

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SNAP, INC.,
Petitioner,

v.

SRK TECHNOLOGY LLC,
Patent Owner.

IPR2020-00819
Patent 8,996,059 B2

Before KRISTEN L. DROESCH, GEORGIANNA W. BRADEN, and
CHARLES J. BOUDREAU, *Administrative Patent Judges*.

DROESCH, *Administrative Patent Judge*.

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

I. INTRODUCTION

We have authority to hear this *inter partes* review under 35 U.S.C. § 6, and this Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons that follow, we determine that Petitioner establishes by the preponderance of the evidence that claims 1, 2, 4–13, 15–19, 21–25, 30, 32–37, and 46–48 of U.S. Patent No. 8,996,059 (Ex. 1001, “’059 Patent”) are unpatentable.

A. Procedural History

Snap Inc. (“Petitioner”) filed a Petition requesting an *inter partes* review of claims 1, 2, 4–13, 15–19, 21–25, 30, 32–37, and 46–48 of the ’059 Patent. Paper 2 (“Pet.”). SRK Technology LLC (“Patent Owner”) filed a Preliminary Response. Paper 9 (“Prelim. Resp.”). Pursuant to our authorization, Petitioner filed a Reply to the Preliminary Response (Paper 11) to address the issue of discretionary denial under 35 U.S.C. §§ 314(a), 325(d), to which Patent Owner filed a Sur-reply (Paper 13). Pursuant to 35 U.S.C. § 314, we instituted trial on October 21, 2020, as to all of the challenged claims of the ’059 Patent (Paper 15, “Institution Decision” or “Dec.”).

After institution of trial, Patent Owner filed a Response (Paper 27, “PO Resp.”), to which Petitioner filed a Reply (Paper 29, “Pet. Reply”), to which Patent Owner filed a Sur-reply (Paper 33, “PO Sur-reply”).

Petitioner relies on a Declaration of Christopher M. Schmandt (“Mr. Schmandt,” Ex. 1002) to support its Petition. Patent Owner relies on a Declaration of Andrew Cromarty, Ph.D. (“Dr. Cromarty,” Ex. 2016) to support its Response. Petitioner relies on a second Declaration of Mr. Schmandt (Ex. 1024) in support of its Reply. Patent Owner relies on a

second Declaration of Dr. Cromarty (Ex. 2031) to support its Sur-reply. Mr. Schmandt and Dr. Cromarty were cross-examined during trial, and transcripts of Mr. Schmandt's depositions (Exs. 2017, 2023) and Dr. Cromarty's depositions (Exs. 1025, 1036, 2032) are included in the record.

Pursuant to our authorization (Paper 34), Petitioner filed Observations on Cross-Examination Testimony of Dr. Andrew Cromarty (Paper 38), to which Patent Owner filed Objections to Petitioner's Observations (Paper 41).

Oral argument was held on July 23, 2021. A transcript of the oral argument is included in the record. Paper 45 ("Tr.").

B. Related Matters

The parties indicate the '059 Patent is or has been the subject of litigation in *SRK Technology LLC v. Snap, Inc.*, Case No. 2:19-cv-02515-PSG-JPR (C.D. Cal). *See* Pet. 1; Paper 4, 2; Paper 7, 2. Patent Owner further indicates that the proceeding in IPR2020-00820 challenging claims of U.S. Patent No. 9,930,159 would affect, or may be affected by, a decision in this proceeding. *See* Paper 4, 2; Paper 7, 2.

C. The '059 Patent (Ex. 1001)

The '059 Patent relates to a method and system for determining a communication mode for recording a media message on a communication device. *See* Ex. 1001, code (57). The method and system includes an adaptive recording application executable by a processor configured to record the media message on the communication device. *See id.* at 6:61–64. The adaptive recording application detects activation (e.g., click, touch, press, push, tap) of an interface element on the communication device for

initiating the recording of the media message. *See id.* at 6:64–7:4. The adaptive recording application determines the duration of the activation of the interface element and compares the duration with one or more configurable timing parameters. *See id.* at 7:11–20, Fig. 1A. The configurable timing parameters can be fixed as a system settable parameter, a user-settable parameter, or may vary, and can be calculated based on the type of communication device, characteristics of the user, user interactions, past interactions, etc. *See id.* at 7:34–39. The adaptive recording application can learn and change the configurable timing parameters based on the user's behavior with the adaptive recording application. *See id.* at 7:42–45. Based on the duration of the activation of the interface element, the adaptive recording application selects one of the communication modes. *See id.* at 7:46–51. For example, the adaptive recording application can select the tap-to-start communication mode if the duration of the activation is less than a critical time, or can select the push-to-talk communication mode if the duration of the activation is greater than the critical time. *See id.* at 7:51–56, Fig. 2. The adaptive recording application triggers recording of the media message in the selected mode. *See id.* at 7:57–58.

In another embodiment, the adaptive recording application, upon detection of activation of the interface element, determines the presence or absence of a media signal during and/or after the activation of the interface element, and selects one of the communication modes for recording based on the presence or absence of the media signal. *See Ex. 1001, 7:62–9:9, Fig. 1B.* In yet another embodiment, the adaptive recording application, upon detection of activation of the interface element, determines the duration of the activation of the interface element, determines the presence or absence

of a media signal during and/or after the activation of the interface element, and selects one of the communication modes for recording based on a comparison of the duration of the activation element with one or more configurable timing parameters and the presence or absence of a media signal. *See id.* at 10:8–39, Fig. 1C.

D. Illustrative Claims

Claims 1, 12, 18, 30, and 46 are independent and claims 2, 4–11, 13, 15–17, 19, 21–25, 32–37, 47, and 48 variously depend therefrom. Claims 1 and 12 are illustrative and reproduced below:

1. A computer implemented method for determining a communication mode for recording a media message on a communication device, comprising:
 - providing an adaptive recording application executable by at least one processor configured to record said media message on said communication device;
 - detecting activation of an interface element on said communication device for initiating said recording of said media message by said adaptive recording application;
 - determining a duration of said activation of said interface element by said adaptive recording application;
 - comparing said duration of said activation of said interface element with one or more configurable timing parameters by said adaptive recording application; and
 - selecting, in response to said detection of said activation of said interface element, one of a plurality of communication modes for recording said media message by said adaptive recording application based on said comparison of said duration of said activation of said interface element with said one or more configurable timing parameters.

Ex. 1001, 26:35–55.

12. A computer implemented method for determining a communication mode for recording a media message on a communication device, comprising:
 - providing an adaptive recording application executable by at least one processor configured to record said media message on said communication device;
 - detecting activation of an interface element on said communication device for initiating said recording of said media message by said adaptive recording application;
 - determining one of a presence and an absence of a media signal during and/or after said activation of said interface element; and
 - selecting, in response to said detection of said activation of said interface element, one of a plurality of communication modes for recording said media message by said adaptive recording application based on said determination of said one of said presence and said absence of said media signal.

