

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

AGIS SOFTWARE DEVELOPMENT, LLC,
Patent Owner.

U.S. Patent No. 8,213,970
Filing Date: November 26, 2008
Issue Date: July 3, 2012

Inventor: Malcolm K. Beyer, Jr.
Title: METHOD OF UTILIZING FORCED ALERTS FOR INTERACTIVE
REMOTE COMMUNICATIONS

PATENT OWNER'S NOTICE OF APPEAL

Case No. IPR2018-01079

IPR2018-01079
Patent Owner's Notice of Appeal

Pursuant to 35 U.S.C. §§ 141 and 142 and 37 C.F.R. §§ 90.2 and 90.3, Patent Owner AGIS Software Development LLC (“AGIS” or “Patent Owner”) hereby provides notice that it appeals to the United States Court of Appeals for the Federal Circuit from the Final Written Decision entered November 19, 2019 (Paper 34) and from all underlying orders, decisions, rulings, and opinions regarding U.S. Patent No. 8,213,970 (the “’970 patent”) in Case No. IPR2018-01079. This notice is timely under 37 C.F.R. § 90.3, having been filed within 63 days after the date of the Final Written Decision.

For the limited purpose of providing the Director with the information requested in 37 C.F.R. § 90.2(a)(3)(ii), Patent Owner anticipates that the issues on appeal may include, but are not limited to: the Board’s claim constructions, its application of those constructions, its obviousness determinations including that claims 1–3, and 9 of the ’970 patent are unpatentable under 35 U.S.C. § 103; the findings, rulings and conclusions supporting or relating to those determinations; the constitutionality of the appointments of Administrative Patent Judges Trevor M. Jefferson, Christa P. Zado, and Kevin C. Trock under U.S. Const. art. II, § 2, cl. 2. in view of *Arthrex v. Smith & Nephew*, No. 18-2140 (Fed. Cir. 2019); and any other issues decided adversely to Patent Owner in any orders, decisions, rulings, or opinions in IPR2018-01079.

IPR2018-01079
Patent Owner's Notice of Appeal

Simultaneous with this submission, three (3) copies of this Notice of Appeal are being filed with the Clerk of the United States Court of Appeals for the Federal Circuit and being submitted electronically through the Court's CM/ECF system, together with the requisite fee in the amount of \$500.00. In addition, a copy of this Notice of Appeal is being filed with the Patent Trial and Appeal Board and served upon counsel of record for Google LLC.

Respectfully submitted,

Dated: January 21, 2020

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AGIS SOFTWARE DEVELOPMENT, LLC,
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IPR2018-01079
Patent 8,213,970

Before TREVOR M. JEFFERSON, CHRISTA P. ZADO, and
KEVIN C. TROCK, *Administrative Patent Judges*.

ZADO, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

We have authority to hear this *inter partes* review under 35 U.S.C. § 6. This Final Written Decision issues pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed herein, we determine that Google LLC (“Petitioner”)¹ has shown, by a preponderance of the evidence, that claims 1 and 3–9 (“challenged claims”) of U.S. Patent No. 8,213,970 B2 (Ex. 1001, “the ’970 patent”) are unpatentable. *See* 35 U.S.C. § 316(e) (2012); 37 C.F.R. § 42.1(d) (2017).

A. Procedural History

Petitioner filed a Petition for *inter partes* review of claims 1 and 3–9 of the ’970 patent. Paper 2 (“Pet.” or “Petition”). AGIS Software Development, LLC (“Patent Owner”)² subsequently filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). Petitioner filed an authorized Reply to Patent Owner’s Preliminary Response. Paper 8. On November 20, 2018, the Board entered a decision instituting an *inter partes* review of all claims and all grounds presented in the Petition. Paper 9 (“Institution Decision” or “Inst. Dec.”).

After institution, Patent Owner filed a Response to the Petition. Paper 17 (“Response” or “PO Resp.”). Petitioner thereafter filed a Reply to Patent Owner’s Response. Paper 22 (“Pet. Reply” or “Reply”). Patent Owner filed a Sur-reply to Petitioner’s Reply to Patent Owner’s Response.

¹ Pursuant to 37 C.F.R. § 42.8, Petitioner identifies as real parties-in-interest Google LLC, Huawei Device USA Inc., Huawei Device Co., Ltd., Huawei Device (Dongguan) Co., Ltd., Huawei Technologies USA Inc., Huawei Technologies Co., Ltd., and LG Electronics, Inc. Pet. 79.

² Pursuant to 37 C.F.R. § 42.8, Patent Owner identifies only itself as a real party-in-interest. Paper 5, 1.

Paper 27 (“Sur-reply”). Patent Owner also filed a Request for Rehearing of the Institution Decision, Paper 12, which we denied, Paper 26.

An oral hearing was held on Sept. 5, 2019. A transcript of the hearing is included in the record. Paper 33 (“Tr.”).

B. Related Matters

The parties advise that the ’970 patent has been asserted in *AGIS Software Development LLC v. Huawei Device USA Inc. et al.*, No. 2:17-cv-00513 (E.D. Tex.); *AGIS Software Development LLC v. HTC Corporation*, No. 2:17-cv-00514 (E.D. Tex.); *AGIS Software Development LLC v. LG Electronics, Inc.*, No. 2:17-cv-00515 (E.D. Tex.); *AGIS Software Development LLC v. Apple Inc.*, No. 2:17-cv-00516-JRG (E.D. Tex.); *AGIS Software Development LLC v. ZTE Corporation et al.*, No. 2:17-cv-00517 (E.D. Tex.). Pet. 79–80; Paper 5, 3–4. Patent Owner further advises that the ’970 patent and patents related to the ’970 patent are the subject of various filings requesting *inter partes* review. Paper 5, 2–3 (table identifying *inter partes* review case numbers)

C. The ’970 Patent

The ’970 patent generally discloses a specialized software application program on a personal computer (“PC”) or PDA/cell phone for creating and processing forced message alerts. Ex. 1001, code (57). The specification of the ’970 patent (“Specification”) discloses it is desirable for a PDA/cell phone user to be able to simultaneously send Digital Smart Message Service (“SMS”) or TCP/IP messages to a large group of PCs or cell phones using cellular technology (such as GSM or CDMA) or WiFi. *Id.* at 1:51–57. The Specification further discloses that in some situations it is additionally desirable to know which PCs and PDA/cell phones received the message, which PCs and PDA/cell phones did not receive the message, and the

response of each recipient of the message. *Id.* at 1:57–61. “As a result, what is needed is a method in which a sender of a text or voice message can force an automatic acknowledgement upon receipt from a recipient’s cell phone or PC and a manual response from the recipient via the recipient’s cell phone or PC.” *Id.* at 1:65–67. In addressing these issues, the Specification discloses “[t]he heart of the invention lies in [a] forced message alert software application program provided in each PC or PDA/cell phone.” *Id.* at 4:47–49. The software provides the ability to

- (a) allow an operator to create and transmit a forced message alert from a sender PDA/cell phone to one or more recipient PCs and PDA/cell phones within the communication network;
- (b) automatically transmit an acknowledgement of receipt to the sender PDA cell phone upon the receipt of the forced message alert;
- (c) periodically resend the message to the recipient PCs and PDA/cell phones that have not sent an acknowledgement;
- (d) provide an indication of which recipient PCs and PDA/cell phones have acknowledged the forced message alert;
- (e) provide a manual response list on the display of the recipient PC and PDA/cell phone's display that can only be cleared by manually transmitting a response; and
- (f) provide an indication on the sender PDA/cell phone of the status and content the manual responses.

Id., code (57). The Specification explains that a forced message alert is comprised of a text or voice message and a forced message alert software packet. *Id.* at 2:11–13, 8:23–25

D. Illustrative Claims

Petitioner challenges claims 1 and 3–9 of the ’970 patent. Pet. 12. Claims 1 and 6 are independent. Claim 1, reproduced below, is illustrative.

1. A communication system for transmitting, receiving, confirming receipt, and responding to an electronic message, comprising:

[1.1] a predetermined network of participants, wherein each participant has a similarly equipped PDA/cell phone that includes a CPU and a touch screen display and a CPU memory;

[1.2] a data transmission means that facilitates the transmission of electronic files between said PDA/cell phones in different locations;

[1.3] a sender PDA/cell phone and at least one recipient PDA/cell phone for each electronic message;

[1.4] a forced message alert software application program including a list of required possible responses to be selected by a participant recipient of a forced message response loaded on each participating PDA/cell phone;

[1.5] means for attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgement to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone;

[1.6] means for requiring a required manual response from the response list by the recipient in order to clear the recipient's response list from recipient's cell phone display;

[1.7] means for receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert;

[1.8] means for periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert; and

[1.9] means for receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the response from each recipient PDA/cell phone that responded.

Ex. 1001, 8:65–9:39 (brackets and numbering added).

Claim 6, reproduced below, also is illustrative.

6. A method of sending a forced message alert to one or more recipient PDA/cell phones within a predetermined communication network, wherein the receipt and response to said forced message alert by each intended recipient PDA/cell phone is tracked, said method comprising the steps of:

[6.1] accessing a forced message alert software application program on a sender PDA/cell phone;

[6.2] creating the forced message alert on said sender PDA/cell phone by attaching a voice or text message to a forced message alert application software packet to said voice or text message;

[6.3] designating one or more recipient PDA/cell phones in the communication network;

[6.4] electronically transmitting the forced message alert to said recipient PDA/cell phones;

[6.5] receiving automatic acknowledgements from the recipient PDA/cell phones that received the message and displaying a listing of which recipient PDA/cell phones have acknowledged receipt of the forced message alert and which recipient PDA/cell phones have not acknowledged receipt of the forced message alert;

[6.6] periodically resending the forced message alert to the recipient PDA/cell phones that have not acknowledged receipt;

[6.7] receiving responses to the forced message alert from the recipient PDA/cell phones and displaying the response from each recipient PDA/cell phone; and

[6.8] providing a manual response list on the display of the recipient PDA/cell phone that can only be cleared by the recipient providing a required response from the list;

[6.9] clearing the recipient's display screen or causing the repeating voice alert to cease upon recipient selecting a response from the response list required that can only be cleared by manually selecting and transmitting a response to the manual response list.

Ex, 1001, 10:7–41 (brackets and numbering added).

E. Prior Art and Asserted Grounds of Unpatentability

Petitioner asserts that claims 1 and 3–9 would have been unpatentable on the following grounds (Pet. 12):

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1, 3–9	103(a)	Kubala, ³ Hammond ⁴
1, 3–9	103(a)	Hammond, Johnson, ⁵ Pepe ⁶
1, 3–9	103(a)	Hammond, Johnson, Pepe, Banerjee ⁷

Petitioner relies on the declaration of David Hilliard Williams, Ex. 1003 (“Williams Declaration”), and the supplemental declaration of Mr. Williams, Ex. 1023 (“Williams Supplemental Declaration”), to support its contentions.

II. ANALYSIS

A. *Legal Principles*

A claim is unpatentable under § 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) when in evidence, objective indicia of non-obviousness

³ U.S. Patent Publication 2006/0218232 A1, filed March 24, 2005 and published September 29, 2006. Ex. 1005 (“Kubala”).

⁴ U.S. Patent 6,854,007 B1, filed September 17, 1998 and issued February 8, 2005. Ex. 1006 (“Hammond”).

⁵ U.S. Patent 5,325,310, filed June 26, 1992 and issued June 28, 1994. Ex. 1007 (“Johnson”).

⁶ U.S. Patent 5,742,905, filed September 19, 1994 and issued April 21, 1998. Ex. 1008 (“Pepe”).

⁷ U.S. Patent Publication 2003/0128195 A1, filed January 8, 2002 and published July 10, 2003. Ex. 1009 (“Banerjee”).

(i.e., secondary considerations).⁸ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). “To satisfy its burden of proving obviousness, a petitioner 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).

B. Level of Ordinary Skill in the Art

Petitioner asserts that a person of ordinary skill in the art in the field of the ’970 patent would have had either (1) a Bachelor of Science degree in electrical engineering or an equivalent field, with three to five years of academic or industry experience in the field of electronic communications, or (2) a Master of Science degree in electrical engineering or an equivalent field, with two to four years of academic experience in the same field. Pet. 9–10 (citing Ex. 1003 ¶¶ 29–30).

Patent Owner asserts that a person of ordinary skill in the art would have had at least a bachelor’s degree in computer science, computer engineering, or equivalent with one to two years of experience in the field of computer programming with a focus on building systems such as GPS-based localization and network transmission. PO Resp. 7 (citing Ex. 2005 ¶¶ 18–20). Patent Owner further asserts that extensive experience and technical training might substitute for educational requirements, while advanced degrees might substitute for experience. *Id.* (citing Ex. 2005 ¶¶ 18–20).

The parties agree that an ordinarily skilled artisan in the field of the ’970 patent would have had a bachelor’s degree in the pertinent technical

⁸ Neither party presents arguments or evidence of secondary considerations, which therefore do not constitute part of our analysis.

field, and a few years of experience and/or more advanced education in the pertinent field. Therefore, we determine a person of ordinary skill in the art would have had a bachelor's degree in electrical engineering, computer science, or computer engineering, or equivalent, and two to four years of additional experience, either work or educational, in the field of electrical communications. We do not adopt Patent Owner's assessment that a skilled artisan would have focused on building systems such as GPS-based localization and network transmission. PO Resp. 7. Patent Owner fails to explain how this is pertinent to the field of the '970 patent, which relates to providing computers and/or PDA/cell phones with forced message alert software that enables users to create and send message alerts.

We note that the level of skill in the art also may be reflected in the prior art. *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).

C. Claim Construction

1. Introduction

In an *inter partes* review filed before November 13, 2018, claim terms in an unexpired patent are given their broadest reasonable construction in light of the specification of the patent.⁹ Consistent with that standard, we assign claim terms their ordinary and customary meaning, as would be understood by one of ordinary skill in the art at the time of the invention, in

⁹ This standard applies to *inter partes* reviews filed before November 13, 2018. 77 Fed. Reg. 48727 (Aug. 14, 2012) (codified at 37 C.F.R. § 42.100(b)), as amended at 81 Fed. Reg. 18766 (Apr. 1, 2016); *see also* 83 Fed. Reg. 51340 (Oct. 11, 2018) (amending 37 C.F.R. § 42.100(b) effective November 13, 2018) (now codified at 37 C.F.R. § 42.100(b) (2019)).

the context of the entire patent disclosure. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

We note that the district court issued an order construing terms of the '970 patent in *AGIS Software Development LLC v. Huawei Device USA Inc. et al.*, No. 2:17-cv-00513 (E.D. Tex.) on October 10, 2018. Ex. 3001, 9–29 (“District Court Claim Construction Order”). We have considered the district court’s constructions.

