

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

CERENCE OPERATING COMPANY,
Patent Owner.

IPR2024-00978
Patent 7,395,078 B2

Before BRIAN J. McNAMARA, BART A. GERSTENBLITH, and
LISA A. MURRAY, *Administrative Patent Judges*.

GERSTENBLITH, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. Background

Samsung Electronics Co., Ltd.; Samsung Electronics, America, Inc.; and Google LLC (collectively, “Petitioner”) filed a Petition (Paper 4, “Pet.”) requesting institution of *inter partes* review of claims 1–17 (“the Challenged Claims”) of U.S. Patent No. 7,395,078 B2 (Ex. 1001, “the ’078 patent”). Cerence Operating Company (“Patent Owner”) filed a Preliminary Response (Paper 9, “Prelim. Resp.”).

An *inter partes* review may be instituted only if “the information presented in the petition . . . and any [preliminary] response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). For the reasons given below, on this record, Petitioner has established a reasonable likelihood that it would prevail in showing the unpatentability of at least one of the Challenged Claims. Accordingly, we institute an *inter partes* review of the Challenged Claims on all grounds raised in the Petition.

B. Related Proceedings

Petitioner identifies the following pending litigation involving the ’078 patent: *Cerence Operating Co. v. Samsung Electronics Co.*, 2:23-cv-00482 (E.D. Tex.) (“Eastern District of Texas Litigation”). Pet. 61–62. Petitioner also identifies their concurrent filing of IPR2024-00979 against U.S. Patent No. 8,081,993 B2, which is a divisional of the ’078 patent. *Id.* Patent Owner identifies the Eastern District of Texas Litigation and *Cerence Operating Co. v. Samsung Electronics Co.*, 2:24-cv-00181 (E.D. Tex.). Paper 10 (Patent Owner’s Mandatory Notices), 1.

C. Real Parties in Interest

Petitioner identifies Samsung Electronics Co., Ltd.; Samsung Electronics, America, Inc.; and Google LLC as real parties in interest. Pet. 61. Petitioner explains that “Google LLC is a subsidiary of XXVI Holdings Inc., which is a subsidiary of Alphabet Inc.” *Id.* at 61 n.10. Petitioner asserts that “XXVI Holdings Inc. and Alphabet Inc. are not real parties-in-interest to this proceeding.” *Id.* Patent Owner identifies Cerence Operating Co. and Cerence, Inc. as real parties in interest. Paper 5, 1. Patent Owner disagrees with Petitioner, contending Alphabet Inc. is also a real party in interest. *Id.* At this stage of the proceeding, we need not determine whether Alphabet Inc. is a real party in interest to Petitioner since neither Petitioner nor Patent Owner has identified any effect that determination would have on the outcome of this proceeding. To the extent Patent Owner seeks to maintain this contention, it should raise the issue in its Patent Owner response.

D. The Asserted Grounds of Unpatentability and Declaration Evidence

Petitioner challenges the patentability of claims 1–17 of the ’078 patent on the following three grounds (Pet. 1):

Claim(s) Challenged	35 U.S.C. §¹	Reference(s)/Basis
1–3, 8–11	103(a)	Dolan ²

¹ The Leahy-Smith America Invents Act (“AIA”) included revisions to 35 U.S.C. § 103 that became effective on March 16, 2013. The ’078 patent was filed before March 16, 2013 (*see, e.g.*, Ex. 1001, code (22)), and, therefore, we apply the pre-AIA version of the statutory basis for unpatentability.

² CA Patent No. 2,275,828 C, issued Jan. 14, 2003 (Ex. 1005, “Dolan”).

Claim(s) Challenged	35 U.S.C. § ¹	Reference(s)/Basis
1, 4–7	103(a)	Dolan, Freedman ³
12, 15–17	103(a)	Dolan, Halonen ⁴
12–14	103(a)	Dolan, Halonen, Freedman

Additionally, Petitioner supports its challenge with a Declaration of Mark R. Lanning (Ex. 1002).

E. The '078 Patent

The '078 patent is directed to “method[s] of sending a voice message via a mobile communication device.” Ex. 1001, code (57). As pertains to the Challenged Claims, the '078 patent is directed to “[a] method of sending a voice message via a mobile communication device” by “generating a non-text representation of [a] received utterance [and] inserting at least some of the non-text representation into a body of a text message.” *Id.* at 8:56–63. Figure 1 is reproduced below:

³ U.S. Patent Application 2004/0073423 A1, published Apr. 15, 2004 (Ex. 1006, “Freedman”).

⁴ U.S. Patent No. 5,887,254 B2, issued Mar. 23, 1999 (Ex. 1007, “Halonen”).