Ex. 1001, 27:50–67.

E. Asserted Challenges to Patentability and Asserted Prior Art

Petitioner asserts the following challenges to the patentability of claims 1, 2, 4–13, 15–19, 21–25, 30, 32–37, and 46–48:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1, 2, 4–6, 18, 21, 22, 30, 32, 33, 46, 47	103 ¹	Newman ² , Araki ^{3,4} , Trewin ⁵
7–13, 15–19, 23–25, 30, 34–37, 46, 48	103	Newman, Araki, Trewin, Ronkainen ⁶
12, 13, 15–17	103	Newman, Araki, Ronkainen

II. ANALYSIS

A. Claim Construction

The Board applies the same claim construction standard as applied in federal courts in civil actions under 35 U.S.C. § 282(b), generally referred to as the *Phillips* standard. *See* 37 C.F.R. § 42.100(b) (2019); Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340, 51,341 (Oct. 11, 2018) (now codified at 37 C.F.R. § 42.100(b) (2019)); *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). Under the *Phillips* standard, words of a claim are generally given their ordinary and customary meaning. *Phillips*, 415 F.3d at 1312.

¹ Petitioner challenges patentability under AIA 35 U.S.C. § 103. *See* Pet. 5 (citing Ex. 1013, 3).

² Ex. 1003, US Patent No. 9,063,629 B2, issued June 23, 2015 (“Newman”).

³ Ex. 1005, JP 3888584 B2, issued March 7, 2007 (English translation).

⁴ Ex. 1004, Original Japanese language of Ex. 1005 (“Araki”).

⁵ Ex. 1007, US Patent No. 6,948,136 B2, issued Sep. 20, 2005 (“Trewin”).

⁶ Ex. 1006, US Patent No. 7,721,227 B2, issued May 18, 2010 (“Ronkainen”).

Petitioner contends that no explicit claim constructions are necessary for any claim term or phrase. *See* Pet. 8. Nonetheless, Petitioner advances claim constructions for “recording,” “adaptive recording application,” “configurable timing parameter,” “communication mode,” and “critical time” in the portions of the Petition addressing the challenges to patentability. *See id.* at 18–19, 27–28, 33, 36. Patent Owner does not appear to dispute Petitioner’s constructions for these terms. *See generally* PO Resp. In addition, we note that the ’059 Patent provides explicit definitions or descriptions for the following terms that appear in the claims: “media message,” “communication mode,” “interface element,” “duration of activation,” “configurable timing parameters,” “critical time,” “media signal,” “lower threshold time,” and “upper threshold time.” *See, e.g.,* Ex. 1001, 2:59–4:14, 4:56–5:14, 6:28–60, 7:12–45, 8:10–21, 13:50–58.

As demonstrated in the analysis below, we need not construe any claim terms or phrases. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (“[W]e need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

B. Principles of Law

A claim is unpatentable under 35 U.S.C. § 103 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) if in the record, evidence of objective indicia of nonobviousness, i.e., secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

C. Level of Ordinary Skill in the Art

Petitioner asserts:

[a] person of ordinary skill as of July 2012 would have possessed at least a bachelor's degree in electrical engineering or computer science, and two years of work experience in multimedia data communications and user interfaces. A person could also have qualified with more formal education and less technical experience, or vice versa.

Pet. 5 (citing Ex. 1002 ¶¶ 15–21). Patent Owner does not dispute Petitioner's assertions addressing the skill level of a person of ordinary skill in the art. *See generally* PO Resp. We adopt Petitioner's definition of a person of ordinary skill in the art as it is consistent with the evidence of the level of ordinary skill in the art provided by the prior art references. *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).

D. Challenges to Patentability

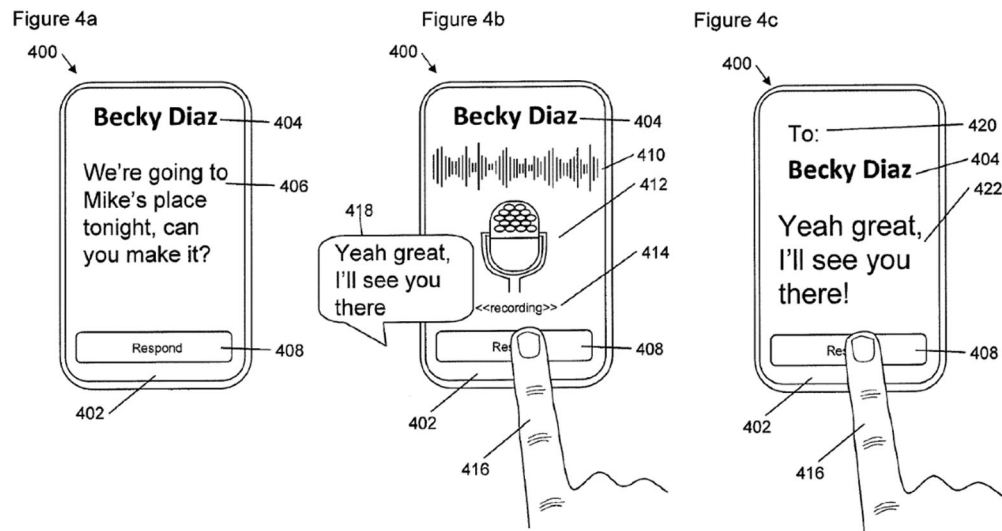
1. Patentability Challenge to Claims 1, 2, 4–6, 18, 21, 22, 30, 32, 33, 46, and 47 over Newman, Araki, and Trewin

a. Overview of Newman (Ex. 1003)

Newman is directed to hand-held portable electronic devices that may provide one or more of audio/text/video communication functions and/or text transmission, interactive/non-interactive viewing functions, music

recording/playing functions, downloading/sending of data functions, image capture functions, and gaming functions. *See* Ex. 1003, 1:6–26. The portable electronic devices provide a mode of operation with intermediate functionality (i.e., second mode) between an active first mode that allows a user to generally interact with the device and access the full functionality of the device and a standby-type or sleep-type mode (i.e., third mode) where the full availability of options is disabled. *See id.* at 7:19–42, 8:43–55, 10:41–49. The second mode of operation with intermediate functionality allows the user to access desired information directly, without the need for the user to consider which on-screen or menu option the user needs to select in order to interact with the desired information. *See id.* at 7:43–47, 9:1–10. “Operating a device using locked user interaction in an intermediate-type operating mode using specific limited user inputs may require a lower level of competence and ability of the user than operating a device allowing general unlocked user interaction.” *Id.* at 7:62–67. When a portable electronic device is operating in the intermediate type mode, the battery life may be prolonged and the processing activity may be reduced, requiring reduced battery recharging frequency and providing increased application speed. *See id.* at 8:1–9.

Figures 4a through 4c of Newman are reproduced below.