2. *Terms to be Construed Expressly*

Petitioner proposes that we construe as means-plus-function under 35 U.S.C. § 112, ¶ 6, the terms in claim 1 that include the word “means,” i.e., limitations 1.2 and 1.5 to 1.9. Pet. 10–12. Patent Owner agrees these terms should be construed as means-plus-function, and further argues we should adopt the constructions entered in the district court proceeding for the purposes of consistency across proceedings. Prelim. Resp. 9–14.¹⁰

We agree these terms should be construed under § 112, ¶ 6. A claim limitation is presumed to invoke § 112, ¶ 6, when it uses the term “means” in combination with functional language, as is the case here. *Signtech USA, Ltd. v. Vutek, Inc.*, 174 F.3d 1352, 1356 (Fed. Cir. 1999). Having determined limitations 1.2 and 1.5 to 1.9 are to be construed under § 112, ¶ 6, below we set forth identification of the function recited in each

¹⁰ We note that prior to institution, Patent Owner did not provide any proposal regarding construction of limitations 1.2 and 1.5 to 1.9, *see generally* Prelim. Resp., and we adopted preliminary constructions based on Petitioner’s proposals, as well as the evidence in the record at the time, Inst. Dec. 9–16. After institution, Patent Owner proposed that we construe the limitations in accordance with the district court’s constructions, but did not provide any argument or evidence to support its proposal other than to argue that the Board’s constructions should be consistent with that of the district court. PO Resp. 9–14.

limitation and the corresponding structure in the written description of the Specification that performs each function. *See Asyst Techs, Inc. v. Empak, Inc.*, 268 F.3d 1364, 1369 (Fed. Cir. 2001) (“The first step in construing a means-plus function limitation is to identify the function explicitly recited in the claim. The next step is to identify the corresponding structure set forth in the written description that performs the particular function set forth in the claim.”) (citations omitted).

In addition, although neither party proposes a construction for the term “forced message alert,” Patent Owner’s arguments regarding claim limitation 1.5 raise an issue regarding the construction of this term. PO Resp. 14–18. Therefore, we also address Patent Owner’s interpretation of the term “forced message alert.”

We determine that no other claim terms require express construction. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (citing *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

3. (*limitation 1.2*) “*data transmission means that facilitates the transmission of electronic files between said PDA/cell phones in different locations*”

We construe the term “data transmission means” under 35 U.S.C. § 112, ¶ 6. The parties agree that the function is to “facilitate the transmission of electronic files between said PDA/cell phones in different locations,” as recited in limitation 1.2. Pet. 10; PO Resp. 10. We agree that this is the recited function.

Petitioner asserts that the corresponding structure is a server that communicates according to either (1) Wifi, WiMax, or other peer-to-peer communications or (2) SMS, TCP/IP, or other messaging protocols. Pet. 10

(citing Ex. 1001, 4:1–36). Patent Owner proposes we adopt the district court’s determination that the corresponding structure is a “communications network server; and equivalents thereof.” PO Resp. 10; Ex. 3001, 10. In pertinent part, both parties assert the corresponding structure is a *server*.

Neither party, however, explains why the corresponding structure is a server. Petitioner provides a bare assertion, without any explanation as to why its construction is correct, and cites to Mr. William’s declaration which likewise includes a bare assertion without any explanation. Pet. 10 (citing Ex. 1003 ¶ 33). Patent Owner does not explain why we should adopt its construction, other than we should do so “for the purposes of consistency” with the district court’s construction. PO Resp. 10.

Although Petitioner does not provide any explanation, Petitioner cites to a description of a communication server that forwards data addressed from one network participant to another, “thus permitting the transmission of forced message alerts, other text and voice messages, photographs, video, E-mail, and URL data” between network participants. Pet. 10 (citing Ex. 1001, 4:1–6). Notably, the Specification does not refer to a server as a transmission means. Neither party addresses other descriptions in the Specification that refer explicitly to two types of transmission means. The Specification refers to the Internet as a transmission means: “[t]o operate on the network, obviously the PC must be on and have an active connection to the Internet or other digital *transmission means*.” Ex. 1001, 3:43–45 (emphasis added). The Specification also refers to communications protocols, such as TCP/IP, as digital *transmission means*: “[a] plurality of PCs and PDA/cell phones each having forced alert software installed providing a communication network . . . with the ability to: 1) allow an operator to create and transmit (via TCP/IP or another digital *transmission*

means) a forced voice alert.” *Id.* at 2:7–11 (emphasis added). Nor do the parties address claim 2, which depends directly from claim 1, and recites “wherein said data transmission means is TCP/IP or another communications protocol.” *Id.* at 9:40–63.

Based on our review of claim 2 and the above-noted disclosure in the Specification, we determine the corresponding structure for a “data transmission means” is “a PDA/cell phone programmed to implement transmission of a forced message alert using TCP/IP or another communications protocol, and equivalents thereof.”

We note that the district court’s claim construction order does not provide analysis as to why a server is the corresponding structure for a “data transmission means,” instead stating that the construction was agreed upon by the parties. Ex. 3001, 10. Furthermore, there is no indication in the district court’s claim construction order that the court considered the language of claim 2, or the portions of the Specification we discuss above about the network and communications protocols being *transmission means*. *Id.*

4. “means for . . .” (limitations 1.5 to 1.9)

a) Introduction

As we discussed above, we construe limitations 1.5 to 1.9 under 35 U.S.C. § 112, ¶ 6. *Supra* Sec. III.C.2. For each of limitations 1.5 to 1.9, the parties agree that the recited function is the respective recitation following the words “means for” (except for limitation 1.5, for which Petitioner asserts the function is less than the entire recitation after “means for,” discussed below). Pet. 10–12; PO Resp. 10–14. As set forth below, for each of limitations 1.5 to 1.9, we determine that the recited function is the entire recitation of the respective limitation following the words “means for.”

With regard to the functions specified in limitations 1.5–1.9, Petitioner contends that the corresponding structure is a computer configured to implement or perform the algorithm recited in the function. Pet. 10–12. As to limitations 1.5, 1.6, and 1.8, Patent Owner essentially agrees with Petitioner, except that Patent Owner asserts the structure is a PC or PDA/cell phone configured to implement or perform the algorithm. PO Resp. 10–14. For limitations 1.7 and 1.9, Patent Owner asserts the corresponding structure is a hardware display and hardware transmitter. *Id.* at 12–14.

For reasons discussed below, *infra* Sec. II.C.4.a.1, we determine the corresponding structure in limitations 1.5, 1.6, and 1.8 is a PDA/cell phone, programmed to carry out an algorithm that performs the recited function. For limitations 1.7 and 1.9, we determine that PDA/cell phone hardware including a display, such as display 16, and a wireless receiver and/or transceiver, and equivalents thereof, corresponds to the receiving function. *Infra* Sec. II.C.4.2.

(1) *Limitations 1.5, 1.6, and 1.8*

Limitations 1.5, 1.6, and 1.8 are computer-implemented means-plus-function limitations because the disclosed structure is a special purpose computer programmed to perform a disclosed algorithm. *WMS Gaming, Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999) (explaining that for computer-implemented means-plus-function limitations, “the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm”). The Specification indicates that PCs and PDA/cell phones are computing devices that include special software—i.e., the forced message alert software application program—programmed to perform the functions recited in limitations 1.5, 1.6, and 1.9. Ex. 1001, 3:41–43 (“Each PC described herein

is like any other contemporary PC, except that it has the forced message alert software application program installed on it.”); *see also id.* at 3:29–31 (“Each PDA/cell phone described herein . . . can function just as any other cell phone . . . [i]n addition . . . it has the forced message alert software application program.”), 4:27, 4:36 (disclosing that the PDA/cell phone includes a CPU).

Because the disclosed structure is a special purpose computer, the Specification must disclose an algorithm for performing the claimed function. *See, e.g., Noah Systems Inc. v. Intuit Inc.*, 675 F.3d 1302, 1312 (Fed. Cir. 2012).

For the foregoing reasons, we determine that the corresponding structure for the respective functions recited in each of limitations 1.5, 1.6, and 1.8 is a PDA/cell phone programmed to carry out an algorithm. Below we identify the algorithm disclosed for performing the claimed functions. *Infra* Sec. III.C.4.a.1.a–c.

(a) (*limitation 1.5*) “*means for attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgement to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone*”

For limitation 1.5, Petitioner asserts that the specified function is “attach a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by a sender PDA/cell phone to a recipient PDA/cell phone.” Pet. 10 (citing Ex. 1001, 8:65–9:39 (claim 1)). Without explanation, Petitioner omits the remainder of limitation 1.5, which recites “said forced message alert software packet

containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgement to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone.”

Petitioner does not adequately explain, nor do we discern why, the remaining language recited in element 1.5 should not be construed as part of the specified function. Patent Owner asserts the recited function includes the entire recitation following “means for” in limitation 1.5. PO Resp. 10. We agree with Patent Owner, and determine the specified function includes the entire recitation following “means for” in limitation 1.5.

For the structure corresponding to the specified function of limitation 1.5, Petitioner identifies the forced message alert software application program functionality described at Ex. 1001, 7:43–63 and Figure 3A. Pet. 10. Patent Owner asserts we should adopt “the algorithm disclosed . . . at 7:8–8:36; and equivalents thereof.” PO Resp. 11.

We find that the disclosure identified by Petitioner describes the recited function because it discloses the steps of a process for sending a forced message alert, except that it does not expressly describe “attaching” the forced message alert software packet to a voice or text message. Ex. 1001, 7:43–63; Fig. 3A. However, it is implied that this step occurs because a user types a text or records a voice message, and a forced message alert is sent, *id.* at 7:43–63, and elsewhere the Specification explains that the software allows a user to create a forced message alert comprising a voice or text message and forced message alert software packet, *id.* at 2:9–13.

The district court, and Patent Owner, also identify Ex. 1001, 7:8–42 and 8:1–36 as disclosing the algorithm. PO Resp. 11; Ex. 3001, 15–18. We find the disclosure at Ex. 1001, 7:8–20 corresponds to the recited function

because it describes as part of the process that the forced message alert software packet contains a list of possible required responses (*see, e.g.*, limitation 1.5, “said forced message alert software packet containing a list of possible required responses”). We also find Ex. 1001, 8:25–30 corresponds to the recited function because it discloses transmitting an automatic acknowledgement receipt (*see, e.g.*, limitation 1.5, “requiring the forced message alert software . . . to transmit an automatic acknowledgement receipt”).

However, the district court and Patent Owner are over-inclusive in their citation to the '970 patent disclosure. The district court and Patent Owner cite to continuous blocks of text that disclose not just the algorithm corresponding to the recited function, but also features not recited in the function. We do not incorporate into our construction features that do not perform the recited function. “Section 112 paragraph 6 does not ‘permit incorporation of structure from the written description beyond that necessary to perform the claimed function.’ Structural features that do not actually perform the recited function do not constitute corresponding structure and thus do not serve as claims limitations.” *Asyst Techs*, 268 F.3d at 1369–70 (citations omitted).

We find that the features disclosed at Ex. 1001, 7:21–42, 8:1–25 and 8:31–36 are not part of the algorithm for performing the function recited in limitation 1.5. For example, Ex. 1001, 7:21–42 describes repeating a message at a defined rate until a user makes a selection from a required response list. The disclosure at Exhibit 1001, 8:1–25 and 8:31–36 describes features unrelated to the recited function including a sender PC or PDA/cell phone monitoring for manual responses, and a recipient PC or PDA/cell

phone separating a forced message alert packet from a text or voice message. None of these features are part of the function specified in limitation 1.5.

For the foregoing reasons, we determine that the corresponding structure is a PDA/cell phone programmed to carry out the algorithm disclosed at Ex. 1001, 2:11–13, 7:8–20, 7:43–63, 8:25–30, and Fig. 3A, and equivalents thereof.

(b) (limitation 1.6) “means for requiring a required manual response from the response list by the recipient in order to clear recipient’s response list from recipient’s cell phone display”

For the structure corresponding to the specified function of limitation 1.6, Petitioner identifies the forced message alert software application program functionality described at Ex. 1001, 8:39–46 and Figure 4. Pet. 11. Patent Owner asserts we should adopt “the algorithm disclosed . . . at 8:37–57; and equivalents thereof.” PO Resp. 12.

We find that the disclosure identified by Petitioner, which relates to the scenario in which a text message is received, describes the applicable algorithm. The disclosure describes a means for requiring a required manual response from the response list by the recipient in order to clear recipient’s response list from recipient’s cell phone display, namely by causing a text message and response list to be shown on a recipient PC or PDA/cell phone until a manual response is selected from the response list, and clearing the forced alert text only after the user of the recipient device has selected a response. Ex. 1001, 8:39–46. We also find the disclosure at Ex. 1001, 8:46–51, which relates to receipt of voice messages, describes the applicable algorithm, as contended by Patent Owner, because the recited function also encompasses scenarios in which voice messages are received.

However, contrary to Patent Owner’s assertion, we find the disclosure at Ex. 1001, 8:37–39 and 8:52–57, does not describe the algorithm for the recited function. Patent Owner does not provide any explanation to support its position, other than its argument that the district court included this disclosure in its claim construction. PO Resp. 11–12. The disclosure at Ex. 1001, 8:37–39 and 8:52–57 describes the forced voice alert software application program “effectively tak[ing] control” of the recipient device and releasing effective control of the recipient PDA/cell phone. Ex. 1001, 8:37–39, 8:52–57. However, the function specified in limitation 1.6 does not mention taking or releasing control of the PDA/cell phone. On the other hand, claim 2, which depends directly from claim 1, explicitly claims a means for taking control of the recipient PDA/cell phone. Ex. 1001, 9:46–54 (“means for controlling of the recipient PDA/cell phone upon transmitting said automatic acknowledgment and causing . . . the text message and a response list to be shown on the display of the recipient PDA cell phone”). Accordingly, we find the feature of taking and releasing control of the PDA/cell phone does not constitute part of the algorithm that achieves the function recited in limitation 1.6, and does not serve as a limitation on the claim. *Cf. Asyst Techs*, 268 F.3d at 1369–70 (“Structural features that do not actually perform the recited function do not constitute corresponding structure and thus do not serve as claims limitations”).