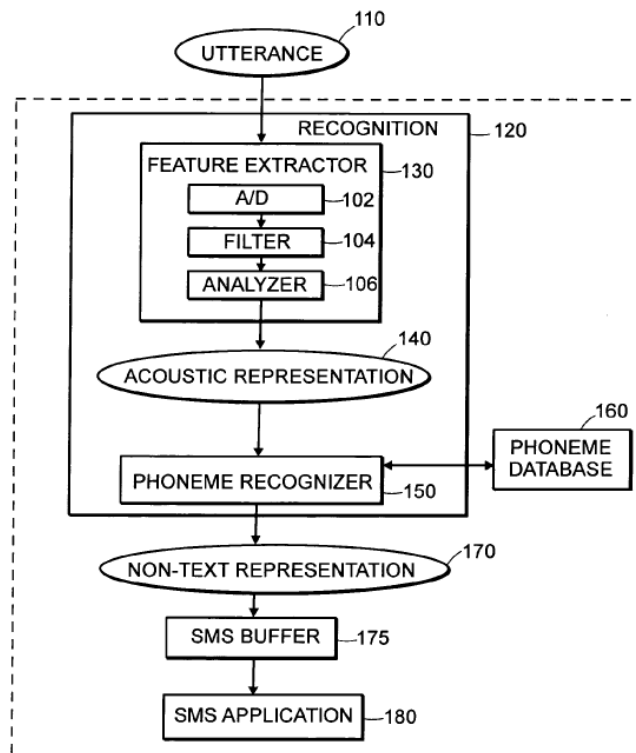


FIG. 1

Figure 1 is a block diagram illustrating “the phonetic recognition system.”
Ex. 1001, 3:24–25.

The method begins when spoken utterance 110 is received by cellular phone 100. Ex. 1001, 3:47–48. Utterance 110 is then received by recognition engine 120 with feature extractor 130 in order to process it into acoustic features. *Id.* at 3:48–50. Feature extractor 130 converts an analog signal using digitizer 102 to convert it into “a sequence of overlapping frames” and then passes it through filter 104 in order to reduce non-speech noise, among other things. *Id.* at 3:51–60. Following the digitization and filtering, the signal goes through analyzer 106 to “extract the relevant acoustic features of the frames.” *Id.* at 3:63–66. Feature extractor 130 then outputs acoustic representation 140 of utterance 110. *Id.* at 3:66–67.

Recognition engine 120 then uses phoneme recognizer 150, along with a set of “phonemes stored in a phoneme database 160,” to perform “a statistical comparison of the acoustic representations of the received utterance with the acoustic representations of the phonemes to identify the best match.” Ex. 1001, 4:22–35.

Phoneme recognizer 150 outputs the recognized sequence of phonemes as a sequence of indices or pointers into its database of phonemes. That is, for each phoneme in the recognized string of phonemes, phoneme recognizer 150 looks up in its database phonemes the particular index or pointer that identifies that phoneme and it outputs that index or pointer. The output is a non-text representation of the spoken utterance, in this case, a phoneme string.

Id. at 4:34–43.

The phoneme string, in this case, is non-text representation 170. Ex. 1001, 4:42–43. The phoneme string is held in SMS buffer 175 for the use of SMS application 180. *Id.* at 4:50–52. When the buffer 175 is either full or the utterance 110 is completed, the SMS application 180 stores the string in the body of an SMS message along with an indicator that alerts the receiving end that it is a non-text string. *Id.* at 4:55–59.

F. Illustrative Claim

Claims 1 and 12 are independent. Claim 1 is illustrative of the claimed subject matter and is reproduced below with Petitioner’s bracketing added for reference:

1. [1pre] A method of sending a voice message via a mobile communication device, said method comprising:
 - [1a] receiving an utterance from a user of the mobile communication device;

[1b] generating a non-text representation of the received utterance;

[1c] inserting at least some of the non-text representation into a body of a text message; and

[1d] sending the text message including at least some of the non-text representation over a wireless messaging channel from the mobile communication device to a recipient's device.

Ex. 1001, 8:56–67; *see* Pet. 13–21 (indicating Petitioner's bracketing).

II. DISCRETIONARY DENIAL

Patent Owner asserts that we should exercise our discretion to deny institution pursuant to 35 U.S.C. § 314(a) because of the advanced state of parallel litigation pending in the Eastern District of Texas Litigation.

Prelim. Resp. 11. Patent Owner asserts that the “six *Fintiv* factors weigh in favor of the Board exercising its discretion to deny institution here.” *Id.* at 11–12 (citing *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5–6 (PTAB Mar. 20, 2020) (precedential)); *see id.* at 12–20 (discussing the *Fintiv* factors).