Figures 4a through 4c are illustrations depicting a user responding to a message received from a third party by dictating a message while operating in the mode of intermediate functionality. *See* Ex. 1003, 6:50–51, 6:56–58, 12:8–9. Figure 4a shows device 400 with touch-sensitive screen 402 displaying text message 406 received from third party 404. *See id.* at 10:51–53. Figure 4b shows a user has performed a locked user interaction of touching and holding down “respond” button 408 with finger 416. *See id.* at 10:55–57. Holding “respond” button 408 has activated device 400 to record sound for the duration of the activating user input, i.e., while “respond” button 408 is held. *See id.* at 10:59–61. Rather than holding down a dedicated button to provide activating user input, a first touch may begin recording and a second touch may end recording. *See id.* at 10:64–65, 11:2–4. Figure 4b shows the user dictating message 418 while holding “respond” button 408. *See id.* at 11:9–12. The device may be configured to operate voice recognition software to convert the user’s recorded voice into text message 422. *See id.* at 11:25–27. Figure 4c shows the user has stopped speaking, but the user would like to check that message 422 appears

as they wish before it is transmitted by continuing to hold down “respond” button 408. *See id.* at 11:43–49. To indicate that device 400 has recognized that the user has finished speaking, the word “To” 420 appears to show that message 422 as dictated will be sent to third party 404. *See id.* at 11:49–52. Releasing the press on the button automatically terminates the activating user input and begins the transmission of message 422 to third party 404. *See id.* at 11:60–65, Fig. 4d. The device also is configured to record the user’s voice message and transmit an audio recording of the message rather than a text version. *See id.* at 11:27–33.

b. Overview of Araki (Exs. 1004, 1005)

Araki discloses a speech-recognizing device that comprises a microphone-button-detecting portion for detecting an ON operation or both an ON operation and an OFF operation of a microphone button that is operated when the user is to speak. *See* Ex. 1005 ¶¶ 15, 41. A speech-recognizing portion of the device carries out speech recognition based on the timing of the ON operation, or timing of both an ON and an OFF operation, detected by the microphone-button-detecting portion. *See id.* ¶¶ 15, 41. The user can operate the microphone button in two different methods, and includes a comparison of the pressing time interval against a set time interval. *See id.* ¶ 16. The microphone button can be operated in a first operating method of pressing for at least one second or a second operating method of pressing for less than one second. *See id.* ¶ 69, Fig. 5 (step S14). When operating in the first operating method, wherein the microphone button has been pressed for at least one second, the device determines the ending time based on the time at which the microphone button is released and stops speech recognition. *See id.* ¶ 69, Fig. 5

(step S14: YES). When the microphone button has been pressed for less than one second, the device performs speech recognition on the sound that is inputted after releasing the microphone button up until a nonspeech segment continues for at least three seconds. *See id.* ¶¶ 69, 71, Fig. 5 (step S14: NO).

c. Overview of Trewin (Ex. 1007)

Trewin discloses automatic, dynamic configuration of input devices used to control computer systems in order to accommodate the control requirements of users who have differing abilities, or users operating in a context which affects their control of an input device. *See Ex. 1007*, 1:13–19, 3:43–46, 4:58–63. The input device may comprise a physical device, such as a keyboard, mouse, or binary switch, or a less tangible means, such as speech input, and is used to control a target device such as a personal computer, household appliance, etc. *See id.* at 4:64–5:6. The input device has a number of software implemented configuration options that include the delay before a key on a keyboard starts to repeat – key repeat delay (KRD). *See id.* at 5:9–19, 8:55–58. For KRD, as the user presses keys on the keyboard, these actions generate key down and key up events that are passed to the operating system and automatic configuration agent software. *See id.* at 8:58–66, Fig. 8. Within the automatic configuration agent, the events are processed by an input monitor that passes the events to an analyzer and a user change recognizer. *See id.* at 8:66–9:3, Fig. 8. The analyzer uses the events to calculate an appropriate KRD. *See id.* at 9:3–6. Based on detection of a change in user, the analyzer responds by restarting its calculations and passes a recommended KRD for a new user to a configurer to update the KRD. *See id.* at 9:6–21, 9:45–59, 10:28–48, 11:36–44; Figs. 8, 10, 12.

d. Analysis of Claim 1

(1) A computer implemented method for determining a communication mode for recording a media message on a communication device, comprising:

Petitioner contends that the recited method is taught by, or obvious over, Newman, Araki, and Trewin, as explained below addressing the limitations recited in the body of claim 1. *See* Pet. 14. Patent Owner does not dispute Petitioner's assertions addressing the preamble. *See generally* PO Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). Based on the entire trial record and for the reasons highlighted below addressing the limitations set forth in the body of claim 1, we determine that Petitioner has shown by a preponderance of the evidence that the combination of Newman and Araki, as well as the combination of Newman, Araki, and Trewin, teaches or suggests "a computer implemented method for determining a communication mode for recording a media message on a communication device," as recited in claim 1.

(2) providing an adaptive recording application executable by at least one processor configured to record said media message on said communication device,

Petitioner asserts that Newman discloses a communication device such as a smartphone or touch screen device that includes a processor. *See* Pet. 14–16 (reproducing Ex. 1003, Figs. 1, 3b, 4a; citing Ex. 1003, 1:6–20, 2:60–65, 9:18–21, 10:51–53). Petitioner contends that Newman discloses a recording application on its communication device in the form of an email or messaging application that can record a voice message. *See id.* at 16–18 (citing Ex. 1003, 1:14–20, 1:30–34, 8:39–41, 9:24–25, 10:51–53, 18:41–45). Petitioner explains that a user can press and hold a messaging application's

“respond” button, as shown in Figures 4a–4c for example, to record a message. *See id.* at 16–18 (reproducing Ex. 1003, Figs. 4a–4c; quoting Ex. 1003, 2:58–61, 10:32–36, 10:50–63; citing Ex. 1003, 8:31–39, 10:9–40, 11:60–66, 12:48–67, 13:23–35, 14:44–49, 15:58–67; Ex. 1002 ¶ 94).

Petitioner asserts that Newman further teaches the recording application is executable by a processor configured to record the media message on the communication device, based on Newman’s disclosure of recording an audio message in response to activating an interface element, such as a respond or reply button, and storing the message on the device. *See id.* at 20–21 (quoting Ex. 1003, 19:7–13; citing Ex. 1003, 2:58–61, 4:23–28, 8:31–42, 10:32–36, 10:59–61, 11:60–66, 12:48–67, 14:44–49; Ex. 1002 ¶¶ 100–101).

