b]oth parties devoted substantial portions of their briefing to the question of whether means-plus-function claiming has been invoked here; WhatsApp argues that Section 112, paragraph 6 applies to both “block” terms (“access block” and “media block”), and TriPlay argues that it does not. In light of the fact that Section 112, paragraph 6 was addressed so substantially by both sides, and because the legal analysis regarding that issue helps to demonstrate why the relevant claim terms are not indefinite, the Court will undertake the Section 112, paragraph 6 analysis first here. *See Intellectual Ventures I, LLC v. Canon Inc.*, Civ. No. 13-473-SLR, 2015 WL 307868, at *2 (D. Del. Jan. 23, 2015) (analyzing a claim term to determine whether Section 112, paragraph 6 had been invoked, finding that the patent described sufficient structure such that the paragraph did not apply, and then explaining that the Court's analysis of that issue also demonstrated why the “description provided by the claims and specification [was] also sufficient” to not be indefinite pursuant to Section 112, paragraph 2).

Ex. 3001, 9 n.6 (emphases added). In contrast to the record in the district court, our record in this *inter partes* review does not contain a “substantial” discussion of Section 112, paragraph 6 by either party, particularly in relation to the patentability challenges before us. Moreover, our proceeding does not include the challenges based on 35 U.S.C. §§101, 112 (indefiniteness) that are central to the dispute in the district court. Ex. 3001, 2–4, 18–19, 25. Further, the parties have had ample notice of claim construction issues from the start of this *inter partes* review. Dec. on Inst. 8

n.4; Paper 23, 5. Each party has had several opportunities to present its position on claim construction in this proceeding, including the opportunity to present arguments here that may have been provided in the district court litigation. Our record in this proceeding is not the record in the district court, which there includes “substantial” briefing of a claim construction dispute that does not exist here. Accordingly, for the purposes of this Decision, we need not construe these “block” terms expressly as means-plus-function limitations or otherwise. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (holding that only those terms that are in controversy need to be construed, and only to the extent necessary to resolve the controversy).

2. *Template (claims 6, 9, 17, 18, 28, 40, and 42)*

Our Decision on Institution did not construe the claim term “template.” Pet. 15. In the Petition, Petitioner proposes that the claim term “template” means “any kind of predefined user interface related to content and/or layout of transmitted and/or received message.” Pet. 15 (emphasis omitted). In response, Patent Owner argues that the predefined user interface of a “template” includes visually displayed interface consisting of actual data elements of interest and not just the fonts or colors to apply to the elements in an HTML document. PO Resp. 36–37. Patent Owner further argues that the ’475 patent teaches that a template comprises pre-existing text, and/or spaces to be filled and/or media items and/or menu elements. *Id.* at 37. In its Reply, Petitioner asserts that Patent Owner’s construction is too narrow and the ’475 patent does not require a visual display or actual content. Pet. Reply 12–13.

Upon review of the complete record, Petitioner’s arguments are persuasive. The ’475 patent teaches that the term “‘message template’ used

in this patent specification should be expansively construed to include ***any kind of predefined user interface related to content and/or layout*** of transmitted and/or received message.” Ex. 1001, 11:8–11 (emphasis added). Referring to Tables 1 and 2, the ’475 patent provides non-exhaustive examples of templates, which include templates containing pre-defined content or pre-defined layouts. *Id.* at 19:49–20:14, 21:21–22:12 (Tables 1–2). Further, the ’475 patent indicates that “typically” the template may include “pre-existing text, and/or spaces to be filled and/or media items and/or menu elements and/or buttons and/or checkboxes to be filled/selected,” but does not limit the term “template” to a visually displayed interface having actual data elements of interest. Thus, under the broadest reasonable construction, we determine that “template” means “any kind of predefined user interface related to content and/or layout of transmitted and/or received message.”

3. “*selecting*” a message layout (claim 12, 17, 37, 41, and 42);
“*select*” message format and a message layout”(claim 1, 9, 28, 39, and 40)

We did not construe this term for the purposes of the Decision on Institution. *See generally* Dec. on Inst. After institution, Patent Owner proposes in its Patent Owner Response that the term “select” should be construed to mean “to pick out as a choice among several.” PO Resp. 26. Patent Owner adds that in the context of the media block, “selecting” requires “picking a format and layout from a *fixed set of choices*.” *Id.* at 28. At the oral hearing, Patent Owner further clarified that the “construction could just as easily be making a selection from a set of choices.” Tr. 33:11–12. In its Reply, Petitioner argues that “select” should be construed to mean “decide” or “determine” and does not require selection from a fixed set of

choices. Pet. Reply 4. Our discussion below refers to claim 12 as illustrative of the same term used in the other challenged claims.

Based on the complete record, we determine that the term “select” when applied to the selection of a message layout/format means “determine.” Petitioner argues persuasively that the ’475 patent describes the selection of a message layout or format by determining the layout or format using information received in the incoming message. Specifically, the ’475 patent discloses that the message system receives a message and makes a delivery *decision* based on information, such as metadata, received with the message. Ex. 1001, 16:51–17:1. The delivery decision includes “delivery instructions with regard to destination device(s) and/or content and/or format and/or layout of the message to be to be delivered.” *Id.* at 16:63–65. The delivery instructions may be received with and extracted from the message. Similarly, with regard to Figure 8, the ’475 patent teaches that the message manager receives a message, and queries the originating and destination devices to obtain delivery instructions that provide the message format and layout, which match the destination device or client. *Id.* at 18:31–45. In this manner, the described system does not select a layout/format from a fixed set of layout/format choices, but determines the format/layout based on information provided in delivery instructions.

Additionally, we agree with Petitioner that the term does not require ***fixed*** choices. Pet. Reply 5–6. Patent Owner relies on a particular embodiment of the ’475 patent where delivery instructions issued by the messaging system are based “on pre-defined rules and parameters (e.g., in a form of a look-up table).” PO Resp. 27 (citing Ex. 1001, 21:8–12). However, as Petitioner points out, the ’475 patent teaches that a “pre-defined

layout” may be “further pre-defined in accordance with information to be obtained with regard to certain filled field, format of selected media items, etc.” Ex. 1001, 21:5–8. Even in the context of a “pre-defined layout,” the layout is not fixed or static, and further allows for the determination of a layout based on information contained in the message.

