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571-272-7822

Paper 31
Entered: September 19, 2018

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION,
Petitioner,

v.

MIRA ADVANCED TECHNOLOGY, INC.,
Patent Owner.

Case IPR2017-01052
Patent 8,848,892 B2

Before MINN CHUNG, MICHELLE N. WORMMEESTER, and
KAMRAN JIVANI, *Administrative Patent Judges*.

CHUNG, *Administrative Patent Judge*.

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

IPR2017-01052
Patent 8,848,892 B2

I. INTRODUCTION

In this *inter partes* review, instituted pursuant to 35 U.S.C. § 314, Microsoft Corporation (“Petitioner”) challenges the patentability of claims 1–10 (the “challenged claims”) of U.S. Patent No. 8,848,892 B2 (Ex. 1001, “the ’892 patent”), owned by Mira Advanced Technology Systems, Inc. (“Patent Owner”). The Board has jurisdiction under 35 U.S.C. § 6. This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. With respect to the grounds of unpatentability asserted by Petitioner, we have considered the papers submitted by the parties and the evidence cited therein. For the reasons discussed below, we determine Petitioner has shown by a preponderance of the evidence that claims 1–10 of the ’892 patent are unpatentable.

II. BACKGROUND

A. *Procedural History*

On March 9, 2017, Petitioner filed a Petition (Paper 2, “Pet.”) requesting an *inter partes* review of claims 1–10 of the ’892 patent. Patent Owner filed a Corrected Preliminary Response. Paper 9 (“Prelim. Resp.”). On September 22, 2017, we instituted an *inter partes* review of claims 1–10 of the ’892 patent. Paper 11 (“Dec. on Inst.”), 33.

After institution, Patent Owner filed a Patent Owner Response (Paper 16, “PO Resp.”), to which Petitioner filed a Reply (Paper 19, “Pet. Reply”).¹ An oral hearing was held on June 21, 2018. A transcript of the hearing is included in the record as Paper 30 (“Tr.”).

¹ With our permission, Patent Owner and Petitioner each filed an errata to their Patent Owner Response and Reply, respectively. Paper 29 (Errata to Patent Owner’s Response); Paper 27 (Errata to Petitioner’s Reply).

IPR2017-01052
 Patent 8,848,892 B2

B. Related Proceedings

According to the parties, the '892 patent is the subject of the following proceeding: *Mira Advanced Tech. Sys., Inc. v. Microsoft Corp.*, No. 2:16-cv-88 (N.D. W. Va.). Pet. 1; Paper 4, 2. Additionally, certain claims of U.S. Patent No. 9,531,657 B2, which is a continuation of the '892 patent, are at issue in IPR2017-01411.

C. The '892 Patent

The '892 patent describes a method for attaching memo data to a contact list entry and providing users reminders of conversation points. Ex. 1001, Abstract, 1:24–33. As background, the '892 patent describes that, because users sometimes forget important conversation points with their contacts, a need exists for a contact list that allows entering memos into contact list entries and provides reminders of a memo when communication is initiated with the contact associated with the memo. *Id.* at 1:13–20.

Figure 1 of the '892 patent is reproduced below.

Name	Address	Phone	Fax	Email	URL	Memo

Figure 1 shows the database structure of the contact list of the '892 patent. *Id.* at 1:37–38. As shown in Figure 1, the contact list consists of multiple contact list entries. *Id.* at 2:1–2.

Each contact list entry comprises data fields to input contact information details, such as contact name, address, phone number, and email address. *Id.* at 2:3–6. In addition, a data field is provided in each contact list

IPR2017-01052

Patent 8,848,892 B2

entry to input memo data associated with the contact entry. *Id.* at 2:6–8. In an exemplary embodiment, the data field for memo may be integrated with the contact list entry. *Id.* at 2:8–9. Alternatively, the memo data field can be stored in a separate database, and the memo and the corresponding contact list entry can be related by a link. *Id.* at 2:9–12.

According to the '892 patent, memo data is displayed when the associated contact list entry is activated, such as when the contact list entry is selected to initiate outgoing communication (e.g., the phone number of the contact is dialed), or when incoming communication is received (e.g., an incoming phone call from the contact is detected). *Id.* at 1:26–31, 2:17–24, Abstract. The display of memo data serves as a reminder of the desired topic of conversation or conversation points when communication is initiated with the contact. *Id.* at 2:27–29, 32–35. Memo data may also be displayed at the end of a phone call, and the user has an option to erase, save, or edit the memo data. *Id.* at 2:29–32.

D. Illustrative Claim

Of the challenged claims, claims 1 and 6 are independent. Claim 1 is illustrative of the challenged claims and is reproduced below:

1. A method, performed by a communication device, for reminding a user of the communication device of a conversation point for a future phone call, the communication device having a processor and a display screen, the communication device having access to a saved contact list having one or more contact list entries, each contact list entry of the contact list including a first field configured to retrieve a stored phone number of a corresponding entity of the respective contact list entry, a second field configured to retrieve a stored name identifying the corresponding entity, and a memo field configured to attach memo data inputted by the user and displayable to show at least

IPR2017-01052

Patent 8,848,892 B2

one memo which is served to remind the user of the conversation point for the future phone call between the user and the corresponding entity, the method comprising:

- (a) receiving, by the processor, a first input indicating that an incoming phone call from the stored phone number of a first contact list entry of the saved contact list is received;
- (b) checking, by the processor after step (a), whether there is memo data that is attached to the memo field of the first contact list entry;
- (c) activating, by the processor, the first contact list entry such that during the activating of the first contact list entry, the user accepts the incoming phone call and conducts the incoming phone call with the corresponding entity of the first contact list entry using the communication device as a result of the user's accepting the incoming phone call; and
- (d) causing, by the processor, a first indication indicating a presence of the at least one memo of the attached memo data, to be automatically displayed on the display screen during the activating of the first contact list entry, when it is detected in the step (b), by the processor, that there is memo data attached to the memo field of the first contact list entry.

Ex. 1001, 2:59–3:27.

IPR2017-01052
Patent 8,848,892 B2

E. Applied References and Declarations

Petitioner relies upon the following references in its challenges:

Reference	Designation	Exhibit No.
U.S. Patent No. 7,130,617 B2 (issued Oct. 31, 2006)	Matsumoto ²	Ex. 1004
European Patent Application Pub. No. EP 1739937 A1 (published Jan. 3, 2007)	Sony	Ex. 1005

Pet. 3. Petitioner also relies on the Declaration of Peter Rysavy (Ex. 1002) in support of its Petition. Patent Owner relies on the Declaration of Zaydoon Jawadi (Ex. 2001) in support of its Patent Owner Response.

F. Instituted Grounds of Unpatentability

We instituted *inter partes* review of the challenged claims based on the following specific grounds (Dec. on Inst. 33).

Claims Challenged	Statutory Basis	Reference(s)
1–4 and 6–9	§ 103(a) ³	Matsumoto
1–10	§ 103(a)	Sony
1–10	§ 103(a)	Sony and Matsumoto

² For clarity and ease of reference, we only list the first named inventor.

³ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. § 103. Because the ’892 patent has an effective filing date prior to the effective date of the applicable AIA amendments, we refer to the pre-AIA version of § 103.

IPR2017-01052
 Patent 8,848,892 B2

III. CLAIM CONSTRUCTION

In an *inter partes* review, claim terms in an unexpired patent are given their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *see Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard as the claim construction standard to be applied in an *inter partes* review proceeding). Under the broadest reasonable interpretation standard, and absent any special definitions, claim terms generally are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in view of the specification. *In re Translogic Tech. Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definitions for claim terms or phrases must be set forth with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). A particular embodiment appearing in the written description generally is not incorporated into a claim if the claim language is broader than the embodiment. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

In our Decision on Institution, we preliminarily interpreted three claim terms as follows.

Term	Construction
“contact list”	“an electronic list comprising contact list entries”
“contact list entry”	“an item in a contact list comprising data fields to input contact information details”
“activating” a contact list entry	“selecting or opening” a contact list entry

IPR2017-01052
Patent 8,848,892 B2

Dec. on Inst. 11–12. Although Petitioner did not propose any express construction for any claim term, Patent Owner in its Preliminary Response argued that the three claim terms listed above should be construed to require certain graphical features displayed on a device’s screen, such as user interfaces or a visual representation displayed on the screen.

Prelim. Resp. 7–15. We were unpersuaded by Patent Owner’s arguments and preliminarily construed the terms as set forth above. Dec. on Inst. 7–12.

A. “*Contact List*”

During the trial, the parties’ claim construction dispute focused on the term “contact list” recited in independent claims 1 and 6. As discussed below, the main claim construction dispute with respect to the term “contact list” centers on whether the recited “contact list” must necessarily include a “user interface.”

Petitioner agrees with our preliminary construction of the term set forth above. Pet. Reply 3. In particular, Petitioner asserts that the “contact list” limitation recited in the challenged claims does not require a “user interface.” *Id.* at 9, 12. Patent Owner disagrees and asserts that the term “contact list” should be construed as follows:

a feature commonly and already available on a smart communication device, a feature which includes entries (namely, “contact list entries”) each including fields of contact information that are known and familiar to ordinary users such as name, phone number, address, or email. In particular, a contact list as claimed is a feature which includes user interfaces to access well-known capabilities relating to communication (see Ex. 2001, ¶ 36), capabilities at least including:

(1) inputting, saving and viewing contact information of an entity (such as a person) visually represented by a contact list

IPR2017-01052

Patent 8,848,892 B2

entry of the contact list which is visually-represented, selectable, and activatable by a user, and

(2) selecting and activating a “contact list entry” by a user so as to initiate a well-known common function such as speed-dialing an underlying phone number of the contact list entry) or opens for displaying the underlying contact information contained therein.

PO Resp. 18–19. Similar to its arguments in the Preliminary Response, the thrust of Patent Owner’s argument in the Patent Owner Response is that a “contact list,” as claimed, must necessarily include a “user interface.” *See id.* at 18–31. Although Patent Owner also argues that a “contact list” is a “commonly and already available feature” of a communication device and must include “common functions” relating to communication, those arguments are largely focused on or predicated upon Patent Owner’s assertion that the recited “contact list” must include a “user interface.” *See id.*

For the reasons explained below, we disagree with Patent Owner’s argument and Patent Owner’s proposed construction. Given the focus of the parties’ dispute, our discussion below focuses on the issue of whether the “contact list” limitation recited in the challenged claims requires a “user interface.” We then address the remaining issues relating to the purported “commonly and already available feature.”

To overview, the basic problem with Patent Owner’s claim construction approach is that Patent Owner focuses on the word “contact list” in isolation from the surrounding claim limitations of claims 1 and 6, and divorced from the context of the claims as a whole, disregarding, for example, the plain language of the claims showing that the “contact list” recited in the claims is a “saved contact list.” As discussed below, we

IPR2017-01052
Patent 8,848,892 B2

determine that the plain meaning interpretation of the “contact list” limitation based on the claim language “saved contact list” controls in this case.

1. Plain Meaning

In determining the broadest reasonable construction of a claim limitation, we begin with the language of the claim itself. *In re Power Integrations, Inc.*, 884 F.3d 1370, 1376 (Fed. Cir. 2018) (“[C]laim construction must begin with the words of the claims themselves.” (quoting *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 457 F.3d 1293, 1301 (Fed. Cir. 2006))); *In re NTP, Inc.*, 654 F.3d 1279, 1288 (Fed. Cir. 2011) (“As with any claim construction analysis, we begin with the claim language.” (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc))).

“Under a broadest reasonable interpretation, words of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification and prosecution history.” *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1062 (Fed. Cir. 2016) (citing *Straight Path IP Grp., Inc. v. Sipnet EU S.R.O.*, 806 F.3d 1356, 1362 (Fed. Cir. 2015)). A plain meaning interpretation is particularly appropriate in this case because, as Petitioner argues, the plain language of claims 1 and 6 provides a plain meaning definition of the term “contact list” recited in the claims.

Addressing the claim language of independent claims 1 and 6, Petitioner asserts that claims 1 and 6 each recite a “communication device” “having access to a saved contact list having one or more contact list entries.” Pet. Reply 5. Petitioner further argues that the claims further specify that each contact list entry of the contact list includes three “fields” corresponding to a contact’s name, phone number, and memo data. *Id.*

IPR2017-01052
Patent 8,848,892 B2

Petitioner asserts that, consistent with our discussion in the Decision on Institution, this claim language defines the recited “contact list”—that is, a list “saved” in a communication device, the list including “one or more contact list entries,” each entry with at least three fields: name, number, and memo data. *Id.* at 8–9. We agree with Petitioner’s argument.

In particular, we agree with Petitioner that the plain language of the claims shows that the “contact list” recited in the claims is a “saved contact list.” In fact, the only “contact list” limitation recited in the claims is a “saved contact list.” In each of claims 1 and 6, the claim limitation “contact list” appears only three times. First, the limitation is introduced as “a saved contact list” in the preamble, which recites that “the communication device” has “access” to “a saved contact list” “having one or more contact list entries.” Ex. 1001, 2:62–64 (claim 1); 3:47–48 (claim 6). Next, in the immediately following recitation, the claims recite that “each contact list entry” of “the contact list” includes a first field for a phone number, a second field for a contact name, and a memo field to attach memo data. *Id.* at 2:64–3:2 (claim 1); 3:48–4:5 (claim 6). The plain language “a *saved contact list* having one or more contact list entries, each contact list entry of *the contact list* including . . .” indicates that “the contact list” refers to “a saved contact list” recited in the immediately preceding phrase. Lastly, in the claim body, the claims recite “the saved contact list” in step (a) of the claims as follows: “(a) receiving, by the processor, a first input indicating that an incoming phone call from the stored phone number of a first contact list entry of *the saved contact list* is received” (*id.* at 3:7–10 (claim 1) (emphasis added)); “(a) receiving, by the processor, a first input indicating a request that the stored phone number of a first contact list entry of *the saved contact list* be

IPR2017-01052
Patent 8,848,892 B2

dialed for an outgoing phone call” (*id.* at 4:10–13 (claim 6) (emphasis added)). None of the dependent claims add recitations that include a distinct “contact list” limitation. *See id.* at 3:28–42 (claims 2–5); 4:33–47 (claims 7–10).

Hence, it is evident from the plain language of the claims that the only “contact list” limitation recited in the challenged claims is a “*saved* contact list.” No other “contact list” is recited in the claims.

Under the broadest reasonable interpretation standard, we must also consider the context of the surrounding claim limitations of the “contact list” limitation. *See Trivascular*, 812 F.3d at 1062. Petitioner asserts that the claim language, “the communication device having access to a *saved* contact list” defines the recited “contact list” as a list “‘saved’ in a communication device,” such as a list “stored in a database.” Pet. Reply 5, 8. We agree with Petitioner’s argument. Further, the claims recite that “each contact list entry of the [saved] contact list” includes “a first field” for “a *stored* phone number” and “a second field” for “a *stored* name” of a saved contact. Ex. 1001, 2:63–3:1 (claim 1 (emphasis added)), 3:47–4:4 (claim 6 (emphasis added)). In addition, the body of the claims recite steps, all performed by the processor of the communication device, to access and process the contact list entry of the “saved contact list.” *Id.* at 3:7–27 (claim 1); 4:10–32 (claim 6).

Thus, when considering the plain language of the claims in their entirety, the characteristic of the “contact list” as a list “saved” or “stored” in a communication device pervades throughout the claims. Therefore, in the context of the claims as a whole, the language of the claims defines the recited “contact list” as a list “saved” or “stored” in a communication device.

IPR2017-01052
Patent 8,848,892 B2

See Lexion Med., LLC v. Northgate Techs., Inc., 641 F.3d 1352, 1356–1357 (Fed. Cir. 2011) (interpreting a disputed limitation by reading it together with other limitations recited in the claim); *Apple Computer, Inc. v. Articulate Sys., Inc.*, 234 F.3d 14, 25 (Fed. Cir. 2000) (“the claim must be viewed as a whole”).

Turning to the written description, the plain meaning interpretation discussed above is also consistent with the written description in the Specification of the ’892 patent. For example, the ’892 patent describes that contact information in a contact list is “*saved* in communication device.” Ex. 1001, 1:16 (emphasis added). The Specification further describes that a contact list “comprises of multiple contact list entries.” *Id.* at 2:1–2. In addition, referencing Figure 1, the ’892 patent describes that “FIG. 1 shows contact list *template* for communication device” (*id.* at 2:2–3 (emphasis added)) and that “FIG. 1 shows the *database structure* of contact list of *present invention*” (*id.* at 1:37–38 (emphases added)). Hence, the ’892 patent describes that the table depicted in Figure 1 is the “database structure” of the “contact list” of the ’892 patent, and that such database structure is a “template” of the claimed “contact list.” The ’892 patent further discloses that “[d]ata field for memo can be integrated within contact list entry [of a contact list]; alternatively *data field* for memo can be *in a separate database* and memo and corresponding contact list entry can be related by means of link for co-functionality.” *Id.* at 2:8–12 (emphases added). In other words, the ’892 patent describes a contact list as a database saved or stored in a communication device.

IPR2017-01052
 Patent 8,848,892 B2

Therefore, the plain meaning of the “contact list” limitation, when read in the context of the claims as a whole and in view of the Specification, is “a list saved in a communication device comprising contact list entries.”

2. Whether the “Contact List” Limitation Requires a User Interface

a. “Saved Contact List”

Because the “contact list” limitation recited in claims 1 and 6 is a “*saved* contact list,” Patent Owner’s proposed construction requiring “user interfaces” as a necessary feature of the claimed “contact list” raises the question of what is meant by a “*saved* user interface” in the context of the ’892 patent. *See* Dec. on Inst. 9.

Similar to our discussion in the Decision on Institution, we discern no disclosure regarding “saving” any “user interfaces” in the ’892 patent. *Id.* During the trial, Patent Owner did not identify any disclosure in the ’892 patent regarding “saved” or “saving” “user interfaces.” *See* Tr. 18:4–10 (Patent Owner stating “something saved doesn’t mean that the specification has to describe how to save it” in response to a question whether the Specification of the ’892 patent describes saving a user interface).

Instead, Patent Owner relies upon the testimony of Mr. Jawadi to assert that “it is not uncommon to characterize a user-interface-enable[d]-feature as ‘saved.’” PO Resp. 41 (citing Ex. 2001 ¶ 75). In the cited paragraph, Mr. Jawadi opines that “it is NOT UNCOMMON to refer to a user-interface-enabled feature resident (stored) in a communication device (such as ‘contact list’) as a ‘saved’ feature (such as ‘saved contact list’).” Ex. 2001 ¶ 75.

IPR2017-01052
 Patent 8,848,892 B2

Essentially, Mr. Jawadi states that a feature “resident (stored) in a communication device” is often referred to as a “saved” feature. But Mr. Jawadi does not explain adequately why a “user-interface-enabled” feature is synonymous or equivalent to a “saved” feature.

Moreover, Mr. Jawadi does not cite any evidence in support of his testimony. *See* Ex. 2001 ¶ 75. Mr. Jawadi’s conclusory statement unsupported by evidence does not provide a satisfactory explanation of what a “*saved* user interface” entails in the context of the ’892 patent. Thus, Mr. Jawadi’s testimony is insufficient to justify Patent Owner’s proposed construction. *See Prolitec, Inc. v. Scentair Techs., Inc.*, 807 F.3d 1353, 1358–59 (Fed. Cir. 2015) (Prolitec’s expert cannot rewrite the intrinsic record of the patent to narrow the scope of the patent and the disputed claim element.), *overruled on other grounds by Aqua Prod., Inc. v. Matal*, 872 F.3d 1290 (Fed. Cir. 2017); *Phillips*, 415 F.3d at 1318 (explaining that “a court should discount any expert testimony that is clearly at odds . . . with the written record of the patent”) (internal quotation marks omitted) (citation omitted).

Accordingly, Patent Owner’s proposed construction is untenable as being incompatible with the claim language “saved contact list.”

b. Whether the “Saved” Limitation is Extrinsic Evidence

Patent Owner next asserts that the term “saved” qualifying “contact list” should be given little significance in the construction of the term “contact list” because the term “saved” is “extrinsic evidence.”

PO Resp. 37. Patent Owner further contends that our Decision on Institution erred in “incorrectly putting more emphasis on *extrinsic evidence* (namely, what is recited before the term ‘contact list’ in the claim) than on the

IPR2017-01052
 Patent 8,848,892 B2

intrinsic evidence of the ‘892 patent” (*id.* at 37 (emphasis added)) and “NOT placing the HIGHEST emphasis on intrinsic evidence” (*id.* at 41 (citing *Phillips*, 415 F.3d at 1317)).

Patent Owner is incorrect that expressly recited claim limitations are “extrinsic evidence.” Rather, claims are part of the specification, which is intrinsic evidence. *See Homeland Housewares, LLC v. Whirlpool Corp.*, 865 F.3d 1372, 1376 (Fed. Cir. 2017) (“Claims must also be read in view of the specification, *of which they are a part.*” (emphasis added) (citing *Phillips*, 415 F.3d at 1315)). Contrary to Patent Owner’s assertion, the *Phillips* case relied upon by Patent Owner placed emphasis on claim language as intrinsic evidence:

Those sources [the court looks to interpret disputed claim language] include “*the words of the claims themselves*, the remainder of the specification, the prosecution history, *and extrinsic evidence* concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” . . . “Quite apart from the written description and the prosecution history, *the claims themselves* provide substantial guidance as to the meaning of particular claim terms.” . . . *To begin with, the context in which a term is used* in the asserted claim can be highly instructive.

Phillips, 415 F.3d at 1314 (emphases added) (citations omitted). Hence, Patent Owner’s assertion that the claim term “saved” expressly recited in the challenged claims is extrinsic evidence is erroneous.

Patent Owner further asserts that the term “saved” qualifying “contact list” is not intrinsic evidence because the exact term “saved contact list” is “not part of the specification of the ‘892 patent and was never extensively discussed as an issue during the prosecution of the ‘892 patent.”

PO Resp. 41. We disagree with Patent Owner’s argument because, as

IPR2017-01052
Patent 8,848,892 B2

discussed above, the challenged claims are a part of the Specification of the '892 patent. *See Homeland Housewares*, 865 F.3d at 1376; *Phillips*, 415 F.3d at 1315. Patent Owner cannot erase the expressly recited claim term “saved” from the challenged claims or remove it from the intrinsic record of the '892 patent merely because the exact term “saved contact list” is not used in the written description or was not discussed “extensively” during the prosecution of the patent. *Cf. Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1345 (Fed. Cir. 2016) (“[W]hen examining the written description for support for the claimed invention . . . the exact terms appearing in the claim ‘need not be used *in haec verba*.’” (quoting *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997))).

Contrary to Patent Owner’s argument, under the broadest reasonable interpretation standard, “[c]onstruing individual words of a claim *without* considering the context in which those words appear is simply not ‘reasonable.’” *Trivascular*, 812 F.3d at 1062 (emphasis added). Instead, “the context of the surrounding words [of the disputed terms] of the claim . . . must be considered in determining the ordinary and customary meaning of those terms.” *Lexion Med.*, 641 F.3d at 1356 (citation omitted). Indeed, “claim language must be construed in the context of the claim in which it appears” because “extracting a single word from a claim divorced from the surrounding limitations can lead construction astray.” *IGT v. Bally Gaming Int’l, Inc.*, 659 F.3d 1109, 1117 (Fed. Cir. 2011).

Thus, although we agree with Patent Owner that intrinsic evidence should be given more weight than extrinsic evidence in interpreting claims, there was no error in our Decision on Institution in considering the expressly recited claim limitation “saved” as informing the scope of “contact list” in

IPR2017-01052
 Patent 8,848,892 B2

the limitation “saved contact list” recited in the claims. *See Apple Computer, Inc. v. Articulate Sys., Inc.*, 234 F.3d at 24–25 (rejecting the proposed construction that ignores the limitation imposed by the word “help” in the claim term “help access window” because such a construction would read the qualifier “help” out of the definition of “help access window”).

Far from being extrinsic evidence, the “saved” limitation qualifying “contact list” plays an important role in determining the correct construction of the “contact list” limitation because the only “contact list” limitation recited in the challenged claims is a “*saved* contact list.”

c. “Entering and Saving Contact Information” Functions

Patent Owner asserts that the Specification of the ’892 patent shows that a “user interface” is required in the recited “contact list,” quoting and relying on a passage of the ’892 patent as follows.

Contact list is ***a common feature*** in most modern communication devices. It comprises of ***multiple contact list entries*** and ***enables users to enter and save contact information of entities***. Users are able to ***enter and save*** name, address, phone, fax, and email into a contact list entry. Most communication devices also ***provide users means*** to speed dial a phone number container [sic] in contact list entry directly without having to dial phone number manually.