With our authorization, Petitioner filed Exhibit 1018, an e-mailed letter stipulating that if the Board

institutes this IPR petition on the grounds presented therein, then Samsung will not pursue in the above-captioned litigation any grounds that were raised or reasonably could have been raised in the IPR. For the sake of clarity, this stipulation does not extend to co-petitioner Google, which is not a party to the above-referenced litigation.

Ex. 1018, 1 (e-mail from Jin-Suk Park to James S. Tsuei, dated Dec. 4, 2024) (Petitioner clarifies in the email that “Samsung” refers to both

Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.); *see also* Ex. 3001 (e-mail correspondence with the Board).

As set forth in the Director’s Memorandum, Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (dated June 21, 2022), at 7, *available at* https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621_.pdf,

the PTAB will not discretionarily deny institution of an IPR . . .
in view of parallel district court litigation where a petitioner stipulates not to pursue in a parallel district court proceeding the same grounds as in the petition or any grounds that could have reasonably been raised in the petition.

Petitioner’s stipulation (Ex. 1018) satisfies the language from the Director’s Memorandum quoted above. Therefore, we need not analyze each *Fintiv* factor to reach the determination that we will not exercise our discretion to deny institution in view of the parallel Eastern District of Texas Litigation.

As noted above, Google LLC is not a party to the Eastern District of Texas Litigation and, therefore, the stipulation discussed above does not apply to Google LLC. Nonetheless, its participation here does not alter our analysis because there is no other parallel proceeding in which Google LLC is currently challenging the validity of the ’078 patent. Therefore, Google LLC’s presence in this proceeding does not raise the concerns that a *Fintiv* analysis is designed to address.

III. ANALYSIS

A. Legal Standards – Obviousness

The U.S. Supreme Court set forth the framework for applying the statutory language of 35 U.S.C. § 103 in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966):

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

The Supreme Court explained in *KSR International Co. v. Teleflex Inc.* that

[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit.

550 U.S. 398, 418 (2007) (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” (alteration in original))).

“Whether an ordinarily skilled artisan would have been motivated to modify the teachings of a reference is a question of fact.” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1327 (Fed. Cir. 2016) (citations omitted).

“[W]here a party argues a skilled artisan would have been motivated to combine references, it must show the artisan ‘would have had a reasonable expectation of success from doing so.’” *Arctic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1360–61 (Fed. Cir. 2017) (quoting *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1068–69 (Fed. Cir. 2012)).

B. Level of Ordinary Skill in the Art

Petitioner, supported by Mr. Lanning’s testimony, proposes that a person of ordinary skill in the art at the time of the invention would have had at least a Bachelor’s of Science Degree (or equivalent) in electrical engineering, computer science, or computer engineering, or a related technical field and two years of experience working with mobile or wireless communications networks such as cellular networks, or a related technical field, and familiarity with short message service protocols.

Pet. 12 (citing Ex. 1002 ¶¶ 22–24). Petitioner further proposes that “[a] great amount of education could compensate for fewer years of work experience, and vice versa.” *Id.*

Patent Owner does not currently take a position on the relevant level of ordinary skill in the art, but believes that “the Board could assume Petitioner’s proposed level of ordinary skill for purposes of deciding whether to institute.” Prelim. Resp. 3.

At this stage of the proceeding and on the present record, we adopt Petitioner’s uncontested, proposed level of ordinary skill in the art, which we find consistent with the level of ordinary skill in the art reflected by the ’078 patent and the prior art of record. *See Okajima v. Bourdeau*, 261 F.3d

1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978).

C. Claim Construction

In this *inter partes* review, claims are construed using the same claim construction standard that would be used to construe the claims in a civil action under 35 U.S.C. § 282(b). *See* 37 C.F.R. § 42.100(b) (2020). The claim construction standard includes construing claims in accordance with the ordinary and customary meaning of such claims, as would have been understood by one of ordinary skill in the art at the time of the invention. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc). In construing claims in accordance with their ordinary and customary meaning, we take into account the specification and prosecution history. *Phillips*, 415 F.3d at 1315–17.

If the specification “reveal[s] a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess[,] . . . the inventor’s lexicography governs.” *Phillips*, 415 F.3d at 1316 (citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002)). Another exception to the general rule that claims are given their ordinary and customary meaning is “when the patentee disavows the full scope of a claim term either in the specification or during prosecution.” *Uship Intellectual Props., LLC v. United States*, 714 F.3d 1311, 1313 (Fed. Cir. 2013) (quoting *Thorner v. Sony Computer Entm’t Am., LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)).

Additionally, only terms that are in controversy need to be construed, and these need be construed only to the extent necessary to resolve the controversy. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375

(Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

At this time, neither party proposes specific construction of any given claim term, instead requesting the claims be given their plain and ordinary meaning. Pet. 12–13; Prelim. Resp. 5.