Furthermore, our construction is consistent with the ’475 patent’s use of the term in the written description and claims. For example, Petitioner observes that the term “select” can be used to mean making a choice from a limited set of options when applied to a “group” of options. Pet. Reply 8. Specifically, Petitioner argues that

a subsequent limitation in claim 1 recites conversion of the message “in accordance with at least one criterion selected from a group comprising,” followed by three identified criteria. (’475, 23:23-34 (emphasis added).) This language would have indicated to a person of ordinary skill in the art that the applicant knew how to use the verb “select” in the narrower context of choosing from a limited set of options. (Klausner Reply Decl., ¶ 17.)

Id. In other words, the use of “select” in connection with a limited set of options includes the options for selection from the “group.” However, in contrast, no such set of options is recited in the claim language when a message layout/format is selected. This distinction in the use of the term “select” is further supported by other occurrences of the term in the written description, which provides, for example, that subscribers may “select” between options such as “Yes/No” buttons and media items. Ex. 1001, 20:21–24, 20:32–33. In this context, the options are provided to indicate a limited set of choices.

Moreover, we are not persuaded by Patent Owner’s extrinsic evidence in the form of Dr. Surati’s reliance on dictionary definitions of “select.” Ex.

2002 ¶ 81. In particular, when read with the entire claim language at issue, the term “selecting” a message layout requires an open-ended operation that is based on the capabilities of the destination communication device, which could be contained in the delivery instructions received in the incoming message. *See* Ex. 1001, 16:63–17:1. This is supported by the language of the claim, which, for example, in claim 12, provides that the selected message layout is based on at least one of the “criterion,” but does not limit the selection of the layout to a choice of a limited set of layouts. *Id.* at 24:64–25:10; *cf. PODS, Inc. v. Porta Stor, Inc.*, 484 F.3d 1359, 1366 (Fed. Cir. 2007) (where the Court found POD did not provide any persuasive evidence that a claim term appearing in different portions of the claims should be construed differently).

Accordingly, we determine that, as used in these claims, the term “select” means “determining.”

4. *Pre-defined layout (claims 6, 9, 17, 18, 28, 40, and 42)*

We did not construe this term for the purposes of the Decision on Institution. *See generally* Dec. on Inst. After institution, Patent Owner proposes, in its Patent Owner Response, that the term “pre-defined layout” should be construed to mean “a layout that is defined prior to the receipt of message for delivery to a destination communication device.” PO Resp. 29. Patent Owner argues that the pre-defined layout cannot be “generated on the fly” by the messaging system after receipt of an incoming message, because these layouts are selected based upon predefined rules and parameters based upon look-up tables. *Id.* at 29–30 (citing Ex. 1001, 21:1–12; Ex. 2002 ¶ 91). In its Reply, Petitioner asserts that Patent Owner’s proposed construction is too narrow because the ’475 patent teaches that the “pre-defined layout” does not have to be “pre-defined” before receiving the message. Pet. Reply

14–15 (citing Ex. 1001, 21:1–8). Petitioner proposes that the correct interpretation of “predefined layout” is “a layout that is created or defined prior to being used.” Pet. Reply 15 (citing Ex. 1002 ¶¶ 118–119).

Petitioner’s position is persuasive. As Petitioner observes, the ’475 patent provides that

for template-based messaging the delivery instructions with regard to layout of the message are based on predefined layout of message matching to template unique identifier and capabilities of destination decide. **The layout may be further predefined in accordance with information to be obtained with regard to certain filled field, format of selected media items, etc.**

Ex. 1001, 21:1–8 (emphasis added). With regard to this specific disclosure, Dr. Surati further confirmed, under cross-examination, that the ’475 patent teaches that the message layout would not necessarily be known until after the message is received because layout is based on information contained in the message. Ex. 1014, 61:2–18, 62:1–11. Thus, based on the entire record, we construe “pre-defined layout” as “a layout defined prior to being used.”

B. Claims 1, 12, 23, 37, 39, and 41 — Obviousness over Coulombe (Ex. 1003)

1. Relevant Legal Principles

A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level

of skill in the art; and, (4) where in evidence, so-called secondary considerations, including commercial success, long-felt but unsolved needs, failure of others, and unexpected results. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966) (“the *Graham* factors”). The level of ordinary skill in the art usually is evidenced by the references themselves. See *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978). For an obviousness analysis, prior art references must be “considered together with the knowledge of one of ordinary skill in the pertinent art.” *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994) (quoting *In re Samour*, 571 F.2d 559, 562 (CCPA 1978)). Moreover, “it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” *In re Preda*, 401 F.2d 825, 826 (CCPA 1968). That is because 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; see also *Translogic Tech., Inc.*, 504 F.3d at 1259.

2. Summary of Coulombe (Ex. 1003)

Coulombe describes a system for adaptation of session initiate protocol (SIP) messages based on the recipient’s terminal capabilities and preferences. Ex. 1003, Abstract. Coulombe discloses that the described invention “tries to overcome the problem of interoperability between terminals and to improve the end user experience by providing a framework for making SIP messages conform to the recipient’s terminal capability and characteristics.” *Id.* ¶ 7. For example, Coulombe describes message size reduction and format adaptation for delivery to the destination terminal. *Id.*

Figure 1 is reproduced below.