For the foregoing reasons, we determine that the corresponding structure is a PDA/cell phone programmed to carry out the algorithm disclosed at Ex. 1001, 8:39–46 and the portions of Figure 4 described at 8:39–46, and equivalents thereof.

(c) (limitation 1.8) “means for periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert”

For the structure corresponding to the specified function of limitation 1.8, Petitioner identifies the forced message alert software application program functionality described at Ex. 1001, 8:6–9 and Fig. 3A and 3B. Pet. 11–12. Patent Owner asserts we should adopt the “the algorithm disclosed . . . at 7:64–8:8; and equivalents thereof.” PO Resp. 13.

We are persuaded that Ex. 1001, 8:6–8¹¹ and the corresponding step in Figure 3B (second step) provide sufficient detail to disclose the applicable algorithm because they disclose “[t]he sender PC or PDA/cell phone will then periodically resend the forced message alert to the PC or PDA/cell phone that have not acknowledged receipt,” and “[t]he sender cell phone, integrated PDA/cell phone or PC periodically resends the message alert to the recipient cell phones, integrated PDA/cell phones or PCs that have not acknowledged receipt,” respectively. Ex. 1001, 8:6–8.

Patent Owner is over-inclusive because the disclosure at Ex. 1001, 7:64–8:5 describes features unrelated to the function recited in limitation 1.8. *Cf. Asyst Techs*, 268 F.3d at 1369–70 (“Structural features that do not actually perform the recited function do not constitute corresponding structure and thus do not serve as claims limitations”). The features relate, for example, to monitoring for and receiving acknowledgments of receipt of forced message alerts, Ex. 1001, 7:64–67,

¹¹ Petitioner includes line 9 of column 8, but this appears to be in error. Line 9 begins a new paragraph and contains only the sentence fragment, “The sender PC or PDA/cell phone also monitors for and,” which is unrelated to the recited function. Therefore, we exclude line 9 from the algorithm.

and the sender PC or PDA/cell phone providing an indication on a display of which of the recipients have and have not acknowledged receipt, Ex. 1001, 8:1–5.

For the foregoing reasons, we determine that the corresponding structure is a PDA/cell phone programmed to carry out the algorithm disclosed at Ex. 1001, 8:6–8 and corresponding step in Fig. 3B (second step in Figure 3B), and equivalents thereof.

- (2) *Limitations 1.7 and 1.9 – (limitation 1.7) “means for receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert”; (limitation 1.9) “means for receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the responses from each recipient PDA/cell phone that responded”*

For the structure corresponding to the specified function of limitation 1.7, Petitioner identifies the forced message alert software application program functionality described at Ex. 1001, 7:64–8:5 and Figures 3A and 3B. Pet. 11. For the structure corresponding to the specified function of limitation 1.9, Petitioner identifies the forced message alert software application program functionality described at Ex. 1001, 8:9–15 and Figures 3A and 3B. *Id.* at 12.

Patent Owner contends the corresponding structure is “PDA/cell phone hardware including touch screen 16, and wireless transmitter or cellular modem; and equivalents thereof.” PO Resp. 12–14.

Therefore, the dispute raised by the parties’ proposals is whether the corresponding structure is: (1) a computer configured to implement or perform an algorithm, or (2) a hardware transmitter (presumably for “receiving”) and a hardware display (presumably for “displaying”). We

adopt Patent Owner’s approach, namely that the corresponding structures are a hardware display and receiver and/or transceiver. With regard to the function of displaying, the Specification discloses a hardware display of the PDA/cell phone (*see, e.g.*, Figure 1, LCD display 16) that displays an indication of which recipients have sent acknowledgements and an indication of the response from each recipient cell phone. Ex. 1001, 8:1–5, 8:12–15. As to the function of receiving, the Specification discloses that the PC and PDA/cell phone can communicate using WiFi or WiMax, both of which are wireless, and the PDA/cell phone can communicate over a wireless cellular network, thereby indicating the PC and PDA/cell phone each have a wireless receiver and/or transceiver for receiving automatic acknowledgements. Ex. 1001, 4:7–11.

Therefore, we find the corresponding structure is PDA/cell phone hardware including a display, such as display 16, and a wireless receiver and/or transceiver, and equivalents thereof.

We decline to adopt Patent Owner’s proposal that a wireless *transmitter* performs the receiving function, because a transmitter transmits rather than receives. PO Resp. 12–14. We also decline to adopt Patent Owner’s proposal that a “cellular modem” corresponds to the receiving function because Patent Owner does not identify any disclosure in the Specification of a cellular modem performing the receiving function. *Id.*

b) “*forced message alert*”

Claim 1 recites (Ex. 1001, 9:14–23) (emphasis added):

means for attaching a forced message alert software packet to a voice or text message creating a *forced message alert* that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the

forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgement to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone.

Claim 6 recites (Ex. 10:7–11, 14–17) (emphasis added):

A method of sending a forced message alert to one or more recipient PDA/cell phones . . . said method comprising the steps of . . . creating the *forced message alert* on said sender PDA/cell phone by attaching a voice or text message to a forced message alert application software packet to said voice or text message.

Neither party proposes a construction for the term “forced message alert.” *See* Pet. 8–12; *see also* PO Resp. 9–14. However, in its discussion of patentability, Patent Owner argues Kubala’s email message 214 with mandatory response flag 216 (asserted “forced message alert”) is not a “forced message alert” because it is not “forced to the display without any action on the part of the recipient.” PO. Resp. 15–18; Sur-Reply 11–15. In doing so, Patent Owner seeks to write a negative limitation, i.e., forcing a message to the display *without any action on the part of the recipient*, into claims 1 and 6. In light of Patent Owner’s argument, we consider whether a “forced message alert” should be interpreted as a message that must be forced to the display without any action on the part of the recipient.

We begin with the language of the claims viewed in light of the Specification. The negative limitation Patent Owner seeks to write into claims 1 and 6 appears nowhere in the language of the claims. *See, e.g.*, Pet. Reply 4–6 (arguing limitation 1.5 does not impose the restriction asserted by Patent Owner). The claim language makes clear that a “forced message alert” is created by attaching a forced message alert software packet to a voice or text message. Ex. 1001, 9:14–15 (claim 1, “means for attaching a forced message alert software packet to a voice or text message

creating a forced message alert”) (emphasis added); *see also* Ex. 1001, 10:14–17 (claim 6, “*creating the forced message alert* on said sender PDA/cell phone by attaching a voice or text message to a forced message alert application software packet to said voice or text message”) (emphasis added). Accordingly, by the very language of the claims, a message is *forced* because it is attached to a *forced* message alert software packet. Nothing in the claim language indicates that what makes the message *forced* is forcing its display without any action on the part of the recipient.

The Specification reinforces the understanding that a forced alert is a message with a forced alert software packet attached thereto, disclosing that forced alert software provides the ability to “create and transmit (via TCP/IP or another digital transmission means) a forced voice alert, wherein said forced voice alert is comprised of a text or voice message file and a forced alert software packet.” Ex. 1001, 2:7–13.

Accordingly, the claim language viewed in light of the Specification is unambiguously clear—a “forced message alert” is a message (e.g., text or voice) attached to a forced message alert software packet.

Patent Owner argues, nonetheless, that we should read its proposed negative claim limitation into the term “forced message alert” based on disclosure in the Specification that upon detection of a forced message alert, a recipient PDA/cell phone transmits an automatic acknowledgement of receipt to the sender, and after transmitting the receipt, the forced voice alert software application program effectively takes control of the recipient PDA/cell phone. PO Resp. 16 (citing Ex. 1001, 8:25–39). Patent Owner also relies on disclosure in the Specification that states “the forced message alert software application program causes the text message and the response list to be shown on the display of the recipient until selection of a manual

response from the response list.” PO Resp. 17 (citing Ex. 1001, 8:37–44); *see also* Sur-reply 12–14.

Patent Owner’s reliance on the cited disclosure is unavailing for several reasons. First, the disclosure cited by Patent Owner does not specify that the message alert is displayed *without any action on part of the recipient*, and does not preclude a user from first opening the message before being presented with a display of the message. Ex. 1001, 8:25–44. Patent Owner’s argument appears to be that the software’s effective taking control of the PDA/cell phone, disclosed at Ex. 1001, 8:37–39, implies a recipient can no longer perform actions that would cause a forced message alert to be displayed, thereby suggesting messages are forced to the display without any action on the part of the recipient. PO Resp. 16. However, we do not find this persuasive because the Specification does not preclude steps such as a user performing acts, e.g., opening a message, that lead to display of the forced alert message.

Second, even if we were to infer that the Specification is describing forcing the message to a display without any action by the recipient, we do not discern a reason to write such a requirement into the claims that appears nowhere in the claim language. *See SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (“Though understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not a part of the claim.”).

Review of the claims as a whole confirms that we should not read Patent Owner’s proposed requirement into the term “forced message alert.” If we were to adopt Patent Owner’s view, it would be inconsistent with Patent Owner’s, and our, interpretation above of limitation 1.5 of claim 1.

As we discussed above, we construe limitation 1.5 as reciting means-plus-function, and we determine the structure corresponding to the specified function is a PDA/cell phone programmed to carry out the algorithm disclosed at Ex. 1001, 2:11–13, 7:8–20, 7:43–63, 8:25–30, and Fig. 3A, and equivalents thereof. *Supra* Sec. II.C.4.a.1.a; *see also* PO Resp. 10–11 (Patent Owner submitting this limitation should be construed as a means-plus-function term). Therefore, if we were to read into limitation 1.5 a requirement of forcing a forced message alert to a display without any action on part of the recipient, there would need to be supporting disclosure in the Specification of an algorithm for performing this function. *Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1312 (Fed. Cir. 2012) (citing *Aristocrat Techs. Australia Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1238, 1333) (Fed. Cir. 2008)). However, as we discussed above, the Specification does not disclose an algorithm sufficient to perform the negative limitation proposed by Patent Owner, i.e., forcing a message to the display without any action on part of the user.

We note the algorithm we identify for limitation 1.5, *supra* Sec. II.C.4.a.1.a, does not disclose forcing a forced message alert to a display without any action on part of the recipient. Ex. 1001, 2:11–13, 7:8–20, 7:43–63, 8:25–30, Fig. 3A. Furthermore, there is no such requirement even under Patent Owner's proposed construction because not even Patent Owner's proposed algorithm discloses forcing a forced message alert to a display without any action on part of the recipient. PO Resp. 11 (asserting the algorithm is disclosed at Ex. 1001, 7:8–8:36); *see also* Pet. Reply 4–6.

For the foregoing reasons, we conclude that a “forced message alert” should not be interpreted as a message that must be forced to the display without any action on the part of the recipient.

5. *Summary*

Our constructions for limitations 1.2 and 1.5 to 1.9 are summarized below:

Limitation	Specified Function	Corresponding Structure
1.2	facilitate the transmission of electronic files between said PDA/cell phones in different locations	a PDA/cell phone programmed to implement transmission of a forced message alert using TCP/IP or another communications protocol, and equivalents thereof
1.5	attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgement to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone	PDA/cell phone programmed to carry out the algorithm disclosed at Ex. 1001, 2:11–13, 7:8–20, 7:43–63, 8:25–30, and Fig. 3A, and equivalents thereof
1.6	requiring a required manual response from the response list by the recipient in order to clear the recipient’s response list from recipient’s cell phone display	PDA/cell phone programmed to carry out the algorithm disclosed at Ex. 1001, 8:39–46 and the portions of Figure 4 described at 8:39–46, and equivalents thereof
1.7	receiving and displaying a	PDA/cell phone hardware

Limitation	Specified Function	Corresponding Structure
	listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert	including a display, such as display 16, and a wireless receiver and/or transceiver, and equivalents thereof
1.8	periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert	PDA/cell phone programmed to carry out the algorithm disclosed at Ex. 1001, 8:6–8 and corresponding step in Fig. 3B (second step in Figure 3B), and equivalents thereof
1.9	receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the responses from each recipient PDA/cell phone that responded	PDA/cell phone hardware including a display, such as display 16, and a wireless receiver and/or transceiver, and equivalents thereof

D. Asserted Obviousness Over Kubala and Hammond

As noted above, Petitioner asserts claims 1 and 3–9 of the '970 patent would have been obvious over the combination of Kubala and Hammond. Pet. 12; Pet. Reply 2–15. Patent Owner contends Petitioner has not shown unpatentability of claims 1 and 3–9 on this ground. PO Resp. 14–28; Sur-reply 7–15. For the reasons stated below, we determine Petitioner has demonstrated, by a preponderance of the evidence, that claims 1 and 3–9 are unpatentable under § 103 as obvious over the combination of Kubala with Hammond.

1. Kubala (Ex. 1005)

Kubala generally discloses a method, system, apparatus, or computer program product for processing electronic messages. Ex. 1005 ¶ 9. Kubala explains that employee productivity may suffer demonstrably in proportion to the number of email messages the employee receives. *Id.* ¶ 5. This is due in part to the high volume of emails an employee may receive, because the task of responding to emails messages consumes an increasingly larger portion of the employee's workday. *Id.* To address these issues, Kubala states that "it would be advantageous to provide productivity enhancing features within e-mail applications for the handling of email messages so that important messages receive the appropriate attention from the recipient of an e-mail message." *Id.* ¶ 8.

Kubala specifically discloses computing devices such as network-enabled phones and PDAs that directly transfer data between each other across wireless links. *Id.* ¶ 27. The devices include email application software that facilitates email communication between devices, wherein the email software 206 includes enhanced functionality. *Id.* ¶ 35. One of the enhanced features is mandatory response functional unit 210 that operates to request that an outgoing email message be flagged as requiring a mandatory response from the email recipient. *Id.* Enhanced email application 206 relies on functional unit 210 to either assist in generation of the outgoing email message or perform the modifications necessary to flag the outgoing message as requiring a mandatory response. *Id.* Kubala discloses, for example, that email message 214 may contain mandatory response flag 216 indicating to the enhanced email application on the recipient computing device that email message 214 should be handled as an important message

requiring a mandatory response. *Id.* Kubala discloses that mandatory response flag 216 may be implemented in a variety of data formats. *Id.*

2. *Hammond (Ex. 1006)*

Hammond generally discloses a system for enhancing the reliability of communicating with electronic messages. Ex. 1006, code (57). Hammond explains that electronically communicated messages such as email, paging messages, and voice mail have become increasingly pervasive. *Id.* at 1:13–15. According to Hammond, although initial distribution of electronic messages by a sender is quick and convenient, ensuring that a message is received and reviewed by a recipient within a certain timeframe can be inconvenient. *Id.* at 1:21–26. Hammond addresses these issues by disclosing a system that sends an electronic message to designated recipients, and automatically helps ensure that each message has been received and reviewed by the recipient. *Id.* at 2:1–5. If receipt is not confirmed within a certain specified timeframe, the system can automatically resend the electronic message or take other appropriate action. *Id.* at 2:5–8.