PO Resp. 20 (quoting Ex. 1001, 1:1–13). Citing the testimony of Mr. Jawadi, Patent Owner argues that this passage shows that a “contact list” is a “common feature” or “common-and-already-available feature” of a communication device. *Id.* (citing Ex. 2001 ¶¶ 38–39). Patent Owner further asserts that the quoted passage shows that a “contact list” has “common functions,” such as “inputting and saving contact information into

IPR2017-01052
 Patent 8,848,892 B2

‘contact list entries’ . . . and speed-dialing an underlying phone number of a ‘contact list entry.’” *Id.* at 20–21. Patent Owner argues that a “contact list” requires user interfaces because user interfaces are necessary *for a user* to perform the common functions of “entering and saving contact information and speed-dialing [a phone number].” *Id.* (citing Ex. 2001 ¶ 40 (“[T]here was really no way for an ordinary *user to perform those functions* at the time of the invention other than using user interfaces of a ‘contact list.’” (emphasis added))).

We disagree with Patent Owner’s argument. First and foremost, Patent Owner’s arguments do not comport with the plain language of the claims. To begin with, independent claims 1 and 6 do *not* recite a method performed by *a user* to enter or save contact information using a user interface. Instead, the claims recite a method performed by a communication device or its processor *after* contact information has been entered or saved into a contact list stored in the communication device.

For instance, claims 1 and 6 each recite in their preamble a “method, *performed by a communication device*, for reminding a user of the communication device of a conversation point.” Ex. 1001, 2:59–61 (claim 1 (emphasis added)); 3:43–45 (claim 6 (emphasis added)). As discussed above, the claims further recite that “the communication device” has “access to a *saved* contact list.” *Id.* at 2:62–63 (claim 1 (emphasis added)); 3:47–48 (claim 6 (emphasis added)). In other words, the plain language of the claims specifies that the recited “contact list” has *already* been “saved” or “stored” in a communication device when the communication device accesses the “contact list.” That is, a user may have used a user interface to enter and save contact information, but the claims recite a method performed by a

IPR2017-01052
Patent 8,848,892 B2

communication device *after* the contact information has been entered and saved into a contact list stored in the communication device—i.e., a “method, performed by a communication device,” which has “access to a *saved* contact list.” As discussed above, the claim bodies of claims 1 and 6 each recite steps, all performed by the *processor* of the communication device, for accessing the contact list entry of the “saved contact list.”

Hence, Patent Owner’s argument that a user interface of a contact list is necessary for a user to enter and save contact information is divorced from the language of the claims. To the extent Patent Owner argues the “contact list” recited in the claims nonetheless requires a user interface to perform the entering and saving contact information functions, Patent Owner’s argument is at odds with the plain language of the claims because neither Patent Owner nor Mr. Jawadi explains adequately why a “communication device” or the “processor” of the communication device requires a user interface to “access” a “contact list” or its “contact list entry” that has already been “saved” in the communication device.

Considering the passage of the ’892 patent relied upon by Patent Owner, the passage does *not* require the “entering and saving contact information” functions be performed using a “user interface” of the “contact list” recited in the claims. Rather, the passage states generally that a contact list “*enables users* to enter and save contact information of entities” and “*users are able* to enter and save name, address, phone, fax, and email into a contact list entry.” Ex. 1001, 1:6–10 (emphases added).

First, the cited passage is not necessarily directed to a user interface because a contact list stored in the communication device (i.e., a stored contact list database) would also enable users to enter and save contact

IPR2017-01052
Patent 8,848,892 B2

information. Second, even if the cited passage is directed to a user interface, the cited passage does not necessarily require a user interface of a contact list to enter and save contact information. For example, there is nothing in the cited passage that excludes the possibility of the communication device providing a display screen for entering and saving contact information as a separate functioning part from the contact list stored in the communication device.

In fact, the disclosures in the remainder of the Specification indicate that a separate means may be used to save information in a contact list stored in the communication device. For example, in the paragraph that begins with the disclosure describing a “contact list” as a database saved or stored in a communication device (Ex. 1001, 2:1–12), the ’892 patent states that “[m]eans is provided in communication device to *save* information contained in contact list.” *Id.* at 2:13–14 (emphases added). Hence, consistent with the preceding description in the same paragraph of a “contact list” as a database saved or stored in a communication device, the ’892 patent indicates that a “means” separate from a “contact list” is used to save information in the contact list.

As discussed above, we determine that the plain meaning of the “contact list” limitation, as recited in the challenged claims, is “a list saved in a communication device comprising contact list entries.” “When claim language has as plain a meaning on an issue,” as the language does in this case, “redefinition or disavowal is required” to contradict the plain meaning of the claim language. *See Straight Path IP*, 806 F.3d at 1361. As discussed above, the disclosures on entering and saving contact information in the ’892 patent do not require a contact list to have a user interface. At a minimum,

IPR2017-01052
Patent 8,848,892 B2

they are insufficient to rise to the level of the requisite redefinition or disavowal sufficient to contradict the plain meaning of the “contact list” limitation as a “saved” contact list.

d. “Speed-Dialing” Function

Similarly, the passage regarding the speed-dialing function relied upon by Patent Owner—“[m]ost communication devices . . . provide users *means* to speed dial a phone number containe[d] in contact list entry” (Ex. 1001, 1:10–12)—is insufficient to contradict the plain meaning of the “contact list” limitation because it indicates or suggests that a separate “means” is used to speed-dial a phone number “saved” in a contact list.

In addition, similar to our discussion above, Patent Owner’s argument that a user interface is necessary for a *user* to perform the speed-dialing function does not comport with the language of the claims. The only claim of the ’892 patent that recites dialing a phone number is claim 6, which recites “(a) *receiving, by the processor*, a first input indicating a *request* that the stored phone number of a first contact list entry of the saved contact list be dialed for an outgoing phone call.” *Id.* at 4:10–13 (emphases added). Hence, although the user may have used a user interface to request dialing of a phone number, the claim recites a step performed *by the processor* of a communication device for receiving the request from the user *after* the user has made the request. Similar to the discussion above, Patent Owner’s argument is divorced from the language of the claim because claim 6 does not recite a method performed by a user to speed-dial a phone number. To the extent Patent Owner argues the “contact list” recited in claim 6 nonetheless requires a user interface to perform the phone dialing function, Patent Owner’s argument does not comport with the plain language of the

IPR2017-01052

Patent 8,848,892 B2

claim because Patent Owner does not explain adequately why a *processor* of the communication device needs a user interface to dial a phone number in the “saved contact list” *after* the user has already made the dialing request.

e. “Selecting and Activating” Functions

Patent Owner further asserts that the recited “contact list” requires a user interface because, without a user interface, a user cannot “select” a contact list entry to “activate” the contact list entry and initiate outgoing communication. PO Resp. 21–23. Similar to our discussion above, Patent Owner’s argument again does not comport with the language of the claims.

First, claims 1 and 6 do not recite a method for a *user* to “select” or “activate” a contact list entry. Rather, as discussed above, the claims recite a “method, *performed by a communication device*, for reminding a user of the communication device of a conversation point.” Ex. 1001, 2:59–61 (claim 1 (emphasis added)); 3:43–45 (claim 6 (emphasis added)).

The only claim of the ’892 patent that recites activating a contact list entry for outgoing communication is claim 6, which recites “(c) activating, *by the processor* [of the communication device], the first contact list entry such that during the activating of the first contact list entry, the stored phone number of the first contact list entry is dialed for the outgoing phone call.” *Id.* at 4:17–20 (emphasis added). As discussed above, claim 6 recites a preceding step (a) *performed by the processor* of a communication device for receiving a request from the user to dial a phone number *after* the user has made the request, possibly by using a user interface to select a contact list entry for outgoing call. Hence, similar to our discussion above, Patent Owner’s argument that a user interface is necessary for a user to “select” a contact list entry to initiate an outgoing call is divorced from the language of

IPR2017-01052
Patent 8,848,892 B2

claim 6. To the extent Patent Owner argues the “contact list” recited in claim 6 nonetheless requires a user interface to perform the “selection” and “activation” functions, Patent Owner’s argument is at odds with the plain language of the claim because Patent Owner does not explain adequately why a *processor* of a communication device requires a user interface to activate a contact list entry of the contact list stored in the communication device (*see id.* at 4:11–12) *after* the user has made the contact list entry *selection* and request for outgoing call.

Patent Owner’s argument that the “contact list” and the “contact list entry” recited in the claims must be “visually represented” and “visually recognizable” for a user to select and activate a “contact list entry” (PO Resp. 22) is similarly divorced from the language of the claims and at odds with the plain language of the claims.

Patent Owner cites the following passage of the ’892 patent in support of its contention: “*Memo is displayed on communication device when corresponding contact list entry is activated, such as when contact list entry is selected to initiate outgoing communication.*” PO Resp. 21–22 (citing Ex. 1001, 1:26–31). The cited passage, however, does not specify how the contact list entry is “selected” to initiate outgoing communication. That is, the cited passage above does not exclude the possibility of using a display screen (e.g., a list of names) separate and distinct from the recited “saved contact list” (i.e., a database saved or stored in a communication device, as described in the Specification) for the user to select a contact for outgoing calls. Thus, the cited passage does not rise to the level of the requisite redefinition or disavowal sufficient to contradict the plain meaning of the

IPR2017-01052
Patent 8,848,892 B2

“contact list” limitation so as to require a user interface in a “saved contact list.”

We have reviewed the remainder of the disclosures cited by Patent Owner (PO Resp. 22–23 (citing Ex. 1001, 1:39–41, 1:45–47, 2:17–21) and find them similarly insufficient to contradict the plain meaning of the “contact list” limitation.

f. Display Functions

Considering the disclosures on displaying information in the contact list, the ’892 patent describes that “*means* is provided in communication device to *display* memo recorded with contact list entry [of the contact list]” (Ex. 1001, 2:15–16) and that “[*m*]eans is provided in communication device to *display data* and image memo . . . when corresponding contact list entry [of the contact list] is activated” (*id.* at 2:24–27). These disclosures again indicate, consistent with the plain meaning of the “contact list” limitation as a “saved contact list,” a “means” separate from a “contact list” is used to display information “saved” in the “contact list.” Again, these disclosures are insufficient to contradict the plain meaning of the “contact list” limitation as a “saved” contact list.

g. Well-known Email Applications

Patent Owner additionally asserts that the recited “contact list” requires a user interface because the ’892 patent describes recording memo into the contact list of well-known email programs, such as hotmail, outlook, and gmail. PO Resp. 23–24 (citing Ex. 1001, 2:36–39). Citing the testimony of Mr. Jawadi, Patent Owner argues that a person of ordinary skill in the art would have known those email programs provide a user interface

IPR2017-01052
Patent 8,848,892 B2

for users to enter and save contact information in the contact list of the email programs. *Id.* at 24 (citing Ex. 2001 ¶ 46). As discussed above, Patent Owner’s argument does not comport with the language of the claims because the claims do not recite a method performed by a user to enter and save contact information.

As outlined above, the basic problem with Patent Owner’s claim construction approach is that Patent Owner focuses on the word “contact list” in isolation from the surrounding claim limitations and divorced from the context of the claim as a whole, disregarding, for example, the plain language of the claims showing that the only “contact list” recited in the challenged claims is a “saved contact list.” *See IGT v. Bally Gaming Int’l, Inc.*, 659 F.3d at 1117 (“Extracting a single word from a claim divorced from the surrounding limitations can lead construction astray. Claim language must be construed in the claim in which it appears.”). Among other errors, Patent Owner’s proposed construction would improperly read the expressly recited claim limitation “saved” out of the challenged claims as extrinsic evidence. As discussed above, Patent Owner’s proposed construction is improper as being divorced from the language of the claims, lacking support from the Specification, and contrary to the well-established law on claim construction.

h. Prosecution History

Turning to the prosecution history of the ’892 patent, Patent Owner asserts that the originally filed claim 1 included limitations reciting a contact list entry with a user interface. PO Resp. 25–26. According to Patent Owner, the prosecution history, therefore, shows that the recited “contact list” in the challenged claims requires a user interface. *Id.* at 26.

IPR2017-01052
Patent 8,848,892 B2

The original claim 1 was canceled, however, in response to the Examiner's rejection under 35 U.S.C. § 112, ¶ 2 as being indefinite for "failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention." Ex. 3001, 166 (rejecting all claims under § 112, ¶ 2), 159–161 (Patent Owner canceling all original filed claims, including original claim 1, without contesting the § 112, ¶ 2 rejection).⁴ Patent Owner's argument is insufficient to overcome the plain language of the challenged claims because Patent Owner does not explain adequately why the originally filed claim 1 that was rejected and canceled as being indefinite under § 112, ¶ 2 nonetheless defines or informs the scope of the challenged claims.

Patent Owner additionally points to originally filed Figure 4 ("Application Figure 4" or "Application Fig. 4") to argue that a person of ordinary skill in the art would have known that a "contact list" is "visually represented." PO Resp. 27–28 & n.1. According to Patent Owner, Application Figure 4 is a screen shot of the gmail application, which shows a hyperlink labeled "Contacts." *Id.* at 28 & n.1.

Application Figure 4 appears to show a displayed window of the gmail application for sending an email. Ex. 3001, 220 (Application Fig. 4), 211 ("As shown in Fig. 4, when contact list entry is selected by user to *send an email*, corresponding memo is displayed on the display monitor as

⁴ We provide a copy of the complete prosecution history as Exhibit 3001 because Patent Owner did not file one as an exhibit in this case. Patent Owner's argument regarding the originally filed claim 1 does not cite the prosecution history. *See* PO Resp. 25–26. Petitioner has filed an excerpt of the prosecution history as Exhibit 1003, which does not include the rejection of the originally filed claims under § 112, ¶ 2.

IPR2017-01052
 Patent 8,848,892 B2

reminder to the user.” (emphasis added)). Having reviewed Patent Owner’s evidence, we determine that a gmail window showing a hyperlink labeled “Contacts” is insufficient to contradict the plain meaning of the “contact list” limitation as a “saved” contact list.

Thus, Patent Owner does not cite, nor do we discern, anything in the prosecution history of the ’892 patent that rises to the level of a redefinition or disavowal sufficient to contradict the plain meaning of the “contact list” limitation.

i. Extrinsic Evidence

Citing the Declaration of Mr. Jawadi, which presents the screens shots of a YouTube video on the operation of gmail, Patent Owner further argues that a person of ordinary skill in the art would have known that if the “Contacts” hyperlink shown on Application Figure 4 was clicked, the gmail application would have displayed a screen or user interface of the gmail’s contact list. PO Resp. 28–30 (citing Ex. 2001 ¶¶ 52–53).

Having reviewed Patent Owner’s evidence, we determine that extrinsic evidence of how gmail’s contact list may have operated is insufficient to overcome the plain meaning of the “contact list” limitation as a “saved” contact list so as to require the “contact list” recited in the challenged claims to have a user interface. *See Sumitomo Dainippon Pharma Co. v. Emcure Pharm. Ltd.*, 887 F.3d 1153, 1160 (Fed. Cir. 2018) (holding that extrinsic evidence is less significant than the intrinsic record in determining the legally operative meaning of claim language, especially where the intrinsic record demonstrates the scope of the claim) (citing *Phillips*, 415 F.3d at 1317).

IPR2017-01052
Patent 8,848,892 B2

Citing the Declaration of Mr. Jawadi, Patent Owner discusses additional extrinsic evidence, such as a video footage of the introduction of the first iPhone in 2007. PO Resp. 34–35 (citing Ex. 2001 ¶¶ 63, 65–68). We have reviewed the submitted evidence and find it insufficient to overcome the plain meaning of the “contact list” limitation as a “saved” contact list.

Patent Owner further contends that the deposition testimony of Petitioner’s declarant, Mr. Rysavy, does not support Petitioner’s proposed construction, but, rather, supports Patent Owner’s proposed construction. PO Resp. 32–34. Petitioner asserts that Patent Owner mischaracterizes Mr. Rysavy’s testimony. Pet. Reply 15–16. Petitioner also argues that Mr. Jawadi’s deposition testimony supports Petitioner’s proposed construction. *Id.* at 7–8.

Notwithstanding the competing extrinsic evidence from the parties, our focus in claim construction must properly remain with the written description and the language of the claims. *See Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009) (“It is not uncommon in patent cases to have [] dueling experts. When construing claims, however, the intrinsic evidence and particularly the claim language are the primary resources.”).

Upon weighing the competing extrinsic evidence regarding claim construction from the parties and in view of our analysis of the written description and claim language discussed above, we find Patent Owner’s extrinsic evidence is not sufficient to overcome the plain meaning of the “contact list” limitation as a “saved” contact list.

IPR2017-01052
Patent 8,848,892 B2

3. Remaining Issues

Patent Owner asserts that the “contact list” recited in the claims should be construed as “a feature commonly and already available on a smart communication device.” PO Resp. 18 (emphases omitted) (citing Ex. 2001 ¶ 36). The term “commonly and already available” feature does not appear anywhere in the ’892 patent. Nor do the challenged claims recite the phrase “commonly and already available.” The only evidence Patent Owner cites in support of its contention is Mr. Jawadi’s Declaration.

Regardless of what the metes and bounds of the purported “commonly and already available” feature may be, Mr. Jawadi’s Declaration alone is insufficient to justify reading in the “commonly and already available feature” that is not recited in the claims or described in the Specification. *See Kara Tech.*, 582 F.3d at 1348 (finding the testimony of an expert cannot overcome the plain language of the claims and rejecting a proposed construction that limits a claim term by reading in a limitation not recited in the claims).

Patent Owner also asserts that the use of the term “electronic” in our preliminary construction was improper. PO Resp. 38. Patent Owner’s objection is moot because, as discussed above, we determine that the plain meaning of the term “contact list” is “a list saved in a communication device comprising contact list entries.”

4. Conclusion

Based on the complete record, we determine that there is nothing in the Specification, the prosecution history, or the extrinsic evidence of record that is sufficient to contradict the plain meaning of the “contact list” limitation, and, therefore, construe the “contact list” limitation according to

IPR2017-01052
Patent 8,848,892 B2

its plain meaning as “a list saved in a communication device comprising contact list entries.” A “contact list,” as recited in the challenged claims, does not require a user interface.

Although including an expressly recited limitation in a construction of a claim term is generally disfavored, *see Digital-Vending Servs. Int’l, LLC v. Univ. of Phoenix, Inc.*, 672 F.3d 1270, 1274–75 (Fed. Cir. 2012), “no canon of [claim] construction is absolute in its application.” *ERBE Elektromedizin GmbH v. Canady Tech. LLC*, 629 F.3d 1278, 1286 (Fed. Cir. 2010).

Because, as discussed above, the characteristic of the “contact list” as a list “saved” or “stored” in a communication device pervades throughout the claims and because the language of the claims provides the plain meaning definition of the “contact list” limitation, we find it appropriate, under the particular circumstances of this case, to interpret the limitation according to the plain language recited in the claims, i.e., “a list saved in a communication device comprising contact list entries.” *See ERBE*, 629 F.3d at 1286–87 (interpreting “low flow rate” to include expressly recited limitation in view of the intrinsic record defining the scope of the claim).

B. Other Terms

As discussed above, in our Decision on Institution, we preliminarily construed terms “contact list entry” and “activating” a contact list entry in addition to “contact list.” Dec. on Inst. 11–12. The parties do not dispute the construction of these two terms in their Patent Owner Response and Reply.

To the extent the parties’ arguments on the construction of “contact list” included or implied issues of construction of these two terms, those issues have been addressed above. For example, similar to “contact list,” a

IPR2017-01052
Patent 8,848,892 B2

“contact list entry” does not require a user interface or a visual representation.

Upon considering the complete record, we discern no reason to deviate from our preliminary constructions and, therefore, adopt the construction of “contact list entry” and “activating” a contact list entry as set forth above for this Final Written Decision.

No other claim terms need to be construed expressly for this Final Written Decision because we need only construe terms “that are in controversy, and only to the extent necessary to resolve the controversy.” *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

IV. PETITIONER’S PRIOR ART CHALLENGES

To prevail in challenging Patent Owner’s claims, Petitioner must demonstrate by a preponderance of the evidence that the claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). “In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d

IPR2017-01052
Patent 8,848,892 B2

1316, 1326–27 (Fed. Cir. 2008)) (discussing the burden of proof in *inter partes* review).

As discussed above, the grounds on which we instituted *inter partes* review are Petitioner’s challenges to claims 1–4 and 6–9 as obvious under 35 U.S.C. § 103(a) over Matsumoto and claims 1–10 as obvious under 35 U.S.C. § 103(a) over Sony alone or Sony combined with Matsumoto. 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 the subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

A. Level of Ordinary Skill in the Art

The person of ordinary skill in the art is a hypothetical person who is presumed to have known the relevant art at the time of the invention. *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). In determining the level of skill in the art, various factors may be considered, including the types of problems encountered in the art, prior art solutions to those problems, the sophistication of the technology, rapidity with which innovations are made, and the educational level of active workers in the field. *Id.* In addition, we may be guided by the level of skill in the art reflected by the prior art of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

IPR2017-01052
Patent 8,848,892 B2

Relying upon the declaration testimony of Mr. Rysavy, Petitioner contends that a person of ordinary skill in the art as of the date of the invention would have had a Bachelor's degree in computer science, computer engineering, and/or electrical engineering or at least 4 years of designing and implementing software features for cellular phones or smartphones. Pet. 9 (citing Ex. 1002 ¶ 46). Patent Owner does not oppose Petitioner's definition of the level of ordinary skill in the art.

Based on the complete record, in the context of the '892 patent and the prior art of record, we agree with and adopt Petitioner's definition of the level of ordinary skill in the art.

B. Claims 1–4 and 6–9 as Obvious Over Matsumoto

Petitioner asserts that claims 1–4 and 6–9 are unpatentable as obvious under 35 U.S.C. § 103(a) over Matsumoto. Pet. 13–41. Petitioner explains how Matsumoto renders obvious the claimed subject matter of each challenged claim, providing detailed discussion and specific citations to Matsumoto indicating where in the reference the claimed features are disclosed or explaining how the differences between the claimed subject matter and the prior art are such that the subject matter would have been obvious to a person of ordinary skill in the art. *Id.* In addition, Petitioner relies upon the Declaration of Peter Rysavy (Ex. 1002) to support its positions. *Id.* Upon review of all of the parties' papers and supporting evidence discussed in those papers, we are persuaded that Petitioner has demonstrated, by a preponderance of evidence, that claims 1–4 and 6–9 are unpatentable under 35 U.S.C. § 103(a) as obvious over Matsumoto.

IPR2017-01052
 Patent 8,848,892 B2

1. Scope and Content of the Prior Art—Overview of Matsumoto (Ex. 1004)

As background, Matsumoto describes that users may not remember the “subject,” i.e., the subject matter or topic, of a previous phone call when calling the number again or receiving a call from the number. Ex. 1004, 1:12–21. To enable users to convey the intended information “without omission,” Matsumoto describes a telephone, such as a wireless mobile phone, that allows the user to input information regarding a phone call and notifies the user of the stored information when a call is received from the stored phone number or the user makes a call to the number. *Id.* at 2:3–35, Abstract. Figure 3 of Matsumoto is reproduced below.

TELEPHONE NUMBER	NAME	E-MAIL ADDRESS	SUBJECT OF NOTES
090-1234-○×○×	TOKKYO TARO	Taro@○×△.ne.jp	RE: PARTY
090-1234-○×△△	TOKKYO JIRO	Jiro@□×□.ne.jp	———
090-1234-□△△△	TOKKYO SABURO	3ro@□×○.ne.jp	WAITING TIME
⋮	⋮	⋮	⋮

Figure 3 shows table 200 illustrating information stored in the recording unit of Matsumoto’s phone. *Id.* at 8:2–5. As shown in Figure 3, table 200 includes personal information of a party (i.e., a contact) entered by the user, such as the party’s name, telephone number, and e-mail address. *Id.* at 8:6–15. Table 200 also includes subject of notes section 204 for entering the “subjects of notes.” *Id.* at 8:17–19. According to Matsumoto, the “subject

IPR2017-01052
 Patent 8,848,892 B2

of notes” means the “content[]” that is to be or was meant to be conveyed to the party. *Id.* at 6:66–7:2.

Figure 5 of Matsumoto is reproduced below.