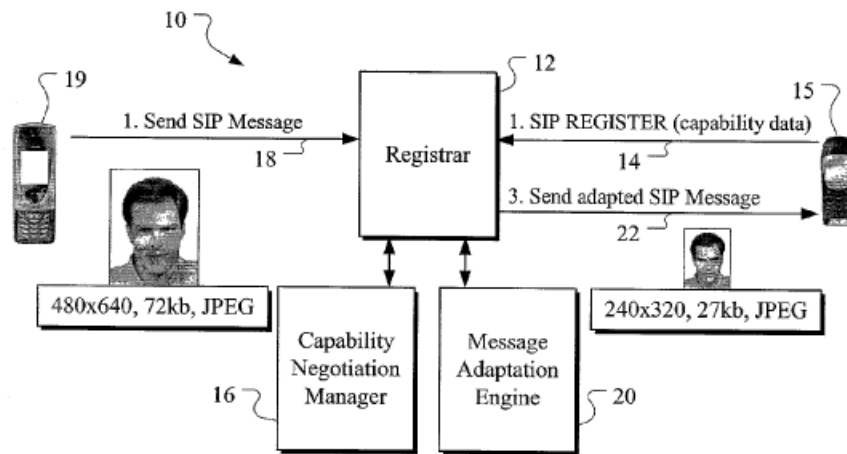


FIG. 1

Figure 1 shows a message flow for SIP message adaptation using system 10. System 10 includes SIP proxy/registrar 12, Capability Negotiation Manager 16, and Message Adaptation Engine 20. *Id.* ¶ 54. Coulombe discloses that when new message 18 arrives at proxy/registrar 12 from another entity, such as sending terminal 19, proxy 12 obtains the terminal capabilities or user preferences of intended recipient's terminal 15 already stored in the registrar, adapts the message (using Message Adaptation Engine 20), and sends adapted message 22 to recipient's terminal 15. *Id.* ¶ 58. Capability Negotiation Manager 16 is responsible for resolving terminal capability information. *Id.* ¶ 59. Message Adaptation Engine 20 is responsible for adapting the message for recipient terminal 15 by performing format conversion, presentation adaptation, media characteristics adaptation, message size reduction, and encapsulation adaptation, as needed. *Id.* ¶¶ 63, 85–91. Coulombe further teaches that “adaptation is any manipulation or modification of the message content based on the terminal capabilities, user

preferences, network conditions, or any characteristics of the user, his terminal or his environment.” *Id.* ¶ 63.

3. Analysis of Claims 12, 23, 37, and 41

Petitioner challenges claims 12, 23, 37, and 41 under 35 U.S.C. § 103 based on Coulombe. Pet. 32–40. Patent Owner contests Petitioner’s position. PO Resp. 8–44. As explained below, we have considered the arguments and evidence presented by both parties, and we conclude that Petitioner has shown by a preponderance of the evidence that claims 12, 23, 37, and 41 would have been obvious over Coulombe. Illustrative claim 12 is discussed below.

Claim 12 is directed to a “method of message communication via a messaging system between one or more originating communication devices assigned to a sender and one or more destination communication devices assigned to a receiver.” Claim 12 recites the step of “before delivery to the receiver, obtaining by a messaging system a message having initial characteristics comprising, at least, a message format and an initial message layout.”

Petitioner asserts that Coulombe teaches this limitation because Coulombe discloses SIP Proxy/Registrar 12 as a combination of hardware and software that receives a SIP message from a sending communication device 19. Pet. 32, 21 (citing Ex. 1003 ¶¶ 92–93, 117, Fig. 1). Petitioner adds that Coulombe discloses message adaptation engine 20, coupled to SIP Proxy/Registrar 12, that obtains an incoming message and makes a determination as to what adaptations are required by comparing the capabilities or user preferences of intended destination terminal 15 with incoming message characteristics such as present resolution, format and size of images, and message size. Pet. 33 (citing Ex. 1003 ¶¶ 86, 118).

Petitioner adds that this occurs before delivery of the message to the receiver. *Id.*

Based on the complete record, Petitioner's arguments are persuasive. Coulombe teaches that message adaptation engine 20 "takes as inputs the original message" and "determines the characteristics of the original message." Ex. 1003 ¶ 86. Moreover, Coulombe describes message characteristics as including resolution, format, and size. *Id.* ¶ 118.

Claim 12 further recites the step of:

b) selecting a message layout and converting at least said initial message layout to said selected message layout to form an adapted message layout in accordance with at least one criterion selected from a group comprising:

i) criterion related to message communication capabilities of the destination communication device with regard to message communication capabilities of the originating communication device;

ii) criterion related to message displaying capabilities of the destination communication device with regard to message communication capabilities of the originating communication device; and

iii) criterion related to communication media between originating and destination device.

For these limitations, Petitioner argues that Coulombe's Message Adaptation Engine 20 determines the layout and format adaptations required before sending messages to the destination device. Pet. 33–34. Petitioner argues the message adaptation engine compares the capabilities or user preferences of the intended destination terminal 15 with the incoming message characteristics (e.g., present resolution, format and size of images, size of the message, etc.) and adapts the message and its components to meet the registering terminal capabilities or user preferences. Pet. 33–34 (citing

Ex. 1003 ¶¶ 86, 87, 89, 115–118). Additionally, Petitioner argues that Coulombe discloses all three selection/conversion criteria — “Coulombe, ¶¶ 0090, 0094-114 (device communication capabilities) ¶¶ 0087, 0089, (device displaying capabilities), ¶¶ 0063, 0043, 0007, 0090, 0009 (communication media/network).” Pet. 34.

In its Patent Owner Response, Patent Owner argues that Coulombe does not teach a “fixed set of choices” that the message adaptation engine selects from.⁴ PO Resp. 33–34. Patent Owner asserts that Coulombe discloses a “flexible design in which format and layout adaptation can encompass any incoming message characteristics, any destination device characteristics, and user preferences.” *Id.* at 34 (citing Ex. 2002 ¶ 107). Patent Owner contends “Coulombe’s delivery decision with respect to formats and layouts cannot be restricted to choices for selection.” *Id.* Further, Dr. Surati testifies that

a POSITA would not be motivated to modify Coulombe to require the selection of layout and format based on a fixed set of choices, as such a result would be contrary to Coulombe’s flexible design in which format and layout adaption can encompass any incoming message characteristics, any destination device characteristics, and user preferences. In fact, one of the express [a]dvantages of Coulombe’s alleged invention is that it “[c]an adapt based on many parameters: terminal capabilities or user preferences (formats, screen resolution, memory), user preferences, network characteristics, etc.” (Coulombe, ¶ 43).