In one embodiment, the disclosed system includes a Message Review Server (“MRS”) that sends electronic messages to designated recipients, and automatically helps ensure that each message has been received and reviewed. *Id.* at 3:1–5. The MRS also allows the sender of an electronic message to specify message delivery information that specifies actions to take when a message is not delivered within a specified timeframe. *Id.* at 3:12–15. For example, the sender can specify that if receipt notification is not received within a specified time period, the message will be resent to the recipient. *Id.* at 3:15–18. Message delivery information can also specify

frequency or duration options, such as an option to resend a message every two hours. *Id.* at 3:18–22.

In one embodiment, Kubala discloses that use of the MRS system begins when a sender of an electronic message supplies a message to a Message Sender component. Ex. 1006, 4:48–51. The sender supplies the message, identifies one or more recipients for the message, and specifies various optional message tracking information (e.g., message delivery information, message review information, and message post-review information). *Id.* at 4:51–56. A sender also can supply delivery information such as a resend period of time and can optionally supply other resend options. *Id.* at 4:56–60. The system also includes a Message Receipt Tracker component that attempts to identify when sent messages have been delivered to recipients and when sent messages have been reviewed by recipients. *Id.* at 5:17–20

3. *Claim 1*

Petitioner relies on Kubala as teaching the subject matter of claim 1, but asserts that to the extent Patent Owner argues Kubala does not teach limitations 1.7 to 1.9, Hammond provides the missing disclosure. Pet. 23–40.

Patent Owner argues: (1) Kubala and Hammond do not disclose a “forced message alert” (PO Resp. 14–18), as recited in limitation 1.5, (2) Kubala does not disclose “requiring a required manual response from the response list by the recipient in order to clear recipient’s response list from recipient’s cell phone display,” as recited in limitation 1.6 (PO Resp. 18–22), (3) Kubala and Hammond do not disclose “displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically

acknowledged the forced message alert,” as recited in limitation 1.7 (PO Resp. 22–27), and (4) Kubala and Hammond do not disclose “displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the responses from each recipient PDA/cell phone that responded,” as recited in limitation 1.9 (PO Resp. 27–28).

Upon review of the record, we determine Petitioner has shown, by a preponderance of the evidence, that claim 1 is unpatentable as obvious over the combination of Kubala with Hammond.

a) Preamble and Limitations 1.1–1.4 and 1.8

Petitioner sets forth where Kubala teaches the preamble and each of limitations 1.1–1.4, and where Kubala, alone or in combination with Hammond, teaches limitation 1.8. Pet. 23–27, 35–37. Petitioner also articulates a rationale to combine Kubala with Hammond. *See, e.g., id.* at 21–23; *see also id.* at 20 (“Like Kubala, Hammond discloses methods and systems for enhancing reliability of electronic messaging”). Patent Owner does not provide argument in the Response contesting Petitioner’s assertions regarding the preamble and limitations 1.1–1.4 and 1.8.¹²

¹² In the Sur-reply, Patent Owner asserts for the first time that its arguments in the Response regarding limitation 1.5’s recitation of “a forced message alert,” PO Resp. 14–18, applies to other claim limitations that recite either “a forced message alert software application program” or “forced message alert,” Sur-reply 7–10. We address Patent Owner’s arguments regarding the phrase “forced message alert” in our discussion of limitation 1.5, *infra* Sec. III.D.3.b.1.

(1) (preamble) “[a] communication system for transmitting, receiving, confirming receipt, and responding to an electronic message”

Petitioner persuasively argues Kubala teaches the preamble of claim 1, because Kubala relates to sending and receiving e-mail messages (e.g., communication system for transmitting and receiving an electronic message) and teaches confirming receipt and responding to an electronic message, disclosing “that it was known to ‘generate return receipts to the sender when the sender’s e-mail message is received at its intended destination or when the recipient opens the email message, thereby providing an acknowledgement that a particular message has been received and/or opened.’” Pet. 23 (citing Ex. 1005 ¶ 6).

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to the preamble of claim 1.

(2) (limitation 1.1) “a predetermined network of participants, wherein each participant has a similarly equipped PDA/cell phone that includes a CPU and a touch screen display a CPU and memory”

Petitioner persuasively argues Kubala teaches limitation 1.1 because Kubala shows, in Figure 1A, a plurality of PDAs 107 and 112 connected through wireless link 116, and connected through network 101 through various other links shown in Figure 1A, that form a predetermined network. Pet. 24. Kubala further discloses that each PDA includes at least one CPU 22, a memory 124, 126, and a user interface adapter 148 that can be coupled to a touch-screen display, as can be seen in Figure 1B. *Id.* at 24–25 (citing Ex. 1005 ¶¶ 26, 27, 29–30, Fig. 1A, Fig. 1B; Ex. 1003 ¶¶ 92–93).

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.1.

(3) (limitation 1.2) “a data transmission means that facilitates the transmission of electronic files between said PDA/cell phones in different locations”

Petitioner argues, based on its construction of “data transmission means,” that the structure corresponding to the function specified in limitation 1.2 is a server that communicates according to certain enumerated messaging protocols. Pet. 10. However, as we discussed above, we disagree with Petitioner’s construction and determine that the pertinent corresponding structure is “a PDA/cell phone programmed to implement transmission of a forced message alert using TCP/IP or another communications protocol, and equivalents thereof.” *Supra* Sec. II.C.3. Although Petitioner’s proposed construction differs from ours, Petitioner nonetheless sets forth a sufficient showing for this limitation. Petitioner argues that the server in Kubala communicates according to, inter alia, peer-to-peer communications (e.g., WiFi or WiMax) or other messaging protocols (e.g., SMS or TCP/IP). Pet. 25. In particular, Petitioner argues that the asserted PDA/cell phones in Kubala communicate with one another using, for example, “Transport Control Protocol/Internet Protocol (TCP/IP)” or WiFi technology (IEEE 802.11), *id.* (citing Ex. 1006 ¶ 27, Fig. 1A), both of which teach or suggest a PDA/cell phone implementing transmission of a forced message alert using a communications protocol, such as TCP/IP.¹³

¹³ The outcome of this Final Decision would not be affected had we adopted the district court’s construction. Petitioner shows, and Patent Owner does not dispute, that the asserted prior art teaches a communications network server. Pet. 25 (“In Kubala, a server supports a network 109 and a client 110, allowing the PDAs/cell phones to (1) ‘communicate with one another’ using, for example, ‘Transport Control Protocol/Internet Protocol (TCP/IP)’ or (2) ‘directly transfer data between themselves’ using, for example, ‘Bluetooth™ wireless technology or WiFi technology (IEEE 802.11).’

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.2.

(4) (limitation 1.3) “a sender PDA/cell phone and at least one recipient PDA/cell phone for each electronic message” (limitation 1.3)

Petitioner persuasively argues Kubala teaches limitation 1.3, because Kubala discloses a plurality of PDAs that communicate with each other, wherein one PDA (i.e., the sender PDA) sends an electronic message to another PDA (i.e., the recipient PDA). Pet. 26 (citing Ex. 1006 ¶¶ 27, 32, 33, Fig. 1A; Ex. 1003 ¶ 95).

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.3.

(5) (limitation 1.4) “a forced message alert software application program including a list of required possible responses to be selected by a participant recipient of a forced message response loaded on each participating PDA/cell phone”

Petitioner persuasively argues Kubala teaches limitation 1.4, because Kubala discloses an enhanced email application (asserted forced message alert software application program) that includes mandatory-response functional unit 212 that sends email messages, and embedding in a sender email message a menu of possible responses 1120 to the sender’s message (asserted list of required possible responses to be selected by a recipient), as shown in Figure 11C. Pet. 26–27 (citing Ex. 1005 ¶¶ 13, 22, 33, 35, 36, 47, 54, 55, 57, 60, Fig. 2, Fig. 11C; Ex. 1003 ¶¶ 96–98).

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.4.

(Kubala, ¶0027, FIG. 1A.) Kubala therefore expressly discloses this limitation. (See Williams, ¶94.)”; *see generally* PO Resp.

(6) (limitation 1.8) “means for periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert”

Petitioner has not shown Kubala alone teaches limitation 1.8; however, Petitioner argues persuasively that Kubala combined with Hammond teaches this limitation. Petitioner relies on Kubala’s description with reference to Figure 10 of resending an email message that has a mandatory-response flag (i.e, the asserted forced message alert) if a reply to the email message has not been made. Pet. 35–36 (citing Ex. 1005 ¶ 53, Fig. 10). With reference to Figure 10, Kubala appears to disclose neither (1) the reply to the e-mail message is an *automatic* acknowledgement of receipt rather than, for example, a manual response, nor (2) the e-mail message is sent *periodically*. Ex. 1005 ¶ 53, Fig. 10. Petitioner does not explain how Kubala’s disclosure teaches *automatic* acknowledgement that is sent *periodically*. Pet. 35–36.

However, Petitioner contends that to the extent Kubala does not teach limitation 1.8, Hammond provides the missing disclosure, and a skilled artisan would have been motivated to combine Kubala with Hammond. Pet. 36–37 (citing Ex. 1006, Abstract, 2:1–8, 4:21–28, 5:5–6:19. 6:66–7:63, Fig. 2, Fig. 3A, Fig. 3B, Fig. 4, Fig. 5A, Fig. 5B; Ex. 1003 ¶¶ 117–118). We are persuaded Hammond provides the missing disclosure because Hammond teaches a recipient “[provid[ing] receipts when messages are received,” Ex. 1006, 5:20–23, and resending messages periodically (every specified Resend Time period) until the recipient sends a receipt of delivery notification, Ex. 1006, 7:7–13 (setting Resend Times to 1 hour or 2 hours), 7:14–17 (explaining that when a message is received by recipient in less than the specified Resend Time, the message is not resent). Hammond also

explains the benefit of periodically resending messages for which a return receipt has not been received, namely to help ensure that each message has been successfully delivered. Ex. 1006, 2:1–10.

Petitioner also provides a rationale to combine Hammond with Kubala, arguing that a skilled artisan would have been motivated to combine these references because both are directed to tracking responses to mandatory-response messages, and both disclose use of acknowledgement receipts. Pet. 36–37 (citing the discussion regarding limitation 1.7 at Pet. 34–35 and Ex. 1003 ¶¶ 117–118). We find Petitioner’s arguments persuasive. We find that both Hammond and Kubala relate to enhancing communication that involves electronic messages such as email, both are directed to the same field of endeavor, and both address the same problem—i.e., to ensure that important email messages receive timely responses. Pet. 20–22; Ex. 1005, code (57); Ex. 1006, code (57). Moreover, as Petitioner points out, Kubala already discloses the use of automatic acknowledgement receipts (although not in connection with Figure 10), explaining that such was well known in the art. *Id.* at 30 (citing Ex. 1005 ¶ 6). Hammond further confirms that use of return receipts was well known in the art, *see, e.g.*, Ex. 1006, 1:21–26, 2:1–10, and confirms Mr. Williams’ assertion that due to uncertainty as to whether an e-mail message was received, return receipts provided a well-known benefit, Ex. 1003 ¶ 103.

Accordingly, we are persuaded that “implementing Hammond’s tracking features in Kubala’s system would have been an obvious design choice,” and “represents no more than ‘the predictable use of prior art elements according to their established functions.’” Pet. 22–23. Moreover, we are persuaded that “[b]ecause Hammond merely discloses details about tracking features that are already suggested by Kubala’s system that collects

and records information about the recipients response to a message, this combination of Kubala and Hammond would not ‘result in a difference in function or give unexpected results.’” *Id.* (citing *In re Rice*, 341 F.2d 309, 314 (CCPA 1965)).

Therefore, we are persuaded a skilled artisan would have been motivated to modify Kubala to periodically resend messages for which a return receipt has not been received to help ensure that each message has been successfully delivered, as taught by Hammond.

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.8

b) Limitations 1.5–1.7 and 1.9

Petitioner sets forth where Kubala teaches each of limitations 1.5 and 1.6, and where Kubala, alone or in combination with Hammond, teaches limitations 1.7 and 1.9. Pet. 28–35, 37–40. Petitioner also articulates a rationale to combine Kubala with Hammond. *See, e.g., id.* at 20–23. As noted above, Patent Owner disputes Petitioner’s assertions regarding limitations 1.5–1.7 and 1.9. PO Resp. 14–28; Sur-reply 7–15.

(1) (limitation 1.5) “means for attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses and requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgment to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone”

As we determined in our claim construction, limitation 1.5 is construed as means-plus-function under § 112, ¶ 6. *Supra* Sec. II.C.2. The function is the entire recitation of limitation 1.5 following the words “means for.” *Supra* Sec. II.C.4.a.1.a. The corresponding structure is a PDA/cell

phone programmed to carry out the algorithm disclosed at Ex. 1001, 2:11–13, 7:8–20, 7:43–63, 8:25–30, and Fig. 3A, and equivalents thereof. *Supra* Sec. III.C.4.a.1.a.

Petitioner persuasively argues that the corresponding structure in Kubala is, e.g., computing device 202, which may be a PDA, with enhanced email application 206 installed on it. Pet. 28 (citing Ex. 1005 ¶¶ 33–36; Ex. 1003 ¶ 99).

Petitioner also persuasively argues that Kubala’s enhanced email application software performs the functions specified in limitation 1.5. *Id.* at 28–30. In particular, Petitioner shows Kubala teaches a voice or text message, based on Kubala’s disclosure that message 214—i.e., the message transmitted from the asserted PDA/cell phone to the asserted recipient PDA/cell phone—may be a text message, audio message, video message, or other type of message. *Id.* at 29 (citing Ex. 1005 ¶ 32).

Petitioner also shows Kubala teaches a forced message alert software packet, based on Kubala’s mandatory response flag 216 that indicates to the enhanced email application on the recipient computing device that email message 214 should be handled as an important message requiring a mandatory response. *Id.* at 28–29 (citing Ex. 1005 ¶¶ 35–41, 54–61, Fig. 3, Fig. 4; Ex. 1003 ¶ 100).