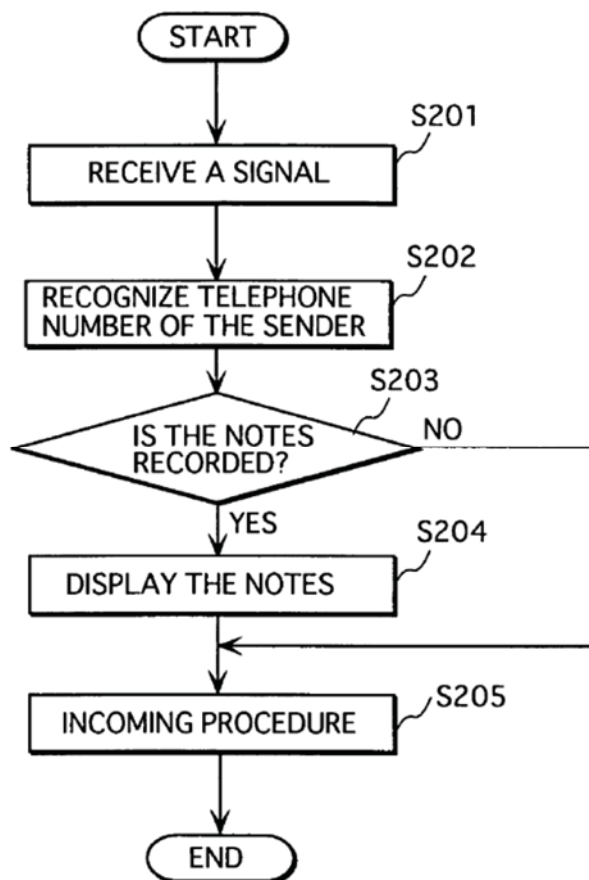


Figure 5 is a flowchart showing the process of displaying the notes, i.e., “notes display procedure,” when receiving an incoming call. *Id.* at 9:25–27. Figure 4 (not reproduced herein) illustrates a similar “notes display procedure” when making a phone call (i.e., placing an outgoing call). *Id.* at 4:50–53.

IPR2017-01052
Patent 8,848,892 B2

*2. Discussion —
Differences Between the Claimed Subject Matter and the Prior Art*

a. Claims 1 and 6

Petitioner contends that Matsumoto discloses all limitations of independent claims 1 and 6 with the possible exception of the “by the processor” aspect of the recited steps. Pet. 13. Nonetheless, Petitioner asserts that Matsumoto, at a minimum, would have rendered the claims obvious. *Id.* at 13, 18–19, 20–21 n.3.

Petitioner asserts that independent claims 1 and 6 are substantially similar except that claim 1 recites steps for processing incoming calls whereas claim 6 recites steps for outgoing calls. Pet. 7. Patent Owner does not dispute Petitioner’s characterization of the claims and argues the patentability of claims 1 and 6 together. PO Resp. 43–44. Hence, in what follows, our discussion will primarily focus on claim 1.

i. Preamble of Claim 1

As set forth above, the preamble of claim 1 recites “[a] method, performed by a communication device, for reminding a user of the communication device of a conversation point for a future phone call” and “the communication device having a processor and a display screen.” The preamble further recites that the communication device has access to “a saved contact list having one or more contact list entries” and that “each contact list entry” includes

a first field configured to retrieve a stored phone number of a corresponding entity of the respective contact list entry, a second field configured to retrieve a stored name identifying the corresponding entity, and a memo field configured to attach memo data inputted by the user and displayable to show at least

IPR2017-01052
Patent 8,848,892 B2

one memo which is served to remind the user of the conversation point for the future phone call between the user and the corresponding entity.

Addressing the preamble of claim 1, Petitioner contends that Matsumoto discloses “a method, performed by a communication device, for reminding a user of the communication device of a conversation point for a future phone call,” as recited in claim 1, because Matsumoto discloses a mobile phone, i.e., a communication device, having the function of notifying the user of stored information when the user makes a call to the telephone number of the party associated with the stored information. Pet. 14 (citing Ex. 1004, 2:16–38, 5:4–8, 37–40, Figs. 1, 2). Petitioner also cites the testimony of Mr. Rysavy in support of its contention. *Id.* (citing Ex. 1002 ¶ 80).

Referencing Figure 2 (not reproduced herein) of Matsumoto, Petitioner maps the claimed “processor” to Matsumoto’s “general control unit 104,” which “includes a Digital Signal Processor (DSP) for controlling general procedures of the wireless phone,” and the claimed “display screen” to “display unit 108,” which “is a liquid crystal display (LCD), which displays texts and images according to the signals received from the general control unit 104 and the notepad control unit 113.” *Id.* at 15 (citing Ex. 1004, 5:37–40, 6:33–36, Fig. 2; Ex. 1002 ¶ 81). Petitioner argues that Matsumoto’s processor “control[s] general procedures of the wireless phone.” *Id.* (citing Ex. 1004, 5:37–39; Ex. 1002 ¶ 81).

Referencing Figure 3 (reproduced above) and related text, Petitioner points to various portions of Matsumoto (including various fields of table 200 and related disclosure) where the claimed “saved contact list having one or more contact list entries” and the claimed

IPR2017-01052

Patent 8,848,892 B2

contact list entry . . . including a first field configured to retrieve a stored phone number of a corresponding entity of the respective contact list entry, a second field configured to retrieve a stored name identifying the corresponding entity, and a memo field configured to attach memo data inputted by the user and displayable to show at least one memo which is served to remind the user of the conversation point for the future phone call between the user and the corresponding entity

are disclosed. *Id.* at 16–18 (citing Ex. 1004, 8:3–22, 32–42, 54–59, 8:62–9:3, Figs. 3, 4). To summarize, Petitioner asserts that table 200 of Matsumoto discloses the claimed “contact list” and that each row of the table entries corresponds to the claimed “contact list entry,” including field 201, i.e., a first field for a phone number, and field 202, i.e., a second field for a stored name identifying the contact. *Id.* at 16–17. Petitioner further argues that subject of notes field 204 of table 200 constitutes the claimed “memo field configured to attach memo data inputted by the user.” *Id.* at 17. Petitioner asserts that table 200 is saved in recording unit 109 of Matsumoto’s mobile phone, and that the phone accesses the saved table to determine if a number calling or being called is stored in the table, to determine if there are notes stored in the table associated with the called or calling number, and to retrieve such notes for display to the user. *Id.* at 17–18 (citing Ex. 1004, 8:3–5, 32–42, 8:62–9:3). Petitioner also relies on the Declaration of Mr. Rysavy. *Id.* at 16–18 (citing Ex. 1002 ¶¶ 82–85).

As discussed above in Section III (Claim Construction), we construe the term “contact list” to mean “a list saved in a communication device comprising contact list entries,” and the term “contact list entry” to mean “an item in a contact list comprising data fields to input contact information details.” We are persuaded by Petitioner’s argument and evidence that table

IPR2017-01052
Patent 8,848,892 B2

200 of Matsumoto teaches the claimed “contact list” and “contact list entry” under these constructions because table 200 stored in recording unit 109 of Matsumoto’s mobile phone is “a database containing rows of contact list entries and columns that show fields of information about each contact, including ‘TELEPHONE NUMBER’ field 201, ‘NAME’ field 202, and ‘SUBJECT OF NOTES’ field 204.” *Id.* at 16–17 (citing Ex. 1004, Fig. 3; Ex. 1002 ¶ 83).

Patent Owner asserts that Matsumoto does not disclose a “contact list” under its proposed construction of the term. PO Resp. 45. Because Patent Owner’s argument turns on its claim construction of “contact list,” we disagree with Patent Owner’s argument for the reasons discussed above in Section III.

Patent Owner also argues that Matsumoto does not “leverage an existing feature,” such as a “contact list” that is “commonly and already available on a user’s communication device.” *Id.* at 5. Similarly, Patent Owner argues that Matsumoto does not “adapt[] a ‘contact list’ feature that is commonly and already available in the communication device.” *Id.* at 45. To the extent Patent Owner’s argument turns on its claim construction of “contact list,” we disagree with Patent Owner’s argument for the reasons discussed in Section III above. To the extent Patent Owner argues that the claims are limited to modifying or upgrading pre-existing conventional contact lists, we are not persuaded by Patent Owner’s argument because no such feature is recited in the challenged claims.

Based on the complete record, we determine that Petitioner has shown sufficiently that Matsumoto teaches the preamble of claim 1.

IPR2017-01052
Patent 8,848,892 B2

ii. Elements (a), (b), (c), and (d) of Claim 1

Petitioner next points to Figure 5 (reproduced above) and related disclosure of Matsumoto and argues that Matsumoto discloses the numbered elements (a), (b), (c), and (d) recited in the body of claim 1. Pet. 18–28. Petitioner provides detailed explanations and specific citations to Matsumoto indicating where in the reference the claimed features are disclosed. *Id.* In addition, Petitioner relies upon the testimony of Mr. Rysavy. *Id.*

As discussed above, Figure 5 is a flowchart showing the “notes display procedure,” i.e., the process of displaying the notes (the claimed “memo data”) stored in the subject of notes field when receiving an incoming call. Ex. 1004, 9:25–27. Petitioner points to various steps described in Figure 5 and argues that they disclose the steps recited in elements (a), (b), (c), and (d) of claim 1. Pet. 18–28. To summarize, Petitioner asserts that steps S201 (“RECEIVE A SIGNAL”) and S202 (“RECOGNIZE TELEPHONE NUMBER OF THE SENDER”) disclose the “receiving” step of element (a), and step S203 (“IS THE NOTE[] RECORDED?”) discloses the “checking” step recited in element (b) of claim 1. *Id.* at 18–23.

Petitioner further asserts that steps S204 (“DISPLAY THE NOTES”) and S205 (“INCOMING PROCEDURE”) disclose the “activating” step recited in element (c) because Matsumoto describes that, after notes for the claimed “first contact list entry” are displayed in step S204, the phone goes forward with the “incoming procedure” of step S205. *Id.* at 23–24. Petitioner argues that Matsumoto’s “incoming procedure” means that “[w]hen the user receives a call from the party, the general control unit 104 also performs a procedure for establishing communication (hereafter called

IPR2017-01052
Patent 8,848,892 B2

‘incoming procedure’).” *Id.* at 24 (citing Ex. 1004, 5:57–59). Although Petitioner does not propose an express construction for the term “activating,” Petitioner argues that the ’892 patent explains that “activating” a contact list entry includes “when user opens contact information contained therein for viewing”; “when phone number contained therein is dialed using speed dial feature”; and “when communication device detects incoming phone call from entity corresponding to contact list entry.” *Id.* at 24–25 n.4 (citing Ex. 1001, 2:17–24). In other words, Petitioner appears to argue that steps S204 and S205 of Matsumoto disclose the claimed “activating” step because Matsumoto discloses opening contact information and detecting incoming phone call.

Petitioner further argues that Matsumoto discloses “(d) causing, by the processor, a first indication indicating a presence of the at least one memo of the attached memo data, to be automatically displayed on the display screen during the activating of the first contact list entry, when it is detected in the step (b), by the processor, that there is memo data attached to the memo field of the first contact list entry,” as recited in claim 1, because Matsumoto discloses displaying the notes that are stored in the “subject of notes” field of the table 200 associated with the contact number that is calling, as shown in step S204 of Figure 5. *Id.* at 26–28. Petitioner argues that displaying the notes, i.e., the actual content of the memo, satisfies displaying an indication of a presence of a memo, as recited in claim 1, because claim 2, which depends from claim 1, recites that the “indication” of claim 1 “comprises content of the at least one memo of the memo data.” *Id.* at 26.

As noted by Petitioner, claim 1 recites that each of the steps (a), (b), (c), and (d) is performed “by the processor.” *Id.* at 13, 20–21 n.3. Relying

IPR2017-01052
Patent 8,848,892 B2

on the testimony of Mr. Rysavy, Petitioner argues that a person of ordinary skill in the art would have found it obvious to use the processor of the phone disclosed in Matsumoto to perform the functions of the phone. *Id.* at 20–21 n.3 (citing Ex. 1002 ¶ 81). Mr. Rysavy testifies that a person of ordinary skill in the art, given a processor in a communication device, such as the mobile phone in Matsumoto, would have been motivated to use that processor to execute instructions for any function of the device and would have had no doubt of the success of using a processor to carry out those functions, particularly given the longstanding knowledge in the art of using processors in cell phones and other communication devices to perform operations. Ex. 1002 ¶ 81 (citing Ex. 1008 (Chris Oxlade, *The Inside & Out Guide to Inventions*), 20 (“Central Processor. The processor controls the phone by carrying out programmed instructions.”)).

As discussed in Section III above, we construe the term “activating” a contact list entry to mean “selecting or opening” a contact list entry. We are persuaded by Petitioner’s argument and evidence that steps S204 and S205 of Matsumoto teach the claimed “activating” step under this construction because Matsumoto discloses opening contact information and detecting incoming phone call. *Id.* at 23–25 & n.4.

Patent Owner addresses the preamble and step (b) of claims 1 and 6 together and makes the same arguments discussed above with respect to the preamble of claim 1. *See* PO Resp. 43–45. For the reasons discussed above, we disagree with Patent Owner’s arguments.

Based on the complete record, we credit Mr. Rysavy’s testimony and determine that Petitioner has provided sufficient evidence and reasoned

IPR2017-01052
Patent 8,848,892 B2

explanation to show that Matsumoto renders elements (a), (b), (c), and (d) recited in claim 1 obvious.

iii. Claim 6

As discussed above, the parties do not dispute that independent claims 1 and 6 are substantially similar except that claim 1 recites steps for processing incoming calls, whereas claim 6 recites steps for outgoing calls. Pet. 7; PO Resp. 43–44.

For the preamble of claim 6, Petitioner refers to and relies on the same argument and evidence presented with respect to claim 1. Pet. 31. With regard to the steps (a), (b), (c), and (d) recited in claim 6, Petitioner presents a similar analysis except that Petitioner relies on Figure 4 and related disclosure of Matsumoto regarding the outgoing call process. *Id.* at 32–40.

Patent Owner does not respond separately, with specificity, to Petitioner’s challenge to claim 6 beyond Patent Owner’s arguments advanced with respect to claim 1 discussed above.

We have considered Petitioner’s argument and evidence with respect to claim 6, and determine that, for the reasons similar to those discussed with respect to claim 1, Petitioner has demonstrated sufficiently that Matsumoto discloses the preamble of claim 6 and renders obvious steps (a), (b), (c), and (d) recited in the claim.

iv. Conclusion Regarding Claims 1 and 6

Upon considering all of the evidence of record, we determine that Petitioner has demonstrated, by a preponderance of evidence, the subject matter of claims 1 and 6 would have been obvious under 35 U.S.C. § 103(a) based on Matsumoto.

IPR2017-01052
Patent 8,848,892 B2

b. Dependent Claims 2–4 and 7–9

i. Claims 2 and 7

Claims 2 and 7 depend from claims 1 and 6, respectively, and each further recites “the first indication comprises content of the at least one memo of the memo data.”

Petitioner asserts that Matsumoto teaches the additionally recited limitation of claims 2 and 7 because Matsumoto discloses displaying the content of the input notes stored in the contact list entry when the associated contact calls the user. Pet. 29 (claim 2) (citing *id.* § VII.A.1.g (discussing step (d) of claim 1); Ex. 1002 ¶¶ 98–102), 40 (claim 7).

Based on the complete record, we determine that Petitioner has shown sufficiently that Matsumoto teaches the additionally recited limitation of claims 2 and 7 for the reasons discussed above with respect to step (d) of claim 1.

ii. Claims 3 and 8

Claims 3 and 8 depend from claims 1 and 6, respectively, and each further recites “the memo data attached to the memo field of the first contact list entry comprises at least one of text, audio, image and video that is displayable or otherwise playable to show the at least one memo of the memo data.”

Petitioner asserts that Matsumoto teaches the additionally recited limitation of claims 3 and 8 because Matsumoto discloses storing in table 200 a field titled “SUBJECT OF NOTES” that corresponds to the memo data in claim 1. Pet. 29. Petitioner argues that Figure 3 illustrates table 200 and shows text examples of the memo data. *Id.* at 29–30 (citing Ex. 1004,

IPR2017-01052
Patent 8,848,892 B2

Fig. 3). Petitioner also points to the following passage in Matsumoto: “[i]n a subject of notes section 204, the subjects of notes which are inputted in the notes input procedure are described” and that “the subjects of notes are stored in the text format.” *Id.* at 30 (quoting Ex. 1004, 8:18–22).

Based on the complete record, we determine that Petitioner has shown sufficiently that Matsumoto teaches the additionally recited limitation of claims 3 and 8.

iii. Claims 4 and 9

Claims 4 and 9 depend from claims 1 and 6, respectively, and each further recite “the step (b) of checking of whether there is memo data that is attached to the memo field of the first contact list entry is performed before or during the step (c) of activating the first contact list entry.”

Petitioner asserts that the “activation” process of connecting and conducting the call is shown for incoming calls as Step S205 in Figure 5 and for outgoing calls as Step S105 in Figure 4. Pet. 30–31 (citing Ex. 1004, Figs. 4, 5; Ex. 1002 ¶ 109). Petitioner argues that the step for checking for memo data in the contact list associated with the number is shown as the earlier Step S203 in Figure 5 for incoming calls and as the earlier Steps S102 and S103 in Figure 4 for outgoing calls. *Id.* at 31 (citing Ex. 1004, Figs. 4, 5; Ex. 1002 ¶ 109). If there are such notes, those notes are also displayed before the activation of the call, as shown in Steps S204 and S104. *Id.* (citing Ex. 1004, 8:29–53, 9:28–42, Figs. 4, 5; Ex. 1002 ¶ 109).

Based on the complete record, we determine that Petitioner has shown sufficiently that Matsumoto teaches the additionally recited limitation of claims 4 and 9.

IPR2017-01052
Patent 8,848,892 B2

iv. Conclusion Regarding Claims 2–4 and 7–9

Patent Owner does not respond separately, with specificity, to Petitioner’s challenge to claims 2–4 and 7–9 beyond Patent Owner’s arguments advanced with respect to claims 1 and 6 discussed above.

Upon considering the complete record, we determine that Petitioner has demonstrated, by a preponderance of evidence, the subject matter of claims 2–4 and 7–9 would have been obvious under 35 U.S.C. § 103(a) based on Matsumoto.

C. Claims 1–10 as Obvious Over Sony Alone or Over the Combination of Sony and Matsumoto

Petitioner asserts that claims 1–10 are unpatentable as obvious under 35 U.S.C. § 103(a) over Sony alone or Sony combined with Matsumoto. Pet. 13–41. Upon review of all of the parties’ papers and supporting evidence discussed in those papers, we are persuaded that Petitioner has demonstrated, by a preponderance of evidence, that claims 1–10 are unpatentable under 35 U.S.C. § 103(a) as obvious over Sony or the combination of Sony and Matsumoto.

1. Overview of Sony (Ex. 1005)

Sony describes a wireless communication system that provides reminders based on contact information. Ex. 1005 ¶¶ 2–9. Sony’s system includes an electronic “phonebook” storage to store contact identification information, such as names, phone numbers, and email addresses. *Id.* ¶ 27. The system also includes a separate reminder storage for storing reminders, which can be entered through a series of menu options. *Id.* ¶¶ 27, 30.

IPR2017-01052
 Patent 8,848,892 B2

Figure 3 of Sony is reproduced below.

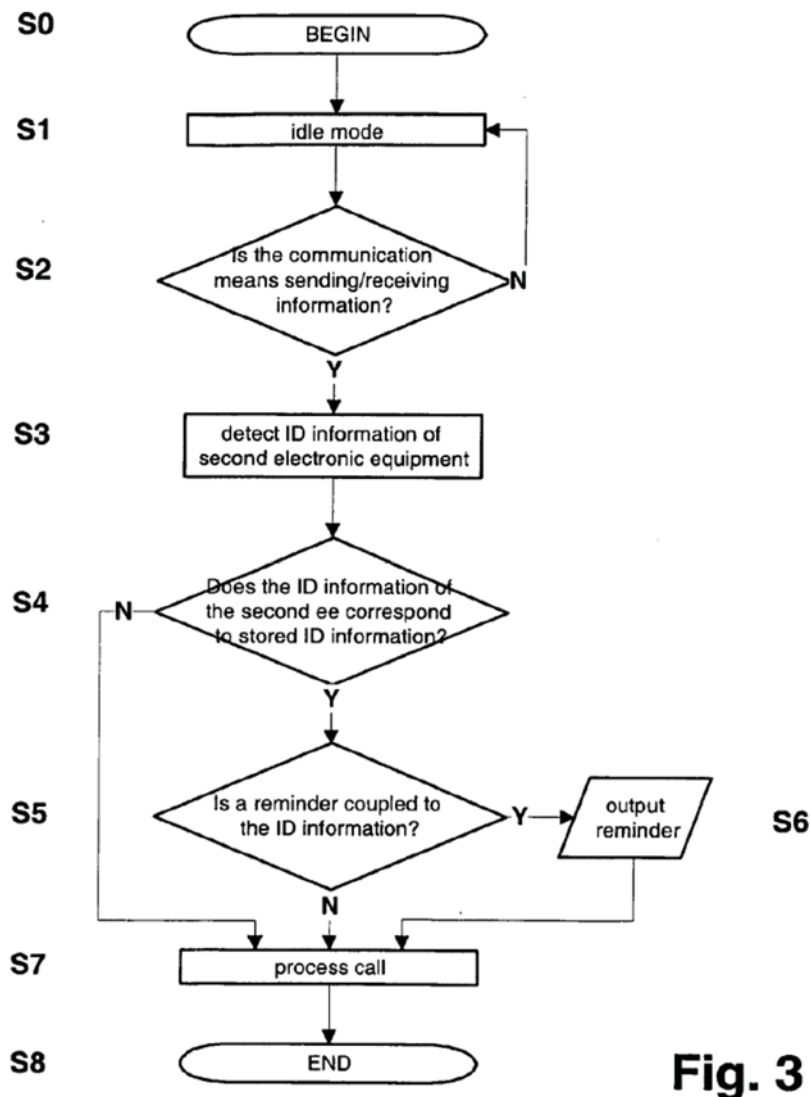


Figure 3 shows a flowchart of the process of providing reminders according to Sony. *Id.* ¶ 32. As indicated in step S2, Figure 3 describes both the incoming call and the outgoing call processes. *Id.* ¶ 32, Fig. 3.

IPR2017-01052
Patent 8,848,892 B2

*2. Discussion —
Differences Between the Claimed Subject Matter and the Prior Art*

a. Claims 1 and 6

Petitioner’s alternative obviousness arguments are directed to one limitation only, namely, the “memo field configured to attach memo data” limitation recited in the preamble. *See* Pet. 47–54. Petitioner relies on Sony alone for all other limitations. *Id.* at 42–47, 54–61. Similar to the ground based on Matsumoto, our discussion will focus on claim 1.

i. Preamble of Claim 1

Petitioner asserts that Sony’s “electronic equipment 1” including a wireless communication system discloses a communication device having a processor and a display screen. *Id.* at 42–43. Petitioner further contends that the electronic equipment of Sony performs a method in which a user is able to input a textual reminder that is saved in storage linked to a contact. *Id.* at 42 (citing Ex. 1005 ¶¶ 11, 30, Fig. 2a). Then, when the user next calls or is called by the number stored for that contact, the equipment displays the reminder before connecting the call. *Id.* (citing Ex. 1005 ¶¶ 32–33, Figs. 3, 4).

Further, Petitioner maps the claimed “contact list” and “contact list entry” to Sony’s phonebook 2, which stores “identification information, e.g. phone numbers, e-mail addresses and the like and additional information relating to the identity such as names, images and/or the like.” *Id.* at 44 (citing Ex. 1005 ¶ 27).

Petitioner also maps the claimed “memo field configured to attach memo data inputted by the user” to “reminder storage 3” described in Sony. *Id.* at 45–46 (citing Ex. 1005 ¶¶ 27, 30). Petitioner asserts that the reminders

IPR2017-01052
Patent 8,848,892 B2

in Sony are input by the user using “input means 7” through a series of “menu options,” as shown in Figure 2a (not reproduced herein). *Id.* at 45 (citing Ex. 1005 ¶ 30, Fig. 2a).

Although Sony discloses that phonebook storage 2 (storing names, phone numbers, and e-mail addresses) is linked or coupled to reminder storage 3 (*id.* at 46–47 (citing Ex. 1005 ¶¶ 11, 29)), Petitioner acknowledges that Sony’s reminder storage 3 is stored in a separate storage from phonebook storage 2, and, hence, Sony does not expressly disclose contact list entries that include all three fields (i.e., the fields for names, phone numbers, and memo data), as recited in the claim. *Id.* at 47. Nonetheless, Petitioner argues either Sony alone or Sony combined with Matsumoto renders the “memo field” limitation obvious.