Petitioner points out that “adaptive recording application” is described in the ’059 Patent generally as an application that changes its manner of recording without requiring manual intervention. *See* Pet. 19 (quoting Ex. 1001, 5:28–36; citing Ex. 1001, 11:41–48). Petitioner implicitly acknowledges that Newman’s recording application is not an adaptive recording application. *See id.* Petitioner asserts, however, that the combination of Newman and Araki teaches or suggests the “adaptive recording application.” *See* Pet. 19. Specifically, Petitioner asserts that Araki teaches a technique for using a single button to select one of two operating modes for recording and performing speech recognition depending on the duration that the button is pressed. *See id.* (citing Ex. 1005 ¶¶ 41, 46, 69–71); *see also id.* at 24 (similar assertions, identifying two operating modes as push-to-talk and tap-to-start i.e., “push to activate”). According to Petitioner, “Newman’s application, as adapted by Araki’s teachings, would have predictably resulted in Newman’s application automatically adapting

its manner of recording voice messages (e.g., tap-to-start or push-to-talk) based on the duration of time that a button was pressed and without requiring user intervention.” *Id.* at 19; *see id.* at 26 (similar argument). Petitioner further asserts that the combination would have predictably resulted in the reply button or respond button of Newman being adapted to carry out push-to-talk or tap-to-start functionality. *See id.* at 25 (citing Ex. 1002 ¶ 114).

Petitioner further contends that it would have been obvious to one of ordinary skill in the art to modify the teachings of Newman in view of Araki such that Newman’s recording application is adaptable. *See* Pet. 25–26 (citing Ex. 1002 ¶¶ 115–116). Petitioner specifically argues that Newman’s recording application as modified by Araki to be adaptable, would “improve the flexibility and ease-of-use of the reply button [] and respond button [] in Newman” and provide the “benefit of a more accurate recording of the message regardless of which mode is selected.” *Id.* (citing Ex. 1002 ¶¶ 115–116). In particular, Petitioner contends that a skilled artisan would have appreciated that users might be confused as to how the buttons work, for example, how the start and ending of a recording is determined when the button is pressed. *See id.* at 25. In support of its arguments, Petitioner cites Araki’s disclosure addressing when a user does not understand the use of the speech recognition device and how to activate the microphone button. *See id.* (citing Ex. 1005 ¶ 25). Petitioner asserts that Araki teaches the system can select a recording mode that reflects the user’s intentions based on a duration of activation of the user interface element. *See id.* (citing 1005 ¶ 89; Ex. 1002 ¶ 116). According to Petitioner,

[f]or example, regardless of the duration for which a user activated the “‘reply’ button []” and “‘respond’ button [],” the messaging program in Newman adapted based on Araki would have been able to more correctly record the voice message as the user intended, even for users with a limited understanding of how the button operated.

Id. at 26 (citing Ex. 1002 ¶ 116). Based on the entire trial record, we determine that Petitioner sets forth sufficient articulated reasoning with rational underpinning to support the conclusion that it would have been obvious to one of ordinary skill in the art to modify the teachings of Newman in view of Araki such that Newman’s recording application is adaptable. *See* Ex. 1002 ¶¶ 115–116; *KSR*, 550 U.S. at 418.

Petitioner further asserts, as an additional position, that if there is any question whether Newman and Araki disclose and render[] obvious the “adaptive recording application,” the further combination with **Trewin** to automatically configure one or more timing parameters used in selecting an operating mode as detailed for [the additional limitations of claim 1], would have provided an additional way for automatically and more precisely adapting the application’s behavior to a user’s intent when interacting with the “‘reply’ button []” (or “‘respond’ button”) of Newman’s application for recording a voice message.

Pet. 19–20; *see also id.* at 27 (similar argument). We address Petitioner’s contentions below in Section II.D.1.d.(5) that modifying the combined teachings of Newman and Araki to include “configurable timing parameters,” as taught by Trewin, would have rendered obvious the claimed “adaptive” recording application as well as the “configurable timing parameters.” *See id.* at 27–32.

Patent Owner argues that Newman’s email application or text messaging feature, even when modified with the teachings of Araki and/or

Trewin, does not render obvious the adaptive recording application of the challenged claims. *See* PO Resp. 13 (citing Ex. 2016 ¶ 54). Patent Owner contends that Petitioner incorrectly characterizes Araki as teaching a button that causes recording. *See id.* at 14 (quoting Pet. 19). Patent Owner asserts that none of paragraphs 41, 46, and 69–71 of Araki, cited by Petitioner, teaches or suggests that depressing a button causes recording, and therefore none of these paragraphs teaches or suggests an adaptive recording application. *See id.* Patent Owner argues that paragraphs 41, 46, and 69–71 of Araki disclose only speech recognition and automatic translating. *See id.* at 14–15 (quoting Ex. 1005 ¶ 71; citing Ex. 1005 ¶¶ 41, 46, 69–71; Ex. 2016 ¶¶ 57–58).

Patent Owner argues that other portions of Araki, not cited by Petitioner, confirm that Araki does not disclose an adaptive recording application or the features required to modify Newman’s teachings into an adaptive recording application. *See* PO Resp. 15. More specifically, Patent Owner argues that, in Araki, storage of sound is performed by a completely different mechanism including a reusable buffer that is not affected by any buttons or interface elements, and where the alleged recording is constant and performed in a single recording mode: always on. *See id.* at 15–17 (reproducing Ex. 1005, Figs. 2, 4; citing Ex. 1005 ¶¶ 54, 58, 66; Ex. 2016 ¶¶ 59–60). Patent Owner further argues that converting speech to translated text does not fall within Petitioner’s own proposed construction of recording because the speech that is captured in Araki’s buffer cannot be heard later. *See id.* at 14–15 (citing Pet. 18; Ex. 2016 ¶ 57). Patent Owner asserts that Araki’s device does not need to infer or determine whether or how the user

desires to record because Araki is designed to constantly record. *See id.* at 15.

Patent Owner asserts that Trewin does not teach or suggest an “adaptive recording application” alone, or in combination with Newman and/or Araki. *See* PO Resp. 17. Patent Owner contends that Petitioner relies on Trewin’s disclosure of the delay before a key on a keyboard starts to repeat. *See id.* at 17–18. Patent Owner contends that there is no disclosure of the keystroke delay being implemented as part of any application, much less any application related to recording. *See id.* at 18 (citing Ex. 1007, 5:11–13, 8:58–9:21). Patent Owner asserts that Trewin’s keystroke delay feature is not an adaptive recording application and Trewin does not teach communication modes or changing the mode of a recording application. *See id.* (citing Ex. 2016 ¶ 61).

In its Reply, Petitioner asserts that Patent Owner’s arguments attack the teachings of Araki for failing to disclose audio recording. *See* Pet. Reply 2 (citing PO Resp. 14–15). Petitioner argues that the combination relies on Newman, not Araki, for audio recording capabilities. *See id.* at 2–3 (citing Pet. 16–18). Petitioner points out that the combination relies on Araki for selecting either a push-to-talk or tap-to-start communication mode based on how long a button on a device is activated. *See id.* at 3 (citing Pet. 19, 24; Ex. 1002 ¶¶ 112–116).