Furthermore, Petitioner shows Kubala teaches attaching a forced message alert software packet to a voice or text message, because Kubala discloses that the mandatory response flag 214 is attached to email message 214, and “may be implemented in a variety of data formats.” *Id.* at 28–29 (quoting Ex. 1005 ¶ 35 and citing *id.* ¶¶ 36, 41, 54–61).

Petitioner also shows Kubala teaches “a list of possible required responses,” based on menu 1120 displayed on the recipient device, which is

shown in the exemplary embodiment in Figure 11C to include as responses, “too busy right now,” “looks okay,” and “request declined.” *Id.* at 29 (citing Ex. 1005 ¶¶ 22, 47, 57, Fig. 11C). We are persuaded that Kubala teaches or suggests attaching the asserted list of possible responses, e.g., text strings such as “too busy right now” that are used as menu items, to the asserted forced message alert software packet, i.e., flag 216, based on Kubala’s disclosure that the responses may be “extracted from the original e-mail message that was received from the sender.” *Id.* (quoting Ex. 1005 ¶ 57, and citing *id.* ¶¶ 40–41).

Petitioner shows, furthermore, that Kubala teaches “requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgement to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone,” based on Kubala’s disclosure that it was known in the art to transmit automatic acknowledgements to a sender of a voice or text message:

Kubala discloses that it was known “to generate return receipts to the sender when the sender’s email message is received at its intended destination or when the recipient opens the e-mail message, thereby providing an acknowledgment that a particular message has been received.”

Pet. 30 (quoting Ex. 1005 ¶ 6). Mr. Williams agrees that the need for acknowledgement of email messages was well understood. Ex. 1003 ¶ 102–103. He explains that at the time, email systems were not completely reliable, and there was uncertainty as to whether, and if, an email message would “get through” to a recipient. *Id.* He states that it would have been obvious, therefore, to include a return receipt to provide the sender with confirmation that the email message has been received by the recipient so the sender would not have “to worry about whether a message was received

or not.” *Id.* We credit Mr. Williams testimony, in light of Kubala’s disclosure that use of return receipts was well known in order to provide a sender with confirmation that a message had been received. Ex. 1005 ¶ 6.

For the foregoing reasons, Petitioner has shown that Kubala teaches or suggests the subject matter of limitation 1.5.

Patent Owner contends Petitioner has not shown that Kubala, alone or in combination with Hammond, teaches or suggests a “forced message alert,” arguing the e-mail messages with attached flag 216 (asserted forced message alerts) in Kubala are not *forced*. PO Resp. 14–18; Sur-reply 11–15. To arrive at this conclusion, Patent Owner asserts that a *forced* message is one in which the message is “forced to the display without any action on the part of the recipient.” *Id.* at 15. According to Patent Owner, Kubala does not satisfy this requirement because a user of a recipient PDA/cell phone in Kubala must manually open a received e-mail message. *Id.* at 15. For the reasons discussed in our claim construction, we reject Patent Owner’s contention that a “forced message alert” must be “forced to the display without any action on the part of the recipient.” *Supra* Sec. II.C.4.a.1.a.

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.5.

(2) (*limitation 1.6*) “*means for requiring a required manual response from the response list by the recipient in order to clear the recipient’s response list from recipient’s cell phone display*”

As we determined in our claim construction, limitation 1.6 is construed as means-plus-function under § 112, ¶ 6. *Supra* Sec. II.C.2. The function is the entire recitation of limitation 1.6 following the words “means for.” *Supra* Sec. II.C.4.a. The corresponding structure is a PDA/cell phone programmed to carry out the algorithm disclosed at Ex. 1001, 8:39–46 and

the portions of Figure 4 described at 8:39–46, and equivalents thereof.
Supra Sec. III.C.4.a.1.b.

Petitioner persuasively argues that the corresponding structure in Kubala is, e.g., computing device 202, which may be a PDA, with enhanced email application 206 installed on it. Pet. 30–31 (citing Ex. 1005 ¶¶ 33–36, Fig. 2; Ex. 1003 ¶ 106).

Petitioner also persuasively argues that Kubala’s enhanced email application software performs the functions specified in limitation 1.6. *Id.* at 30–32.

Petitioner persuasively argues Figure 11C of Kubala teaches the specified function of requiring a manual response by the recipient from the response list in order to clear the response list from the recipient’s cell phone display. Petitioner relies on disclosure that menu 1120 includes a list of possible responses from which a recipient can choose, and argues that this list is a “response list” as recited in limitation 1.6. *Id.* at 31. We find Petitioner’s argument persuasive in light of Figure 11C, reproduced below, and Figure 11A.

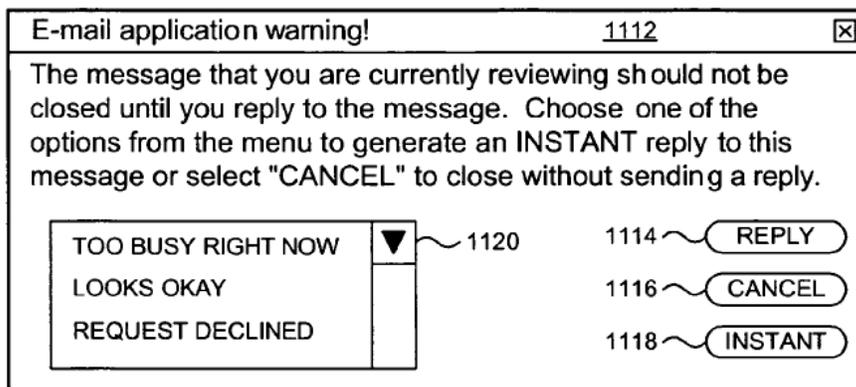


FIG. 11C

“Fig. 11C showing GUI display window 112”

Ex. 1005, Fig. 11C. Figure 11C illustrates GUI display window 1112 that is displayed on a recipient device if a user attempts to close an email without

replying to it. *Id.* ¶ 57. Window 1112 contains an error message informing the recipient that a reply is needed before closing the email. Window 1112 also includes menu 1120 comprising a list of responses from which a recipient can select a response to provide to the sender (e.g., a response list). *Id.* Although window 1112 also includes CANCEL button 1116, that allows a user to close an email message without selecting and sending a response message to the sender, Kubala also teaches explicitly that a user of a recipient PDA/cell phone can be prevented from closing, exiting, or deleting the e-mail message until the recipient has responded to the message. Pet. 31–32 (citing Ex. 1005 ¶¶ 9, 55). This is shown in Figure 11A, where the error message in window 1102 states the message cannot be closed until the user replies to the message. Ex. 1005, Figure 11A (“[t]he message that you are currently viewing cannot be closed until you reply to the message”); *id.* Fig. 11C. The description of Figure 11A explains the message in window 1102 may be displayed in “a strict process in which a user is not permitted to perform another action with respect to a message that contains a mandatory response flag unless the user first responds or replies to the message, thereby fulfilling the request of the sender of the message that the user must respond to the message.” Ex. 1005 ¶ 55. The Summary of the Invention in Kubala also describes this strict process, in which “actions are *required* by the recipient with respect to usage of a data processing system until the recipient uses the data processing system to send a response for the received electronic message to the sender.” *Id.* ¶ 9 (emphasis added). Kubala explains, “the recipient can be prevented from closing a review of the received e-mail message, from deleting the received e-mail message, and from exiting the e-mail application until the recipient has responded to the received email message.” *Id.*

We are persuaded a skilled artisan viewing Kubala's disclosure of (1) a response list from which a user selects a response, and (2) a feature preventing a user from exiting or deleting an e-mail or exiting the application until a response is sent, would have been motivated to combine these features, because the Summary of Invention of Kubala just discussed describes using a strict process requiring a recipient to respond and preventing a recipient from closing/deleting an e-mail or exiting the e-mail application until the recipient responds as the invention. *Id.* Moreover, Kubala explicitly teaches that the features of Figures 11A through 11D can be combined in different ways, *see, e.g.*, Pet. 19–20, 31–32, Pet. Reply 10:

FIGS. 11A-11D may be used in different scenarios depending upon the manner in which the enhanced e-mail application is implemented or configured to handle an e-mail message that contains a mandatory response flag. Other scenarios could be handled in different ways that are not illustrated within FIGS. 11A-11D, and these different processes would also be considered as embodiments of the present invention because each different process would represent a different way of attempting to fulfill a request from the sender of the original message that the recipient should or must provide a reply message in response to the original message.

Ex. 1005 ¶ 54. This teaching provides further persuasive evidence that a skilled artisan would have been motivated to combine the feature in Figure 11A of window 1102 stating the message cannot be closed until the user replies to the message, with a response list (e.g., menu 1120) as shown in Figure 11C.

For the foregoing reasons, we find based on Kubala's teachings it would have been obvious to have a window that displays a response list that cannot be cleared until the user replies.

Patent Owner submits that Kubala does not disclose a single embodiment in which selection of a response from the response list is required in order to clear the response list from the recipient's cell phone display. PO Resp. 18–20. Patent Owner erroneously states that “Petitioner elects a single embodiment that corresponds to Figure 11C.” *Id.* at 18. This argument is unavailing because, as we discussed above, Petitioner does not rely solely on Figure 11C as teaching limitation 1.6. Pet. 30–32; Pet. Reply 10. Patent Owner, a few pages later, contradicts its earlier argument that Petitioner relies solely on Figure 11C, acknowledging that Petitioner relies on disclosures in Kubala in addition to Figure 11C. PO Resp. 20 (citing Pet. 31) (asserting Petitioner “acknowledges this missing element [from Figure 11C] and alleges generally that other embodiments disclose preventing the recipient from closing a review of the received e-mail message, from deleting the e-mail message, and from exiting the e-mail application until the recipient has responded to the message.”). Patent Owner argues the Petition is deficient, nonetheless, on grounds that the Petition presents no obviousness analysis or motivation to combine the distinct embodiments in Kubala. *Id.* at 20–21. However, as argued by Petitioner and discussed above, Kubala itself teaches that the scenarios shown in Figures 11A through 11D can be combined in different ways. Pet. Reply 10–11; Ex. 1005 ¶ 54. Petitioner explains “Kubala explicitly provide[s] the motivation to combine,” citing to numerous disclosures in Kubala describing, for example, combining Figures 11A–11D, and describing preventing closing review of a received e-mail message and exiting the e-mail application until the recipient has responded. Pet. Reply 10–11 (citing Ex. 1005 ¶¶ 9, 54, 55, 59–60).

As we discussed above, we agree with Petitioner that Kubala teaches combining features, because it explicitly teaches combining features such as those shown in Figures 11A–11D and described in paragraph 9, and because Kubala teaches “strict” scenarios in which a user is not permitted to perform another action with respect to a message unless the user first responds to the message. *See, e.g.*, Ex. 1005 ¶¶ 9, 54, 55, 59–60. We find these explicit teachings provide sufficient rationale to combine a response list from which a user selects a response with a feature preventing a user from exiting or deleting an e-mail or exiting the application until a response is sent.

Patent Owner also asserts that even if the Board accepts that Figures 11A through 11D can be combined, Petitioner fails to show how the combination discloses a response list because “these embodiments lack menu 1120 [e.g., a response list].” PO Resp. 22. Patent Owner does not explain this single sentence assertion. This assertion is incorrect, because Figure 11C includes menu 1120. Moreover, in the very next sentence, Patent Owner acknowledges the embodiments upon which Petitioner relies include a response list. *Id.*

Finally, Patent Owner asserts that “the additional embodiments” cited by Petitioner pertain to clearing the *received message* from the display, rather than clearing the *response list* from the display. *Id.* This argument, too, is unavailing because the response list is part of the received message, and therefore would be cleared from the display when the message is closed. *See, e.g.*, Fig. 11C (showing menu 1120 is part of the message being viewed by the recipient); *see also* Pet. Reply 11–12 (explaining that neither the Petition, Kubala’s teachings, nor Mr. Williams’ testimony are limited to clearing a received message from the display).

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.6.

(a) New Argument

We note that during the oral hearing, Patent Owner attempted to introduce a new argument regarding limitation 1.6 found nowhere in the Patent Owner Response or Sur-reply. Patent Owner argued for the first time that Petitioner failed to demonstrate that the prior art teaches “taking control” of a PDA until a response is made, then releasing control of the PDA. *See, e.g.*, Tr. 27:23–28:6. Patent Owner explained that to show unpatentability the art must teach “taking control,” arguing that the algorithm for performing the function recited in limitation 1.6 requires “taking control of the device until a response is made, and then releasing control of the device.” *See, e.g.*, Tr. 28:4–6; 28:25–30.

Parties are not permitted to present new evidence or arguments during the oral hearing. 37 C.F.R. § 42.70 (a) (“A party may request oral argument on *an issue raised in a paper* at a time set by the Board”) (emphasis added); Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,768 (Aug. 12, 2012) (“A party may rely upon evidence that has been previously submitted in the proceeding and may only present arguments relied upon in the papers previously submitted. No new evidence or arguments may be presented at the oral argument.”).

In an attempt to pass the new argument as previously submitted, Patent Owner’s counsel indicated for the first time its interpretation of the construction proposed in the Petition and adopted in the Board’s preliminary construction in the Institution Decision as requiring taking and releasing control of a PDA. Tr. 29:12–30:10. Specifically, at the hearing Patent Owner expressed for the first time that because we identified Figure 4 as

providing disclosure of the algorithm corresponding to the function specified in limitation 1.6, we intended to include every feature shown in Figure 4 including taking and releasing control of a PDA. *Id.*

Patent Owner's argument strains credibility. In the Institution Decision, we identified written description of algorithms by column and line numbers, and to the extent we identified Figures, it is evident that we intended to include only the portion[s] of the Figures described in the identified column and line numbers. Inst. Dec. 13–16. For limitation 1.6, our intent to include in the algorithm only certain steps shown in Figure 4 is clear. *Id.* at 14. We did not identify the Specification's entire description of Figure 4, but rather identified only the column and line numbers we considered to disclose the algorithm, which excluded the explicit disclosure of taking and releasing control. Specifically, we identified Ex. 1001, 8:39–46. *Id.* Had we intended to include description of taking and releasing control of the PDA, we would have also identified the disclosure at Ex. 1001, 8:37–39 and 8:52–57, which explicitly mentions taking and releasing control of the PDA.