Ex. 2002 ¶ 107.

Based on the complete record, Petitioner’s position is persuasive. As

⁴ Patent Owner presents this argument with regard to claim 1. PO Resp. 33–34. However, Patent Owner applies this argument to claims 1, 12, 23, 37, 39 and 41. *Id.* at 1.

discussed above, we construe the term “select” a message format/layout or “selecting” a message format/layout to mean “determining” a layout or format. *See supra* Claim Construction. Moreover, we agree with Petitioner that Coulombe teaches the message adaptation engine determines the layout and format adaptations before sending messages to the destination device. For example, Coulombe teaches that the message adaptation engine performs format conversion to a media content format supported by the terminal and adapts message layout to make the content “suitable for the recipient’s terminal display characteristics.” Ex. 1003 ¶¶ 87, 89.

Claim 12 further recites the step of “facilitating delivery of the adapted message to the receiver.” Petitioner argues that Coulombe teaches that the SIP Proxy/Registrar transmits the message to the intended recipient after it has been adapted. Pet. 34–35 (citing Ex. 1003 ¶ 118, Fig. 1). Based on the complete record, Petitioner’s arguments are persuasive. Coulombe indicates in Figure 1 that Step 3 provides the “Send adapted SIP Message” step from Registrar 12 to terminal 15. Ex. 1003 ¶ 118, Fig. 1.

Accordingly, for the foregoing reasons, Petitioner has demonstrated by a preponderance of the evidence that claim 12 is unpatentable under 35 U.S.C. § 103 over Coulombe.

Additionally, we determine that Petitioner provides detailed explanations of how each limitation recited in claims 23, 37, and 41 are obvious over Coulombe. Pet. 32–40. For these claims, we agree with and adopt Petitioner’s arguments as our own. In the Patent Owner Response, Patent Owner relies on arguments presented for claim 1 that are discussed above. PO Resp. 33–34. For the reasons set forth in the Petition (*see* Pet. 32–40), we conclude that Petitioner has established by a preponderance of the evidence that these claims are rendered obvious by Coulombe.

Accordingly, based on the complete record, Petitioner has established by a preponderance of the evidence that claims 12, 23, 37, and 41 are unpatentable under 35 U.S.C. § 103 over Coulombe.

4. *Analysis of Claims 1 and 39*

Petitioner asserts claims 1 and 39 are unpatentable under 35 U.S.C. § 103 over Coulombe. Pet. 19–32. Petitioner relies on similar arguments discussed above, with regard to challenged claim 12, for its position that Coulombe renders claims 1 and 39 unpatentable. *Id.*

Specifically, Petitioner argues that Coulombe’s SIP Proxy/Registrar (12) teaches an “access block” that first receives a message (1. Send SIP message) from the sending communication device (19). Pet. 21. Petitioner adds that Coulombe describes the Message Adaptation Engine (20), in communication with SIP Proxy/Registrar (12), as including “an adaptation control (64) that provides the initial characteristics of the incoming message, including format and layout, along with destination terminal capabilities or user preferences to a means 68 for comparing the two.” *Id.* at 22 (citing Ex. 1003 ¶¶ 117–118, Fig. 1). Further, Petitioner asserts Coulombe’s SIP Proxy/Registrar is configured to transmit the message to the intended recipient/destination device (5) over signal line (22) as shown as step “3” in Figure 1. *Id.* at 23 (citing Ex. 1003, Fig. 1).

Additionally, Petitioner argues that Coulombe’s Message Adaptation Engine is operatively coupled to (i.e., in communication with) Coulombe’s SIP Proxy/Registrar (12) (i.e., “access block”), and, further includes “means 68” that determines (i.e., selects) “what sort of adaptation or adaptations are required by comparing the capabilities or user preferences of the intended destination terminal 15 with the incoming message characteristics (e.g., present resolution, format and size of images, size of the message, etc.) for

each component thereof.” Pet. 25 (citing Ex. 1003 ¶ 118). Petitioner further argues that the Message Adaptation Engine is configured to convert the initial message layout to selected message layouts via adaptation means 70, after which, the “Message Adaptation Engine 20 then return the fully adapted message on the line 62 once the message has been completely adapted.” *Id.* at 26 (citing Ex. 1003 ¶ 118).

Additionally, Petitioner argues that Coulombe teaches that selection and conversion is done in accordance to “at least one criterion” recited in claim 1. Pet. 28–32. For example, Petitioner argues that

Coulombe also discloses that the selection and conversion may be done in accordance with “ii) criterion related to message displaying capabilities of the destination communication device with regard to message communication capabilities of the originating communication device.” In particular, Coulombe discloses that message layout can be adapted based on the destination device’s display capabilities:

3) Presentation or layout adaptation: this involves making the content presentation suitable for the recipient's terminal display characteristics. For instance, the best presentation of a message (e.g. how the images are organized on the display) is different for a landscape orientation display compared to a portrait one. (*Id.*, ¶ 0089 (underlining added); *see also id.*, ¶ 0087.)

Pet. 29–30. Patent Owner responds that Coulombe’s Message Adaptation Engine does not select a format and layout from a *fixed set of layout and format choices*. PO Resp. 33 (citing Ex. 2002 ¶83).

Based on the complete record in this proceeding, Petitioner’s position is persuasive. As discussed with regard to claim 12, we construe the term “select” a message format/layout or “selecting” a message format/layout to mean “determining” a layout or format. *See supra* Claim Construction. Moreover, we agree with Petitioner that Coulombe teaches the message

adaptation engine determines the layout and format adaptations before sending messages to the destination device. For example, Coulombe teaches that the message adaptation engine performs format conversion to a media content format supported by the terminal and adapts message layout to make the content “suitable for the recipient’s terminal display characteristics.” Ex. 1003 ¶¶ 87, 89.