We do not agree with Patent Owner’s arguments because they are misplaced. Patent Owner’s arguments address the teachings of Newman, Araki, and Trewin individually, instead of addressing the combined teachings of Newman in view of Araki, or the combined teachings of Newman and Araki further in view of Trewin, as proposed by Petitioner.

One cannot show nonobviousness by attacking references individually. *See In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) (“Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of the combination of references.”). Contrary to Patent Owner’s arguments, the Petition does not rely on Araki alone or Trewin alone for teaching a recording application or an adaptive recording application. Petitioner proposes modifying Newman’s recording application in view of Araki’s teachings such that Newman’s recording application is adaptive. *See* Pet. 19–21. Petitioner also proposes further modifying the adaptive recording application taught by the combination of Newman and Araki in view of Trewin’s teachings to be adaptive by enabling the timing parameter associated with the button for activating recording to be set and changed by the application. *See id.* at 24–26. Moreover, Patent Owner’s argument that Trewin does not teach changing the mode of a recording application is not commensurate in scope with the limitations of claim 1 because claim 1 does not recite or require changing the mode.

Based on the entire trial record, we determine that Petitioner has shown by a preponderance of the evidence that the combination of Newman and Araki as well as the combination of Newman, Araki, and Trewin, teaches or suggests “providing an adaptive recording application executable by at least one processor configured to record said media message on said communication device,” as recited in claim 1.

(3) detecting activation of an interface element on said communication device for initiating said recording of said media message by said adaptive recording application;

Petitioner asserts that Newman further teaches “detecting activation of an interface element on said communication device for initiating said recording of said media message by said adaptive recording application” based on Newman’s disclosure of a reply button shown in Figure 3b and a respond button 408 shown in Figure 4b that are each capable of receiving user input or capturing the application of pressure from the user, and the application providing the recording functionality in response to detecting activation of the button. *See* Pet. 21–23 (reproducing Ex. 1003, Figs. 3b, 4a; citing Ex. 1003, 2:29–33, 2:58–67, 9:52–53, 10:32–35, 10:51–61, 11:60–66, 13:23–35, 15:58–67; Ex. 1002 ¶¶ 107–108).

Patent Owner argues that Newman does not disclose this claim limitation because Newman does not disclose the claimed interface element. *See* PO Resp. 19. According to Patent Owner, “[t]here is no teaching in Newman that describes using the reply or respond button to perform one of two actions, *i.e.*, select one of two communication modes.” *Id.* (citing Pet. 21–23, Ex. 2016 ¶ 62); *see id.* at 21–23 (similar argument addressing Newman’s locked and unlocked modes, citing Ex. 1003, code (57), 1:44–48, 2:18–29, 7:33–35; Pet. 21–23, Ex. 2016 ¶¶ 64–66; Ex. 2017, 103:8–104:2).

We do not agree with Patent Owner’s argument because it is not commensurate in scope with the disputed claim limitation. As pointed out by Petitioner (*see* Pet. Reply 4–5), “detecting activation of an interface element on said communication device for initiating said recording of said media message by said adaptive recording application,” does not recite using the interface element to perform one of two actions. Ex. 1001, 26:41–43.

As explained below in Section II.D.1.d.(6), addressing the limitation “selecting, in response to said detection of said activation of said interface element, one of a plurality of communication modes . . . ,” the Petition relies on the combined teachings of Newman and Araki for teaching selecting one of two communication modes. *See* Pet. 23–27, 33–34.

Patent Owner argues that Newman contains no disclosure of detecting an input provided by the user. *See* PO Resp. 23. Patent Owner contends that Newman’s disclosures of a reply button and respond button describe only what a user can do to a screen (i.e., “hold down” or “touch and hold”). *See id.* (citing Ex. 1003, 10:32–35, 10:55–61). According to Patent Owner, “Newman does not disclose how the user action is processed by Newman’s device or whether there is any one or more instructions or method for processing the user actions.” *Id.* at 23–24. Patent Owner asserts that there is no disclosure describing that Newman’s email application or text messaging feature processes user actions. *See id.* at 24 (citing Ex. 1003, 2:29–33, 2:58–67, 9:52–53, 13:23–35, 15:58–67, Figs. 5c, 6a; Ex. 2016 ¶ 67).

We do not agree with Patent Owner’s arguments because they overlook evidence cited by Petitioner. Newman discloses: (1) an activating user input enabling one or more associated functionalities to be performed using the device upon detection of the activating user input; and (2) a user touching and holding down the respond button 408 is an activating user input that activates the device to record sound while the button is held. *See* Ex. 1003, 2:29–33; 10:51–61; Pet. 21–23 (citing *inter alia* Ex. 1003, 2:29–33; 10:51–61). Patent Owner also overlooks the testimony of Petitioner’s declarant, Mr. Schmandt, that, based on Newman’s disclosures, a person of ordinary skill in the art would have understood that interaction

with those buttons would be detected by the application in order to carry out the associated functionality. *See* Pet. 23; Ex. 1002 ¶ 108.

Patent Owner also asserts that, in our Institution Decision, we misapprehended the positions presented in the Petition and the teachings of Newman, asserting “[t]he Board credited Newman’s disclosure ‘that it is envisaged that the portable electronic device may operate by activating the device to begin recording based on a first touch and end recording based on a second touch (*i.e.* touch to start).’” PO Resp. 19–20 (quoting Dec. 50–51; citing Ex. 1003, 10:50–11:12). Patent Owner, nonetheless, asserts: (1) Petitioner does not rely on this embodiment; (2) Petitioner does not assert obviousness between different embodiments or alternatives of Newman; and (3) Mr. Schmandt confirmed that his analysis was based on interface element 324 in Fig. 3B and interface element 408 in Fig. 4A. *See id.* at 20–21 (citing Ex. 2017, 93:4–94:2, 94:6–96:21, 99:13–100:14). Patent Owner persists, arguing that Newman’s disclosure cited by the Board describes touching anywhere on the screen, not just a single interface element, or squeezing the phone as alternative embodiments to the reply or respond button. *See id.* at 20. Patent Owner contends that these alternative embodiments cut against a motivation to combine and teach away from combining Newman’s alternative embodiments because the alternative embodiments encourage touching elsewhere on the screen rather than touching the same element. *See id.* In the Reply, Petitioner confirms that the Petition does not rely on Newman’s alternative techniques. *See* Pet. Reply 5 (citing PO Resp. 20).

We do not agree with Patent Owner’s understanding of the Institution Decision. The Institution Decision does not contemplate any additional

positions, besides those set forth in the Petition, and does not contemplate combining embodiments disclosed by Newman. *See* Dec. 50–51. The Institution Decision explains that Patent Owner’s Preliminary Response argument that Newman’s device only provides a single option for replying when in a second limited input operating mode is not applicable to Petitioner’s combination of the teachings of Newman and Araki. Immediately following this explanation, the Decision merely pointed out that Newman also disclosed push-to-start and envisaged using touch-to-start for recording when in a mode of limited user input. *See id.* Because the Petition and the Institution Decision do not rely on combining Newman’s embodiments, we find inapplicable Patent Owner’s arguments that Newman’s alternative embodiments teach away from and/or cut against any motivation to combine Newman’s embodiments.