D. Ground 1: Obviousness over Dolan

Petitioner, relying on the testimony of Mark Lanning, contends that claims 1–3 and 8–11 would have been obvious to one of ordinary skill in the art in light of Dolan. Pet. 13–35. Patent Owner opposes Petitioner’s challenge. *See, e.g.*, Prelim. Resp. 6–9.

1. Scope and Content of the Prior Art

a. Dolan (Ex. 1005)

Dolan is directed to an apparatus and methods for “using discrete message-oriented services to deliver short audio communications.” Ex. 1005, code (54) (Title). Dolan’s Figure 1 is reproduced below:

FIG. 1

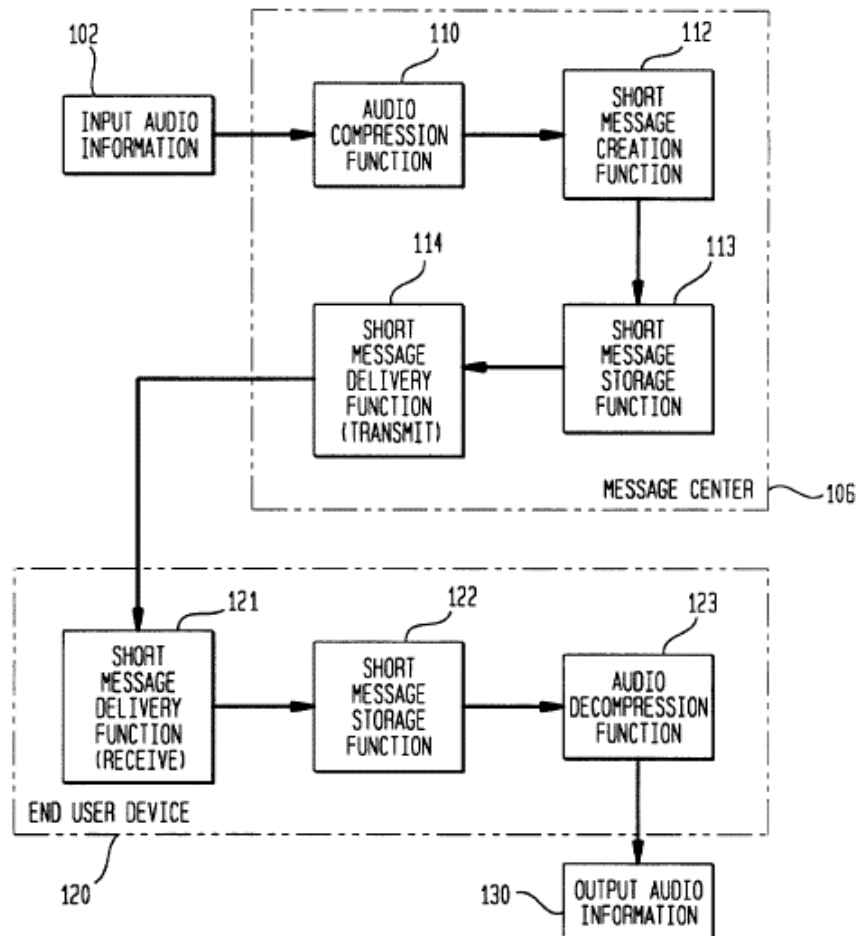


Figure 1 is a block diagram of a system for using Short Message Service (“SMS”) to deliver an audio message to an end user device. *Id.* at 5:25–27.⁵ The figure depicts the flow of information from block 102 (“Input audio information”) through a message center to an end user device that outputs the audio information at block 130. *Id.* at 10:27–13:27, Fig. 1.

⁵ Citations are to the native page numbers in Dolan.

Dolan further explains the invention depicted in Figure 1 as follows:

This invention allows audio messages to be sent to and from remote receiving devices such as mobile telephones, through the adaptation of already existing technologies, in combination with new communications structures, in order to provide new functions. In a preferred embodiment of the invention, a short audio message, e.g., “Call home, emergency!”, is encoded and delivered directly to a digital mobile station via Short Message Service or another discrete message-oriented service. . . .

. . .

In a preferred embodiment of the invention, a segment of audio information is first captured, the captured information is encoded by means of any audio compression technology known in the art, such as the technology used in voice coding schemes on wireless networks, and the compressed information is stored at a message center or other facility that provides mailbox services to end users. . . .

As a general proposition, in each of these compression techniques a voice signal is prepared for digital transmission by band-limiting and sampling at a convenient pre-specified frequency (such as 8 kHz). Each sample is then encoded into multi-bit PCM for transmission. At the receiver, the sample is then decoded in order to recreate the original voice signal. . . .