(1) Obviousness Based on Sony Alone

Relying upon the testimony of Mr. Rysavy, Petitioner argues that it would have been obvious to a person of ordinary skill in the art to modify Sony to substitute Sony’s two storages (i.e., phonebook storage 2 and reminder storage 3) coupled by a link with a single contact list that includes all three recited fields, because an ordinary artisan would have understood that these two techniques (single database for all information, as opposed to multiple databases with a link between the data) were simple design choices and known equivalents that could be substituted with rudimentary skill to achieve the same straightforward result of storing information in a way that allowed related information to be accessed. *Id.* at 47–48 (citing Ex. 1002 ¶ 120).

Mr. Rysavy testifies that a person of ordinary skill in the art would have understood that while these two approaches are distinct, the distinction

IPR2017-01052
Patent 8,848,892 B2

between them is minimal and that linking two physical databases to create a single virtual (or logical) database was well understood at the time of the filing of the '892 patent. Ex. 1002 ¶ 120. In support of his testimony, Mr. Rysavy cites and discusses a couple of references published before the filing date. *Id.* (citing Exs. 1006, 1007).

Mr. Rysavy further testifies that modifying Sony's teaching to obtain a single contact list entry that includes all three recited fields would have been mere substitution of one known equivalent in the field for another with a well-known and predictable result. *Id.* ¶ 121.

Patent Owner asserts that Sony does not disclose "each contact list entry of the contact list including . . . a memo field configured to attach memo data inputted by the user," as recited in claims 1 and 6, because Sony does not "integrate" memo data with a contact list entry. PO Resp. 46. Patent Owner refers to this limitation (along with a portion of step (b)) as "the core claim limitation." *Id.* at 44. According to Patent Owner, the recited limitation requires "integration of memo data with the WHOLE ENTRY of a 'contact list entry' (as properly construed) in achieving a memo function." *Id.* at 44. Patent Owner cites a passage in the Specification as describing this "integration" of memo data with a contact list entry. *Id.* at 43 (citing Ex. 1001, 2:9–12).

The portion of the '892 patent cited by Patent Owner states as follows:

Data field for memo can be *integrated* within contact list entry;
alternatively data field for memo can be in a separate database
and memo and corresponding contact list entry can be related
by means of link for co-functionality.

Ex. 1001, 2:8–12 (emphasis added). Thus, the integrated contact list entry argued by Patent Owner appears to be simply a contact list entry that

IPR2017-01052
Patent 8,848,892 B2

includes all three data fields recited in the claims—i.e., the fields for a phone number, a name, and memo. In other words, Patent Owner appears to argue that Sony does not disclose a contact list entry with all three data fields, including the memo field.

Petitioner’s challenge based on Sony, however, is one of obviousness. Although Petitioner relies on Sony alone in this asserted ground of obviousness, obviousness can be established by considering whether “*a single piece of prior art could be modified*, to produce the claimed invention.” *Comaper Corp v. Antec Inc.*, 596 F.3d 1343, 1351–52 (Fed. Cir. 2010) (emphasis added). As discussed above, Petitioner asserts that it would have been obvious to modify the teaching of Sony to obtain a single contact list with contact list entries that include data fields for names, phone numbers, and memo data. Pet. 47–49. Therefore, we find that Patent Owner does not adequately refute Petitioner’s challenge based on *obviousness*.

Patent Owner further asserts that “the core claim limitation” is missing from Sony and cannot be “supplied through ‘common sense.’” PO Resp. 48–49 (citing *Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1362 (Fed. Cir. 2016)). We disagree with Patent Owner’s argument.

As discussed above, with respect to the purported “core claim limitation” identified by Patent Owner—i.e., “each contact list entry of the contact list including . . . a memo field configured to attach memo data inputted by the user”—Petitioner has established sufficiently that Sony teaches a “contact list” with a “contact list entry” that includes a “memo field.” Pet. 44–47. As Petitioner explained, the difference between Sony and the claimed subject matter is that Sony has two contact lists—one with identification information and names, and another with reminders coupled to

IPR2017-01052
Patent 8,848,892 B2

the identification information—whereas the claims recite a single contact list with contact list entries having all three data fields, i.e., the fields for a phone number, a name, and memo. *Id.* at 47–49. Hence, there are no missing limitations in Sony; rather, the elements are arranged differently in Sony from the claims.

Furthermore, Petitioner does not rely on common sense to supply any missing limitation. Rather, Petitioner has demonstrated sufficiently that a person of ordinary skill in the art would have been motivated to modify Sony to obtain a single contact list with all three data fields because Sony itself suggests contact information and reminders could be stored together as fields in one contact list. Pet. 47 (citing Ex. 1005 ¶ 27; Ex. 1002 ¶ 118); Pet. Reply 21 (citing Ex. 1005 ¶¶ 9, 11, 27; Ex. 1002 ¶ 118).

(2) Obviousness Based on the Combination of Sony and Matsumoto

In the alternative, Petitioner asserts that a person of ordinary skill in the art would have found it obvious to combine the teachings of Sony with the disclosure in Matsumoto of a single contact list containing all three fields. Pet. 49–50 (citing Ex. 1002 ¶ 123). Similar to its obviousness challenge based on Sony alone, Petitioner argues that a person of ordinary skill in the art would have been motivated to combine the single storage technique of Matsumoto with the separate but linked storage technique of Sony, because an ordinary artisan would have understood that these two techniques were known equivalents in the art that could be substituted with a predictable result. *Id.* at 50 (citing Ex. 1002 ¶ 120). Relying upon the testimony of Mr. Rysavy, Petitioner further asserts that a person of ordinary skill in the art would have been motivated to combine Sony with Matsumoto because the references both address the same need recognized among those

IPR2017-01052
Patent 8,848,892 B2

of skill in the art at the time to provide a phone user a reminder about a specific contact when that contact calls or is called. *Id.* at 51 (citing Ex. 1002 ¶ 125). Petitioner further argues that both Sony and Matsumoto address that need on a mobile phone using the same general solution—i.e., when a call is received or dialed, checking to see if there is a note stored that is associated with the calling or dialed contact and, if so, displaying the text of the note to the user before the call is connected. *Id.* (citing Ex. 1002 ¶ 125). Further, citing the Declaration of Mr. Rysavy, Petitioner asserts that there is nothing in Sony that would have been viewed by a person of ordinary skill in the art as technically incompatible with employing the single storage format of Matsumoto in place of Sony’s multiple storage embodiment, or vice-versa. *Id.* at 52 (citing Ex. 1002 ¶ 127).

We are persuaded by Petitioner’s argument and evidence that a person of ordinary skill in the art would have been motivated to combine the teachings of Sony and Matsumoto in the manner proposed by Petitioner because, similar to Petitioner’s argument on the asserted obviousness ground based on Sony alone, Sony’s and Matsumoto’s techniques (single database for all information, as opposed to multiple databases with a link between the data) were simple design choices and known equivalents that could have been substituted with a predictable result. In addition, as Petitioner persuasively argues, Sony itself suggests contact information and reminders could be stored together as fields in one contact list. Pet. 47 (citing Ex. 1005 ¶ 27; Ex. 1002 ¶ 118); Pet. Reply 21 (citing Ex. 1005 ¶¶ 9, 11, 27; Ex. 1002 ¶ 118).

Patent Owner’s Response does not dispute Petitioner’s contention that the combination of Sony and Matsumoto teaches the preamble of claim 1.

IPR2017-01052
Patent 8,848,892 B2

Based on the complete record, we credit Mr. Rysavy's testimony and determine that Petitioner has presented sufficient evidence to show a person of ordinary skill in the art would have been motivated to combine Sony with Matsumoto as proposed to produce the "contact list" and "contact list entry," as recited in claim 1.

Upon reviewing the complete record, we determine that Petitioner has shown sufficiently that Sony alone or the combination of Sony and Matsumoto renders the preamble of claim 1 obvious.

ii. Elements (a), (b), (c), and (d) of Claim 1

Petitioner next points to various steps described in Figure 3 (reproduced above) and related disclosure of Sony and argues that Sony discloses the steps recited in elements (a), (b), (c), and (d) of claim 1. Pet. 54–61. Petitioner asserts that Figure 3 discloses both the incoming call and the outgoing call processes. *Id.* at 54. Petitioner provides detailed explanations and specific citations to Sony indicating where in the reference the claimed features are disclosed. *Id.* at 54–61. In addition, Petitioner relies upon the testimony of Mr. Rysavy. *Id.*

For instance, Petitioner asserts that steps S2–S4 in Figure 3 disclose the "receiving" step of element (a) for an incoming or outgoing call because at step S2, the system determines "if the communication means 6 is establishing a communication to the second electronic equipment, i.e. sending/receiving information via the wireless communication system." *Id.* at 54–55 (citing Ex. 1005 ¶ 32). If the system is sending or receiving information, "then in step S3 the detection means will detect the identification information [e.g., number] of the second electronic equipment to which the communication means 6 is sending information or from which

IPR2017-01052
Patent 8,848,892 B2

the communication means 6 is receiving information and in a further step S4 the detection means checks if the identification information [e.g., number] of the second electronic equipment corresponds to a stored identification information,” which is stored in the phonebook. *Id.* at 55–56 (citing Ex. 1005 ¶ 32).

Petitioner further asserts that Sony expressly discloses that the functions of the Sony device are performed by the “central control unit” (which can embody “a microprocessor”), which “controls the operation of the electronic equipment 1.” *Id.* at 56 (citing Ex. 1005 ¶ 26). Citing the testimony of Mr. Rysavy, Petitioner argues, therefore, a person of ordinary skill in the art would have understood that the procedure in the steps of Sony are performed by the “central control unit” of Sony. *Id.* (citing Ex. 1002 ¶¶ 131–132, 112).

Petitioner further provides a detailed discussion of how Sony discloses steps (b), (c), and (d). *Id.* at 57–61. With regard to step (b), Petitioner asserts that Figure 3 of Sony illustrates the checking process for both incoming and outgoing calls. *Id.* at 57 (citing Ex. 1005, Fig. 3; Ex. 1002 ¶¶ 133–135). Sony further discloses that if the called or calling number matches one “stored in the phonebook 2 of the electronic equipment 1, then in the next step S5 it is checked if a reminder is coupled to this identification information.” *Id.* (citing Ex. 1005 ¶ 32; Ex. 1002 ¶ 134).

With respect to step (c), Petitioner asserts that Sony teaches “activating” a contact list entry because Sony accesses the stored phone numbers when receiving an incoming phone call or dialing an outgoing phone number. *Id.* at 58 (citing Ex. 1005 ¶ 32, Fig. 3).

IPR2017-01052
Patent 8,848,892 B2

As discussed in Section III above, we construe the term “activating” a contact list entry to mean “selecting or opening” a contact list entry. We are persuaded by Petitioner’s argument and evidence that Sony teaches the claimed “activating” step under this construction because Sony discloses accessing stored identification information and processing incoming or outgoing calls. *See* Ex. 1005 ¶ 32, Fig. 3.

Petitioner further asserts that Sony teaches step (d) for both incoming and outgoing call procedures because it displays the content of the stored reminder when the associated contact calls or is called by the user. Pet. 59–61 (citing Ex. 1005 ¶¶ 26, 33, Figs. 3, 4).

Similar to its argument with respect to the preamble, Patent Owner asserts that Sony does not disclose “(b) checking, by the processor after step (a), whether there is memo data that is attached to the memo field of the first contact list entry,” which Patent Owner identifies as “the core claim limitation” along with the portion of the preamble discussed above. PO Resp. 44, 46–48. Patent Owner argues that Sony does not “integrate” memo data with a contact list entry, but, instead, “couples” memo data to a contact entry. *Id.* at 46.

By Sony’s “coupling” approach, Patent Owner appears to argue that Sony has phone numbers in both storages (i.e., the phonebook and the reminder storage, each being the claimed “contact list”), which are “coupled” to each other. But the “coupling” gets broken or outdated if the phone number in the phonebook is changed. *See id.* at 9–10.

In its Reply, Petitioner argues that Patent Owner misreads Sony. Pet. Reply 21–23.

IPR2017-01052
Patent 8,848,892 B2

Similar to our discussion above, we disagree with Patent Owner’s argument because Petitioner’s obviousness challenge is based on its proposed modification of Sony to obtain a single contact list including all three claimed data fields. That is, “the memo field” recited in step (b) refers to the memo field in the preamble, for which Petitioner relies on the single contact list obtained from its proposed modification of Sony. *See* Pet. Reply 21 (citing Pet. 47–49; Ex. 1005 ¶¶ 9, 11, 27; Ex. 1002 ¶ 118).

Although Petitioner’s discussion of step (b) appears to refer to Sony’s teachings without the proposed modification, it is reasonable to understand that Petitioner is relying on Sony to teach “checking” whether there is memo attached to the memo field, *not* the memo field itself. *See* Pet. 57; Pet. Reply 21.

Therefore, based on the complete record, we determine that Petitioner has shown sufficiently that Sony teaches or renders obvious elements (a), (b), (c), and (d) recited in claim 1.

iii. Claim 6

With respect to claim 6, Petitioner relies on essentially the same argument and evidence discussed with respect to claim 1 because Figure 3 of Sony discloses both the incoming call and the outgoing call processes. Pet. 66–69.

Patent Owner does not respond separately, with specificity, to Petitioner’s challenge to claim 6 beyond Patent Owner’s arguments advanced with respect to claim 1 discussed above.

We have considered Petitioner’s argument and evidence with respect to claim 6, and determine that, for the reasons similar to those discussed with respect to claim 1, Petitioner has demonstrated sufficiently that Sony alone

IPR2017-01052
Patent 8,848,892 B2

or the combination of Sony and Matsumoto renders the preamble of claim 6 obvious and teaches or renders obvious steps (a), (b), (c), and (d) recited in the claim.

iv. Conclusion Regarding Claims 1 and 6

Upon considering all of the evidence of record, we determine that Petitioner has demonstrated, by a preponderance of evidence, the differences between the claimed subject matter of claims 1 and 6 and Sony alone or Sony combined with Matsumoto are such that the subject matter, as a whole, would have been obvious to a person having ordinary skill in the art at the time of the filing of the '892 patent. Accordingly, Petitioner has demonstrated, by a preponderance of evidence, the subject matter of claims 1 and 6 would have been obvious under 35 U.S.C. § 103(a) over Sony or the combination of Sony and Matsumoto.

b. Claims 5 and 10

Claims 5 and 10 depend from claims 1 and 6, respectively, and each further recites “the user is provided by the communication device at least one option to erase, save or edit memo data attached to the memo field of the first contact list entry at the end of the incoming [outgoing] phone call.” Ex. 1001, 3:39–42, 4:44–47. Our discussion below focuses on claim 5 because the issues are identical for both claims 5 and 10.

Petitioner asserts that Sony renders claim 5 obvious because Sony expressly discloses an option for the user to delete the displayed reminder at the end of an incoming or outgoing call (Pet. 64 (citing Ex. 1005 ¶ 32)), as well as menu options to create a new reminder, edit an existing reminder, and delete a reminder (*id.* at 65 n.6 (citing Ex. 1002 ¶¶ 115–116, 157)).

IPR2017-01052
Patent 8,848,892 B2

Mr. Rysavy opines that a person of ordinary skill in the art would have understood that Sony disclosed options for creating, editing, and deleting a reminder before or after a call ends as an option to delete the reminder at the end of the call on which it was displayed. Ex. 1002 ¶ 157.

Based on the complete record, we credit the testimony of Mr. Rysavy and are persuaded that a person of ordinary skill in the art would have combined the cited disclosures of Sony, arguably disparate embodiments, to arrive at the subject matter recited in claim 5.

Patent Owner does not respond separately, with specificity, to Petitioner's challenge to claims 5 and 10 beyond Patent Owner's arguments advanced with respect to claim 1 discussed above.

Upon considering the complete record, we determine that Petitioner has demonstrated, by a preponderance of evidence, the subject matter of claims 5 and 10 would have been obvious under 35 U.S.C. § 103(a) over Sony or the combination of Sony and Matsumoto.

c. Claims 2–4 and 7–9

i. Claims 2 and 7

Claims 2 and 7 depend from claims 1 and 6, respectively, and each further recites “the first indication comprises content of the at least one memo of the memo data.” Patent Owner asserts that Sony teaches displaying the content of the input notes stored in the contact list entry when the associated contact calls the user. Pet. 62 (claim 2) (citing *id.* § VII.B.1.g (discussing step (d) of claim 1); Ex. 1002 ¶¶ 142–145), 69 (claim 7).

Based on the complete record, we determine that Petitioner has shown sufficiently that Sony teaches the additionally recited limitation of claims 2

IPR2017-01052
Patent 8,848,892 B2

and 7 for the reasons discussed above with respect to step (d) of claim 1.

ii. Claims 3 and 8

Claims 3 and 8 depend from claims 1 and 6, respectively, and each further recites “the memo data attached to the memo field of the first contact list entry comprises at least one of text, audio, image and video that is displayable or otherwise playable to show the at least one memo of the memo data.”

Petitioner asserts that Sony teaches the additionally recited limitation of claims 3 and 8 because Sony discloses that “the user may have the possibility to input a specific text for the reminder” and “this text may also be output on the display.” Pet. 62 (citing Ex. 1005 ¶¶ 30, 33, Fig. 4).

Based on the complete record, we determine that Petitioner has shown sufficiently that Sony teaches the additionally recited limitation of claims 3 and 8.

iii. Claims 4 and 9

Claims 4 and 9 depend from claims 1 and 6, respectively, and each further recites “the step (b) of checking of whether there is memo data that is attached to the memo field of the first contact list entry is performed before or during the step (c) of activating the first contact list entry.”

For claims 4 and 9, Petitioner cites its previous discussion of steps (b) and (c). Pet. 63 (citing *id.* §§ VII.A.1.f, B.1.f, B.1.e). Petitioner also asserts that Sony teaches checking for a reminder (and then displaying it) before the call is connected and conducted. *Id.* (citing Ex. 1005 ¶ 32; Ex. 1002 ¶ 152).

IPR2017-01052
Patent 8,848,892 B2

Based on the complete record, we determine that Petitioner has shown sufficiently that Sony teaches the additionally recited limitation of claims 4 and 8–9.

iv. Conclusion Regarding Claims 2–4 and 7–9

Patent Owner does not respond separately, with specificity, to Petitioner’s challenge to claims 2–4 and 7–9 beyond Patent Owner’s arguments advanced with respect to claims 1 and 6 discussed above.

Upon considering the complete record, we determine that Petitioner has demonstrated, by a preponderance of evidence, the subject matter of claims 2–4 and 7–9 would have been obvious under 35 U.S.C. § 103(a) over Sony or the combination of Sony and Matsumoto.

V. CONCLUSION

Petitioner has met its burden of proof, by a preponderance of the evidence, in showing that claims 1–10 of the ’892 patent are unpatentable based on the following grounds:

1. Claims 1–4 and 6–9 as obvious under 35 U.S.C. § 103(a) over Matsumoto; and
2. Claims 1–10 as obvious under 35 U.S.C. § 103(a) over Sony; and
3. Claims 1–10 as obvious under 35 U.S.C. § 103(a) over the combination of Sony and Matsumoto.

IPR2017-01052

Patent 8,848,892 B2

VI. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1–10 of the '892 patent are unpatentable; and

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

IPR2017-01052
Patent 8,848,892 B2

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Paper 37
Entered: November 27, 2018

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION,
Petitioner,

v.

MIRA ADVANCED TECHNOLOGY, INC.,
Patent Owner.

Case IPR2017-01411
Patent 9,531,657 B2

Before MINN CHUNG, MICHELLE N. WORMMEESTER, and
KAMRAN JIVANI, *Administrative Patent Judges*.

CHUNG, *Administrative Patent Judge*.

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

IPR2017-01411
Patent 9,531,657 B2

I. INTRODUCTION

In this *inter partes* review, instituted pursuant to 35 U.S.C. § 314, Microsoft Corporation (“Petitioner”) challenges the patentability of claims 1–12 (the “challenged claims”) of U.S. Patent No. 9,531,657 B2 (Ex. 1001, “the ’657 patent”), owned by Mira Advanced Technology Systems, Inc. (“Patent Owner”). The Board has jurisdiction under 35 U.S.C. § 6. This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. With respect to the grounds of unpatentability asserted by Petitioner, we have considered the papers submitted by the parties and the evidence cited therein. For the reasons discussed below, we determine Petitioner has shown by a preponderance of the evidence that claims 1–12 of the ’657 patent are unpatentable.

II. BACKGROUND

A. *Procedural History*

On May 10, 2017, Petitioner filed a Petition (Paper 2, “Pet.”) requesting an *inter partes* review of claims 1–12 of the ’657 patent. Patent Owner filed a Preliminary Response. Paper 7 (“Prelim. Resp.”). On December 1, 2017, we instituted an *inter partes* review of all the challenged claims of the ’657 patent based on all the grounds presented in the Petition. Paper 8 (“Dec. on Inst.”), 40.

After institution, Patent Owner filed a Patent Owner Response (Paper 24, “PO Resp.”), to which Petitioner filed a Reply (Paper 25,

IPR2017-01411
Patent 9,531,657 B2

“Pet. Reply”).¹ An oral hearing was held on June 21, 2018. A transcript of the hearing is included in the record as Paper 36 (“Tr.”).

B. Related Proceeding

According to the parties, the ’657 patent is the subject of the following proceeding: *Mira Advanced Tech. Sys., Inc. v. Microsoft Corp.*, No. 2:16-cv-88 (N.D. W. Va.). Pet. 1; Paper 3, 1. Additionally, U.S. Patent No. 8,848,892 B2, which is a predecessor to the ’657 patent, is the subject of IPR2017-01052, in which we issued a final written decision finding all challenged claims unpatentable. *See Microsoft Corp. v. Mira Advanced Tech. Sys., Inc.*, Case IPR2017-01052 (PTAB Sept. 19, 2018) (Paper 31).

C. The ’657 Patent

The ’657 patent describes a method for attaching memo data to a contact list entry. Ex. 1001, Abstract. As background, the ’657 patent describes that, because users sometimes forget important conversation points with their contacts, a need exists for a contact list that allows entering memo data into contact list entries and provides reminders of the memo data when communication is initiated with the contact associated with the memo data. *Id.* at 1:25–32.

¹ With our permission, Patent Owner and Petitioner each filed an errata to their Patent Owner Response and Reply, respectively. Paper 35 (Errata to Patent Owner’s Response); Paper 33 (Errata to Petitioner’s Reply).

IPR2017-01411
 Patent 9,531,657 B2

Figure 1 of the '657 patent is reproduced below.

Name	Address	Phone	Fax	Email	URL	Memo

Figure 1 shows the database structure of the contact list of the '657 patent. *Id.* at 1:49–50. As shown in Figure 1, the contact list consists of multiple contact list entries. *Id.* at 2:14–15.

Each contact list entry comprises data fields to input contact information details, such as contact name, address, phone number, and email address. *Id.* at 2:16–17. In an exemplary embodiment, a data field is added to each contact list entry to input memo data associated with the contact entry. *Id.* at 2:20–21.

According to the '657 patent, memo data is displayed when the associated contact list entry is activated, such as when the contact list entry is selected to initiate outgoing communication (e.g., the phone number of the contact is dialed), or when incoming communication is received (e.g., an incoming phone call from the contact is detected). *Id.* at 1:38–43, 2:27–31, Abstract. The display of memo data serves as a reminder of the desired topic of conversation or conversation points when communication is initiated with the contact. *Id.* at 2:37–39, 42–46. Memo data may also be displayed at the end of a phone call, and the user has an option to erase, save, or edit the memo data. *Id.* at 2:39–42.

IPR2017-01411
Patent 9,531,657 B2

D. Illustrative Claim

Of the challenged claims, claim 1 is the only independent claim.

Claim 1 is illustrative of the challenged claims and is reproduced below:

1. A method, performed by a communication device, for reminding a user of the communication device of a conversation point for a future communication, the communication device having a processor and a display screen, the communication device having access to a memory storing a contact list having a list of contact list entries, each contact list entry of the contact list including a first field configured to retrieve a stored communication address of a corresponding entity of the respective contact list entry, a second field configured to retrieve a stored name identifying the corresponding entity, and a memo field configured to attach memo data inputted by the user and displayable to show at least one memo which can be served to remind the user of a conversation point for a future communication between the user and the corresponding entity, the method comprising:

(a) receiving, by the processor, a first input indicating a need to activate a first contact list entry of the contact list for the user to perform at least one of receiving and requesting a communication addressed to the stored communication address of the first contact list entry;

(b) checking, by the processor after step (a), whether there is memo data that is attached to the memo field of the first contact list entry;

(c) activating, by the processor, the first contact list entry, such that during the activating of the first contact list entry, the user performs at least one of receiving, requesting, drafting and conducting the communication addressed to the communication address of the first contact list entry; and

(d) causing, by the processor, a first indication indicating a presence of the at least one memo of the attached memo data, to be automatically displayed on the display screen during the activating of the first contact list entry, when it is detected in

IPR2017-01411
Patent 9,531,657 B2

step (b), by the processor, that there is memo data attached to the memo field of the first contact list entry.