Accordingly, we determine that Petitioner has demonstrated by a preponderance of the evidence that claim 1 would have been obvious over Coulombe. With respect to claim 39, Petitioner and Patent Owner rely on the same arguments discussed. Pet. 32 (“For the same reasons as claim 1, therefore, Coulombe discloses each limitation of claim 39.”); PO Resp. 55–56 (“For the same reasons discussed above with respect to claim 1, Petitioner has likewise failed to establish that claims 12, 37, 39, 41 are obvious over Coulombe.”) Thus, we determine that Petitioner has also established by a preponderance of the evidence that claim 39 is unpatentable.

C. Claims 6, 9, 17, 18, 28, 40, and 42 — Asserted Obviousness over Coulombe, Druyan (Ex. 1004), and Tittel (Ex. 1005)

1. Summary of Druyan (Ex. 1004)

Druyan is directed to web-browsing for handheld computerized devices. Ex. 1004, 1:8–10. Druyan discloses that portable devices, which Druyan refers to as “CLDs” (connected, limited devices) contain a display screen that “is typically smaller than the size of a desktop computer display screen.” *Id.* at 1:13–17, 1:25–27. Referring to Figures 1 and 3, Druyan discloses a technique for addressing this issue. Figure 3 is reproduced below.

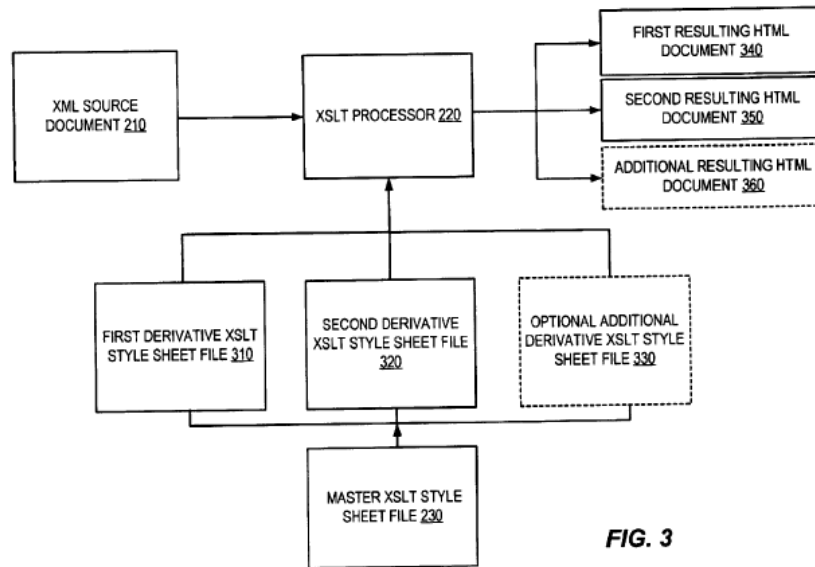


FIG. 3

Figure 3 shows master Extensible Stylesheet Language Transformations (XSLT) style sheet file 230, which specifies the styling/layout of HTML document 240 and includes information 100 (shown in Fig. 1), optimized for display by a web browser on display screen 105 (shown in Fig. 1) of a desktop computer. *Id.* at 3:48–52. The information specified by XSLT style sheet file 230 exceeds an amount which CLD display screen 110 (shown in Fig. 1) can display in one view. *Id.* at 3:52–55. Druyan discloses that to “optimize for the CLD display screen 110, the information from the source document 210 is segmented by processor 220, responsive to style sheets 310, 320, and 330, into HTML documents 340, 350, and 360.” *Id.* at 3:55–59. Druyan further discloses that style sheets 310, 320, and 330 are “derived” from a master or parent XSLT style sheet file 230. *Id.* at 3:32–36.

2. Summary of Tittel (Ex. 1005)

Tittel generally describes HTML development and provides fundamental concepts of certain web technologies, in particular style sheets. Ex. 1005, 7–84. Tittel teaches “[s]tyle sheets are essentially collections of rules that tell a browser how a document should appear. As with all other

things HTML, these rules have a specific syntax.” Ex. 1005, 59. Tittel further discloses a linking tag can be placed in the HTML code to identify an external style sheet file. *Id.* at 68.

3. Analysis of Claims 6, 9, 17, 18, 28, 40, and 42

Petitioner asserts claims 6, 9, 17, 18, 28, 40, and 42 are unpatentable under 35 U.S.C. § 103 over Coulombe, Druyan, and Tittel. Pet. 41–59. We have considered the arguments and evidence presented, and are persuaded that Petitioner has demonstrated by a preponderance of the evidence that claims 6, 9, 17, 18, 28, 40, and 42 are unpatentable. Illustrative claim 17 is discussed below.⁵

Claim 17 is directed to a method of message communication via a messaging system between one or more originating communication devices assigned to a sender and one or more destination communication devices assigned to a receiver. The method of claim 17 includes the step of “before delivery to the receiver, obtaining by the messaging system a message having a layout based on a template, and characterized, at least, by a message format and an initial message layout; said template characterized by, at least, a unique identifier.”

For this limitation, Petitioner argues that Coulombe discloses SIP Proxy/Registrar 12 that receives a message from a sending communication device. Pet. 44 (citing Ex. 1003 ¶ 117, Fig. 1). Petitioner acknowledges that Coulombe does not expressly disclose a message that has a “layout based on a template, said template characterized by at least a unique identifier, wherein the system is further configured to recognize the unique identifier of the template.” Pet. 44 (emphasis omitted). Nonetheless, Petitioner asserts

⁵ Petitioner relies on arguments presented for claims 1, 6, and 9 for its challenge of claim 17 in the Petition. Pet. 57.

that this feature would have been obvious to one of ordinary skill in the art based on Coulombe, Druyan, and Tittel. Specifically, Petitioner argues that the “template” recited in claim 17 “takes the form of a ‘**master style sheet**’ file, which Druyan also refers to as ‘XSLT style sheet file **230**.’” *Id.* at 45 (citing Ex. 1004, 2:12–15). Petitioner asserts Druyan teaches a master style sheet (XSLT) file that is part of an HTML document and “specifies how to display the HTML document,” including the layout of the HTML document. *Id.* at 45 (citing Ex. 1004, 1:59–62).