Based on the entire trial record, we determine that Petitioner has shown by a preponderance of the evidence that combination of Newman and Araki teaches or suggests “detecting activation of an interface element on said communication device for initiating said recording of said media message by said adaptive recording application” as recited in claim 1.

(4) determining a duration of said activation of said interface element by said adaptive recording application;

Petitioner asserts that Newman discloses detecting an activation of an interface element by an application, and that a voice recording is carried out for the duration of that activation, but that Newman does not disclose determining a duration of that activation. *See* Pet. 23 (citing Ex. 1003, 10:59–63). Petitioner asserts that determining a duration of the activation is taught by and would have been obvious in view of Araki. *See id.*

Petitioner asserts that Araki discloses a speech recognition program, where, depending on the duration that a button on a device is pressed, one of two operating modes for recording and performing speech recognition is selected—either push-to-talk or tap-to-start (i.e., “push to activate”). *See* Pet. 24 (citing Ex. 1005 ¶¶ 41, 46, 69, 71). Petitioner contends that Araki provides a specific example of detecting whether the button has been pressed for more or less than one second. *See id.* (reproducing a portion of Ex. 1005, Fig. 5, with annotations; citing Ex. 1005 ¶¶ 41, 46, Fig. 5 (step S14)).

Petitioner contends that it would have been obvious to one of ordinary skill in the art to modify the combined teachings of Newman and Araki to further include (a) determining a duration of activation of a button and (b) selectively performing push-to-talk and tap-to-start modes as a result, as taught by Araki, in order (i) “to improve the flexibility and ease-of-use of the reply button [] and respond button [] in Newman,” and (ii) to provide the “benefit of a more accurate recording of the message regardless of which mode is selected.” Pet. 24–26 (citing Ex. 1002 ¶¶ 114–117). In particular, Petitioner contends that a skilled artisan would have appreciated that users might be confused as to how the buttons work, for example, how the start and ending of a recording is determined when the button is pressed. *See id.* at 25. In support of its arguments, Petitioner directs our attention to Araki’s disclosure addressing when a user does not understand the use of the speech recognition device and how to activate the microphone button. *See id.* (citing Ex. 1005 ¶ 25). Petitioner asserts that Araki teaches the system can select a recording mode that reflects the user’s intentions based on a duration

of activation of the user interface element. *See id.* at 25–26 (quoting Ex. 1005 ¶ 89; citing Ex. 1002 ¶ 116). According to Petitioner:

[f]or example, regardless of the duration for which a user activated the “‘reply’ button []” and “‘respond’ button [],” the messaging program in Newman adapted based on Araki would have been able to more correctly record the voice message as the user intended, even for users with a limited understanding of how the button operated.”

Id. at 26 (citing Ex. 1002 ¶ 116).

Patent Owner does not specifically challenge Petitioner’s assertions that the combination of Newman and Araki teaches or suggests “determining a duration of said activation of said interface element by said adaptive recording application.” *See generally* PO Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

Based on the entire trial record, we determine that Petitioner sets forth sufficient articulated reasoning with rational underpinning to support the conclusion that it would have been obvious to one of ordinary skill in the art to modify the combined teachings of Newman and Araki to further include (a) determining a duration of activation of a button and (b) selectively performing push-to-talk and tap-to-start modes as a result, as taught by Araki, in order (i) “to improve the flexibility and ease-of-use of the reply button [] and respond button [] in Newman,” and (ii) to provide the “benefit of a more accurate recording of the message regardless of which mode is selected.” *See* Ex. 1002 ¶¶ 114–117; *KSR*, 550 U.S. at 418. Accordingly, we conclude that Petitioner has shown by a preponderance of the evidence that the combination of Newman and Araki teaches or suggests “determining

a duration of said activation of said interface element by said adaptive recording application,” as recited in claim 1.

(5) comparing said duration of said activation of said interface element with one or more configurable timing parameters by said adaptive recording application; and

Petitioner asserts the combined teachings of Newman and Araki teach, “comparing said duration of said activation of said interface element with one or more configurable timing parameters by said adaptive recording application,” as recited in claim 1. *See* Pet. 27–28. Petitioner bases its assertion on the teachings of Newman as modified by Araki’s teaching of comparing a duration of activation of a button to whether it is pressed for more or less than one second. *See id.* at 27 (citing Ex. 1005 ¶¶ 69, 71, Fig. 5 (step S14)). Petitioner acknowledges that Araki discloses an exemplary duration of one second, but asserts that Araki refers more generally to the duration as a “set time interval” or a “prescribed time interval.” *See id.* (citing Ex. 1005 ¶¶ 23, 24, claims 1, 4, 6, 7, 9). Petitioner asserts that it would have been obvious that the interval could have been implemented using other values. *See id.* (citing Ex. 1002 ¶ 121). Petitioner further acknowledges that the claim limitation requires one or more configurable timing parameters, where “configurable timing parameter” is described in the ’059 Patent as follows: “[a]s used herein, the term ‘configurable timing parameters’ refers to time parameters used by the adaptive recording application for comparison with the duration of activation of an interface element to enable the adaptive recording application to select one of the communication modes for recording the media message.” Ex. 1001, 3:26–31; *see* Pet. 27–28. Petitioner asserts that the combination of Newman

and Araki teaches a set time interval or prescribed time interval (e.g., one second) which corresponds to a configurable timing parameter consistent with the '059 Patent description. *See* Pet. 28 (citing Ex. 1005 ¶¶ 23, 24).

As an additional position, Petitioner contends that if the word “configurable” incorporates a further requirement that the time parameter “can be set and changed by the application,” consistent with Petitioner’s litigation position, Newman and Araki do not teach this limitation as more narrowly construed. *See* Pet. 28. Petitioner asserts that this limitation, as more narrowly construed, would be obvious in view of the teachings of Trewin. *See id.*

Petitioner contends that Trewin teaches a technique for setting and changing parameters associated with input devices to improve the performance and control of the device according to the needs of a user. *See* Pet. 28–29 (citing Ex. 1007, 3:43–52; Ex. 1002 ¶ 122). Petitioner asserts that Trewin discloses the delay before a keyboard starts to repeat can be configured, e.g., pressing a letter key on a keyboard quickly causes only one letter to appear, but holding down the letter key for a given duration will cause the letter to repeat. *See id.* at 29 (citing Ex. 1007, 5:11–13). Petitioner asserts that Trewin’s key repeat delay (KRD) is analogous to the teachings of Araki because, like Araki’s microphone button, a key in Trewin can have two different behaviors based on how long the key is held down. *See id.* (citing Ex. 1002 ¶ 124). Petitioner points out that Trewin generally discloses the ability to configure and customize the repeat delay value based on the needs of the particular user. *See id.* (quoting Ex. 1007, 1:41–42). According to Petitioner, “[a]lthough Trewin’s discussion of the KRD focuses on physical keyboards, Trewin explains that its techniques are broadly