Ex. 1001, 3:5–40.

E. Applied References and Declarations

Petitioner relies upon the following references in its challenges:

Reference	Designation	Exhibit No.
U.S. Patent No. 7,130,617 B2 (issued Oct. 31, 2006)	Matsumoto ²	Ex. 1004
European Patent Application Pub. No. EP 1739937 A1 (published Jan. 3, 2007)	Sony	Ex. 1005
U.S. Patent No. 7,822,434 B2 (filed May 9, 2006; issued Oct. 26, 2010)	Scott	Ex. 1009
U.S. Patent Application Pub. No. 2006/0195518 A1 (published Aug. 31, 2006)	Neilsen	Ex. 1010

Pet. 3. Petitioner also relies on the Declaration of Peter Rysavy (Ex. 1002) in support of its Petition. Patent Owner relies on the Declaration of Zaydoon Jawadi (Ex. 2001) in support of its Patent Owner Response.

² For clarity and ease of reference, we only list the first named inventor.

IPR2017-01411
Patent 9,531,657 B2

F. Instituted Grounds of Unpatentability

We instituted *inter partes* review of all the challenged claims based on all the grounds presented in the Petition, as follows³ (Dec. on Inst. 40).

Claims Challenged	Statutory Basis	Reference(s)
1–4 and 9–12	§ 103(a) ⁴	Sony
1–4 and 9–12	§ 103(a)	Sony and Matsumoto
5–8	§ 103(a)	Matsumoto and Scott
5–8	§ 103(a)	Matsumoto and Neilsen

III. CLAIM CONSTRUCTION

In an *inter partes* review, claim terms in an unexpired patent are given their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *see Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard as the claim construction standard to be applied in an *inter partes* review proceeding). Under the broadest reasonable interpretation standard, and absent any special

³ In its summary of the asserted grounds, Petitioner identifies three grounds. Pet. 3. Under the first ground, Petitioner asserts that claims 1–4 and 9–12 are unpatentable over Sony and Matsumoto. *Id.* Based on Petitioner’s substantive arguments (*id.* at 14–40), however, we treat the first ground as containing two separate grounds: obviousness over Sony as well as obviousness over Sony and Matsumoto. Dec. on Inst. 13–14, 40.

⁴ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. § 103. Because the ’657 patent has an effective filing date prior to the effective date of the applicable AIA amendments, we refer to the pre-AIA version of § 103.

IPR2017-01411
 Patent 9,531,657 B2

definitions, claim terms generally are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in view of the specification. *In re Translogic Tech. Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definitions for claim terms or phrases must be set forth with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). A particular embodiment appearing in the written description generally is not incorporated into a claim if the claim language is broader than the embodiment. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

In our Decision on Institution, we preliminarily interpreted three claim terms as follows.

Term	Construction
“contact list”	“an electronic list comprising contact list entries”
“contact list entry”	“an item in a contact list comprising data fields to input contact information details”
“activating” a contact list entry	“selecting or opening” a contact list entry

Dec. on Inst. 11, 13. Although Petitioner did not propose any express construction for any claim term, Patent Owner in its Preliminary Response argued that the three claim terms listed above should be construed to require certain graphical features displayed on a device’s screen, such as user interfaces or a visual representation displayed on the screen. Prelim. Resp. 7–15. We were unpersuaded by Patent Owner’s arguments and preliminarily construed the terms as set forth above. Dec. on Inst. 8–13.

IPR2017-01411
 Patent 9,531,657 B2

A. “Contact List”

During the trial, the parties’ claim construction dispute focused on the term “contact list” recited in claim 1. As discussed below, the main claim construction dispute with respect to the term “contact list” centers on whether the recited “contact list” must necessarily include a “user interface.”

Petitioner agrees with our preliminary construction of the term set forth above. Pet. Reply 3. In particular, Petitioner asserts that the “contact list” limitation recited in the challenged claims does not require a “user interface.” *Id.* at 9, 11–12. Patent Owner disagrees and asserts that the term “contact list” should be construed as follows:

a feature commonly and already available on a smart communication device, a feature which includes entries (namely, “contact list entries”) each including fields of contact information that are known and familiar to ordinary users such as name, phone number, address, or email. In particular, a contact list as claimed is a feature which includes user interfaces to access well-known capabilities relating to communication (see Ex. 2001, ¶ 21), capabilities at least including:

(1) inputting, saving and viewing contact information of an entity (such as a person) visually represented by a contact list entry of the contact list which is visually-represented, selectable, and activatable by a user, and

(2) selecting and activating a “contact list entry” by a user so as to initiate a well-known common function (such as speed-dialing an underlying phone number of the “contact list entry” in the case of phone communication) or opens for displaying the underlying contact information contained therein.

PO Resp. 20–21. Similar to its arguments in the Preliminary Response, the thrust of Patent Owner’s argument in the Patent Owner Response is that a “contact list,” as claimed, must necessarily include a “user interface.” *See id.* at 21–33. Although Patent Owner also argues that a “contact list” is a

IPR2017-01411
Patent 9,531,657 B2

“commonly and already available feature” of a communication device and must include “common functions” relating to communication, those arguments are largely focused on or predicated upon Patent Owner’s assertion that the recited “contact list” must include a “user interface.” *See id.*

For the reasons explained below, we disagree with Patent Owner’s argument and Patent Owner’s proposed construction. Given the focus of the parties’ dispute, our discussion below focuses on the issue of whether the “contact list” limitation recited in the challenged claims requires a “user interface.” We then address the remaining issues relating to the purported “commonly and already available feature.”

To overview, the basic problem with Patent Owner’s claim construction approach is that Patent Owner focuses on the word “contact list” in isolation from the surrounding claim limitations of claim 1, and divorced from the context of the claim as a whole, disregarding, for example, the plain language of the claim showing that the “contact list” recited in the claim is “stor[ed]” in a memory. As discussed below, we determine that the plain meaning interpretation of the “contact list” limitation based on the claim language “a memory storing a contact list” controls in this case.

1. Plain Meaning

In determining the broadest reasonable construction of a claim limitation, we begin with the language of the claim itself. *In re Power Integrations, Inc.*, 884 F.3d 1370, 1376 (Fed. Cir. 2018) (“[C]laim construction must begin with the words of the claims themselves.” (quoting *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 457 F.3d 1293, 1301 (Fed. Cir.

IPR2017-01411
Patent 9,531,657 B2

2006))); *In re NTP, Inc.*, 654 F.3d 1279, 1288 (Fed. Cir. 2011) (“As with any claim construction analysis, we begin with the claim language.” (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc))).

“Under a broadest reasonable interpretation, words of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification and prosecution history.” *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1062 (Fed. Cir. 2016) (citing *Straight Path IP Grp., Inc. v. Sipnet EU S.R.O.*, 806 F.3d 1356, 1362 (Fed. Cir. 2015)). A plain meaning interpretation is particularly appropriate in this case because, as Petitioner argues, the plain language of claim 1 provides a plain meaning definition of the term “contact list” recited in the claims.

Addressing the claim language of independent claim 1, Petitioner notes that claim 1 recites a “communication device” “having access to a memory storing [a] contact list having a list of contact list entries.” Pet. Reply 5. Petitioner asserts that the claim further specifies that each contact list entry of the contact list includes three “fields” corresponding to a contact’s name, phone number, and memo data. *Id.* Petitioner argues that, consistent with our discussion in the Decision on Institution, this claim language defines the recited “contact list”—that is, a “memory storing a contact list” in a communication device, the contact list “having a list of contact list entries,” each entry with at least three fields: name, number, and memo data. *Id.* at 9. We agree with Petitioner’s argument.

As Petitioner notes, claim 1 expressly recites a “memory *storing* a contact list”—that is, the recited “contact list” is “stor[ed]” in a “memory” of the communication device. In fact, the only “contact list” limitation recited in the claim is a “contact list” “stor[ed]” in a “memory.” In claim 1, the

IPR2017-01411
Patent 9,531,657 B2

claim limitation “contact list” appears only three times. First, the limitation is introduced in the preamble, which recites that “the communication device” has “access” to “a memory *storing* a contact list” “having a list of contact list entries.” Ex. 1001, 3:8–10 (emphasis added). Next, in the immediately following recitation, the claim recites that “each contact list entry” of “the contact list” includes a first field for a phone number, a second field for a contact name, and a memo field to attach memo data. *Id.* at 3:10–16. The plain language “a memory *storing* a contact list having a list of contact list entries, each contact list entry of *the contact list* including . . .” indicates that “the contact list” refers to “a contact list” “stor[ed]” in a “memory” recited in the immediately preceding phrase. Lastly, in the claim body, the claim recites “(a) receiving, by the processor, a first input indicating a need to activate a first contact list entry of *the contact list* for the user to perform at least one of receiving and requesting a communication addressed to the stored communication address of the first contact list entry.” *Id.* at 3:20–24 (emphasis added).

None of the dependent claims add recitations that include a distinct “contact list” limitation. Rather, dependent claims recite “the contact list,” referring to the “contact list” “stor[ed]” in a “memory” recited claim 1. *See id.* at 3:41–4:14 (claims 2–5); 4:23–26 (claim 7). Thus, it is evident from the plain language of the claims that the only “contact list” limitation recited in the challenged claims is a “contact list” “stor[ed]” in a “memory.” No other “contact list” is recited in the challenged claims.

Under the broadest reasonable interpretation standard, we must also consider the context of the surrounding claim limitations of the “contact list” limitation. *See Trivascular*, 812 F.3d at 1062. Claim 1 recites that “each

IPR2017-01411
 Patent 9,531,657 B2

contact list entry of *the contact list*” includes “a first field” for “a *stored* communication address” and “a second field” for “a *stored* name” of a contact. Ex. 1001, 3:10–15 (emphases added). In addition, the body of the claim recites steps, all performed by the processor of the communication device, to access and process the contact list entry of “the contact list” “stor[ed]” in the memory of the communication device. *Id.* at 3:20–40.

Thus, when considering the plain language of the claim in their entirety, the characteristic of the “contact list” as a list “stored” in the memory of a communication device pervades throughout the claim. Therefore, in the context of the claim as a whole, the language of the claim defines the recited “contact list” as a list “stored” in a memory of a communication device. *See Lexion Med., LLC v. Northgate Techs., Inc.*, 641 F.3d 1352, 1356–1357 (Fed. Cir. 2011) (interpreting a disputed limitation by reading it together with other limitations recited in the claim); *Apple Computer, Inc. v. Articulate Sys., Inc.*, 234 F.3d 14, 25 (Fed. Cir. 2000) (“the claim must be viewed as a whole”).

Turning to the written description, the plain meaning interpretation discussed above is also consistent with the written description in the Specification of the ’657 patent. For example, the ’657 patent describes that contact information in a contact list is “*saved* in communication device.” Ex. 1001, 1:28–29 (emphasis added). In addition, referencing Figure 1, the ’657 patent describes that “FIG. 1 shows contact list *template* for communication device” (*id.* at 2:15–16 (emphasis added)) and that “FIG. 1 shows the *database structure* of contact list of *present invention*” (*id.* at 1:49–50 (emphases added)). Hence, the ’657 patent describes that the table depicted in Figure 1 (reproduced above in Section II.C.) is the “database

IPR2017-01411
Patent 9,531,657 B2

structure” of the “contact list” of the ’657 patent, and that such database structure is a “template” of the claimed “contact list.” In other words, the ’652 patent describes a contact list as a database saved or stored in a communication device.

Therefore, the plain meaning of the “contact list” limitation, when read in the context of the claims as a whole and in view of the Specification, is “a list stored in a memory of a communication device comprising contact list entries.”

2. Whether the “Contact List” Limitation Requires a User Interface

a. “Memory Storing a Contact List”

Because the “contact list” limitation recited in claim 1 is a “contact list” “stor[ed]” in a “memory,” Patent Owner’s proposed construction requiring “user interfaces” as a necessary feature of the claimed “contact list” raises the question of what is meant by “storing” “user interfaces” in a “memory” in the context of the ’657 patent. *See* Dec. on Inst. 10.

Similar to our discussion in the Decision on Institution, we discern no disclosure regarding “storing” or “saving” any “user interfaces” in a memory of a communication device in the ’657 patent. *See id.* During the trial, Patent Owner did not identify any disclosure in the ’657 patent regarding “storing” or “saving” “user interfaces” in a communication device. *See* Tr. 18:4–10 (Patent Owner stating “something saved doesn’t mean that the specification has to describe how to save it” in response to a question whether the Specification of the ’657 patent describes saving a user interface).

IPR2017-01411
Patent 9,531,657 B2

Instead, Patent Owner relies upon the testimony of Mr. Jawadi to assert that “it is NOT UNCOMMON to characterize a user-interface-enabled[d]-feature as being ‘stored.’” PO Resp. 46 (citing Ex. 2001 ¶ 89). In the cited paragraph, Mr. Jawadi opines that “it is NOT UNCOMMON to refer to a user-interface-enabled feature resident (stored) in a communication device (such as ‘contact list’) as being stored in a memory of the communication device.” Ex. 2001 ¶ 89.

Essentially, Mr. Jawadi states that a feature “resident (stored) in a communication device” is often referred to as a “stored” feature. But Mr. Jawadi does not explain adequately why a “user-interface-enabled” feature is synonymous or equivalent to a “stored” feature.

Moreover, Mr. Jawadi does not cite any evidence in support of his testimony. *See* Ex. 2001 ¶ 89. Mr. Jawadi’s conclusory statement unsupported by evidence does not provide a satisfactory explanation of what “*storing*” “user interfaces” entails in the context of the ’657 patent. Thus, Mr. Jawadi’s testimony is insufficient to justify Patent Owner’s proposed construction. *See Prolitec, Inc. v. Scentair Techs., Inc.*, 807 F.3d 1353, 1358–59 (Fed. Cir. 2015) (Prolitec’s expert cannot rewrite the intrinsic record of the patent to narrow the scope of the patent and the disputed claim element.), *overruled on other grounds by Aqua Prods., Inc. v. Matal*, 872 F.3d 1290 (Fed. Cir. 2017); *Phillips*, 415 F.3d at 1318 (explaining that “a court should discount any expert testimony that is clearly at odds . . . with the written record of the patent”) (internal quotation marks omitted) (citation omitted).

Accordingly, Patent Owner’s proposed construction is untenable as being incompatible with the claim language “memory storing a contact list.”

IPR2017-01411
 Patent 9,531,657 B2

b. Whether the Claim Term “Memory Storing a Contact List” is Extrinsic Evidence

Patent Owner next asserts that claim 1’s recitation “a memory *storing* a contact list” should be given little significance in the construction of the term “contact list” because the claim terms surrounding “contact list” are “not . . . intrinsic evidence” or “non-actual intrinsic evidence.” PO Resp. 40, 45–46. Patent Owner contends that this is so because the phrase “a memory *storing* a contact list” recited in claim 1 is “NOT part of the specification, and therefore is not part of intrinsic evidence.” *Id.* at 45–46.

Patent Owner further contends that our Decision on Institution erred in “incorrectly putting more emphasis on *non-actual intrinsic evidence* (e.g., what is recited in claim 1 *surrounding* the term “contact list”) than on the actual intrinsic evidence of the ‘657 patent” (*id.* at 40 (emphases added)) and “NOT placing the HIGHEST emphasis on intrinsic evidence” (*id.* at 45 (citing *Phillips*, 415 F.3d at 1317)).

Patent Owner is incorrect that an expressly recited claim limitation is “NOT part of the specification, and therefore is not part of intrinsic evidence.” *See id.* at 45–46. Quite the contrary, all of claim 1 is part of the Specification, which is intrinsic evidence. *See Homeland Housewares, LLC v. Whirlpool Corp.*, 865 F.3d 1372, 1376 (Fed. Cir. 2017) (“Claims must also be read in view of the specification, *of which they are a part.*” (emphasis added) (citing *Phillips*, 415 F.3d at 1315)). Contrary to Patent Owner’s assertion, the *Phillips* case relied upon by Patent Owner placed emphasis on claim language as intrinsic evidence:

Those sources [the court looks to interpret disputed claim language] include “*the words of the claims themselves*, the remainder of the specification, the prosecution history, *and*

IPR2017-01411
 Patent 9,531,657 B2

extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” . . . “Quite apart from the written description and the prosecution history, *the claims themselves* provide substantial guidance as to the meaning of particular claim terms.” . . . *To begin with, the context in which a term is used* in the asserted claim can be highly instructive.

Phillips, 415 F.3d at 1314 (emphases added) (citations omitted). Thus, Patent Owner’s assertion that the claim term “memory storing a contact list” expressly recited in claim 1 is extrinsic evidence (or non-intrinsic evidence) is erroneous.

Contrary to Patent Owner’s argument, under the broadest reasonable interpretation standard, “[c]onstruing individual words of a claim *without* considering the context in which those words appear is simply not ‘reasonable.’” *Trivascular*, 812 F.3d at 1062 (emphasis added). Instead, “the context of the *surrounding words* [of the disputed terms] of the claim . . . must be considered in determining the ordinary and customary meaning of those terms.” *Lexion Med.*, 641 F.3d at 1356 (emphasis added) (citation omitted). Indeed, “claim language must be construed in the context of the claim in which it appears” because “[e]xtracting a single word from a claim divorced from the *surrounding limitations* can lead construction astray.” *IGT v. Bally Gaming Int’l, Inc.*, 659 F.3d 1109, 1117 (Fed. Cir. 2011) (emphasis added).

Thus, although we agree with Patent Owner that intrinsic evidence should be given more weight than extrinsic evidence in interpreting claims, there was no error in our Decision on Institution in considering the expressly recited claim limitation “memory storing a contact list” as informing the scope of “contact list” recited in the claim. *See Apple Computer, Inc. v.*

IPR2017-01411
 Patent 9,531,657 B2

Articulate Sys., Inc., 234 F.3d at 24–25 (rejecting the proposed construction that ignores the limitation imposed by the word “help” in the claim term “help access window” because such a construction would read the qualifier “help” out of the definition of “help access window”).

Far from being extrinsic evidence, the surrounding claim terms in “memory storing a contact list” plays an important role in determining the correct construction of the “contact list” limitation because, as discussed above, the only “contact list” limitation recited in the challenged claims is a “contact list” “stor[ed]” in a “memory.”

c. “Entering and Saving Contact Information” Functions

Patent Owner asserts that the Specification of the ’657 patent shows that a “user interface” is required in the recited “contact list,” quoting and relying on a passage of the ’657 patent as follows.

Contact list is *a common feature* in most modern communication devices. It comprises of *multiple contact list entries* and *enables users to enter and save contact information of entities*. Users are able to enter and save name, address, phone, fax, and email into a contact list entry. Most communication devices also *provide users means to speed dial a phone number container [sic] in contact list entry directly without having to dial phone number manually*.

PO Resp. 22–23 (quoting Ex. 1001, 1:18–26). Citing the testimony of Mr. Jawadi, Patent Owner argues that this passage shows that a “contact list” is a “common feature” or “common-and-already-available feature” of a communication device. *Id.* at 23 (citing Ex. 2001 ¶¶ 51–52). Patent Owner further asserts that the quoted passage shows that a “contact list” has “common . . . functions,” such as “inputting and saving contact information into ‘contact list entries’ . . . and speed-dialing an underlying phone number

IPR2017-01411
 Patent 9,531,657 B2

of a ‘contact list entry.’” *Id.* Patent Owner argues that a “contact list” requires user interfaces because user interfaces are necessary *for a user* to perform the common functions of “entering and saving contact information and speed-dialing [a phone number].” *Id.* at 23–24 (citing Ex. 2001 ¶ 52 (“[T]here was no way for an ordinary *user to perform those functions* at the time of the claimed invention other than using user interfaces which a ‘contact list’ provides.” (emphasis added))).

We disagree with Patent Owner’s argument. First and foremost, Patent Owner’s arguments do not comport with the plain language of the claims. To begin with, the challenged claims do *not* recite a method performed by *a user* to enter or save contact information using a user interface. Instead, the claims recite a method performed by a communication device or its processor *after* contact information has been entered or saved into a contact list stored in the communication device.

For instance, claim 1 (the only independent claim of the ’657 patent) recites in its preamble a “method, *performed by a communication device*, for reminding a user of the communication device of a conversation point.” Ex. 1001, 3:5–7 (emphasis added). As discussed above, the claim further recites that “the communication device” has “access to a memory *storing* a contact list.” *Id.* at 3:8–10 (emphasis added). In other words, the plain language of the claim specifies that the recited “contact list” has *already* been “stored” in a communication device when the communication device accesses the “contact list.” That is, a user may have used a user interface to enter and save contact information, but the claims recite a method performed by a communication device *after* the contact information has been entered and saved into a contact list stored in the communication device—i.e., a

IPR2017-01411
Patent 9,531,657 B2

“method, performed by a communication device,” which has “access to a memory *storing* a contact list.” Thus, Patent Owner’s argument that the “contact list” recited in the claim requires a user interface because a user interface of a contact list is necessary for a user to enter and save contact information is divorced from the language of the claims.

Considering the passage of the ’657 patent relied upon by Patent Owner, the passage does *not* require the “entering and saving contact information” functions be performed using a “user interface” of the “contact list” recited in the claims. Rather, the passage states generally that a contact list “*enables users* to enter and save contact information of entities” and “[u]sers are *able* to enter and save name, address, phone, fax, and email into a contact list entry.” Ex. 1001, 1:20–23 (emphases added).

First, the cited passage is not necessarily directed to a user interface because a contact list stored in the communication device (i.e., a stored contact list database) would also enable users to enter and save contact information. Second, even if the cited passage is directed to a user interface, the cited passage does not necessarily require a user interface of a contact list to enter and save contact information. For example, there is nothing in the cited passage that excludes the possibility of the communication device providing a display screen for entering and saving contact information as a separate functioning part from the contact list stored in the communication device.

In fact, the disclosures in the remainder of the Specification indicate that a separate means may be used to save information in a contact list stored in the communication device. For example, in the paragraph that begins with the disclosure describing a “contact list” as a database (Ex. 1001, 2:14–

IPR2017-01411
 Patent 9,531,657 B2

16), the '657 patent states that “[*m*]eans is provided in communication device to *save* information contained in contact list.” *Id.* at 2:22–24 (emphases added). Hence, consistent with the preceding description in the same paragraph of a “contact list” as a database saved or stored in a communication device, the '657 patent indicates that a “means” separate from a “contact list” is used to save information in the contact list.

As discussed above, we determine that the plain meaning of the “contact list” limitation, as recited in the challenged claims, is “a list stored in a memory of a communication device comprising contact list entries.” “When claim language has as plain a meaning on an issue,” as the language does in this case, “redefinition or disavowal is required” to contradict the plain meaning of the claim language. *See Straight Path IP*, 806 F.3d at 1361. As discussed above, the disclosures on entering and saving contact information in the '657 patent do not require a contact list to have a user interface. At a minimum, they are insufficient to rise to the level of the requisite redefinition or disavowal sufficient to contradict the plain meaning of the “contact list” limitation as a “stored” contact list.

d. “Speed-Dialing” Function

Similarly, the passage regarding the speed-dialing function relied upon by Patent Owner— “[*m*]ost communication devices . . . provide users *means* to speed dial a phone number *containe[d]* in contact list entry” (Ex. 1001, 1:22–24 (emphasis added))—is insufficient to contradict the plain meaning of the “contact list” limitation because it indicates or suggests that a separate “means” is used to speed-dial a phone number “contained” or “stored” in a contact list.

IPR2017-01411
 Patent 9,531,657 B2

e. “Selecting and Activating” Functions

Patent Owner further asserts that the recited “contact list” requires a user interface because, without a user interface, a user cannot “select” and “activate” a contact list entry of a contact list to initiate outgoing communication. PO Resp. 24–25. Similar to our discussion above, Patent Owner’s argument again does not comport with the language of the claims.