Our intent to include in the algorithm only portions of Figures that correspond to descriptions in the Specification that we explicitly identified by column and line numbers is also evident in view of our construction of other limitations. For example, for limitation 1.7, we identified Figures 3A and 3B, Inst. Dec. 15, even though certain steps in the Figures clearly relate not to limitation 1.7, but to other limitations. *See, e.g.*, Ex. 1001, Fig. 3A, Fig. 3B. For example, the second step of Figure 3B describes periodically resending message alerts, which clearly pertains to limitation 1.8 (reciting means for periodically resending said forced message alert), and the third step in Figure 3B describes receiving and displaying an indication of

responses (rather than *automatic acknowledgements* as recited in limitation 1.7), which clearly pertains to limitation 1.9. *Id.* Fig. 3B. Accordingly, for limitation 1.7 we identified the column and line numbers corresponding to the first step of Figure 3B, Ex. 1001, 7:64–8:5, which describes the function recited in limitation 1.7 (i.e., receiving and displaying automatic acknowledgements); however, we did not identify the column and lines numbers describing the second and third steps of Figure 3B, i.e., Ex. 1001, 8:6–15, describing the functions recited in limitations 1.8 and 1.9. Inst. Dec. 15. Therefore, we identified algorithms by column and line numbers, and to the extent we identified Figures, it is evident that we intended to include only the portion[s] of the Figures corresponding to the identified column and line numbers.

Even if we were to credit Patent Owner’s assertion at the hearing as to its understanding of our preliminary construction, this does not address the fact that Patent Owner neither expressed its understanding nor argued Kubala does not teach taking and releasing control of a PDA, prior to the hearing. *See generally* PO Resp.; *see generally* Sur-reply. In the Response, Patent Owner’s proposed construction for limitation 1.6 identified the disclosure at Ex. 1001, 8:37–57 as disclosing the algorithm. PO Resp. 12. Notably, Patent Owner included lines not included in our preliminary construction, namely Ex. 1001, 8:37–39 and 8:52–57 describing taking and releasing control. *Id.* However, Patent Owner did not express an understanding that our preliminary construction is consistent with requiring taking and releasing control. *Id.* at 11–12. Patent Owner did not argue that taking and releasing control of a PDA is a requirement of limitation 1.6, much less explain why it should be a requirement. *Id.* Indeed, Patent Owner’s only commentary and argument concerning construction of this

limitation was that we should adopt the construction adopted in district court. *Id.* Patent Owner's failure to argue that taking and releasing control should be written into limitation 1.6, coupled with the lack of any argument by Patent Owner that Kubala fails to teach taking and releasing control, *see generally* PO Resp. and Sur-reply, left Petitioner and the Board entirely in the dark as to Patent Owner's positions until the oral hearing, thereby depriving Petitioner the opportunity to develop a response.

For the foregoing reasons, we do not consider Patent Owner's untimely arguments in rendering our Final Decision. However, had we considered Patent Owner's new arguments made at the hearing, it would not have affected the outcome of this Final Decision.

The claim construction adopted in this Final Decision renders moot Patent Owner's new argument. As we discussed above, Patent Owner's argument assumes the construction of limitation 1.6 includes, as part of the algorithm, the discussion in the Specification of taking and releasing control of a PDA. However, our construction does not include such description as part of the algorithm. As we clarified above, *supra* Sec. II.C.4.a.1.b, we do not adopt Patent Owner's proposed construction of limitation 1.6. Namely, unlike in Patent Owner's proposal, we do not include in the algorithm the description of taking and releasing control at Ex. 1001, 8:37–39, 8:52–57, and portions of Figure 4 not described at 8:39–51. We do not read into limitation 1.6 a requirement of taking control of a PDA/cell phone—a requirement that is not expressly stated in claim 1, *supra* Sec. II.C.4.a.1.b.

Our interpretation is consistent with the '970 patent disclosure taken as a whole. Claim 2, which depends directly from claim 1, explicitly recites means for controlling a PDA/cell phone, supporting our determination that claim 1 does not require taking control of a PDA/cell phone. Ex. 1001,

9:46–54, Claim 2 (“means for controlling of the recipient PDA/cell phone upon transmitting said automatic acknowledgment and causing, in cases where the force message alert is a text message, the text message and a response list to be shown on the display of the recipient PDA/cell phone or causes, in cases where the forced message alert is a voice message, the voice message being periodically repeated by the speakers of the recipient PDA/cell phone while said response list is shown on the display”).

Even if we were to agree with Patent Owner that claim 1 requires taking control of a PDA/cell phone, this would not alter the outcome of our Final Decision. In light of the claim language and Specification, we would interpret the forced message alert software application program “effectively tak[ing] control” of a PDA/cell phone to mean that the application program does not allow a recipient to clear a text message and response list or stop a voice message from repeating until the recipient selects a response, because this is the only written description associated with taking control of a PDA/cell phone. *Id.*; *see also id.* at 8:52–57 (explaining that when the recipient selects a response, the application program “releases control” of the recipient device, clearing the display and stopping repeating the voice message). The Specification offers no support for a broader interpretation of taking control of a PDA/cell phone.

Under the hypothetical interpretation in the preceding paragraph, we would find Petitioner has made a persuasive showing because, as we discussed above, Petitioner has shown Kubala teaches requiring a required manual response from the response list by the recipient in order to clear recipient’s response list from recipient’s cell phone display. We note that a finding that Kubala teaches e-mail application 206 taking control of a PDA/cell phone would be further supported by Kubala’s disclosure that “the

user must reply to the received e-mail in some manner *before the e-mail application will allow the user to perform some other action.*” Ex. 1005 ¶ 53 (emphasis added).

We note that at the hearing, when asked if how the algorithm takes control of a PDA is limited to the description in the Specification, Patent Owner took the untenable position that taking control includes physically grabbing someone’s PDA out of their hands:

JUDGE TROCK: It [the algorithm] explains how it takes control. It’s very limited in how it takes control; is it not?

MR RUBINO: No Your Honor. It says –

JUDGE TROCK: It doesn’t say it grabs the cell phone out of the recipient’s hand, does it?

MR. RUBINO: It does, Your Honor.

Tr. 30:14–20; *see also* Tr. 34:17–35:14. When asked why a skilled artisan wouldn’t have understood “taking control” to be limited to the only written description in the Specification of what happens when the application program effectively takes control of a PDA (i.e., Ex. 1001, 8:39–51 and corresponding portion of Figure 4), Patent Owner responded that “taking control” must mean more because Figure 4 states “the forced voice alert software takes control of the recipient’s cell phone . . . *and* causes” display of the text message or repeating the voice message until a response is sent—the “and” indicating taking control must mean something other than displaying the text message or repeating the voice message until a response is sent, according to Patent Owner. Tr. 36:18–37:25. Patent Owner’s position appeared to be that because “taking control” must mean more than what is described at 8:39–51 and corresponding portion of Figure 4, and

because the Specification doesn't explicitly describe any other form of taking control, taking control could be so broad as to include physically grabbing a phone away from someone's hands. *Id.* If we were to consider this belated argument, we would reject Patent Owner's conclusion that "take control" is so broad. The broadest reasonable interpretation of a claim that invokes 35 U.S.C. § 112, ¶ 6 is the structure, material, or act described in the specification as performing the entire claimed function and equivalents thereof. *In re Donaldson Co.*, 16 F.3d 1189, 1193 (Fed. Cir. 1994) (en banc). Therefore, we would not interpret limitation 1.6 more broadly than what is described in the Specification as taking control of a PDA. As we discussed above, the only possible description of taking control of a PDA/cell phone is at 8:39–51 and the corresponding portion of Figure 4.

For the foregoing reasons, even if we had considered Patent Owner's new argument, it would not have altered the outcome of our Final Decision.

(3) *"means for receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert" (limitation 1.7); "means for receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the responses from each recipient PDA/cell phone that responded" (limitation 1.9)*

Petitioner persuasively argues that Kubala teaches limitations 1.7 and 1.9. Although Petitioner's analysis is based on a construction different from that adopted above, *supra* Sec. II.C.4.a.2, Petitioner still shows Kubala teaches limitations 1.7 and 1.9 under our construction. We determined that the structure corresponding to the functions recited in limitations 1.7 and 1.9 is PDA/cell phone hardware including a display, such as display 16, and a wireless receiver and/or transceiver, and equivalents thereof. *Supra*

Sec. II.C.4.a.2. Petitioner has shown Kubala discloses a hardware display because Petitioner shows each PDA/cell phone in Kubala includes a touch screen display. Pet. 24 (citing Ex. 1005 ¶¶ 29–30; Ex. 1003 ¶ 93).

Petitioner has shown Kubala discloses a wireless receiver and/or transceiver because Petitioner shows the PDA/cell phones in Kubala communicate using wireless technology. *Id.* at 25 (citing Ex. 1005 ¶ 27, Figure 1A). Patent Owner does not dispute that Kubala discloses a PDA/cell phone hardware including a display, such as display 16, and a wireless receiver and/or transceiver. *See generally* PO Resp.

Petitioner also shows, for reasons discussed below, that the structures in Kubala perform the functions specified in limitations 1.7 and 1.9 through its showing that the software application program (e.g., enhanced email application 206, 208) in Kubala results in the functions being performed on Kubala’s touch screen display and wireless receiver and/or transceiver. Pet. 32–35, 37–40.

(a) *Limitation 1.7*

Petitioner persuasively shows that Kubala teaches receiving “a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert,” as recited in limitation 1.7, because Kubala discloses that prior art solutions “have provided the ability to generate return receipts to the sender when the sender’s e-mail message is received at its intended destination or when the recipient opens the e-mail message, thereby providing an acknowledgement that a particular message has been received and/or opened.” Pet. 32 (quoting Ex. 1005 ¶ 6). Furthermore, we are persuaded that a skilled artisan would have understood that the listing is accessible, e.g., available for display, on

the sender PDA/cell phone because the user of the sender PDA/cell phone would have wanted to access the information regarding acknowledgement receipts. *Id.* at 33 (citing Ex. 1003 ¶ 111); *see also* Tr. 18:8–15 (Petitioner’s counsel explaining “accessible” means accessible by the user and the only way a user could access the information would be to view it).

Petitioner also presents a contingent argument in the event “it is argued that Kubala doesn’t teach this limitation [1.7].” *Id.* Petitioner argues that in the event we find Kubala does not teach use of acknowledgement receipts, Hammond, like Kubala, also teaches this feature. Pet. 33. (citing Ex. 1006, Abstract, 2:11–18, 5:20–23). Petitioner persuasively shows Hammond teaches use of such receipts. *Id.* at 33–35 (citing Ex. 1006, 3:1–4:28, 5:31–37, 6:56–8:45, 10:6–22, Fig. 2). Indeed, Hammond discloses that the sender of an electronic message supplies a message to a Message Sender component, and can specify optional message tracking information, including message delivery (e.g., receipt) information. Ex. 1006, 4:48–56. In one embodiment a recipient “provide[s] receipts when messages are received” and a Message Receipt Tracker is notified of these receipts. *Id.* at 5:20–23. The Message Receipt Tracker in turn stores information, such as notification of receipts, in a Message Tracking Table, such as that shown in Figure 2 of Hammond. *Id.* at 5:32–37.

Petitioner also provides a rationale to combine Hammond with Kubala, arguing that a skilled artisan would have been motivated to combine these references because both are directed to tracking responses to mandatory-response messages, and both disclose use of acknowledgement receipts. Pet. 34–35. We find Petitioner’s argument persuasive. Hammond, like Kubala, relates to enhancing communication that involves electronic messages such as e-mail. Ex. 1005, code at (57); Ex. 1006, code (57). As

Petitioner points out, Kubala already discloses the use of automatic acknowledgement receipts, explaining that such was well known in the art. *Id.* (citing Ex. 1005 ¶ 6). Hammond further confirms Kubala’s teaching that use of return receipts was well known in the art, *see, e.g.*, Ex. 1006, 1:21–26, 2:1–10, and confirms Mr. Williams’ assertion that due to uncertainty as to whether an e-mail message was received, return receipts provided a well-known benefit, Ex. 1003 ¶ 103. For the foregoing reasons, we find persuasive Petitioner’s assertion that the combination of Kubala with Hammond teaches receiving “a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert,” as recited in limitation 1.7.

Patent Owner’s contentions and arguments do not undermine Petitioner’s showing. Patent Owner contends that “Petitioner does not rely on Kubala to disclose the recited function,” but instead “Petitioner submits that Hammond discloses the claim elements required by the recited function of displaying the required listing.” PO Resp. 23. Patent Owner is incorrect. Petitioner unambiguously asserts that Kubala alone teaches the recited function. Pet. 32–33 (“Kubala discloses the claimed structure and the claimed function of this [1.7] limitation.”); Pet. Reply 13–15. As we discussed above, Petitioner relies on Hammond only for a contingent argument, stating explicitly that Hammond is relied on “[t]o the extent it is argued that Kubala doesn’t teach this [1.7] limitation.” Pet. 33. Accordingly, Patent Owner’s assertion that Petitioner does not rely on Kubala to disclose the recited function is incorrect.

Patent Owner also criticizes an argument that is not made by Petitioner. Patent Owner argues that Hammond’s Message Tracking Table

(as shown in Figure 2) does not depict a display screen, but rather illustrates a data structure stored in memory. PO Resp. 23–27. However, Petitioner never asserts that the Message Tracking Table shown in Figure 2 depicts a display screen. Pet. 33–35. Rather, Petitioner explains that (1) Hammond’s Message Tracking Tables show tracking of acknowledgement receipts, (2) Hammond is relied on for its teaching of tracking acknowledgement receipts, and (3) a skilled artisan would have combined Hammond based on its disclosure as it relates to exchanging and tracking recipient-devices. *Id.* (citing Ex. 1006, 3:1–4:28, 5:31–37, 6:56–8:45, 10:6–22, Fig. 2; Ex. 1003 ¶ 112). Nowhere does the Petition argue that the Message Tracking Table in Figure 2 depicts a display. *Id.* Accordingly, Patent Owner’s argument that Petitioner’s expert, Mr. Williams, “conceded during his deposition that Hammond’s ‘Message Tracking Table’ depicted in Figure 2 is located and stored in the server’s memory,” is irrelevant. PO Resp. 24 (citing Ex. 2007, 63:13–65:1, 66:16–6:22). Nor do we find persuasive Patent Owner’s argument that Mr. Williams testified that the existence of the Message Tracking Table itself is not sufficient to show how the table is displayed. PO Resp. 24 (citing Ex. 2007, 75:14–76:8). Nowhere does Petitioner assert that Hammond is relied on for displaying information. Pet. 33–35. As we discussed above, Petitioner relies on Kubala for displaying tracked information, and relies on Hammond for its teaching of the kind of information that is tracked, namely return receipt information. *Id.* at 32–35.