The compressed audio information is next transmitted by means of Short Message Service or another discrete message-oriented service to the end user. The Short Message containing the compressed audio information is received at an end user device, the audio information is decompressed, and the decompressed audio information is played back to the end user (the intended message recipient).

Ex. 1005, 6:13–8:2.

Dolan teaches that the “Short Message” containing the encoded audio information also contains fields indicating the contents of the Short Message and the type of decompression technique needed to reconstitute the audio information. Ex. 1005, 8:11–13. These fields are depicted in Dolan’s Figure 4, reproduced below.

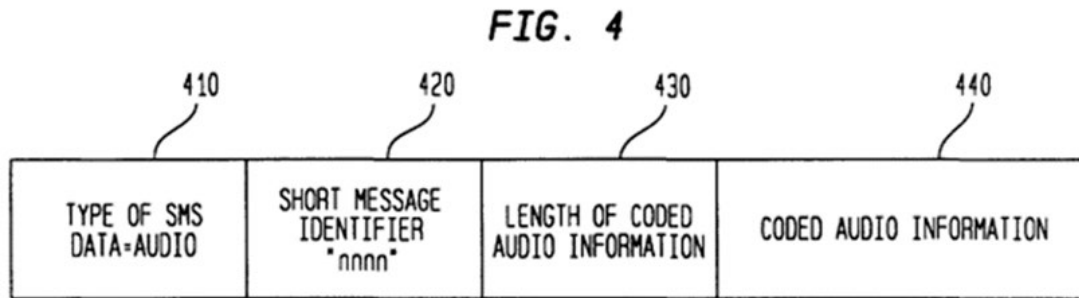


Figure 4 shows “the major fields” of a Short Message Service message, one of which contains the coded audio information.⁶ Ex. 1005, 6:6–7. Dolan further discloses that:

As seen in Fig. 4, the major fields in a Short Message Service message used to carry coded audio information are a Type of Data field 410, indicating that the associated message is an Audio message and including information on the type of translator needed to decompress and decode the message field in order to retrieve the audio message, a Short Message Identifier field (“nnnn”) 420 that is specified by the SMS or other standard, a Length field 430 indicating the overall coded message length, and the coded audio information 440.

Id. at 8:14–20.

⁶ For messages that are too long to fit the coded audio information plus the contents of the three other fields shown in Figure 4 into a single SMS message, Dolan describes a similar alternate structure, which is shown in Figure 5. Ex. 1005, 9:16–10:16, Fig. 5.

2. *Claim 1*

a. *[1pre]*

[1pre] recites “[a] method of sending a voice message via a mobile communication device, said method comprising[.]” Ex. 1001, 8:56–57. Petitioner contends, “[t]o the extent that the preamble is limiting, Dolan discloses or suggests this feature.” Pet. 13 (citing Ex. 1002 ¶¶ 81–89). Petitioner asserts “Dolan discloses that the ‘present invention relates to delivery of audio messages to or from remote receiving units such as mobile telephones and, in particular, to a method for using Short Messaging Service [(“SMS”)] or other discrete message-oriented services to deliver audio messages.’” *Id.* (citing Ex. 1005, 1:4–6) (emphasis omitted). Petitioner further asserts that “[a] POSITA would have understood that the audio messages discussed in Dolan encompass voice messages.” *Id. at 14* (citing Ex. 1002 ¶¶ 86–88) (emphasis omitted). Petitioner further states that “Dolan discloses encoding audio messages using ‘technology used in voice coding schemes on wireless networks.’” *Id.* (citing Ex. 1005, 7:9–12) (emphasis omitted).

In the Preliminary Response, Patent Owner does not challenge Petitioner’s contentions regarding the preamble of claim 1. *See generally* Prelim. Resp.

We find, at this stage of the proceeding and on the present record, that Petitioner has shown Dolan satisfies the preamble of claim 1 for the reasons provided by Petitioner.

b. *Element [1a]*

Element [1a] recites “receiving an utterance from a user of the mobile communication device[.]” Ex. 1001, 8:58–59. Petitioner contends “Dolan

discloses or suggests this feature.” Pet. 14 (citing Ex. 1002 ¶¶ 90–94).
Petitioner asserts that Dolan discloses sending an audio message, which “can be a user speaking the words, for example, ‘[c]all home, emergency!’” *Id.* at 15 (citing Ex. 1005, 6:16–17). Petitioner alleges a POSITA would understand this to constitute an utterance. *Id.* (citing Ex. 1002 ¶ 93).
Petitioner also contends that Dolan discloses the “the end user device may be a digital mobile telephone handset” and that “the digital mobile telephone handset receives the audio message.” *Id.* (citing Ex. 1005, 15:5–13).

In the Preliminary Response, Patent Owner does not challenge Petitioner’s contentions regarding element [1a]. *See generally* Prelim. Resp.