As discussed above, claim 1 recites a “method, *performed by a communication device*, for reminding a user of the communication device of a conversation point.” Ex. 1001, 3:5–7 (emphasis added). The body of claim 1 recites the step of “(a) *receiving, by the processor, a first input indicating a need to activate a first contact list entry of the [stored] contact list for the user to perform . . . requesting a communication addressed to the stored communication address of the first contact list entry.*” *Id.* at 3:20–24 (emphases added). Dependent claim 4 similarly recites “*the first input indicates a request that the phone number of the first contact list entry of the [stored] contact list be dialed for an outgoing phone call.*” *Id.* at 4:1–6 (emphases added). Thus, although the user may have used a user interface to select and request dialing of a phone number, the claims recite a step performed *by the processor* of a communication device for *receiving* the request from the user to dial the phone number saved in the *stored* contact list *after* the user has made the selection and request. In other words, the use of the “[stored] contact list” recited in the claims to initiate outgoing communication or dial a phone number occurs *after* the user has selected a contact for outgoing communication. Therefore, Patent Owner’s argument that the “[stored] contact list” recited in the claims requires a user interface because a user interface of a contact list is necessary for a user to select and

IPR2017-01411
Patent 9,531,657 B2

activate a contact for outgoing communication is divorced from the language of the claims.

Patent Owner’s argument that the “contact list” and the “contact list entry” recited in the claims must be “visually represented” and “visually recognizable” for a user to select and activate a “contact list entry” (PO Resp. 24–25) is similarly divorced from the language of the claims and at odds with the plain language of the claims.

Patent Owner cites the following passage of the ’657 patent in support of its contention: *“Memo is displayed on communication device when corresponding contact list entry is activated, such as when contact list entry is selected to initiate outgoing communication.”* PO Resp. 24 (citing Ex. 1001, 1:38–41). The cited passage, however, does not specify how the contact list entry is “selected” to initiate outgoing communication. That is, the cited passage above does not exclude the possibility of using a display screen (e.g., a list of names) separate and distinct from the recited “contact list” “stor[ed]” in a communication device (i.e., a database saved or stored in a communication device, as described in the Specification) for the user to select a contact for outgoing calls. Thus, the cited passage does not rise to the level of the requisite redefinition or disavowal sufficient to contradict the plain meaning of the “contact list” limitation so as to require a user interface in a “contact list” “stor[ed]” in a communication device.

We have reviewed the remainder of the disclosures cited by Patent Owner (PO Resp. 25 (citing Ex. 1001, 1:51–53, 1:58–60, 2:27–31) and find them similarly insufficient to contradict the plain meaning of the “contact list” limitation.

IPR2017-01411
Patent 9,531,657 B2

f. Display Functions

Considering the disclosures on displaying information in the contact list, the '657 patent describes that “*means* is provided in communication device to *display* memo recorded with contact list entry [of the contact list]” (Ex. 1001, 2:24–26) and that “[*m*]*means* is provided in communication device to *display data* and image memo . . . when corresponding contact list entry [of the contact list] is activated” (*id.* at 2:34–37). These disclosures again indicate, consistent with the plain meaning of the “contact list” limitation as a “contact list” “stored” in a “memory,” a “means” separate from a “contact list” is used to display information “stored” in the “contact list.” Again, these disclosures are insufficient to contradict the plain meaning of the “contact list” limitation as a contact list “stored” in a communication device.

g. Well-known Email Applications

Patent Owner additionally asserts that the recited “contact list” requires a user interface because the '657 patent describes recording memo into the contact list of well-known email programs, such as hotmail, outlook, and gmail. PO Resp. 26–27 (citing Ex. 1001, 2:47–50). Citing the testimony of Mr. Jawadi, Patent Owner argues that a person of ordinary skill in the art would have known those email programs provide a user interface for users to enter and save contact information in the contact list of the email programs. *Id.* at 26–27 (citing Ex. 2001 ¶ 61). As discussed above, Patent Owner’s argument does not comport with the language of the claims because the claims do not recite a method performed by a user to enter and save contact information.

IPR2017-01411
Patent 9,531,657 B2

h. Figure 4 of the '657 Patent

Patent Owner additionally points to Figure 4 of the '657 patent to argue that a person of ordinary skill in the art would have known that a “contact list” is “visually-represented.” PO Resp. 29–30 & n.2. According to Patent Owner, Figure 4 is a screen shot of the gmail application, which shows a hyperlink labeled “Contacts.” *Id.* at 29 & n.2.

Figure 4 appears to show a displayed window of the gmail application for sending an email. Ex. 1001, 2:51–54 (“As shown in FIG. 4, when contact list entry is selected by user to *send an email*, corresponding memo is displayed on the display monitor as reminder to the user.” (emphasis added)), Fig. 4. Having reviewed Patent Owner’s evidence, we determine that a gmail window showing a hyperlink labeled “Contacts” is insufficient to contradict the plain meaning of the “contact list” limitation as a contact list “stored” in a communication device.

As outlined above, the basic problem with Patent Owner’s claim construction approach is that Patent Owner focuses on the word “contact list” in isolation from the surrounding claim limitations and divorced from the context of the claim as a whole, disregarding, for example, the plain language of the claims showing that the only “contact list” recited in the challenged claims is a “contact list” “stored” in a communication device. *See IGT*, 659 F.3d at 1117 (“Extracting a single word from a claim divorced from the surrounding limitations can lead construction astray. Claim language must be construed in the claim in which it appears.”). Among other errors, Patent Owner’s proposed construction would improperly read the expressly recited claim limitation “stored” or “storing” out of the challenged claims as extrinsic evidence. As discussed above, Patent

IPR2017-01411
Patent 9,531,657 B2

Owner's proposed construction is improper as being divorced from the language of the claims, lacking support from the Specification, and contrary to the well-established law on claim construction.

i. Prosecution History

Turning to the prosecution history of the '657 patent, Patent Owner asserts that the "[o]riginal claims of the priority application . . . supports and confirms the USER INTERFACE aspect of 'contact list' as claimed." PO Resp. 32. Patent Owner, however, does not discuss what the purported "[o]riginal claims of the priority application" are or how they support or confirm that a user interface is required in the "contact list" limitation recited in the challenged claims.

Thus, Patent Owner does not cite, nor do we discern, anything in the prosecution history of the '657 patent that rises to the level of a redefinition or disavowal sufficient to contradict the plain meaning of the "contact list" limitation.

j. Extrinsic Evidence

Citing the Declaration of Mr. Jawadi, which presents the screens shots of a YouTube video on the operation of gmail, Patent Owner further argues that a person of ordinary skill in the art would have known that if the "Contacts" hyperlink shown on Figure 4 was clicked, the gmail application would have displayed a screen or user interface of the gmail's contact list. PO Resp. 29–31 & n.3 (citing Ex. 2001 ¶¶ 65–66).

Having reviewed Patent Owner's evidence, we determine that extrinsic evidence of how gmail's contact list may have operated is insufficient to overcome the plain meaning of the "contact list" limitation as

IPR2017-01411
Patent 9,531,657 B2

a contact list “stored” in a “memory” of a communication device so as to require the “contact list” recited in the challenged claims to have a user interface. *See Sumitomo Dainippon Pharma Co. v. Emcure Pharm. Ltd.*, 887 F.3d 1153, 1160 (Fed. Cir. 2018) (holding that extrinsic evidence is less significant than the intrinsic record in determining the legally operative meaning of claim language, especially where the intrinsic record demonstrates the scope of the claim) (citing *Phillips*, 415 F.3d at 1317).

Citing the Declaration of Mr. Jawadi, Patent Owner discusses additional extrinsic evidence, such as a video footage of the introduction of the first iPhone in 2007. PO Resp. 38–39 (citing Ex. 2001 ¶¶ 78–80). We have reviewed the submitted evidence and find it insufficient to overcome the plain meaning of the “contact list” limitation as a contact list “stored” in a “memory” of a communication device.

Patent Owner further contends that the deposition testimony of Petitioner’s declarant, Mr. Rysavy, does not support Petitioner’s proposed construction, but, rather, supports Patent Owner’s proposed construction. PO Resp. 33–37. Petitioner asserts that Patent Owner mischaracterizes Mr. Rysavy’s testimony. Pet. Reply 15–16. Petitioner also argues that Mr. Jawadi’s deposition testimony supports Petitioner’s proposed construction. *Id.* at 7–8.

Notwithstanding the competing extrinsic evidence from the parties, our focus in claim construction must properly remain with the written description and the language of the claims. *See Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009) (“It is not uncommon in patent cases to have [] dueling experts. When construing

IPR2017-01411
Patent 9,531,657 B2

claims, however, the intrinsic evidence and particularly the claim language are the primary resources.”).

Upon weighing the competing extrinsic evidence regarding claim construction from the parties and in view of our analysis of the written description and claim language discussed above, we find Patent Owner’s extrinsic evidence is not sufficient to overcome the plain meaning of the “contact list” limitation as a contact list “stored” in a “memory” of a communication device.

3. Remaining Issues

Patent Owner asserts that the “contact list” recited in the claims should be construed as “a feature commonly and already available on a smart communication device.” PO Resp. 20–21 (emphases omitted) (citing Ex. 2001 ¶ 21). The term “commonly and already available” feature does not appear anywhere in the ’657 patent. Nor do the challenged claims recite the phrase “commonly and already available.” The only evidence Patent Owner cites in support of its contention is Mr. Jawadi’s Declaration.

Regardless of what the metes and bounds of the purported “commonly and already available” feature may be, Mr. Jawadi’s Declaration alone is insufficient to justify reading in the “commonly and already available feature” that is not recited in the claims or described in the Specification. *See Kara Tech.*, 582 F.3d at 1348 (finding the testimony of an expert cannot overcome the plain language of the claims and rejecting a proposed construction that limits a claim term by reading in a limitation not recited in the claims).

Patent Owner also asserts that the use of the term “electronic” in our preliminary construction was improper. PO Resp. 40. Patent Owner’s

IPR2017-01411
Patent 9,531,657 B2

objection is moot because, as discussed above, we determine that the plain meaning of the term “contact list” is “a list stored in a memory of a communication device comprising contact list entries.”

4. Conclusion

Based on the complete record, we determine that there is nothing in the Specification, the prosecution history, or the extrinsic evidence of record that is sufficient to contradict the plain meaning of the “contact list” limitation, and, therefore, construe the “contact list” limitation according to its plain meaning as “a list stored in a memory of a communication device comprising contact list entries.” A “contact list,” as recited in the challenged claims, does not require a user interface.

Although including an expressly recited limitation in a construction of a claim term is generally disfavored, *see Digital-Vending Servs. Int’l, LLC v. Univ. of Phoenix, Inc.*, 672 F.3d 1270, 1274–75 (Fed. Cir. 2012), “no canon of [claim] construction is absolute in its application.” *ERBE Elektromedizin GmbH v. Canady Tech. LLC*, 629 F.3d 1278, 1286 (Fed. Cir. 2010). Because, as discussed above, the characteristic of the “contact list” as a list “stored” or “saved” in a communication device pervades throughout the claims and because the language of the claims provides the plain meaning definition of the “contact list” limitation, we find it appropriate, under the particular circumstances of this case, to interpret the limitation according to the plain language recited in the claims, i.e., “a list stored in a memory of a communication device comprising contact list entries.” *See ERBE*, 629 F.3d at 1286–87 (interpreting “low flow rate” to include expressly recited limitation in view of the intrinsic record defining the scope of the claim).

IPR2017-01411
Patent 9,531,657 B2

B. Other Terms

As discussed above, in our Decision on Institution, we preliminarily construed terms “contact list entry” and “activating” a contact list entry in addition to “contact list.” Dec. on Inst. 11, 13. The parties do not dispute the construction of these two terms in their Patent Owner Response and Reply.

To the extent the parties’ arguments on the construction of “contact list” included or implied issues of construction of these two terms, those issues have been addressed above. For example, similar to “contact list,” a “contact list entry” does not require a user interface or a visual representation.

Upon considering the complete record, we discern no reason to deviate from our preliminary constructions and, therefore, adopt the construction of “contact list entry” and “activating” a contact list entry as set forth above for this Final Written Decision.

No other claim terms need to be construed expressly for this Final Written Decision because we need only construe terms “that are in controversy, and only to the extent necessary to resolve the controversy.” *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

IV. PETITIONER’S PRIOR ART CHALLENGES

To prevail in challenging Patent Owner’s claims, Petitioner must demonstrate by a preponderance of the evidence that the claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). “In an [*inter partes*

IPR2017-01411
Patent 9,531,657 B2

review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)) (discussing the burden of proof in *inter partes* review).

As discussed above, the grounds on which we instituted *inter partes* review are Petitioner’s challenges to claims 1–4 and 9–12 as obvious under 35 U.S.C. § 103(a) over Sony alone or Sony combined with Matsumoto and claims 5–8 as obvious under 35 U.S.C. § 103(a) over Matsumoto combined with Scott or Neilsen. 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 the subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

IPR2017-01411
Patent 9,531,657 B2

A. Level of Ordinary Skill in the Art

The person of ordinary skill in the art is a hypothetical person who is presumed to have known the relevant art at the time of the invention. *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). In determining the level of skill in the art, various factors may be considered, including the types of problems encountered in the art, prior art solutions to those problems, the sophistication of the technology, rapidity with which innovations are made, and the educational level of active workers in the field. *Id.* In addition, we may be guided by the level of skill in the art reflected by the prior art of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

Relying upon the declaration testimony of Mr. Rysavy, Petitioner contends that a person of ordinary skill in the art as of the date of the invention would have had a Bachelor's degree in computer science, computer engineering, and/or electrical engineering or at least 4 years of designing and implementing software features for cellular phones or smartphones. Pet. 9 (citing Ex. 1002 ¶ 49). Patent Owner does not oppose Petitioner's definition of the level of ordinary skill in the art.

Based on the complete record, in the context of the '657 patent and the prior art of record, we agree with and adopt Petitioner's definition of the level of ordinary skill in the art.

B. Claims 1–4 and 9–12 as Obvious Over Sony Alone or Over the Combination of Sony and Matsumoto

Petitioner asserts that claims 1–4 and 9–12 are unpatentable as obvious under 35 U.S.C. § 103(a) over Sony alone or Sony combined with Matsumoto. Pet. 14–40. Upon review of all of the parties' papers and supporting evidence discussed in those papers, we are persuaded that

IPR2017-01411
 Patent 9,531,657 B2

Petitioner has demonstrated, by a preponderance of evidence, that claims 1–4 and 9–12 are unpatentable under 35 U.S.C. § 103(a) as obvious over Sony or the combination of Sony and Matsumoto.

1. Scope and Content of the Prior Art

a. Overview of Matsumoto (Ex. 1004)

As background, Matsumoto describes that users may not remember the “subject,” i.e., the subject matter or topic, of a previous phone call when calling the number again or receiving a call from the number. Ex. 1004, 1:12–21. To enable users to convey the intended information “without omission,” Matsumoto describes a telephone, such as a wireless mobile phone, that allows the user to input information regarding a phone call and notifies the user of the stored information when a call is received from the stored phone number or the user makes a call to the number. *Id.* at 2:3–35, Abstract. Figure 3 of Matsumoto is reproduced below.

TELEPHONE NUMBER	NAME	E-MAIL ADDRESS	SUBJECT OF NOTES
090-1234-◯X◯X	TOKKYO TARO	Taro@◯X△.ne.jp	RE: PARTY
090-1234-◯X△△	TOKKYO JIRO	Jiro@□X□.ne.jp	—
090-1234-□△△△	TOKKYO SABURO	3ro@□X◯.ne.jp	WAITING TIME
⋮	⋮	⋮	⋮

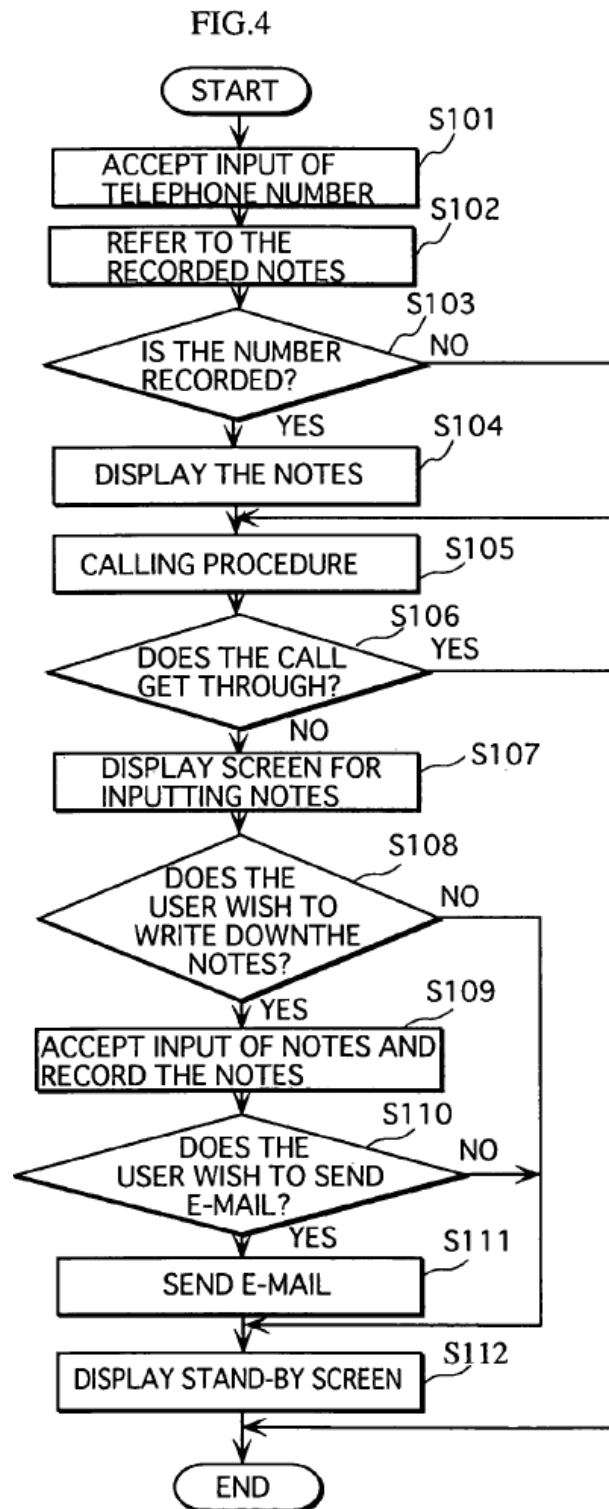
Figure 3 shows table 200 illustrating information stored in the recording unit of Matsumoto’s phone. *Id.* at 8:2–5. As shown in Figure 3, table 200 includes personal information of a party (i.e., a contact) entered by the user,

IPR2017-01411
Patent 9,531,657 B2

such as the party's name, telephone number, and e-mail address. *Id.* at 8:6–15. Table 200 also includes subject of notes section 204 for entering the “subjects of notes.” *Id.* at 8:17–19. According to Matsumoto, the “subject of notes” means the “content[]” that is to be or was meant to be conveyed to the party. *Id.* at 6:66–7:2.

IPR2017-01411
 Patent 9,531,657 B2

Figure 4 of Matsumoto is reproduced below.



IPR2017-01411
Patent 9,531,657 B2

Figure 4 is a flowchart showing the “notes display procedure,” i.e., the process of displaying the notes stored in the subject of notes field, when making a phone call. *Id.* at 8:25–26. Figure 5 (not reproduced herein) illustrates a similar “notes display procedure” when receiving an incoming call. *Id.* at 9:25–27.

b. Overview of Sony (Ex. 1005)

Sony describes a wireless communication system that provides reminders based on contact information. Ex. 1005 ¶¶ 2–9. Sony’s system includes an electronic “phonebook” storage to store contact identification information, such as names, phone numbers, and email addresses. *Id.* ¶ 27. The system also includes a separate reminder storage for storing reminders, which can be entered through a series of menu options. *Id.* ¶¶ 27, 30.

IPR2017-01411
 Patent 9,531,657 B2

Figure 3 of Sony is reproduced below.

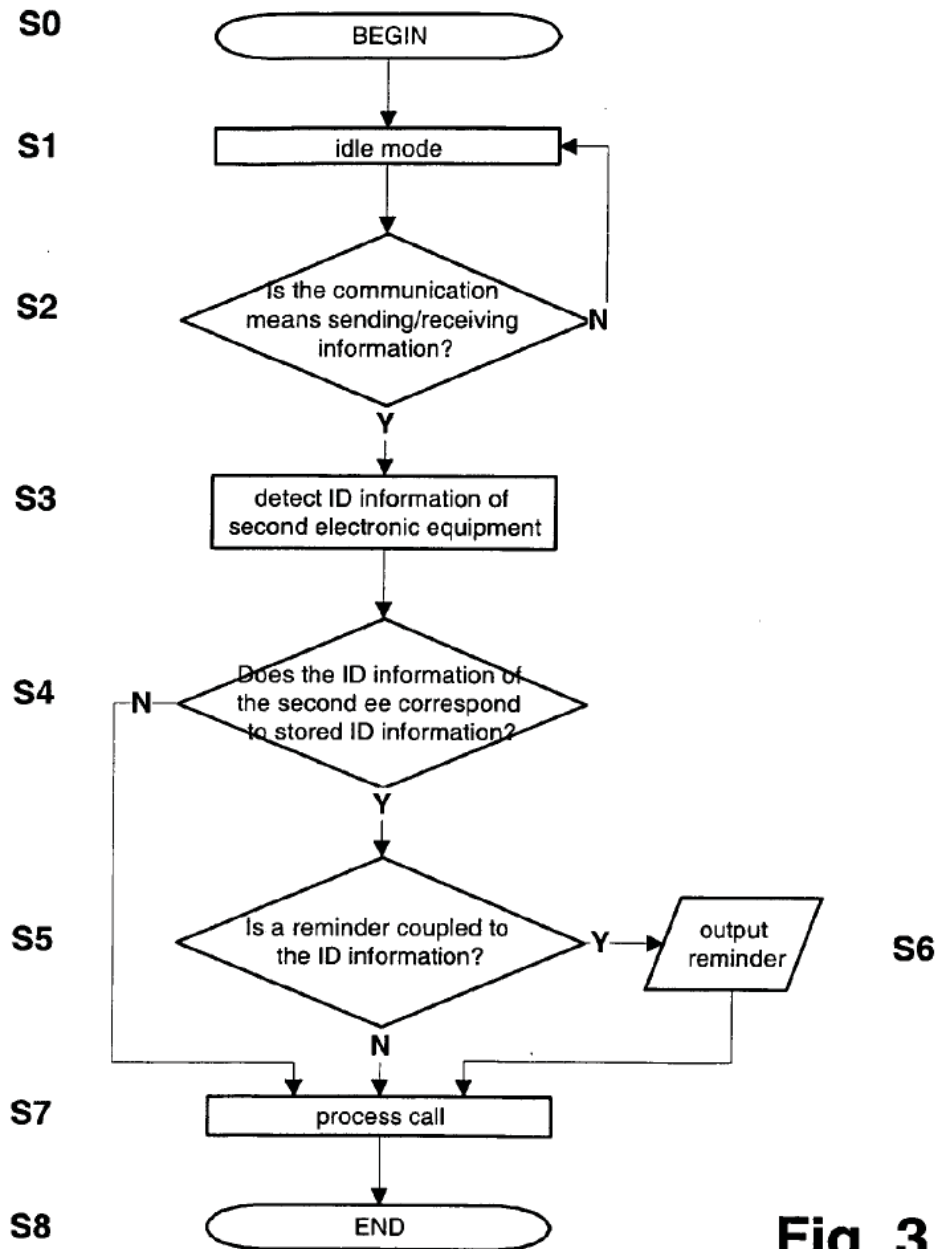


Fig. 3

Figure 3 shows a flowchart of the process of providing reminders according to Sony. *Id.* ¶ 32. As indicated in step S2, Figure 3 describes both the incoming call and the outgoing call processes. *Id.* ¶ 32, Fig. 3.

IPR2017-01411
Patent 9,531,657 B2

*2. Discussion—
Differences Between the Claimed Subject Matter and the Prior Art*

a. Claim 1

Petitioner’s alternative obviousness arguments are directed to one limitation only, namely, the “memo field configured to attach memo data” limitation. *See* Pet. 19–25. For all other limitations of claim 1, Petitioner contends that Sony discloses the limitations. *Id.* at 15–18, 26–34.

i. Preamble of Claim 1

As set forth above, the preamble of claim 1 recites “[a] method, performed by a communication device, for reminding a user of the communication device of a conversation point for a future communication,” and “the communication device having a processor and a display screen.” The preamble further recites that the communication device has access to “a memory storing a contact list having a list of contact list entries” and that “each contact list entry” includes

a first field configured to retrieve a stored communication address of a corresponding entity of the respective contact list entry, a second field configured to retrieve a stored name identifying the corresponding entity, and a memo field configured to attach memo data inputted by the user and displayable to show at least one memo which can be served to remind the user of a conversation point for a future communication between the user and the corresponding entity.

Ex. 1001, 3:11–19.