In addition, Petitioner relies on the testimony of Mr. Klausner, which states that one of ordinary skill in the art would have understood that style sheet files (e.g., master style sheet files) may be uniquely identified by names. *Id.* at 46 (citing Ex. 1002 ¶ 103). Petitioner argues this understanding is consistent with the disclosure in Tittel, which describes a linking tag that can be placed in the HTML code to identify an external style sheet by its uniform resource locator (URL). *Id.* Petitioner adds that “[w]hen the web browser encounters the <LINK> tag in the HTML document, it downloads the style sheet file specified in the URL in the <LINK> tag, and uses the downloaded style sheet to provide a correct layout for the display of the HTML document.” *Id.* at 46–47 (citing Ex. 1005, 68–69; Ex. 1002 ¶ 105).

In the Patent Owner Response, Patent Owner argues that Druyan and Tittel do not disclose a “template” in the form of a predefined user interface.⁶ PO Resp. 36. Patent Owner asserts that XSLT master sheet file 230 is a set of XSLT style rules to apply to an XML file, which defines the structure of the elements to display. *Id.* Patent Owner further argues that

⁶ Patent Owner presents several arguments with respect to claim 6 that apply to the similarly recited limitations of claim 17. PO Resp. 35–39, 56.

CSS style sheets provide styling rules to HTML documents, but “neither create the elements being displayed nor enable the ability to change any of the elements in an HTML file.” *Id.* at 37. Patent Owner contends that the CSS style sheets are not a “predefined user interface” because nothing is displayed without an HTML document input. *Id.* (citing Ex. 2002 ¶ 113). Patent Owner further asserts Mr. Klausner’s testimony otherwise is based on a “misinterpretation of the ‘predefined user interface’ limitation.” *Id.* at 36 (citing Ex. 1002 ¶ 100).

Based on the entire record, Petitioner’s position is persuasive. First, Patent Owner’s arguments are based on a construction of “template” that we have not adopted. *See supra* Claim Construction. Rather, our construction does not require the predefined user interface of the recited “template” to visually display any particular “actual data elements of interest and not just the fonts or colors to apply to the elements in an HTML document.” *Id.* Second, we credit Mr. Klausner’s testimony that a style sheet discloses a predefined user interface because “a style sheet can be used to apply a set of formatting and display rules to an HTML document, such as a web page. (*See id.*, at 57-58 (describing style sheets).)” Ex. 1002 ¶ 100. Mr. Klausner’s testimony is consistent with the disclosure in Tittel and Druyan, which teach that a style sheet can be used to provide formatting and display rules for a HTML document. Ex. 1004, 3:48–52 (“In one aspect, master XSLT style sheet file **230** specifies the styling and/or the layout of the HTML document **240** (FIG. 2), including information **100**, optimized for display by a web browser on the display screen **105** (FIG. 1) of a desktop computer”); Ex. 1005, 57–58.

Additionally, we agree with Mr. Klausner’s testimony that a style sheet specifies user interface properties such as “how elements are arranged

on the screen, the color, size and fonts associated with those elements, the screen background and foreground colors, and a number of other visual properties.” Ex. 1013 ¶ 26. This position is supported by the disclosure in the references that style sheets provide the styling and layout of HTML documents. *See* Ex. 1004, 3:48–52. Moreover, we note that Dr. Surati testified, under cross-examination, that “[s]o insofar as you’re changing the properties of the elements of a HTML file, you can use the CSS file to specify what those changes are.” Ex. 1014, 28:20–23.

Claim 17 further requires the step of “obtaining information related to said unique identifier.” The Petition relies on the arguments made for claim 9, which are that one of ordinary skill in the art would have understood that style sheet files such as the “master style sheet file” in Druyan may be uniquely identified by file names as shown by Tittel, and that making copies of the initial style sheet file by the Druyan system would have required obtaining information related to the unique identifier in order to retrieve the style sheet file. Pet. 45, 57.

Based on the complete record, Petitioner’s arguments are persuasive. Druyan discloses the process of generating derivative style sheets from an initial master style sheet. To create derivative style sheets, Druyan’s system would need the initial master style sheet to copy. Ex. 1004, 3:62–4:5. As Petitioner points out, Tittel discloses the use of tags to identify external style sheets. Ex. 1005, 68. Thus, we determine to be persuasive Petitioner’s argument, as supported by Mr. Klausner’s testimony, that one of ordinary skill in the art would have read Druyan’s system as retrieving an initial style sheet by obtaining information related to the unique identifier, such as the Link tag in Tittel. *See* Ex. 1002 ¶ 124.

Claim 17 further recites the step of

c) selecting a message layout for the message format fitting to each of said at least one destination device and converting the initial layout of the message to the selected message layout, said selection and conversion being done in accordance with at least one predefined layout corresponding to said unique identifier and displaying capabilities of the destination communication device to form an adapted message.

For this limitation, Petitioner asserts that the “predefined layout corresponding to the recognized unique identifier” is taught by Druyan’s derivative style sheet file, which is based on a copy of the initial master style sheet. Pet. 51 (citing Ex. 1002 ¶ 117). Petitioner further explains that the derivative style sheet file, disclosed in Druyan, is a “predefined layout” because it was created prior to its use in generating an appropriate display of the HTML document, and further, that it would have been obvious to a skilled artisan that the derivative style sheet files could have been created at any time prior to the receipt of the initial message. *Id.* at 51–52 (citing Ex. 1004, 3:37–41; Ex. 1002 ¶ 119). Petitioner further argues the predefined layout in the form of a derivative style sheet file corresponds to “the displaying capabilities of the destination communication device” because Druyan teaches that the disclosed method creates “multiple segments of source information for presentation on a device having a limited size display screen.” *Id.* at 52 (citing Ex. 1004, 2:8–11) (emphasis omitted).