Even if we were to find Patent Owner’s arguments regarding Hammond to be persuasive, and we do not, they relate to a contingency in the event we find Kubala does not teach the function recited in limitation 1.7. However, for reasons discussed above, we find Petitioner has shown Kubala teaches limitation 1.7.

For the foregoing reasons, we determine Petitioner has made a persuasive showing as to limitation 1.7 in view of Kubala, either alone or in combination with Hammond.

(b) Limitation 1.9

Petitioner persuasively shows that Kubala teaches receiving “a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert and details the responses from each recipient PDA/cell phone that responded,” as recited in limitation 1.9. Pet. 37–38. Kubala discloses that a sending PDA (e.g., computing device 202) can receive and display a response from a recipient PDA (e.g. computing device 204). *Id.* at 37 (citing Ex. 1005 ¶¶ 26–41, Fig. 2; Ex. 1003 ¶ 121). Petitioner argues that a skilled artisan would have known, in addition to receiving and displaying responses from recipient PDAs, also to display a listing of which recipient PDA’s have transmitted a response. *Id.* at 27–30. We find this persuasive because, as noted by Petitioner, Kubala discloses that receiving e-mail application 208 may collect and record information about the manner in which the recipient responds to an e-mail message that has a mandatory-response flag, wherein the information may include mandatory-response return-status codes included within the reply e-mail. Pet. 38 (citing Ex. 1005 ¶¶ 50, 51, 61, Fig 9). We are persuaded by Petitioner’s argument that a skilled artisan would have known that the collected information regarding which recipients have responded to the e-mail messages was available and accessible, e.g., available for display, on the sender PDA/cell phone because the user of the sender PDA/cell phone would have wanted to access the information regarding acknowledgement receipts. *Id.* (citing Ex. 1003 ¶ 122); *see also* Tr. 18:8–15 (Petitioner’s

counsel explaining “accessible” means accessible by the user and the only way a user could access the information would be to view it).

Patent Owner does not provide argument specific to limitation 1.9.

For the foregoing reasons, we find Petitioner has made a persuasive showing as to limitation 1.9 in view of Kubala.

Although Petitioner provides argument that Kubala alone teaches “receiving and displaying a listing of which recipient PDA/cell phones have transmitted a manual response to said forced message alert,” Petitioner also argues that “Hammond also provides this disclosure.” *Id.* at 38. Petitioner provides evidence and argument that Hammond, like Kubala, teaches tracking information about electronic messages that have been read by recipients. *Id.* at 38–39 (citing Ex. 1006, 5:17–8:45, 10:5–11:48, Fig. 4, Fig. 5A, Fig. 5B; Ex. 1003 ¶ 123). However, Petitioner does not explain how Kubala is being combined with Hammond. *Id.* at 40. Rather, Petitioner refers to its argument regarding limitation 1.7; but, limitations 1.7 and 1.9 are distinct, and Petitioner fails to address the differences in the limitations and explain how limitation 1.9 is taught by the combination. *Id.* at 40.

For the foregoing reasons, we are not persuaded as to Petitioner’s arguments regarding the combination of Kubala with Hammond.

c) Conclusion

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 1 of the ’970 patent is unpatentable under § 103 as obvious over the combination of Kubala with Hammond.

4. Claim 3

Claim 3 depends directly from claim 1, and recites the system as in claim 1, “wherein said data transmission means is TCP/IP or another communication protocol.” Ex. 1001, 9:64–65.

Petitioner argues persuasively that Kubala discloses the limitation of claim 3 because Kubala discloses PDAs/cell phones communicating according to TCP/IP or another communication protocol, such as Wi-Fi. Pet. 40 (citing Ex. 1005 ¶ 27, Fig. 1A; Ex. 1003 ¶ 127).

Patent Owner does not dispute Petitioner’s contentions as to claim 3. *See generally* PO Resp.

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 3 of the ’970 patent is unpatentable under § 103 over the combination of Kubala with Hammond.

5. Claim 4

Claim 4 depends directly from claim 1, and recites the system as in claim 1, “wherein the response list that is transmitted within the forced message alert software packet is a default response list that is embedded in the forced message alert software application program.” Ex. 1001, 9:66–10:2.

As we discussed above with regard to limitation 1.4 of claim 1, Petitioner argues persuasively that Kubala’s menu 1120 in Figure 11C teaches a response list that is transmitted within the forced message alert software packet. *Supra* Sec. II.D.3.a.5. Petitioner argues that Kubala teaches that the responses in the transmitted list of possible responses, e.g., the text strings “too busy right now,” “looks okay,” and “requested declined,” can be default responses. Pet. 40–41 (citing Ex. 1005 ¶ 57, Fig. 11C). We are persuaded that Kubala teaches the text string that are

used as menu items can be default responses because, as Petitioner points out, “Kubala also explains that the text strings may be ‘required and standardized within a data format specification, e.g., in a standard similar to RFC 2822.’” *Id.* at 41 (citing Ex. 1005 ¶¶ 57, 60; Ex. 1003 ¶¶ 129–130). Patent Owner does not dispute Petitioner’s contentions as to claim 4. *See generally* PO Resp.

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 4 of the ’970 patent is unpatentable under § 103 over the combination of Kubala with Hammond.

6. *Claim 5*

Claim 5 depends directly from claim 1, and recites the system as in claim 1, “wherein the response list that is transmitted within the forced message alert software packet is a custom response list that is created at the time the specific forced message alert is created on the sender PDA/cell phone.” Ex. 1001, 10:3–6.

As we discussed above with regard to limitation 1.4 of claim 1, Petitioner argues persuasively that Kubala’s menu 1120 in Figure 11C teaches a response list that is transmitted within the forced message alert software packet. *Supra* Sec. II.D.3.a.5. Petitioner argues that Kubala teaches that the text strings used as menu items in the response list can be configurable. Pet. 41–42 (citing Ex. 1003 ¶¶ 132–133). We find Petitioner’s argument persuasive because Kubala discloses “[t]he text strings that are used as menu items may be obtained in a variety of manners,” and discloses an example in which the text strings are configurable:

the text strings may be configurable through the enhanced e-mail application by allowing user-specifiable or system-administrator-specifiable parameters. As another alternative, the text strings may be extracted from the original e-mail message

that was received from the sender, in which case the text strings may have been configured as user-specifiable or system-administrator-specifiable parameters in the sender's instance of the enhanced e-mail application.

Id. (quoting Ex. 1005 ¶ 57). Patent Owner does not dispute Petitioner's contentions as to claim 5. *See generally* PO Resp.

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 4 of the '970 patent is unpatentable under § 103 over the combination of Kubala with Hammond.

7. Claim 6

Claim 6 is similar to claim 1. However, claim 6 recites a method, whereas claim 1 recites a communication system. Petitioner sets forth where the preamble and each limitation of claim 6 is taught by the combination of Kubala and Hammond. Pet. 42–47. Patent Owner disputes Petitioner's contentions. Patent Owner's arguments are made together with, and are the same, as those for claim 1. PO Resp. 14–28.

Regarding the preamble of claim 6, Petitioner argues that, as set forth in its arguments and evidence for limitations 1.1 and 1.3 of claim 1, "Kubala discloses a method for sending a forced-message alert to one or more recipient PDA/cell phones within a predetermined communication network." Pet. 42 (citing Ex. 1005 ¶¶ 26–27, 32–33, Fig. 1A; Ex. 1003 ¶ 135). Moreover, for the reasons argued for limitation 1.7, Petitioner argues Hammond discloses the ability to track the receipt and response to forced-message alerts. *Id.* (citing Ex. 1006, code (57), 2:11–18, 3:1–4:28, 5:20–37, 10:6–22, 6:56–8:45, FIG. 2). For our reasons stated above for limitations 1.1, 1.3, and 1.7, we are persuaded Petitioner has shown the combination of Kubala and Hammond teaches or suggests the preamble of claim 6.

For limitation 6.1, Petitioner shows persuasively that Kubala teaches “accessing a forced message alert software application program on a sender PDA/cell phone,” relying on Kubala’s enhanced email application program on a sender PDA and its arguments for limitation 1.4 of claim 1 as to why Kubala’s enhanced email application program teaches a forced message alert software application program. Pet. 43 (citing Ex. 1005 ¶¶ 13, 33–36, Fig. 2; Ex. 1003 ¶ 136). For the same reasons we stated above for limitation 1.4, we are persuaded Kubala’s enhanced email application teaches a forced message alert software application program on a sender PDA/cell phone.

For limitation 6.2, Petitioner shows persuasively that Kubala teaches “creating the forced message alert on said sender PDA/cell phone by attaching a voice or text message to a forced message alert application software packet to said voice or text message,” relying on its evidence and arguments for limitation 1.5 that Kubala’s email message 214 with mandatory response flag 216 created on the sender PDA is a forced message alert. Pet. 43 (citing Ex. 1005 ¶¶ 32–41, 54–61, Fig. 1A, 1B, 2–4; Ex. 1003 ¶ 137). For the same reasons we stated above for limitation 1.5, we are persuaded Kubala’s email message with mandatory response flag created on the sender PDA is a forced message alert, and that Kubala teaches limitation 6.2

For limitation 6.3, Petitioner shows persuasively that Kubala teaches “designating one or more recipient PDA/cell phones in the communication network,” relying on disclosure in Kubala that email messages are sent to a recipient. Pet. 43 (citing Ex. 1005 ¶¶ 32–44, 54–61, Fig. 1A, 1B, 2–5; Ex. 1003 ¶ 138). We credit Mr. William’s testimony that a person of ordinary skill in the art would have recognized that an email messaging application to which recipients receive an email involves designating a

recipient within the communication network. Ex. 1003 ¶ 138. Indeed, Kubala discloses that emails have message headers that provide information about the recipient of a message, suggesting a recipient has been designated. Ex. 1005 ¶ 37. For the reasons stated above, we are persuaded Kubala teaches limitation 6.3

For limitation 6.4, Petitioner shows persuasively that Kubala teaches “electronically transmitting the forced message alert to said recipient PDA/cell phones,” relying on Kubala’s disclosure of sending outgoing email messages flagged as a message to which a recipient is required to provide a mandatory response. Pet. 44 (citing Ex. 1005 ¶¶ 32–44, 54–61, Fig. 1A, 1B, 2–5; Ex. 1003 ¶ 139). We are persuaded that Kubala teaches limitation 6.4 because the email (i.e., electronic mail) message is transmitted electronically to a recipient PDA. *See, e.g.*, Ex. 1005 ¶ 35.

For limitation 6.5, we are persuaded by Petitioner’s showing. Petitioner relies on its evidence and arguments for limitation 1.5 of claim 1, Pet. 44, for which we find, above, Petitioner shows Kubala teaches requiring the recipient PDA/cell phone to transmit an automatic acknowledgement to the sender PDA/cell phone as soon as the forced message alert is received by the recipient PDA/cell phone, *supra* Sec. II.D.3.b.1. Petitioner further relies on its evidence and argument for limitation 1.7 of claim 1, Pet. 44, for which we find, above, Petitioner shows Kubala, either alone or in combination with Hammond, teaches receiving and displaying a listing of which recipient PDA/cell phones have automatically acknowledged the forced message alert and which recipient PDA/cell phones have not automatically acknowledged the forced message alert, *supra* Sec. II.D.3.b.3.a. For our reasons stated above as to limitation 1.5 and 1.7, we are persuaded Kubala, either alone or in combination with Hammond, teaches limitation 6.5.

For limitation 6.6, Petitioner shows persuasively that the combination of Kubala and Hammond teach “periodically resending the forced message alert to the recipient PDA/cell phones that have not acknowledged receipt,” relying on its evidence and arguments for limitation 1.8 of claim 1. Pet. 44. As we discussed for limitation 1.8, we are persuaded the combination of Kubala and Hammond teach “periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert. *Supra* Sec. II.D.3.a.6. For the same reasons, we are persuaded the combination of Kubala and Hammond teaches limitation 6.6.

For limitation 6.7, Petitioner shows persuasively that Kubala teaches “receiving responses to the forced message alert from the recipient PDA/cell phones and displaying the response from each recipient PDA/cell phone,” relying on Kubala’s disclosure that the sending PDA (e.g., computing device 202) may receive an email message 218 from a recipient PDA (e.g., computing device) in response to email message 214 with mandatory response flag 216. Pet. 45 (citing Ex. 1005 ¶¶ 33–36; Ex. 1003 ¶ 142). Petitioner argues persuasively that the received email would have been displayed on the PDA, relying on Mr. William’s testimony that the ability to display email has been in place at least since 1993 with the IBM Simon. *Id.* (citing Ex. 1003 ¶ 143). We credit Mr. William’s testimony. Indeed, Kubala depicts PDAs as having display screens in Figure 1A, Ex. 1005, Fig. 1A, and we find credible Mr. William’s assertion that emails were displayed, based on our observation that the message comprises text, which we find indicates the message would be viewed on a display. For the foregoing reasons, we are persuaded Kubala teaches limitation 6.7.

For limitation 6.8, Petitioner shows persuasively that Kubala teaches “providing a manual response list on the display of the recipient PDA/cell phone that can only be cleared by the recipient providing a required response from the list,” relying on its evidence and arguments for limitations 1.5 and 1.6 of claim 1. Pet. 46 (citing Ex. 1005 ¶¶ 9, 33–36, 40, 41, 47, 54–60. Fig. 2, 8, 10, 11A, 11C; Ex. 1003 ¶ 144). For reasons we discussed above for limitation 1.5, we are persuaded Kubala teaches providing a manual response list on the display of a recipient PDA, as is illustrated in Figure 11C. For reasons we discussed above for limitation 1.6, we are persuaded Kubala teaches requiring a required manual response from the response list by the recipient in order to clear recipient’s response list from recipient’s cell phone display. Therefore, we are persuaded Kubala teaches limitation 6.8

For limitation 6.9, Petitioner persuasively shows Kubala teaches “clearing the recipient’s display screen or causing the repeating voice alert to cease upon recipient selecting a response from the response list required that can only be cleared by manually selecting and transmitting a response to the manual response list,” because Kubala discloses that a user can select a response from a menu of responses, and after selecting a response, a user presses the INSTANT button, thereby closing the window and clearing the display and generating a reply message. Pet. 46–47 (citing Ex. 1005 ¶ 57, Fig. 11C; Ex. 1003 ¶ 145–147). Petitioner points out that although the embodiment illustrated in Figure 11C shows that a user can select CANCEL to close the window without sending a reply, Kubala also teaches that a recipient can be prevented from closing a review of the received email message, from deleting the received email message, and from exiting the email application until the recipient has responded to the received email

message. *Id.* at 47 (citing Ex. 1005 ¶ 9). Furthermore, as we discussed above for limitation 1.6, Petitioner has shown persuasively that Kubala teaches combining these features. For the foregoing reasons, Petitioner has shown that Kubala teaches limitation 6.9.