Addressing the preamble of claim 1, Petitioner contends that Sony discloses “[a] method, performed by a communication device, for reminding a user of the communication device of a conversation point for a future communication,” as recited in claim 1, because Sony discloses “electronic

IPR2017-01411
Patent 9,531,657 B2

equipment 1,” such as a cell phone, which “is able to transmit and receive information in a wireless communication system” (Pet. 15 (citing Ex. 1005 ¶¶ 24, 26)) and “performs a method in which a user can input a textual reminder” (*id.* (citing Ex. 1005 ¶¶ 11, 30, Fig. 2a)). Petitioner further asserts that Sony discloses that when the user next calls or is called by the number stored for that contact, the equipment displays the reminder before connecting the call. *Id.* (citing Ex. 1005 ¶¶ 32–33, Figs. 3, 4). Petitioner also cites the testimony of Mr. Rysavy in support of its contention. *Id.* (citing Ex. 1002 ¶ 94).

In addition, Petitioner asserts that Sony discloses “the communication device having a processor and a display screen,” as recited in claim 1, because Sony discloses “central control unit 5, which . . . controls the operation of the electronic equipment 1,” as well as an “output means 8,” which “corresponds to a display and/or loudspeakers.” *Id.* at 16 (quoting Ex. 1005 ¶ 26). Petitioner also asserts that central control unit 5 of Sony can be “embodied in a microprocessor, central processing unit or the like.” *Id.* (quoting Ex. 1005 ¶ 26).

Further, Petitioner maps the claimed “contact list” and “contact list entry” to Sony’s phonebook 2, which stores “identification information, e.g. phone numbers, e-mail addresses and the like and additional information relating to the identity such as names, images and/or the like.” *Id.* at 16–17 (quoting Ex. 1005 ¶ 27). Petitioner argues that the phone numbers and e-mail addresses disclosed in Sony constitute “communication addresses” recited in claim 1. *Id.* at 17 (citing Ex. 1002 ¶ 96).

Petitioner also maps the claimed “memo field configured to attach memo data inputted by the user” to “reminder storage 3” described in Sony.

IPR2017-01411
 Patent 9,531,657 B2

Id. (citing Ex. 1005 ¶ 27). Petitioner asserts that the reminders in Sony are input by the user using “input means 7” through a series of “menu options,” as shown in Figure 2a (not reproduced herein). *Id.* (citing Ex. 1005 ¶¶ 26, 30, Fig. 2a).

Although Sony discloses that phonebook storage 2 (storing names, phone numbers, and e-mail addresses) is linked or coupled to reminder storage 3 (*id.* at 18 (citing Ex. 1005 ¶¶ 11, 29)), Petitioner acknowledges that Sony’s reminder storage 3 is stored in a separate storage from phonebook storage 2, and, hence, Sony does not expressly disclose contact list entries that include all three fields (i.e., the fields for names, phone numbers, and memo data), as recited in the claim. *Id.* at 19. Nonetheless, Petitioner argues either Sony alone or Sony combined with Matsumoto renders the “memo field” limitation obvious.

(1) Obviousness Based on Sony Alone

Relying upon the testimony of Mr. Rysavy, Petitioner argues that it would have been obvious to a person of ordinary skill in the art to modify Sony to substitute Sony’s two storages (i.e., phonebook storage 2 and reminder storage 3) coupled by a link with a single contact list that includes all three recited fields, because an ordinary artisan would have understood that these two techniques (single database for all information, as opposed to multiple databases with a link between the data) were simple design choices and known equivalents that could be substituted with rudimentary skill to achieve the same straightforward result of storing information in a way that allowed related information to be accessed. *Id.* at 19–20 (citing Ex. 1002 ¶ 103).

IPR2017-01411
Patent 9,531,657 B2

Mr. Rysavy testifies that a person of ordinary skill in the art would have understood that while these two approaches are distinct, the distinction between them is minimal and that linking two physical databases to create a single virtual (or logical) database was well understood at the time of the filing of the '657 patent. Ex. 1002 ¶ 103. In support of his testimony, Mr. Rysavy cites and discusses a couple of references published before the filing date. *Id.* (citing Exs. 1006, 1007).

Mr. Rysavy further testifies that modifying Sony's teaching to obtain a single contact list entry that includes all three recited fields would have been mere substitution of one known equivalent in the field for another with a well-known and predictable result. *Id.* ¶ 104; Pet. 21.

Patent Owner identifies the recitations "each contact list entry of the contact list including . . . a memo field configured to attach memo data inputted by the user and displayable to show at least one memo" and "(b) checking, by the processor after step (a), whether there is memo data that is attached to the memo field of the first contact list entry" as the "core claim limitation." PO Resp. 47–48. Patent Owner asserts that Sony does not teach the purported "core claim limitation" because the "core claim limitation" requires "*integration* of memo data with the WHOLE ENTRY (i.e., the ENTITY) of a 'contact list entry' (as properly construed) in achieving a memo function" (*id.* at 48 (emphasis added)), whereas Sony discloses "*coupling* memo data to a historical value of an identification field of an intended 'contact list entry'" (*id.* at 50 (emphasis added)).

Although it is not entirely clear what Patent Owner argues, Patent Owner appears to argue that the claimed "contact list entry" includes all three data fields recited in the claims—i.e., the fields for a phone number, a

IPR2017-01411
Patent 9,531,657 B2

name, and memo—whereas Sony discloses two storages (i.e., phonebook storage 2 and reminder storage 3) coupled by a link. By Sony’s “coupling” approach, Patent Owner appears to argue that Sony has phone numbers in both storages (i.e., the phonebook and the reminder storage, each being the claimed “contact list”), which are “coupled” to each other. But the “coupling” gets broken or outdated if the phone number in the phonebook is changed. *See id.* at 8–10, 50–51.

Thus, Patent Owner appears to argue that Sony does not disclose a contact list entry with all three data fields, including the memo field, “integrated” in the same contact list. Petitioner’s challenge in this asserted ground, however, is one of obviousness based on the proposed *modification* of Sony. Although Petitioner relies on Sony alone in this asserted ground of obviousness, obviousness can be established by considering whether “*a single piece of prior art could be modified*, to produce the claimed invention.” *Comaper Corp v. Antec, Inc.*, 596 F.3d 1343, 1351–52 (Fed. Cir. 2010) (emphasis added). As discussed above, Petitioner asserts that it would have been obvious to *modify* the teaching of Sony to obtain a single contact list with contact list entries that include data fields for names, phone numbers, and memo data (Pet. 19–21)—that is, the “integrated” contact list entry Patent Owner argues required by the claims. Therefore, we find that Patent Owner does not adequately refute Petitioner’s challenge based on *obviousness*.

Patent Owner further asserts that “the core claim limitation” is missing from Sony and cannot be “supplied through ‘common sense.’” PO Resp. 51 (citing *Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1362 (Fed. Cir. 2016)). We disagree with Patent Owner’s argument.

IPR2017-01411
Patent 9,531,657 B2

As discussed above, with respect to the purported “core claim limitation” identified by Patent Owner—i.e., “each contact list entry of the contact list including . . . a memo field configured to attach memo data inputted by the user”—Petitioner has established sufficiently that Sony teaches a “contact list” with a “contact list entry” that includes a “memo field.” Pet. 16–18. As Petitioner explained, the difference between Sony and the claimed subject matter is that Sony has two contact lists—one with identification information and names, and another with reminders coupled to the identification information—whereas the claims recite a single contact list with contact list entries having all three data fields, i.e., the fields for a phone number, a name, and memo. *Id.* at 19–21. Hence, there are no missing limitations in Sony; rather, the elements are arranged differently in Sony from the claims.

Furthermore, Petitioner does not rely on common sense to supply any missing limitation. Rather, Petitioner has demonstrated sufficiently that a person of ordinary skill in the art would have been motivated to modify Sony to obtain a single contact list with all three data fields because Sony itself suggests contact information and reminders could be stored together as fields in one contact list. Pet. 19 (citing Ex. 1005 ¶ 27; Ex. 1002 ¶ 101); Pet. Reply 19 (citing Ex. 1005 ¶¶ 9, 11, 27; Ex. 1002 ¶ 118).

(2) Obviousness Based on the Combination of Sony and Matsumoto

In the alternative, Petitioner asserts that a person of ordinary skill in the art would have found it obvious to combine the teachings of Sony with the disclosure in Figure 3 (reproduced above) of Matsumoto of a single

IPR2017-01411
Patent 9,531,657 B2

contact list containing all three fields. Pet. 21–22 (citing Ex. 1004, Fig. 3; Ex. 1002 ¶¶ 106, 111).

Similar to its obviousness challenge based on Sony alone, Petitioner argues that a person of ordinary skill in the art would have been motivated to combine the single storage technique of Matsumoto with the separate but linked storage technique of Sony, because an ordinary artisan would have understood that these two techniques were known equivalents in the art that could be substituted with a predictable result. *Id.* at 22 (citing Ex. 1002 ¶ 108). Relying upon the testimony of Mr. Rysavy, Petitioner argues that a person of ordinary skill in the art would have been motivated to combine Sony with Matsumoto because the references both address the same need to provide a device user a reminder about a specific contact in a subsequent communication between the contact and the user. *Id.* at 23 (citing Ex. 1002 ¶ 108). Petitioner further argues that both Sony and Matsumoto address that need on a phone using the same general solution which, when a call is received or dialed, checks to see if there is a note associated with the contact and, if so, displays the note to the user before the call is connected. *Id.* (citing Ex. 1002 ¶ 108). Further, citing the Declaration of Mr. Rysavy, Petitioner asserts that there is nothing in Sony that would have been viewed by a person of ordinary skill in the art as technically incompatible with employing the single storage format of Matsumoto in place of Sony’s multiple storage embodiment, or vice-versa. *Id.* at 24 (citing Ex. 1002 ¶ 110).

We are persuaded by Petitioner’s argument and evidence that a person of ordinary skill in the art would have been motivated to combine the teachings of Sony and Matsumoto in the manner proposed by Petitioner

IPR2017-01411
Patent 9,531,657 B2

because, similar to Petitioner’s argument on the asserted obviousness ground based on Sony alone, Sony’s and Matsumoto’s techniques (single database for all information, as opposed to multiple databases with a link between the data) were simple design choices and known equivalents that could have been substituted with a predictable result. In addition, as Petitioner persuasively argues, Sony itself suggests contact information and reminders could be stored together as fields in one contact list. Pet. 19 (citing Ex. 1005 ¶ 27; Ex. 1002 ¶ 101); Pet. Reply 19 (citing Ex. 1005 ¶¶ 9, 11, 27; Ex. 1002 ¶ 118).

Patent Owner asserts that Matsumoto does not teach or suggest “any use/adaptation of a commonly and already available existing “contact list” (as properly construed) in its achieving of a memo function.” PO Resp. 52. Patent Owner also asserts that Matsumoto does not “leverage an existing feature,” such as a “contact list” that is “common and already available on a user’s communication device.” *Id.* at 14.

To the extent Patent Owner’s argument turns on its claim construction of “contact list,” we disagree with Patent Owner’s argument for the reasons discussed in Section III above. To the extent Patent Owner argues that the claims are limited to modifying or upgrading pre-existing conventional contact lists, we are not persuaded by Patent Owner’s argument because no such feature is recited in the challenged claims.

Based on the complete record, we credit Mr. Rysavy’s testimony and determine that Petitioner has presented sufficient evidence to show a person of ordinary skill in the art would have been motivated to combine Sony with Matsumoto as proposed to produce the “contact list” and “contact list entry,” as recited in claim 1.

IPR2017-01411
Patent 9,531,657 B2

Upon reviewing the complete record, we determine that Petitioner has shown sufficiently that Sony alone or the combination of Sony and Matsumoto renders the preamble of claim 1 obvious.

ii. Elements (a), (b), (c), and (d) of Claim 1

Petitioner next points to various steps described in Figure 3 (reproduced above) and related disclosure of Sony and argues that Sony discloses the steps recited in elements (a), (b), (c), and (d) of claim 1. Pet. 26–34. Petitioner asserts that Figure 3 discloses procedures for processing both the incoming and outgoing communication. *Id.* at 26–28. Petitioner provides detailed explanations and specific citations to Sony indicating where in the reference the claimed features are disclosed. *Id.* at 26–34. In addition, Petitioner relies upon the testimony of Mr. Rysavy. *Id.*

For instance, Petitioner asserts that steps S2–S4 in Figure 3 disclose the “receiving” step of element (a) for an incoming or outgoing communication because, at step S2, the system determines “if the communication means 6 is establishing a communication to the second electronic equipment, i.e. sending/receiving information via the wireless communication system.” *Id.* at 26–27 (citing Ex. 1005 ¶ 32, Fig. 3). If the system is sending or receiving information, “then in step S3 the detection means will detect the identification information [e.g., number] of the second electronic equipment to which the communication means 6 is sending information or from which the communication means 6 is receiving information and in a further step S4 the detection means checks if the identification information [e.g., number] of the second electronic equipment corresponds to a stored identification information,” which is stored in the phonebook. *Id.* at 28 (citing Ex. 1005 ¶ 32). Petitioner further provides a

IPR2017-01411
Patent 9,531,657 B2

detailed discussion of how Sony discloses steps (b), (c), and (d). *Id.* at 30–34.

Petitioner further asserts that Sony expressly discloses that the functions of the Sony device are performed by the “central control unit” (which can embody “a microprocessor”), which “controls the operation of the electronic equipment 1.” *Id.* at 28 (citing Ex. 1005 ¶ 26). Citing the testimony of Mr. Rysavy, Petitioner argues, therefore, a person of ordinary skill in the art would have understood that the procedure in the steps of Sony are performed by the “central control unit” of Sony. *Id.* (citing Ex. 1002 ¶¶ 112–113).

Petitioner further provides a detailed discussion of how Sony discloses steps (b), (c), and (d). *Id.* at 30–34. With regard to step (b), Petitioner asserts that Figure 3 of Sony illustrates the checking process for both incoming and outgoing calls. *Id.* at 30 (citing Ex. 1005, Fig. 3; Ex. 1002 ¶¶ 114–116). Sony further discloses that if the called or calling number matches one “stored in the phonebook 2 of the electronic equipment 1, then in the next step S5 it is checked if a reminder is coupled to this identification information.” *Id.* (citing Ex. 1005 ¶ 32; Ex. 1002 ¶ 115).

With respect to step (c), Petitioner asserts that Sony teaches “activating” a contact list entry because Sony accesses the stored phone numbers when receiving an incoming phone call or dialing an outgoing phone number. *Id.* at 31–32 (citing Ex. 1005 ¶ 32, Fig. 3).

As discussed in Section III above, we construe the term “activating” a contact list entry to mean “selecting or opening” a contact list entry. We are persuaded by Petitioner’s argument and evidence that Sony teaches the claimed “activating” step under this construction because Sony discloses

IPR2017-01411
Patent 9,531,657 B2

accessing stored identification information and processing incoming or outgoing calls. *See* Ex. 1005 ¶ 32, Fig. 3.

Petitioner further asserts that Sony teaches step (d) for both incoming and outgoing call procedures because it displays the content of the stored reminder when the associated contact calls or is called by the user. Pet. 32–34 (citing Ex. 1005 ¶¶ 26, 33, Figs. 3, 4).

Similar to its argument with respect to the preamble, Patent Owner asserts that Sony does not disclose “(b) checking, by the processor after step (a), whether there is memo data that is attached to the memo field of the first contact list entry,” which Patent Owner identifies as “the core claim limitation” along with the portion of the preamble discussed above. PO Resp. 47–51. Patent Owner argues that Sony does not “integrate” memo data with a contact list entry, but, instead, “couples” memo data to a contact entry. *Id.* at 50. In its Reply, Petitioner argues that Patent Owner misreads Sony. Pet. Reply 19–21.

Similar to our discussion above on the preamble of claim 1, we disagree with Patent Owner’s argument because Petitioner’s obviousness challenge is based on its proposed modification of Sony to obtain a single contact list including all three claimed data fields. That is, “the memo field” recited in step (b) refers to the memo field in the preamble, for which Petitioner relies on the single contact list obtained from its proposed modification of Sony. *See* Pet. Reply 19 (citing Pet. 47–49;⁵ Ex. 1005 ¶¶ 9, 11, 27; Ex. 1002 ¶ 118).

⁵ Petitioner appears to cite to the petition in IPR2017-01052. The corresponding citation in this proceeding appears to be pages 19–21 of the Petition. *Compare* IPR2017-01052 Pet. 47–49, *with* Pet. 19–21.

IPR2017-01411
Patent 9,531,657 B2

Although Petitioner’s discussion of step (b) appears to refer to Sony’s teachings without the proposed modification, it is reasonable to understand that Petitioner is relying on Sony to teach “checking” whether there is memo attached to the memo field, *not* the memo field itself. *See* Pet. 19–21, 30; Pet. Reply 19.

Therefore, based on the complete record, we determine that Petitioner has shown sufficiently that Sony teaches or renders obvious elements (a), (b), (c), and (d) recited in claim 1.

iii. Conclusion Regarding Claim 1

Upon considering all of the evidence of record, we determine that Petitioner has demonstrated, by a preponderance of evidence, the differences between the claimed subject matter of claim 1 and Sony alone or Sony combined with Matsumoto are such that the subject matter, as a whole, would have been obvious to a person having ordinary skill in the art at the time of the filing of the ’657 patent. Accordingly, Petitioner has demonstrated, by a preponderance of evidence, the subject matter of claim 1 would have been obvious under 35 U.S.C. § 103(a) over Sony or over the combination of Sony and Matsumoto.

b. Dependent Claim 12

Claim 12 depends from claim 1 and further recites “the user is provided by the communication device at least one option to erase, save or edit memo data attached to the memo field of the first contact list entry at the end of the communication.” Petitioner contends that Sony renders claim 12 obvious because Sony expressly discloses an option for the user to delete the displayed reminder at the end of the communication (Pet. 39 (citing

IPR2017-01411
Patent 9,531,657 B2

Ex. 1005 ¶ 32)), as well as menu options to create a new reminder, edit an existing reminder, and delete a reminder (*id.* at 39–40 n.5 (citing Ex. 1002 ¶ 146)). Mr. Rysavy opines that a person of ordinary skill in the art would have understood that Sony disclosed options for creating, editing, and deleting a reminder before or after a call ends as an option to delete the reminder at the end of the call on which it was displayed. Ex. 1002 ¶ 146.

Based on the complete record, we credit the testimony of Mr. Rysavy and are persuaded that a person of ordinary skill in the art would have combined the cited disclosures of Sony, arguably disparate embodiments, to arrive at the subject matter recited in claim 12.

Patent Owner does not respond separately, with specificity, to Petitioner’s challenge to claim 12 beyond Patent Owner’s arguments advanced with respect to claim 1 discussed above.

Upon considering the complete record, we determine that Petitioner has demonstrated, by a preponderance of evidence, the subject matter of claim 12 would have been obvious under 35 U.S.C. § 103(a) over Sony or the combination of Sony and Matsumoto.

c. Dependent Claims 2–4 and 9–11

Claim 2 depends from claim 1 and further recites “the stored communication address of the first contact list entry of the contact list is a phone number of the corresponding entity of the first contact list entry.”

Petitioner asserts that Sony teaches the additionally recited limitation of claim 2 because, Sony’s phonebook (i.e., the claimed “contact list”) stores several different types of communication addresses, including “phone numbers” relating to a contact. Pet. 35 (citing Ex. 1005 ¶ 27).

IPR2017-01411
Patent 9,531,657 B2

Based on the complete record, we determine that Petitioner has shown sufficiently that Sony teaches the additionally recited limitation of claim 2.

Claim 3 depends from claim 2 and further recites “the first input indicates that an incoming phone call from the phone number of the first contact list entry of the contact list is received, and during the activating of the first contact list entry, the user accepts the incoming phone call and conducts the incoming phone call with the corresponding entity of the first contact list entry using the communication device as a result of the user's accepting the incoming phone call.”

Citing its discussion of step (a) of claim 1, Petitioner asserts that Sony teaches “the first input indicates that an incoming phone call from the phone number of the first contact list entry of the contact list is received,” as recited in claim 3, because Sony discloses receiving a first input indicating that an incoming phone call from the stored phone number of a first contact list entry of the saved contact list is received. Pet. 35 (citing Pet. § VII.A.1.d.; Ex. 1002 ¶¶ 93–122). Petitioner argues that the receiving-an-input function is illustrated as Steps S2-S4 in Sony's Figure 3. *Id.* (citing Ex. 1005 ¶ 32, Fig. 3; Pet. § VII.A.1.d.; Ex. 1002 ¶ 128).

Petitioner asserts that Sony also teaches “during the activating of the first contact list entry, the user accepts the incoming phone call and conducts the incoming phone call with the corresponding entity of the first contact list entry using the communication device as a result of the user's accepting the incoming phone call,” as recited in claim 3. *Id.* at 36. Citing its discussion of step (c) of claim 1, Petitioner argues that Sony teaches this limitation because Sony discloses that for both incoming and outgoing calls, after a reminder is displayed in Step S6 (or after determining in Step S4 that the

IPR2017-01411
Patent 9,531,657 B2

number does not correspond to a stored contact, or after determining at Step S5 that there is no reminder coupled to the contact), Sony's mobile phone goes forward with the "process call" procedure in Step S7. *Id.* (citing Pet. § VII.A.1.f.; Ex. 1005 ¶ 32, Fig. 3; Ex. 1002 ¶ 129). Petitioner argues that the "process call" step of Sony involves connecting the user and the caller/called party and allowing them to conduct the communication because the next step (S8) includes "ending the call." *Id.* (citing Ex. 1005 ¶ 32; Ex. 1002 ¶¶ 129–130).

We agree with Petitioner's characterization of the teachings of Sony, as well as Petitioner's reasonable inference (supported by the testimony from Mr. Rysavy) that the "process call" step of Sony involves connecting the user and the caller (or the called contact) and allowing them to conduct the phone call. Based on the complete record, we determine that Petitioner has shown sufficiently that Sony teaches the additionally recited limitation of claim 3.

Claim 4 depends from claim 2 and further recites "the first input indicates a request that the phone number of the first contact list entry of the contact list be dialed for an outgoing phone call, and during the activating of the first contact list entry, the phone number of the first contact list entry is dialed for the outgoing call and the user conducts the outgoing phone call with the corresponding entity of the first contact list entry using the communication device as a result of the outgoing phone call being received and accepted by the corresponding entity of the first contact list entry." Claim 4 is similar to claim 3 except that claim 3 recites processing of an incoming call whereas claim 4 recites operations relating to an outgoing call. *Compare* Ex. 1001, 3:45–52, *with id.* at 4:1–10.

IPR2017-01411
Patent 9,531,657 B2

Citing similar evidence discussed above with respect to claim 3, Petitioner asserts that Sony teaches the additionally recited limitation of claim 4 for the reasons similar to those discussed above in the context of claim 3. Pet. 36–37 (citing Pet. §§ VII.A.1.d., VII.A.1.f.; Ex. 1005 ¶ 32, Fig. 3; Ex. 1002 ¶¶ 133–134).

For the similar reasons and based on the complete record, we determine that Petitioner has shown sufficiently that Sony teaches the additionally recited limitation of claim 4.

Claim 9 depends from claim 1 and further recites “the first indication comprises contents of the at least one memo of the memo data.”

Citing its discussion of step (d) of claim 1, Petitioner argues that Sony teaches the additionally recited limitation of claim 9 because Sony discloses displaying the contents of the notes stored in the contact list entry when the associated contact calls the user. Pet. 37 (citing Pet. § VII.A.1.g.; Ex. 1002 ¶¶ 119–122, 136).

Based on the complete record and for the same reasons discussed above with respect to step (d) of claim 1, we determine that Petitioner has shown sufficiently that Sony teaches the additionally recited limitation of claim 9.

Claim 10 depends from claim 1 and further recites “the memo data attached to the memo field of the first contact list entry comprises at least one of text, audio, image and video that is displayable or otherwise playable to show the at least one memo of the memo data.”

Petitioner asserts that Sony teaches the additionally recited limitation of claim 10 because Sony discloses a textual reminder memo as well as

IPR2017-01411
Patent 9,531,657 B2

displaying the reminder text. Pet. 38 (citing Ex. 1005 ¶¶ 30, 33, Fig. 4; Ex. 1002 ¶ 138).

Based on the complete record, we determine that Petitioner has shown sufficiently that Sony teaches the additionally recited limitation of claim 10.

Claim 11 depends from claim 1 and further recites “the step (b) of checking of whether there is memo data that is attached to the memo field of the first contact list entry is performed before or during the step (c) of activating the first contact list entry.”