‘applicable to any control device that can be configured via software, and not necessarily one composed of physical buttons.’” *Id.* at 29–30 (citing Ex. 1007, 2:41–43, 13:23–28; Ex. 1002 ¶¶ 117 n.1, 124)

Petitioner contends that it would have been obvious to one of ordinary skill in the art to modify the combined teachings of Newman and Araki in view of Trewin’s teachings such that the set or prescribed timing parameter (e.g., one second) was capable of being set and changed by the application in order “to allow the application to adapt to the needs of the specific user” and “best suit the needs and capabilities of the user, thus resulting in more accurate recording.” Pet. 30–31 (citing Ex. 1002 ¶¶ 125–130). In particular, Petitioner contends that

[a] skilled artisan would have appreciated that the amount of delay required by the user to properly utilize a single button/multiple function element . . . may vary from one user to the next, as users often have varying visual capabilities, motor skills, and reaction times based on their age, experience, familiarity with the application, and many other factors.

Id. at 30 (citing Ex. 1002 ¶ 127). In support of its arguments, Petitioner directs attention to Trewin’s disclosure that users with disabilities or novice users may have difficulty with single-button/multiple-function user interface elements because of inadvertently activating the “long press” repeat functionality. *See id.* at 30–31 (quoting Ex. 1007, 1:36–39). Petitioner further asserts that the ability of the user to configure timing parameters of input devices was a well-known feature of the Microsoft Windows and Apple Macintosh operating systems since at least the 1990s, and that, by 2011, it was known to provide configurability of the “tap and hold delay” parameter for touchscreen mobile devices. *See id.* at 31 (citing Ex. 1002 ¶ 126).

Patent Owner does not address the construction of “configurable timing parameters and does dispute Petitioner’s assertions that the combination of Newman and Araki as well as the combination of Newman, Araki, and Trewin, teaches or suggests this limitation of claim 1. *See generally* PO Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

Based on the entire trial record, we determine that Petitioner sets forth sufficient articulated reasoning with rational underpinning to support the conclusion that it would have been obvious to one of ordinary skill in the art to modify the combined teachings of Newman and Araki in view of Trewin’s teachings such that the set or prescribed timing parameter (e.g., one second) was capable of being set and changed by the application in order “to allow the application to adapt to the needs of the specific user” and “best suit the needs and capabilities of the user, thus resulting in more accurate recording.” *See* Ex. 1002 ¶¶ 125–130; *KSR*, 550 U.S. at 418.

Accordingly, we conclude that Petitioner has shown by a preponderance of the evidence that the combination of Newman and Araki, as well as the combination of Newman, Araki, and Trewin teaches, or suggests “comparing said duration of said activation of said interface element with one or more configurable timing parameters by said adaptive recording application,” as recited in claim 1.

(6) selecting in response to said detection of said activation of said interface element, one of a plurality of communication modes for recording said media message by said adaptive recording application based on said comparison of said duration of said activation of said interface element with one or more configurable timing parameters.

Petitioner asserts that the combination of Newman and Araki teaches or suggests implementing Newman's application to select between either a push-to-talk (PTT) or a tap-to-start (TTS) communication mode based on comparing the duration of the activation of the "reply" button or "respond" button to a timing parameter such as 1 second. *See* Pet. 33 (citing Ex. 1005 ¶¶ 69–71, Fig. 5; incorporating by reference Pet. 21–23). Petitioner notes that the '059 Patent discloses: "[A]s used herein, the term 'communication mode' refers to a mode for initiating and terminating recording of a media message on a communication device. The communication mode can be, for example, a push to talk (PTT) communication mode or a tap to start (TTS) communication mode." Ex. 1001, 2:67–3:5; *see* Pet. 33. Petitioner also asserts that modifying the combination of Newman and Araki in view of the teachings of Trewin would have resulted in a configurable timing parameter that would be compared to the duration of pressing the "reply" button or "respond" button in order to select the communication mode. *See* Pet. 34 (incorporating by reference Pet. 23–27).

Patent Owner argues that "Petitioner mischaracterizes Newman and Araki when arguing that 'Newman and Araki are closely analogous references, which is further confirmed by the fact that both expressly disclose both the push-to-talk and tap-to-start modes.'" PO Resp. 26 (quoting Pet. 25). Patent Owner contends the Petition's statement is

misleading and unsupported, and more specifically argues that Newman contains no discussion of any push-to-talk feature. *See id.* at 27. According to Patent Owner, “Newman discloses two *operating* modes (not communication modes), *i.e.*, locked and unlocked.” *Id.* at 26; *see id.* at 21 (similar argument). Patent Owner nevertheless acknowledges that Petitioner’s arguments are not based on Newman’s locked and unlocked modes. *See id.* at 27 (citing Ex. 2017, 103:8–104:2; Ex. 2016 ¶ 69); *see also id.* at 23 (similar argument, citing Ex. 2017, 103:8–104:2; Ex. 2016 ¶ 66).

We do not agree with Patent Owner’s arguments. As pointed out by Petitioner, Patent Owner’s arguments attack the teachings of Newman alone, when the Petition relies on Araki for teaching the communication modes. *See* Pet. Reply 7 (citing PO Resp. 27); *see also* Pet. 23–27, 33–34 (addressing the combined teachings of the references). We also agree with Petitioner that Patent Owner’s argument is factually inaccurate because Newman does disclose both tap-to-start and push-to-talk communication modes. *See* Pet. Reply 7 (citing Pet. 9–10, 17–18; Ex. 1003, 2:58–61, 10:9–40, 10:50–63, 11:2–6, 11:60–66, 13:23–35, 15:58–67). For example, Newman’s disclosures, cited by Petitioner, describe that a user provides an activating user input by holding down a button, during which the device is activated to record sound for the duration of the activating user input, and that separate discrete interactions may be used to begin and/or end the message recording process e.g., a momentary interaction such as a tap or click. *See* Pet. 10 (citing *inter alia* Ex. 1003, 13:23–35, 15:58–67), 17–18 (citing *inter alia* Ex. 1003, 13:23–35, 15:58–67), 25 (citing Ex. 1003, 13:23–35, 15:58–67).