We find Petitioner’s arguments persuasive as to element [1a] and supported on the record before us for the reasons explained by Petitioner.

c. Element [1b]

Element [1b] recites “generating a non-text representation of the received utterance.” Ex. 1001, 8:60–61. Petitioner contends “Dolan discloses or suggests this feature.” Pet. 16 (citing Ex. 1002 ¶¶ 95–102).

Petitioner asserts the audio information in Dolan is encoded and compressed digitally. *Id.* (citing Ex. 1005, 15:12–13). Petitioner further states “normal speech is converted to a ‘compressed digital’ form utilizing various vocoders already utilized by mobile phones.” *Id.* at 16–17 (citing Ex. 1005, 11:8–10). Petitioner then contends the compressed audio information in Dolan is a “non-text representation of voice/speech because it is a compressed version of an audio signal that is no human readable text.” *Id.* at 17 (citing Ex. 1002 ¶ 100). Petitioner further asserts that the ’078 patent contemplates the usage of a vocoder to generate a non-text

representation of the audio as an alternative to a phoneme recognizer. *Id.* (citing Ex. 1001, 6:58–61; Ex. 1002 ¶ 101).

In the Preliminary Response, Patent Owner does not challenge Petitioner’s contentions regarding element [1b]. *See generally* Prelim. Resp.

We find Petitioner’s arguments persuasive as to element [1b] and supported on the record before us for the reasons explained by Petitioner.

d. Element [1c]

Element [1c] recites “inserting at least some of the non-text representation into a body of a text message.” Ex. 1001, 8:62–63. Petitioner contends “Dolan discloses or suggests this feature.” Pet. 18 (citing Ex. 1002 ¶¶ 103–13). Petitioner relies on their mapping of “compressed audio information” in element [1b] to fulfill the restriction of the “non-text representation.” *See id.* 18–21.

Petitioner asserts that, in Dolan, “the compressed audio is ‘formatted into one or more Short Messages by the End User Short Message Creation Function 306.’” Pet. 18 (citing Ex. 1005, 15:17–18). Petitioner states, as established in Dolan prior to its claimed enhancements, Short Message Service (“SMS”) “is currently utilized only to deliver messages to mobile stations as short text messages.” *Id.* (citing Ex. 1005, 1:18–19) (emphasis omitted). Petitioner additionally states “[SMS] capability is two-way, i.e. a digital phone user can both receive and send short text messages utilizing this technology” and that “an object of the present invention is to utilize [SMS] or other existing text message-oriented services to deliver short audio messages.” *Id.* (citing Ex. 1005, 2:20–21, 3:1–3) (emphasis omitted). Petitioner asserts this is consistent with the teachings of the ’078 patent,

which discloses “the text message is an SMS message.” *Id.* at 19 (citing Ex. 1001, 2:32–33).

Petitioner then contends that “Dolan discloses that the Message Center Short Message Creation Function formats the compressed audio information and inserts it into one or more Short Messages.” Pet. 19 (citing Ex. 1005, 15:18–21, 4:20–21). Petitioner refers to aforementioned Dolan Figure 4, *see supra* § III.D.1.a, to establish four major fields associated with SMS messages which would all fit into a single SMS message: Type of Data field 410, Short Message Identifier field ‘nnnn’ 420, Length of Coded Audio Information field 430, and Coded Audio Information 440. *Id.* at 19–20 (citing Ex. 1005, 8:20–24, Fig. 4). Petitioner argues that one of ordinary skill in the art “would have understood coded audio information 440 to comprise a body of the SMS message as it contains the encoded, compressed audio information that is being transmitted by the SMS message.” *Id.* at 20 (citing Ex. 1002 ¶ 111). Alternatively, Petitioner argues that at the very least, “a POSITA would have understood the encoded, compressed audio information to have been inserted into the body of the SMS message because fields 410–440 together comprise the SMS message where the audio message is part 440.” *Id.* (citing Ex. 1002 ¶ 112).

In the Preliminary Response, Patent Owner challenges Petitioner’s contentions regarding element [1c]. *See* Prelim. Resp. 6–9. Patent Owner’s primary contention regarding element [1c] is that “the disclosures relied upon from Dolan do not utilize a ‘text message’ under the plain and ordinary meaning of the term.” *Id.* at 6. Patent Owner argues that the “Short Messages” mentioned in Dolan are distinct from the known “Short Message Service (SMS).” *Id.* (citing Ex. 1005, 1:18–19). Patent Owner also asserts

that the mapping of Dolan's Figure 4 to the challenged claim is inaccurate, again stating that the Short Messages in Dolan are different and that "there is no field in Dolan's Figure 4 that contains text or that could contain text." *Id.* at 6–7. Further, Patent Owner contends that the result of Dolan's enhancements to the SMS system "are not 'text messages' under the plain meaning of that term as understood by those skilled in the art." *Id.* at 7. Rather, Patent Owner contends Dolan's "'coded audio' is digital, compressed multi-bit pulse-code modulated (PCM) audio" and it "cannot carry a 'text message' or be the body of a 'text message.'" *Id.* at 7–8 (citing Ex. 1005, 7:17–23).