Patent Owner argues that Druyan does not disclose a “predefined layout” because “it discloses one that is created after the request is received.” PO Resp. 37 (citing Ex. 1004, 5:43–46, Ex. 2002 ¶ 114). Patent Owner adds that there is no need to create a derivative style sheet in advance, because the elements for segmenting (which are used to generate the full screen version of the web page) are already known by the system. PO Resp. 38 (citing Ex. 2002 ¶ 116).

We do not agree with Patent Owner's arguments. The '475 patent indicates that the "predefined layout" can be further "predefined" by information received in the incoming message. Ex. 1001, 21:1–8. As discussed above, we determine, under the broadest reasonable construction, that the term "pre-defined layout" means "a layout defined prior to being used." *See supra* Claim Construction. Further, we are persuaded by and credit Mr. Klausner's testimony that Druyan's derivative style sheet file is a "predefined" layout because it was created prior to its use in generating an appropriate display of the HTML document. Ex. 1002 ¶ 118. Mr. Klausner explains that Druyan discloses "[a]fter the derivative style sheet file **310** is created, it is then used to properly display the original HTML document on the compact device, in accordance with the derivative style sheet." *Id.* Mr. Klausner adds that Druyan teaches

the source information from source document **210** and the derivative style sheets **310**, etc. are processed with XSLT processor **220**, which generates respective presentation-style, e.g., HTML, documents **340**, **350**, etc. for generating respective views of the information portions on the CLD [compact limited device]." (*Id.*, 4:9-14 (underlining added).) Accordingly, the derivative style sheet is "predefined" because it must be created prior to being used in generating an appropriate display of the HTML document.

Id. Patent Owner further agrees that "[i]n Druyan, the derivative style sheets...can be generated in advance of the content being delivered, because the content of the webpage . . . is known in advance." PO Resp. 40–41.

Thus, based on the complete record, Petitioner's arguments are persuasive.

Claim 17 also recites the step of "forwarding the adapted message to the receiver." For this limitation, Petitioner argues that Coulombe discloses that the SIP Proxy/Registrar transmits the message to the intended recipient

after it has been adapted. Pet. 57 (citing Ex. 1003, Fig. 1 (Step 3), ¶ 118).

Based on the complete record, Petitioner's position is persuasive. Step 3 in Figure 1 states, "Send adapted SIP Message," in which the message is forwarded from the SIP Proxy/Registrar (12) to the intended recipient (15) over signal line (22). Ex. 1003, Fig. 1, ¶ 0118.

Motivation to Combine Coulombe, Druyan, and Tittel

In addition to the arguments discussed above, Patent Owner further argues that Petitioner has not articulated sufficient reasoning for the proposed combination of Coulombe, Druyan, and Tittel. PO Resp. 39–55. Patent Owner "does not dispute that POSITA would understand that the master style sheet in Druyan has a unique identifier." PO Resp. 42. However, Patent Owner argues that combining Druyan with Coulombe, or Tittel with Coulombe, would not yield predictable results and would hinder Coulombe's basic principle of operation. PO Resp. 39–42.

Patent Owner argues that the combination of Druyan and Coulombe would alter Coulombe's basic principle of operation because the proposed combination would hinder Coulombe's flexibility. PO Resp. 46–47. Specifically, Patent Owner contends that a XSLT style sheet cannot be incorporated into an HTML file and have an expected output because XSLT files are applied to XML files and HTML renderers would not know what to do with a link tag specifying the URL of a style sheet file. PO Resp. 47 (citing Ex. 2002 ¶ 135). Patent Owner argues that the proposed combination of Druyan and Coulombe would require message senders to use XHTML with structured XML capabilities to use XSLT style sheets. *Id.* at 48 (citing Ex. 2002 ¶ 137). Patent Owner contends that these structured design changes hinder the principle of operation for Coulombe's system because the flexibility of Coulombe "places no restrictions on message formats and

references that messages can be expressed in XHTML and WML.” *Id.*

Patent Owner further argues that a skilled artisan would find no advantage to using Druyan’s derivative style sheets with Coulombe because “[s]uch techniques would have advantages only where the delivery decision choices could be reasonably restricted such that processing benefits could be obtained.” *Id.* at 53.

Patent Owner also argues that if message structures are not defined in advance, then the proposed combination of Coulombe and Druyan would have to “design the XSLT master style sheet in such a way that it first has to process all the content of the message to ascertain the message structure, create the necessary XML input file, and then apply the derivative style sheets.” PO Resp. 49 (citing Ex. 2002 ¶ 139). Patent Owner observes that Dr. Surati testifies that “this solution . . . would likely add additional process without any corresponding benefit.” *Id.*

We do not agree that the proposed combination of the references would hinder the operation of Coulombe’s system because the system must use XSLT style sheets with HTML. Petitioner explains that Druyan expressly teaches that XML and XSLT are non-limiting examples of programming languages that can be used for Druyan’s disclosed method, and further notes that Druyan teaches the use of Java Server Pages that contain HTML and JSP elements. Pet. Reply 22–23 (citing Ex. 1004, 6:30–38).⁷ Further, Petitioner notes that Dr. Surati does not dispute that CSS style

⁷ Patent Owner argues that Petitioner’s argument exceeds the scope of the Reply. Tr. 47:18–25; see Paper 49, 2–3, Paper 52. However, Petitioner’s argument is responsive to Patent Owner’s argument presented in the Patent Owner’s Response that the combination of Coulombe and Druyan requires the use of XSLT. PO Resp. 46–47. As such, we will consider Petitioner’s argument.

sheets can perform the same function as the XSLT style, which is to convert an input into an output document. Pet. Reply 23 (citing Ex. 1014, 81:22–82:20). Thus, considering the entire record, we agree with Petitioner that Coulombe’s system is compatible with teachings in Druyan. Further, we agree with Petitioner’s argument that even if style sheets are used for layout adaptation in Coulombe for certain types of messages (e.g., HTML messages), the flexibility of Coulombe’s system would, nonetheless, be maintained by being able to receive other types of messages and to adapt the layouts of those messages using other techniques described in Coulombe. See Pet. Reply 23.