Citing its discussion of step (c) of claim 1, Petitioner argues that the activation of the contact list for claim 1 necessarily includes the time during which the call is being conducted by the user. Pet. 38 (citing Pet. § VII.A.1.f.; Ex. 1002 ¶¶ 116–117, 141). Petitioner asserts that, in Sony, that “activation” process of connecting and conducting the call is shown for both incoming and outgoing calls as Step S7 in Figure 3. *Id.* (citing Pet. § VII.A.1.f.; Ex. 1002 ¶ 141). Petitioner argues that Sony teaches the additionally recited limitation of claim 11 because Sony discloses checking for a reminder (Step S5 in Figure 3) before the call is connected and conducted (Step S7). *Id.* at 38–39 (citing Pet. §§ VII.A.1.f., VII.A.1.e.; Ex. 1005 ¶ 32, Fig. 3; Ex. 1002 ¶ 141).

Based on the complete record, we determine that Petitioner has shown sufficiently that Sony teaches the additionally recited limitation of claim 11.

Patent Owner does not respond separately, with specificity, to Petitioner’s challenge to claims 2–4 and 9–11 beyond Patent Owner’s arguments advanced with respect to claim 1 discussed above.

Upon considering the complete record, we determine that Petitioner has demonstrated, by a preponderance of evidence, the subject matter of

IPR2017-01411
Patent 9,531,657 B2

claims 2–4 and 9–11 would have been obvious under 35 U.S.C. § 103(a) over Sony or the combination of Sony and Matsumoto.

C. Claims 5–8 as Obvious Over the Combination of Matsumoto and Scott or Over the Combination of Matsumoto and Neilsen

Claims 5–8 depend directly or indirectly from claim 1. Petitioner contends claims 5–8 are unpatentable as obvious under 35 U.S.C. § 103(a) over Matsumoto combined with Scott or Neilsen. Pet. 41–75. In support of its contentions, Petitioner submits the Declaration of Mr. Rysavy (Ex. 1002). *Id.*

Patent Owner does not respond separately to Petitioner’s challenges in these asserted grounds beyond Patent Owner’s arguments advanced with respect to the challenges based on Sony or the combination of Sony and Matsumoto discussed above. PO Resp. 56. For the same reasons discussed above in Section IV.B., we do not agree with Patent Owner’s arguments. Thus, in what follows, we discuss only Petitioner’s arguments and evidence.

For the reasons discussed below, we are persuaded that Petitioner has demonstrated a reasonable likelihood that it will prevail in its challenge to claims 5–8 as obvious over the combination of Matsumoto and Scott or the combination of Matsumoto and Neilsen.

1. Scope and Content of the Prior Art

a. Overview of Scott (Ex. 1009)

Scott discloses a method of automatically establishing an input language for a handheld electronic device based on the stored contact information for a particular selected contact. Ex. 1009, Abstract, 1:9–13, 2:53–55. The disclosed method includes receiving a request to initiate the

IPR2017-01411
Patent 9,531,657 B2

composition of a new message, such as an email, receiving a selection of a particular contact (i.e., the intended recipient of the message), and determining whether the selected contact has a preferred input language stored in the handheld device. *Id.* at 2:55–61. If the preferred input language is different from the current input language, the input language is switched to the preferred input language. *Id.* at 2:61–3:1.

b. Overview of Neilsen (Ex. 1010)

Neilsen discloses a mobile communications device in which a reminder can be entered and associated with a software application or an identifier within the application. Ex. 1010, Abstract. In an exemplary embodiment, a reminder is associated with an application start event, such as starting a call handler application. *Id.* ¶¶ 9, 12. A reminder may also be associated with an identifier, such as a telephone number or an email address. *Id.* ¶¶ 7, 12.

For example, a reminder may be entered into a mobile telephone to thank a friend or family member for a birthday card the next time a call is made to or received from that person. *Id.*, Abstract. When the mobile telephone detects a call handler application start event, it determines whether a parameter associated with the reminder matches a parameter associated with the application, e.g., the outgoing or incoming phone number, and announces the reminder as appropriate, e.g., displays the reminder on the display screen of the phone. *Id.*, Abstract, ¶¶ 45, 56.

IPR2017-01411
Patent 9,531,657 B2

*2. Discussion—
Differences Between the Claimed Subject Matter and the Prior Art*

In these asserted grounds of obviousness, Petitioner argues that Matsumoto renders obvious base claim 1 from which claims 5–8 depend. Thus, we discuss claim 1 first before addressing dependent claims 5–8.

a. Claim 1

Petitioner contends that Matsumoto discloses all limitations of independent claim 1 with the possible exception of the “by the processor” aspect of the recited steps. Pet. 41, 51. Nonetheless, Petitioner asserts that Matsumoto, at a minimum, would have rendered the claim obvious. *Id.* at 48 n.6, 51.

i. Preamble of Claim 1

Addressing the preamble of claim 1, Petitioner contends that Matsumoto teaches “[a] method, performed by a communication device, for reminding a user of the communication device of a conversation point for a future communication,” as recited in claim 1, because Matsumoto discloses a mobile phone, i.e., a communication device, having the function of notifying the user of stored information when the user makes a call to the telephone number of the party associated with the stored information or receives a call from the number. Pet. 42 (citing Ex. 1004, 2:16–30, 5:4–8, 37–40, Figs. 1, 2). Petitioner also cites the testimony of Mr. Rysavy in support of its contention. *Id.* (citing Ex. 1002 ¶ 150).

Referencing Figure 2 (not reproduced herein) of Matsumoto, Petitioner maps the claimed “processor” to Matsumoto’s “general control unit 104,” which “includes a Digital Signal Processor (DSP) for controlling

IPR2017-01411
 Patent 9,531,657 B2

general procedures of the wireless phone,” and the claimed “display screen” to “display unit 108,” which “is a liquid crystal display (LCD), which displays texts and images according to the signals received from the general control unit 104 and the notepad control unit 113.” *Id.* at 43 (citing Ex. 1004, 5:37–40, 6:33–36, Fig. 2; Ex. 1002 ¶ 151). Petitioner argues that Matsumoto’s processor “control[s] general procedures of the wireless phone.” *Id.* (citing Ex. 1004, 5:37–39).

Referencing Figure 3 (reproduced above in Section IV.B.1.a.) and related text, Petitioner points to various portions of Matsumoto (including various fields of table 200 and related disclosure) where the claimed “memory storing a contact list having a list of contact list entries” and the claimed

contact list including a first field configured to retrieve a stored communication address of a corresponding entity of the respective contact list entry, a second field configured to retrieve a stored name identifying the corresponding entity, and a memo field configured to attach memo data inputted by the user and displayable to show at least one memo which can be served to remind the user of a conversation point for a future communication between the user and the corresponding entity

are disclosed. *Id.* at 44–46 (citing Ex. 1004, 8:3–22, 32–42, 54–59, 8:62–9:3, Figs. 3, 4). To summarize, Petitioner asserts that table 200 of Matsumoto discloses the claimed “contact list” and that each row of the table entries corresponds to the claimed “contact list entry,” including field 201, i.e., a first field for a phone number, and field 202, i.e., a second field for a stored name identifying the contact. *Id.* at 44–45. Petitioner further argues that subject of notes field 204 of table 200 constitutes the claimed “memo field (labeled 204) configured to attach memo data inputted by the

IPR2017-01411
Patent 9,531,657 B2

user.” *Id.* at 45. Petitioner asserts that table 200 is saved in recording unit 109 of Matsumoto’s mobile phone, and that the phone accesses the saved table to determine if a number calling or being called is stored in the table, to determine if there are notes stored in the table associated with the called or calling number, and to retrieve such notes for display to the user. *Id.* at 45–46 (citing Ex. 1004, 8:3–5, 32–42, 8:62–9:3). Petitioner also relies on the Declaration of Mr. Rysavy. *Id.* at 44–46 (citing Ex. 1002 ¶¶ 152–154).

As discussed above in Section III (Claim Construction), we construe the term “contact list” as “a list stored in a memory of a communication device comprising contact list entries,” and the term “contact list entry” to mean “an item in a contact list comprising data fields to input contact information details.” We are persuaded by Petitioner’s argument and evidence that table 200 of Matsumoto teaches the claimed “contact list” and “contact list entry” under these constructions because table 200 stored in recording unit 109 of Matsumoto’s mobile phone is “a database containing rows of contact list entries and columns that show fields of information about each contact, including ‘TELEPHONE NUMBER’ field 201, ‘NAME’ field 202, ‘E-MAIL FIELD’ 203, and ‘SUBJECT OF NOTES’ field 204.” Pet. 45 (citing Ex. 1004, Fig. 3).

ii. Elements (a), (b), (c), and (d) of Claim 1

Petitioner next points to Figure 4 (reproduced above in Section IV.B.1.a.) and related disclosure of Matsumoto and argues that Matsumoto teaches or renders obvious the numbered elements (a), (b), (c), and (d) recited in the body of claim 1. Pet. 46–57. Petitioner provides detailed explanations and specific citations to Matsumoto indicating where in the

IPR2017-01411
Patent 9,531,657 B2

reference the claimed features are disclosed. *Id.* In addition, Petitioner relies upon the testimony of Mr. Rysavy. *Id.*

As discussed above in Section IV.B.1.a., Figure 4 is a flowchart showing the “notes display procedure,” i.e., the process of displaying the notes (the claimed “memo data”) stored in the subject of notes field, when making a phone call. Ex. 1004, 8:25–26. Petitioner points to various steps described in Figure 4 and argues that they disclose the steps recited in elements (a), (b), (c), and (d) of claim 1. Pet. 46–57. To summarize, Petitioner asserts that steps S101 (“ACCEPT INPUT OF TELEPHONE NUMBER”) and S102 (“REFER TO THE RECORDED NOTES”) disclose the “receiving” step of element (a), and steps S102 and S103 (“IS THE NUMBER RECORDED?”) discloses the “checking” step recited in element (b) of claim 1. *Id.* at 46–51.

Petitioner further asserts that steps S104 (“DISPLAY THE NOTES”) and S105 (“CALLING PROCEDURE”) teach the “activating” step recited in element (c) because Matsumoto describes that, after notes for the claimed “first contact list entry” are displayed in step S104, the phone goes forward with the “calling procedure” of step S105. *Id.* at 51–52. Petitioner argues that Matsumoto’s “calling procedure” means that “the general control unit 104 conducts a procedure for calling the party with the received calling telephone number to establish the communication (i.e., calling procedure) (Step S105).” *Id.* at 52 (quoting Ex. 1004, 8:46–52).

Although Petitioner does not propose an express construction for the term “activating,” Petitioner argues that the ’657 patent explains that “activating” a contact list entry includes “when user opens contact information contained therein for viewing”; “when phone number contained

IPR2017-01411
Patent 9,531,657 B2

therein is dialed using speed dial feature”; and “when communication device detects incoming phone call from entity corresponding to contact list entry.” *Id.* at 31 (quoting Ex. 1001, 2:27–34). In other words, Petitioner appears to argue that steps S104 and S105 of Matsumoto teach the claimed “activating” step because Matsumoto discloses opening contact information and making a phone call to the contact telephone number.

Petitioner further argues that Matsumoto teaches “(d) causing, by the processor, a first indication indicating a presence of the at least one memo of the attached memo data, to be automatically displayed on the display screen during the activating of the first contact list entry, when it is detected in the step (b), by the processor, that there is memo data attached to the memo field of the first contact list entry,” as recited in claim 1, because Matsumoto discloses displaying the notes that are stored in the “subject of notes” field of the table 200 associated with the contact number that is calling, as shown in step S104 of Figure 4. *Id.* at 54–55. Petitioner argues that displaying the notes, i.e., the actual content of the memo, satisfies displaying an indication of a presence of a memo, as recited in claim 1, because claim 9, which depends from claim 1, recites that the “indication” of claim 1 “comprises contents of the at least one memo of the memo data.” *Id.* at 54.

As noted by Petitioner, claim 1 recites that each of the steps (a), (b), (c), and (d) is performed “by the processor.” *Id.* at 48 & n.6, 51, 54, 56–57. Relying on the testimony of Mr. Rysavy, Petitioner argues that a person of ordinary skill in the art would have found it obvious to use the processor of the phone disclosed in Matsumoto to perform the functions of the phone. *Id.* at 48 n.6 (citing Ex. 1002 ¶ 151). Mr. Rysavy testifies that a person of ordinary skill in the art, given a processor in a communication device, such

IPR2017-01411
Patent 9,531,657 B2

as the mobile phone in Matsumoto, would have been motivated to use that processor to execute instructions for any function of the device and would have had no doubt of the success of using a processor to carry out those functions, particularly given the longstanding knowledge in the art of using processors in cell phones and other communication devices to perform operations. Ex. 1002 ¶ 151 (citing Ex. 1008 (Chris Oxlade, *The Inside & Out Guide to Inventions*), 20 (“Central Processor. The processor controls the phone by carrying out programmed instructions.”)).

As discussed in Section III above, we construe the term “activating” a contact list entry to mean “selecting or opening” a contact list entry. We are persuaded by Petitioner’s argument and evidence that steps S204 and S205 of Matsumoto teach the claimed “activating” step under this construction because Matsumoto discloses opening contact information and detecting incoming phone call. Pet. 51–54.

Based on the complete record, we credit Mr. Rysavy’s testimony and determine that Petitioner has provided sufficient evidence and reasoned explanation to show that Matsumoto renders elements (a), (b), (c), and (d) recited in claim 1 obvious.

iii. Conclusion Regarding Claim 1

Upon considering all of the evidence of record, we determine that Petitioner has demonstrated, by a preponderance of evidence, the differences between the claimed subject matter of claim 1 and Matsumoto are such that the subject matter, as a whole, would have been obvious to a person having ordinary skill in the art at the time of the filing of the ’657 patent. Accordingly, Petitioner has demonstrated, by a preponderance of evidence,

IPR2017-01411
Patent 9,531,657 B2

the subject matter of claim 1 would have been obvious under 35 U.S.C. § 103(a) over the teachings of Matsumoto.

b. Dependent Claim 5

Claim 5 depends from claim 1 and further recites “the stored communication address of the first contact list entry of the contact list is a messaging address of the corresponding entity of the first contact list entry.” Ex. 1001, 4:11–14. Petitioner argues that a person of ordinary skill in the art would have understood that the recited “messaging address” encompasses an email address in view of the claim language and the written description of the ’657 patent. Pet. 57 (citing Ex. 1001, 2:47–60, Fig. 4, claim 7; Ex. 1002 ¶ 62).

Petitioner asserts that Matsumoto discloses the user sending a memo as an email to the contact using an email client program. *Id.* at 58 (citing Ex. 1004, 5:19–21). Petitioner acknowledges, however, Matsumoto does not expressly disclose displaying a memo reminder when the user next uses the email program to send an email to the contact. *Id.* at 59.

i. Matsumoto Combined with Scott

Petitioner asserts that Scott supplies this element missing from Matsumoto by teaching the contact list with phone numbers and email addresses for each contact as well as automatically displaying a stored reminder memo when the user either dials the phone number or uses an email client to compose an email to the email address. *Id.* Petitioner asserts that Scott teaches a handheld communication device including a number of typical smartphone applications, including “a phone application 48, an address book application 50 for storing information for a plurality of

IPR2017-01411
Patent 9,531,657 B2

contacts, a messaging application 52 which includes email, SMS and MMS applications.” *Id.* at 59–60 (citing Ex. 1009, 3:10–14, 3:27–38, 3:60–67, 4:18–22, Figs. 1, 2). Petitioner further asserts that Scott discloses a stored contact list containing entries for each contact, with each entry including data fields storing the contact’s name, phone number, and email address, as well as a data field for specifying the contact’s preferred language. *Id.* at 60 (citing Ex. 1009, 4:45–61, Fig. 3).

According to Petitioner, Scott teaches that, when detecting that the user “has initiated the composition of a new message, such as an email, SMS or MMS message, and has selected a particular contact stored by the address book application 50 as the recipient of the message . . . for example, by entering a contact’s name in the ‘To’ field of an email message,” the device checks to see “whether the selected contact has a preferred input language that has been stored in the preferred language data field for that contact.” *Id.* at 62–63 (citing Ex. 1009, 5:10–20, Fig. 4 (steps 100, 105)). If so, the device determines whether the contact’s preferred language matches the default text input language of the device and, if different, switches the device’s default input language to the preferred input language for the selected contact and allows the user to compose the message. *Id.* at 63 (citing Ex. 1009, 5:22–35, Fig. 4 (steps 110, 115, 120)). Petitioner argues that Scott also teaches automatically displaying a textual reminder of the current input language. *Id.* (citing Ex. 1009, 5:35–40).

In other words, Scott teaches automatically displaying a reminder during an email communication triggered by an email address of a contact. Thus, Petitioner argues that the combination of Matsumoto and Scott teaches

IPR2017-01411
Patent 9,531,657 B2

displaying a memo reminder when the user uses the email program to send an email to the contact. *Id.* at 59 (citing Ex. 1002 ¶ 174).

ii. Matsumoto Combined with Neilsen

Petitioner asserts that Neilsen’s mobile phone has a reminder controller that can generate reminders based on events within software applications, such as “call handling application” and an “email application.” *Id.* at 64–65 (citing Ex. 1010 ¶ 40, Fig. 2). Petitioner further asserts that Neilsen discloses generating reminders when the user composes an email message to a stored email address. *Id.* at 66–67 (citing Ex. 1010 ¶¶ 7, 12). According to Petitioner, announcement of reminders can be made by a “display of text or a picture on the display,” a “sound alert,” or a “combination of these.” *Id.* at 66 (citing Ex. 1010 ¶ 60). Thus, Petitioner argues that Neilsen teaches the additionally recited limitation of claim 5. *Id.* at 58, 67.

iii. Reasons to Combine Matsumoto with Scott or Neilsen

Petitioner asserts that a person of ordinary skill in the art would have been motivated to apply Matsumoto’s reminder method for phone calls to email messaging because the phone call and the email functions are among only a handful of communication methods available on a typical mobile phone. Pet. 68 (citing Ex. 1002 ¶ 187). Petitioner argues that an ordinarily skilled artisan would have been motivated to add Matsumoto’s reminder method to email messaging because Matsumoto’s phone already includes a contact list entry with a field for the contact’s phone number and email address, as well as an email program for sending an email message to a

IPR2017-01411
Patent 9,531,657 B2

contact's email address. *Id.* at 67 (citing Ex. 1004, 8:5–17, 5:19–21, 9:18–24, Figs. 3, 4; Ex. 1002 ¶ 186).

Petitioner argues that one of ordinary skill would have looked to combine Matsumoto with Scott or Neilsen because (1) all three references address the same recognized need to provide a mobile phone user a reminder about a specific contact when a communication is sent to or received from a contact (*id.* at 70 (citing Ex. 1002 ¶ 193)), and (2) all three address that need on a mobile phone using the same general solution which, when a communication is sent or received, checks to see if there is a reminder note or memo stored that is associated with the communication address (e.g., phone number and/or email address) and, if so, displays the text of the note to the user (*id.* at 70–71 (citing Ex. 1002 ¶ 193)).

Petitioner also asserts that both Scott and Neilsen expressly contemplate applying a phone call reminder method to emails and vice versa. *Id.* at 69–70. In support of its argument, Petitioner points to Scott's disclosure that a reminder memo (the contact's preferred language) is used to display the reminder automatically when the user has a phone call with that contact or when the user composes an email addressed to that contact (*id.* at 69 (citing Ex. 1009, 5:35–40, 6:19–34, Fig. 1; Ex. 1002 ¶ 188)), and Neilsen's disclosure that reminders can be triggered by events occurring within many mobile phone software applications, including initiation of a *phone or email* communication with a contact (*id.* at 69–70 (citing Ex. 1010 ¶¶ 5, 7; Ex. 1002 ¶ 189)).

We are persuaded by Petitioner's argument and evidence that a person of ordinary skill in the art would have been motivated to combine the teachings of Matsumoto and Scott or Neilsen in the manner proposed by

IPR2017-01411
Patent 9,531,657 B2

Petitioner because, among other reasons, Matsumoto, Scott, and Neilsen all expressly provide a teaching, suggestion, or motivation to apply reminder methods to both phone calls and email applications.

iv. Conclusion Regarding Claim 5

Upon considering all of the evidence of record, we determine that Petitioner has demonstrated, by a preponderance of evidence, the differences between the claimed subject matter of claim 5 and Matsumoto combined with Scott or Neilsen are such that the subject matter, as a whole, would have been obvious to a person having ordinary skill in the art at the time of the filing of the '657 patent. Accordingly, Petitioner has demonstrated, by a preponderance of evidence, the subject matter of claim 5 would have been obvious under 35 U.S.C. § 103(a) over Matsumoto combined with Scott or over Matsumoto combined with Neilsen.

c. Dependent Claims 6–8

Claim 6 depends from claim 5 and further recites “the first input indicates a request that the messaging address of the first contact list entry be selected to send a message to the corresponding entity of the first contact list entry, and during the activating of the first contact list entry, the user operates a messaging client displayed on the display screen to compose and send the message to the corresponding entity of the first contact list entry.”

Petitioner asserts that Matsumoto combined with Scott or Neilson renders claim 6 obvious for the same reasons discussed above for claim 5. Pet. 72. First, as discussed above in the context of step (a) of claim 1, Matsumoto teaches receiving a first input indicating a need to activate a first contact list entry of the contact list for the user to perform receiving or

IPR2017-01411
Patent 9,531,657 B2

requesting a phone communication to the stored phone number of the first contact list entry. *Id.* (citing Pet. § VII.B.1.d.; Ex. 1002 ¶¶ 154–155). Next, for the reasons discussed above for claim 5, both Scott and Neilsen disclose an input from the user indicating a need to send an email message to a stored email address of a contact and a reminder being triggered as a result of that input. *Id.* (citing Pet. § VII.B.2.a; Ex. 1002 ¶¶ 173–183, 197). As also discussed above for claim 5, both Scott and Neilsen further disclose that during the activating of the first contact list entry, the user operates an email messaging client displayed on the display screen to compose and send the message to the corresponding entity of the first contact list entry. *Id.* at 73 (citing Pet. § VII.B.2.a; Ex. 1005, 5:10–35, Fig. 4; Ex. 1010 ¶¶ 6–8, 12–13, Fig. 7; Ex. 1002 ¶¶ 173–183, 198).

Based on the complete record, we determine that Petitioner has demonstrated, by a preponderance of evidence, the subject matter of claim 6 would have been obvious under 35 U.S.C. § 103(a) over Matsumoto combined with Scott or Matsumoto combined with Neilsen.

Claim 7 depends from claim 5 and further recites “the stored communication address of the first contact list entry of the contact list comprises an email address of the corresponding entity of the first contact list entry.” Petitioner notes that claim 7 specifies that the communication address of claim 5 to be an “email address.” Pet. 74.

Our discussion for claim 5 already included the discussion of the communication address being an email address. Thus, for the same reasons discussed above with respect to claim 5, based on the complete record, we determine that Petitioner has demonstrated, by a preponderance of evidence, the subject matter of claim 7 would have been obvious under 35 U.S.C.

IPR2017-01411
Patent 9,531,657 B2

§ 103(a) over Matsumoto combined with Scott or Matsumoto combined with Neilsen.

Claim 8 depends from claim 7 and further recites “the first input indicates a request that the email address of the first contact list entry be selected to send a message to the corresponding entity of the first contact list entry, and during the activating of the first contact list entry, the user operates an email client displayed on the display screen to compose and send the email to the corresponding entity of the first contact list entry.” Petitioner notes that claim 8 specifies an “email address,” an “email client,” and an “email,” instead of a “messaging address,” “messaging client,” and “message,” recited in claim 6. Pet. 74.

Our discussion for claims 5 and 6 above already included the discussion of an email address, email client, and an email. Thus, for the same reasons discussed above with respect to claims 5 and 6 and based on the complete record, we determine that Petitioner has demonstrated, by a preponderance of evidence, the subject matter of claim 8 would have been obvious under 35 U.S.C. § 103(a) over Matsumoto combined with Scott or Matsumoto combined with Neilsen.

V. CONCLUSION

Petitioner has met its burden of proof, by a preponderance of the evidence, in showing that claims 1–12 of the ’657 patent are unpatentable based on the following grounds:

1. Claims 1–4 and 9–12 as obvious under 35 U.S.C. § 103(a) over Sony;

IPR2017-01411
Patent 9,531,657 B2

2. Claims 1–4 and 9–12 as obvious under 35 U.S.C. § 103(a) over the combination of Sony and Matsumoto;
3. Claims 5–8 as obvious under 35 U.S.C. § 103(a) over the combination of Matsumoto and Scott; and
4. Claims 5–8 as obvious under 35 U.S.C. § 103(a) over the combination of Matsumoto and Neilsen.

VI. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1–12 of the '657 patent are unpatentable; and

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

IPR2017-01411
Patent 9,531,657 B2

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