Patent Owner admits there are embodiments of the '078 patent that use SMS messages and some dependent claims recite that "the text message is an SMS message," but argues that SMS messages are not all inherently text messages. Prelim. Resp. 8 (Ex. 1001, 9:24–26, 10:25–27). Patent Owner contends "[t]he teachings of the '078 patent are entirely consistent with the plain meaning of a 'text message' as a type of communication that contains or at the very least is capable of containing text." *Id.* Patent Owner also asserts that the '078 patent's preferred embodiments "depend on the ability to send text 'characters' within the text message." *Id.*

Patent Owner again states "Dolan fails to teach a 'body of a text message' into which the 'non-text representation' is inserted, and the Petition fails to argue it would have been obvious to modify Dolan to do so." Prelim. Resp. 9. Accordingly, Patent Owner believes Petitioner failed to meet its burden of showing Dolan discloses each aspect required of element [1c]. *Id.*

We find Petitioner’s arguments persuasive as to element [1c] and supported on the current record. As stated previously, we accept Petitioner’s mapping of “compressed audio information” in element [1b] to fulfill the restriction of the “non-text representation.” *See supra* § III.D.2.c. Element [1c] additionally requires that at least part of this “non-text representation” is inserted into “the body of a text message.” *See* Ex. 1001, 8:62–63. Fundamentally, Petitioner’s analysis and argument equates text messages and SMS messages. *See* Pet. 18–19 (discussing Dolan’s use of SMS to send its coded audio information and asserting that the ’078 patent “identifies SMS messages as a form of text messages” (citing Ex. 1001, 2:31–32)). Petitioner’s argument is supported by the testimony of Mr. Lanning, in which he also equates an SMS message and a text message. *See, e.g.*, Ex. 1002 ¶¶ 112 (testifying as to “the SMS body”), 113 (equating coded audio information field 440 of an SMS message with a body of a text message). At this stage, Patent Owner’s arguments that an SMS message is not necessarily a text message and that Dolan’s coded audio information field 440 is distinct from the body of a text message are unsupported attorney argument on the present record. *See generally* Prelim. Resp.; *see also Icon Health and Fitness, Inc. v. Strava, Inc.*, 849 F.3d 1034, 1046 (Fed. Cir. 2017) (“Attorney argument is not evidence or explanation in support of a conclusion.” (citing *Gemtron Corp. v. Saint-Gobain Corp.*, 572 F.3d 1371, 1380 (Fed. Cir. 2009))).

At this juncture, we are persuaded by Petitioner’s arguments as to element [1c] based on the evidence currently of record. First, the ’078 patent describes sending a non-text representation “in the body of an SMS message.” Ex. 1001, 3:38–40. Second, claim 8 recites “and the text

message is an SMS message.” *Id.* at 9:24–26 (claim 8). Thus, even if not all SMS messages are text messages, we find Dolan at least suggests element 1[c] for the reasons explained by Petitioner. To the extent that this issue is raised after institution, the parties are encouraged to further develop the record as to the meaning of “text,” “text message,” and “non-text representation,” and to address the issue of whether an “SMS” message is necessarily a “text message.”

e. Element [1d]

Element [1d] recites “sending the text message including at least some of the non-text representation over a wireless messaging channel from the mobile communication device to a recipient’s device.” Ex. 1001, 8:64–67. Petitioner contends “Dolan discloses or suggests this feature.” Pet. 21 (citing Ex. 1002 ¶¶ 114–35).

Petitioner asserts Dolan discloses “the End User Short Message Delivery Function - Transmit 315 initiates transmission of the Short Message(s) [containing the compressed audio information] to Message Center 106 where they are received by the Message Center Short Message Delivery Function - Receive 325.” *Id.* at 21 (citing Ex. 1005, 15:28–16:3). Petitioner further contends the Transmit and Receive functions can be implemented by using methods used in other embodiments throughout Dolan, which could be SMS. *Id.* at 21–22 (citing Ex. 1005, 16:3–6, 8:2–3; Ex. 1002 ¶ 118).