Additionally, Patent Owner argues that a person of ordinary skill in the art would not have incorporated Tittel’s CSS style sheets into Coulombe because CSS style sheets are a presentational layer tool that cannot delete an element, change an element, or change the encoding format of an element. PO Resp. 14, 54. Patent Owner further argues that there would be no motivation to combine CSS style sheets with a messaging system where the messaging system designer is not the creator of the content and consistent “look and feel” of documents is not a design concern. *Id.* at 55.

Patent Owner’s arguments are unpersuasive. Patent Owner takes the position that there is no motivation to combine Coulombe and Druyan because CSS style sheets are not relevant to Coulombe’s “more **sophisticated** format and layout transformations.” PO Resp. 15 (emphasis added). Nonetheless, Patent Owner concedes that CSS style sheets can perform “aspects of ¶ 89” regarding layout adaptation. *Id.* at 14 (citing Ex. 2002 ¶ 50). Indeed, “just because better alternatives exist in the prior art

does not mean that an inferior combination is inapt for obviousness purposes.” *In re Mouttet*, 686 F.3d 1322, 1333–34 (Fed. Cir. 2012) (citing *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994)).

Further, we determine that paragraphs 107 through 113 of Mr. Klausner’s Declaration articulate sufficient reasons for the proposed combination of the references. Pet. 48; Tr. 51:15–53:2. Looking to these paragraphs of Mr. Klausner’s Declaration, we determine that Petitioner has articulated persuasive reasoning for the proposed combination of Coulombe, Druyan, and Tittel. Mr. Klausner testifies that one of ordinary skill in the art would have adapted Druyan and Tittel to modify Coulombe’s system to receive HTML messages that included a style sheet file (e.g., template) identified by its URL (e.g., unique identifier). Ex. 1002 ¶ 107. Mr. Klausner further testifies that “[o]ne of ordinary skill in the art would have appreciated the benefits of sending HTML messages that reference external style sheets.” *Id.* ¶ 108. According to Mr. Klausner, these benefits include “allowing the sender the flexibility to reuse the same style sheet across multiple Web documents.” *Id.* Mr. Klausner further explains how the advantages of using style sheets with HTML messages applies to Coulombe’s system. Specifically, Mr. Klausner states that

Coulombe specifically discloses the ability to convert input formats using XHTML, a format that encapsulates HTML within XML. (Coulombe, Ex. 1003, ¶ 0087 (“This category includes conversion of layout formats (e.g. XHTML to WML) . . .”).) One of ordinary skill in the art would have found no technological obstacle to, and no teaching away from, adapting the style sheet teachings of Druyan and Tittel to the SIP messaging system of Coulombe.

Id. ¶ 109. Based on the complete record, including Mr. Klausner’s testimony discussed above, we are persuaded that Petitioner has articulated

sufficient reasoning for the proposed combination of Coulombe, Druyan, and Tittel.

Accordingly, we are persuaded that Petitioner has demonstrated, by a preponderance of the evidence, that claim 17 is unpatentable over Coulombe, Druyan, and Tittel.

Additionally, we determine that Petitioner provides detailed explanations of how claims 18, 28, and 42 are obvious over Coulombe, Druyan, and Tittel. Pet. 57–59. For these claims, we agree with and adopt Petitioner’s arguments as our own. In the Patent Owner’s Response, Patent Owner relies on arguments presented for claim 1 that are discussed above. PO Resp. 55–56. For the reasons set forth in the Petition (*see* Pet. 57–59), we conclude that Petitioner has established by a preponderance of the evidence that these claims are rendered obvious by Coulombe, Druyan, and Tittel.

Further, we note that claims 6, 9, and 40 are system claims that recite functional limitations that are largely the same as the limitations discussed above with regard to claim 17. For example, claim 6 depends from claim 1 and further requires the system be configured

to receive a message having a layout based on a template, said template characterized by at least a unique identifier, wherein the system is further configured to recognize the unique identifier of the template, and the media block is further configured to select, before transmitting, at least one message format and a message layout for each of the at least one message formats fitting to each of said at least one destination device, and then convert the initial layout of the message to the selected message layouts, said selection and conversion being done in accordance with at least one predefined layout corresponding to the recognized unique identifier and the displaying capabilities of the destination communication device.

Due to this similarity of claim language, the parties rely on the same arguments and evidence discussed above for claim 17 for respective positions regarding claims 6, 9, and 40. *See* Pet. 55–57; *see also* PO Resp. 56 (“For the same reasons discussed above with respect to claim 6, Petitioner has likewise failed to establish that claims 9, 17, 23, 28, 39, 40, and 42 are obvious over Coulombe in view of Druyan and Tittel” and “[f]or the reasons discussed above with respect to claim 6, Petitioner has not proven that claim 18 is obvious over Coulombe in view of Druyan and Tittel.”). Thus, for the same reasons discussed above with respect to claim 17, we are persuaded that Petitioner has established by a preponderance of the evidence that claims 6, 9, and 40 are unpatentable over the combination of Coulombe, Druyan, and Tittel.

III. CONCLUSION

For the foregoing reasons, we are persuaded that the information presented in the Petition establishes, by a preponderance of the evidence, that claims 1, 6, 9, 12, 17, 18, 23, 28, 37, 39, 40, 41, and 42 are unpatentable.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1, 12, 23, 37, 39, and 41 are held to be unpatentable under 35 U.S.C. § 103 over Coulombe; and

FURTHER ORDERED that claims 6, 9, 17, 18, 28, 40, and 42 are held to be unpatentable under 35 U.S.C. § 103 over Coulombe, Druyan, and Tittel; and

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

IPR2015-00740
Patent 8,332,475 B2

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