Patent Owner disputes Petitioner has shown unpatentability, but its arguments are made together with claim 1, PO Resp. 14–28, and we addressed such arguments in our discussion above for claim 1. For the same reasons as above, we find Patent Owner’s arguments unavailing.

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 6 of the ’970 patent is unpatentable under § 103 over the combination of Kubala with Hammond.

8. *Claim 7*

Claim 7 depends directly from claim 6, and recites the method as in claim 1, “wherein each PDA/cell phone within a predetermined communication network is similarly equipped and has the forced message alert software application program loaded on it.” Ex. 1001, 10:42–45.

As we discussed above with regard to limitations 1.1 and 1.4 of claim 1, Petitioner argues persuasively that Kubala teaches a predetermined network of participants, wherein each participant has a similarly equipped PDA/cell phone (limitation 1.1) and a forced message alert application software application program loaded on each participating PDA/cell phone (limitation 1.4). *Supra* Sec. II.D.3.a.2, II.D.3.a.5; Pet. 48–50. Patent Owner does not dispute Petitioner’s contentions as to claim 7. *See generally* PO Resp.

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 7 of the ’970 patent is unpatentable under § 103 over the combination of Kubala with Hammond.

9. *Claim 8*

Claim 8 depends directly from claim 6, and recites the method as in claim 1, “wherein said forced message alert application software packet contains a response list, wherein said response list is a default list embedded in the forced message alert software application program.” Ex. 1001, 10:46–49.

As we discussed above with regard to claim 4, Petitioner argues persuasively that Kubala teaches a response list that is transmitted within the forced message alert software packet that is a default list that is embedded in the forced message alert software application program. *Supra* Sec. II.D.5; Pet. 50. Patent Owner does not dispute Petitioner’s contentions as to claim 8. *See generally* PO Resp.

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 8 of the ’970 patent is unpatentable under § 103 over the combination of Kubala with Hammond.

10. *Claim 9*

Claim 9 depends directly from claim 6, and recites the method as in claim 1, “wherein said forced message alert application software packet contains a response list, wherein said response list is a custom response list that is created at the time the specific forced message alert is created on the sender PDA/cell phone.” Ex. 1001, 10:50–54.

As we discussed above with regard to claim 5, Petitioner argues persuasively that Kubala teaches a response list that is transmitted within the forced message alert software packet that is a custom response list that is created at the time the specific forced message alert is created on the sender PDA/cell phone. *Supra* Sec. II.D.6; Pet. 50–51. Patent Owner does not dispute Petitioner’s contentions as to claim 9. *See generally* PO Resp.

For the foregoing reasons, Petitioner has demonstrated, by a preponderance of the evidence, that claim 9 of the '970 patent is unpatentable under § 103 over the combination of Kubala with Hammond.

E. Asserted Obviousness Over Hammond, Johnson, and Pepe; Asserted Obviousness Over Hammond, Johnson, Pepe, and Banerjee

Petitioner contends that claims 1 and 3–9 are unpatentable under 35 U.S.C. § 103 as obvious over the combination of Hammond, Johnson, and Pepe, or alternatively, over the combination of Hammond, Johnson, and Pepe with Banerjee. Pet. 12, 51–78. Patent Owner disputes Petitioner's contentions. PO Resp. 28–39.

1. Johnson (Ex. 1007)

Johnson generally discloses a method and system having a plurality of enrolled users and electronic mail objects that may be transmitted and received between users. Ex. 1007, [57]. The method and system include designating an electronic mail object as requiring a specific response and transmitting the electronic mail object to a recipient. *Id.* The recipient of the electronic mail object is prompted for a specific response when the recipient opens the electronic mail object and is prohibited from performing other actions until the required specific response is entered by the recipient. *Id.*

2. Pepe (Ex. 1008)

Pepe generally discloses a personal communications internetwork ("PCI") that provides a network subscriber with the ability to remotely control receipt and delivery of wireless and wireline voice and text messages. Ex. 1008, 3:45–48. The PCI operates as an interface between various wireless and wireline networks, and also performs media translation where necessary. *Id.* at 3:48–51. The PCI permits the subscriber to send

and receive messages between disparate networks and messaging systems. *Id.* at 5:56–59. A database maintains the subscriber’s message receipt and delivery options. *Id.* at 3:51–54.

3. *Analysis*

After considering the arguments and evidence submitted by the parties, we determine Petitioner has not shown claims 1 and 3–9 would have been obvious over the combination of Hammond, Johnson, and Pepe, or alternatively, over the combination of Hammond, Johnson, and Pepe with Banerjee, because the Petition fails to specify with particularity what element in the prior art discloses a “forced message alert software packet,” as recited in independent claim 1, and a “forced message alert application software packet,” as recited in independent claim 6. Petitioner’s showing as to claims 3–5 and 7–9, which depend either from claim 1 or 6, are deficient for the same reasons.

Claims 1 and 6 recite that a “forced message alert” is created by attaching a “forced message alert [application] software packet” to a voice or text message. Ex. 1001, 9:14–23, 10:14–17. For claim 1, Petitioner asserts that Hammond, Johnson, and Pepe alone each disclose transmission to a recipient computer of a forced message alert, but does not specify what element in the prior art it contends is the asserted forced message alert, much less how the forced message alert includes a *forced message alert [application] software packet*. Pet. 60. Petitioner’s argument is reproduced below:

The combination of Hammond, Johnson, and Pepe disclose this limitation [limitation 1.5]. In particular, Hammond and Johnson each alone disclose the transmission of forced message alerts to recipient computers. (See Hammond at Abstract, 1:66-2:50, 3:1-

4:28, 5:17-61, 6:3-19; Johnson, 1:58-61, 2:1-35, 3:64-4:42, 6:60-65.)

Id. Petitioner’s argument for claim 6 merely refers to the argument for claim 1, and therefore is likewise deficient:

As set forth above (*supra* claim [1.5]), the combination of Hammond, Johnson, and Pepe teaches or suggests the features of this limitation. (See Hammond, Abstract, 1:66-2:50, 3:1-4:28, 5:17-61; Johnson, 1:58-61, 2:1-35, 3:64-4:42, 6:60-65; Pepe, 34:8-36:51, 5:17-20, FIGS. 28-45.)

Id. at 71.

Petitioner’s contentions are insufficient for two reasons. First, Petitioner does not identify what element in each reference it contends is the “forced message alert.” Instead, Petitioner places the burden on Patent Owner and the Board to sift through several columns of text to guess what Petitioner contends is a “forced message alert.” Second, even if we were to identify a potential candidate “forced message alert,” we would next have to speculate as to which part Petitioner contends is the “message” and which part is the “packet”—a task which we do not undertake. Our rules require that a petition specify with particularity where each element of a claim is found in the prior art, and include a detailed explanation of the relevance of the prior art to the claim. 37 C.F.R. § 42.104(b)(4) (“[t]he petition must specify where each element of the claim is found in the prior art patents or printed publications relied upon”); *id.* § 42.22(a)(2) (“[e]ach petition . . . must include . . . a detailed explanation of the significance of the evidence including material facts”); *id.* § 42.104(b)(5) (“[t]he petition must set forth . . . the relevance of the evidence to the challenge raised, including identifying specific portions of the evidence that support the challenge”). As the Federal Circuit has explained, “[i]n an IPR, 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). Petitioner’s citation to several columns of text is not sufficient to specify where the claimed “packet” is found in the prior art. 37 C.F.R. §§ 42.22(a)(2), 42.104(b)(4), 42.104(b)(5).

Therefore, we find the Petition fails to show with particularity why the challenged claims are unpatentable.

In the Institution Decision, we identified the deficiency in the Petition:

We do not discern any identification in the Petition of where or how the asserted references disclose a “forced message alert software packet.” Petitioner asserts that Hammond, Johnson, and Pepe alone each disclose transmission of a forced message alert to a recipient computer. Pet. 60. Petitioner cites to various disclosure in each reference. *Id.* However, Petitioner does not explain how the messages transmitted in these references comprise a voice or text message and a forced message alert software packet attached thereto. *Id.*

Inst. Dec. 36. Patent Owner agrees in the Response that the Petition is deficient:

Patent Owner agrees with and adopts the Board’s findings that each and every element is not disclosed or suggested by the prior art references in Grounds 2–3 [Hammond, Johnson, and Pepe, with or without Banerjee], and that the Petition neither identifies nor describes how the references in Grounds 2–3 comprise a voice or text message and a forced message alert software packet. Paper 9 at 36; Ex. 2005, ¶ 48.

PO Resp. 29.

Petitioner attempts, improperly, to cure the defect in the Petition by introducing more specific contentions in the Reply. The Reply specifies with particularity Petitioner’s contentions, for the first time, regarding what elements in the prior art disclose the claimed “packet,” and provides at least

some indication as to how the packet is attached to a message. Pet. Reply 19. Petitioner explicitly identifies Hammond's "message delivery information" as disclosing the claimed "packet," explaining that the "message delivery information" can be stored with a message as a header. *Id.* Petitioner also explicitly identifies Johnson's "persistent reply attribute" as disclosing the claimed "packet," explaining that the "persistent reply attribute" is described as a mechanism for forcing a recipient to reply to an electronic mail object. *Id.* These contentions in the Reply exemplify the level of specificity that could have been, but were not, in the Petition. Moreover, these contentions illustrate the challenge we would have faced had we tried to speculate, based on the Petition, as to Petitioner's positions on what constitutes the claimed "packet." Neither Hammond nor Johnson use the term "forced message alert [application] software packet," and there is need for identification, and an explanation as to why Hammond's "message delivery information" and Johnson's "persistent reply attributes," would have been considered to be the claimed "packet." *See id.* Petitioner's identification and explanation for the first time in the Reply comes too late.

The Reply may only respond to argument raised in the Patent Owner Response. 37 C.F.R. § 42.23(b) ("A reply may only respond to arguments raised in the corresponding opposition, patent owner preliminary response, or other patent owner response"). However, even if responsive, a reply is not an opportunity to cure a deficiency in the petition, such as by providing the argument necessary to make out a *prima facie* case of unpatentability. *See Office Patent Trial Practice Guide*, 77 Fed. Reg. 48,756 at 48,767 (Aug. 14, 2012) ("Patent Trial Practice Guide"). ("While replies can help crystalize issues for decision, a reply that raises a new issue or belatedly presents evidence will not be considered and may be returned . . . [e]xamples

of indications that a new issue has been raised in a reply include new evidence necessary to make out a *prima facie* case for the patentability or unpatentability of an original or proposed substitute claim, and new evidence that could have been presented in a prior filing”).

Because the new contentions in the Reply are introduced belatedly, to make out a *prima facie* case of unpatentability that could have been presented in the Petition, we do not consider them in issuing our Final Decision. Patent Trial Practice Guide at 48,767; *Harmonic Inc.*, 815 F.3d at 1363.

For the foregoing reasons, Petitioner has not demonstrated, by a preponderance of the evidence, that claims 1 and 3–9 of the ’970 patent are unpatentable under § 103 over the combination of Hammond, Johnson, and Pepe or over the combination of Hammond, Johnson, Pepe, and Banerjee.¹⁴

III. CONCLUSION¹⁵

In summary:

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not shown Unpatentable
1, 3–9	§ 103(a)	Kubala, Hammond	1, 3–9	

¹⁴ Petitioner relies on Banerjee for the teaching of a touchscreen display only, and does not provide arguments that alter our analysis. Pet. 77–78.

¹⁵ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this Final Decision, we draw Patent Owner’s attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

1, 3–9	§ 103(a)	Kubala, Hammond, Johnson, Pepe		1, 3–9
1, 3–9	§ 103(a)	Kubala, Hammond, Johnson, Pepe, Banerjee		1, 3–9
Overall Outcome			1, 3–9	

IV. ORDER

In consideration of the foregoing, it is hereby

ORDERED that Petitioner has demonstrated by a preponderance of the evidence that claims 1 and 3–9 of U.S. Patent No. 8,213,970 B2 are *unpatentable*; and

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

IPR2018-01079
Patent 8,213,970 B2

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CERTIFICATE OF FILING

Pursuant to 37 C.F.R. §§ 90.2(a)(1) and 104.2(b), the undersigned hereby certifies that on January 21, 2020, the original of the foregoing Notice of Appeal was filed with the Director of the United States Patent and Trademark Office **by hand-delivery**, at the following address:

Director of the United States Patent and Trademark Office
c/o Office of General Counsel
10B20, Madison Building East
600 Dulany Street
Alexandria, VA 22314-5793

In addition, pursuant to 37 C.F.R. § 90.2(a)(1) and 37 C.F.R. §42.6(b), the undersigned certifies that on January 21, 2020, a copy of the foregoing Notice of Appeal was filed **electronically** with the Board through the Board's Patent Review Processing System.

In addition, pursuant to 37 C.F.R. § 90.2(a)(2) and Federal Circuit Rule 15(a)(1), the undersigned certifies that on January 21, 2020, the requisite fee for the appeal and a true and correct copy of the foregoing Notice of Appeal were **electronically** filed with the Clerk of Court of the United States Court of Appeals for the Federal Circuit at the following address <http://ecf.cafc.uscourts.gov>.

IPR2018-01079
Patent Owner's Notice of Appeal

Respectfully Submitted,

Dated: January 21, 2020

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e)(4) and 37 C.F.R. § 90.2(a)(3)(ii), the undersigned certifies that on January 21, 2020, a true and correct copy of the foregoing the PATENT OWNER'S NOTICE OF APPEAL was served **via email** on the Petitioner by serving the correspondence email addresses of record below:

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January 21, 2020

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