Petitioner established Dolan’s disclosure of a mobile communication device in element [1pre], *see supra* § III.D.2.a, but further asserts Dolan’s mention of “GSM, TDMA, and CDMA” as alternative wireless communication standards would have led a POSITA to understand that the

“user devices” in Dolan are mobile communication devices or “cellular phones.” Pet. 22–23 (citing Ex. 1005, 11:16–21; Ex. 1002 ¶¶ 119–23). Petitioner additionally contends “Dolan states the ‘flow of the audio information is from the End User Device 120 to the Message center 106 for subsequent delivery to a second end user.’” *Id.* at 24 (citing Ex. 1005, 15:5–7) (emphasis omitted). Petitioner’s expert also states that even though the figures do not show a second end user device “that would not have altered a POSITA’s understanding of Dolan as a whole, especially in view of its written description.” *Id.* (citing Ex. 1002 ¶ 128).

In the Preliminary Response, Patent Owner does not challenge Petitioner’s contentions regarding element [1d]. *See generally* Prelim. Resp.

We find each of Petitioner’s alternative arguments persuasive as to element [1d] and supported on the record before us for the reasons explained by Petitioner.

f. Summary as to Claim 1

For the reasons discussed above, on the present record we find that Petitioner has established that Dolan teaches or suggests each of the elements of claim 1.

3. Claims 2, 3, and 8–11

Each of claims 2, 3, and 8–11 depends from claim 1. Petitioner sets forth a detailed discussion of each of these dependent claims with evidence supporting its contention that the subject matter of these claims would have been obvious to one of ordinary skill in the art in light of Dolan. Pet. 27–35. Patent Owner relies on the same argument directed to element 1[c] in response to Petitioner’s challenge of these claims. Prelim. Resp. 9. We have reviewed Petitioner’s contentions as to claims 2, 3, and 8–11 and we

find them sufficiently supported on the record before us for the reasons explained by Petitioner. Pet. 27–35. Additionally, for the same reasons discussed in the context of element 1[e] above, Patent Owner’s attorney arguments are not supported on the present record. Accordingly, we find that Petitioner has established that Dolan teaches or suggests the subject matter of claims 2, 3, and 8–11.

4. Objective Indicia of Nonobviousness

In the record presently before us, neither Petitioner nor Patent Owner has presented any evidence of objective indicia of nonobviousness.

5. Weighing the Graham Factors

“Once all relevant facts are found, the ultimate legal determination [of obviousness] involves the weighing of the fact findings to conclude whether the claimed combination would have been obvious to an ordinary artisan.” *Arctic Cat*, 876 F.3d at 1361. On balance, considering the record presently before us, Petitioner has established a reasonable likelihood that it would prevail in showing that Dolan would have rendered the subject matter of claims 1–3 and 8–11 of the ’078 patent obvious to one of ordinary skill in the art at the time of the invention.

E. Ground 1B: Obviousness over Dolan and Freedman

Ground 2A: Obviousness over Dolan and Halonen

Ground 2B: Obviousness over Dolan, Halonen, and Freedman

Petitioner additionally asserts Grounds 1B, 2A, and 2B as additional challenges. Freedman is relied upon by Petitioner to disclose a phoneme-based compression technique. Pet. 36. Halonen is relied upon to challenge independent claim 12 and is used to disclose typical cellular phone hardware. *Id.* at 11, 2.

Patent Owner’s Preliminary Response does raise substantive arguments directed to Petitioner’s Grounds 1B, 2A, and 2B. *See* Prelim. Resp. 9–11. However, we have determined above that, at this stage of the proceeding and on the present record, the information presented in the Petition shows that there is a reasonable likelihood that Petitioner will prevail with respect to its challenge based on the combination of Dolan (Ground 1A). Accordingly, we need not address, in this Decision, Petitioner’s additional challenges (Grounds 1B, 2A, and 2B). *See* 35 U.S.C. § 314(a); *SAS Inst., Inc. v. Iancu*, 584 U.S. 357, 365 (2018) (“Section 314(a) does not require the Director to evaluate every claim individually. Instead, it simply requires him to decide whether the petitioner is likely to succeed on ‘at least 1’ claim. Once that single claim threshold is satisfied, it doesn’t matter whether the petitioner is likely to prevail on any additional claims; the Director need not even consider any other claim before instituting review.”); 37 C.F.R. § 42.108(a).

IV. CONCLUSION

For the reasons discussed above, we do not exercise our discretion to deny institution. Additionally, Petitioner has demonstrated a reasonable likelihood that it would prevail in showing that at least one claim of the ’078 patent is unpatentable. Our analysis is based on the preliminary record developed thus far and may change after the record is developed fully, during trial.

V. ORDER

Accordingly, it is:

ORDERED that, pursuant to 35 U.S.C. § 314(a), *inter partes* review is instituted as to claims 1–17 of the '078 patent on each ground set forth in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of the '078 patent shall commence on the entry date of this Decision, and notice is hereby given of the institution of a trial.

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