Patent Owner argues that the prior art does not teach or suggest a “plurality of communication modes for recording said media message by said adaptive recording application.” *See* PO Resp. 31. According to Patent Owner, “Petitioner characterizes Newman as an ‘application to select between either a push to talk or tap to start recording mode.’” *Id.* (quoting Pet. 33). Patent Owner asserts that Newman does not disclose an option to select between push-to-talk or tap-to-start recording mode. *See id.*; *see also id.* at 19 (Newman does not describe using the reply or respond button to select one of two communication modes). Patent Owner points out that Newman states that the embodiment disclosed in Figure 4, cited by Petitioner, does not involve switching modes. *See id.* at 31 (quoting Ex. 1003, 10:50–51; citing Ex. 2017, 99:13–100:14, 103:8–104:2). Patent Owner contends that the plurality of communication modes relating to the interface element are not present in Newman. *See id.* at 32 (citing Ex. 2016 ¶ 74).

Patent Owner further argues that Petitioner misleads the Board when it states that Araki discloses a button for selecting one of two modes for recording. *See* PO Resp. 27 (citing Dec. 42; Pet. 24). Patent Owner contends that Araki fails to disclose the use of two communication modes with respect to recording. *See id.* at 32. Patent Owner contends that Araki’s microphone is not for recording, Araki does not teach a mode for recording, and Araki’s button is not designed to record a message or to initiate recording. *See id.* at 27; *see also id.* at 30 (similar argument, citing Ex. 2017, 112:23–113:5), 32 (similar argument, citing Fig. 5, steps S10, S14, S15, S16). Patent Owner asserts that Araki’s system includes a sound recording portion 12 that constantly records speech segments in a buffer and

Araki does not need a button for recording because the system is constantly recording. *See id.* at 27 (citing Ex. 1005 ¶ 54; Ex. 2016 ¶ 70); *see also id.* at 28 (similar argument, citing Ex. 2017, 112:7–113:5; Ex. 2016 ¶ 71), 30 (similar argument, citing Ex. 1005 ¶ 54), 32 (similar argument). Patent Owner further contends that Araki also does not teach activation upon user input such as touch event or press event. *See id.* at 29. Patent Owner asserts that when an input is received at Araki's button, the device first checks whether sound has been recorded into the buffer and if not, stands by until sound is recorded into the buffer. *See id.* at 30 (citing Ex. 1005 ¶¶ 66–68; Fig. 5, step S10); *see also id.* at 32 (similar argument, citing Fig. 5, step S10). Patent Owner contends that Araki's button is not used for any determination to select one of a plurality of communication modes for recording because Araki is already constantly recording. *See id.* at 30–31 (citing Ex. 2016 ¶¶ 72–73).

We do not agree with Patent Owner's arguments. Patent Owner's arguments are misplaced and address the teachings of Newman alone and Araki alone instead of addressing the teachings of Newman in view of Araki, as combined by Petitioner. One cannot show nonobviousness by attacking references individually. *See In re Merck*, 800 F.2d at 1097. Contrary to Patent Owner's arguments, the Petition does not rely on Newman alone for teaching an option to select between push-to-talk and tap-to-start modes and does not rely on the teachings of Araki alone to disclose recording, a recording application, and using a button to initiate recording or select a communication mode for recording. Rather, the Petition proposes modifying Newman's recording application in view of Araki's teachings of selecting between push-to-talk and tap-to-start modes based on a comparison

of the duration of the activation time to a configurable timing parameter such that Newman's recording application is modified to include Araki's selection between push-to-talk and tap-to-start modes, and, therefore, also modified to be an adaptive recording application. *See* Pet. 21–27, 33–34.

Patent Owner also argues that a system or application built based on the teachings of Newman and Araki exists only in hindsight because the prior art consists of the separate and distinct teachings of Newman's email application with a reply button or text messaging feature with a respond button and Araki's device that constantly records and contains a button that is not used for recording. *See* PO Resp. 28 (quoting Pet. 27, 28, 30; citing Ex. 2016 ¶ 72). Similarly, Patent Owner contends that a person of ordinary skill in the art would not have had any motivation to combine Newman and Araki to arrive at the claimed adaptive recording application and interface element because one with ordinary skill in the art would not have attempted to modify Newman's email application or text messaging feature with Araki's speech recognition program. *See id.* at 36 (citing Ex. 2016 ¶ 78). Patent Owner contends that Newman is directed to a system having unlocked and locked operating modes. *See id.* Patent Owner argues that other than the fact that Newman's reply button 324 and response button 408 can be touched to record a message, "Newman is devoid of any relevant disclosure." *Id.* Patent Owner contends that Araki is different because Araki's device is already constantly recording input sound. *See id.* at 36–37 (citing Ex. 2016 ¶¶ 78–79). Patent Owner contends that a person of ordinary skill in the art would not have understood to modify Newman's email application button or text messaging button to record with the features of an application designed to constantly record without the need of a button or a

button that is not purposed for recording. *See id.* at 37 (citing Ex. 2016 ¶ 79); *see id.* at 27 (similar argument citing Ex. 2016 ¶ 70). Related to the previous arguments, Patent Owner contends that a person of ordinary skill in the art would not have attempted to modify Newman with Araki because, according to Patent Owner, “at a fundamental level, a person of ordinary skill in the art would have understood that Araki’s device is not adaptive because it is constantly recording sound.” *Id.* at 37 (citing Ex. 2016 ¶¶ 79–80).

In Reply, Petitioner points out that Petitioner’s declarant, Mr. Schmandt, articulated a detailed rationale and motivation for the combination including the express motivation in Araki explaining that a user might mistakenly treat a recording button as implementing push-to-talk on a device that implements tap-to-start. *See* Pet. Reply 7 (citing Pet. 25–26; Ex. 1002 ¶¶ 115–116). In the Sur-reply, Patent Owner contends the Reply confirms that there is no motivation to combine by faulting Petitioner for not disputing or addressing Patent Owner’s arguments and Dr. Cromarty’s testimony. *See* PO Sur-reply 5–6 (citing Ex. 2016 ¶¶ 79–80).

We do not agree with Patent Owner’s arguments because they are misplaced. The Petition does not propose modifying Newman’s email application button or text messaging button in view of Araki’s teachings of constantly recording speech segments into a buffer without the need for a button, or in view of Araki’s teachings of a button that is not used for recording. *See generally* Pet. As explained previously, the Petition proposes modifying Newman’s recording application including an interface button in view of Araki’s teachings of selecting between push-to-talk and tap-to-start modes for recording and speech recognition based on a

comparison of the duration of the activation time to a configurable timing parameter such that Newman's recording application and interface element is modified to include Araki's selection between push-to-talk and tap-to-start modes, and, therefore, also modified to be an adaptive recording application due to the ability to select between push-to-talk and tap-to-start modes. *See id.* at 24–28, 33–34.

Patent Owner further argues that Araki's device is incompatible with Newman's email application because Araki's single storage mode, which includes only a temporary buffer for storing speech segments, is incompatible with recording media such as voice or video. *See* PO Resp. 32–33 (citing Ex. 2016 ¶¶ 75–76); *see also id.* at 37–38 (similar argument, citing Ex. 2016 ¶¶ 79–80). Patent Owner asserts that Araki's device is programmed to use the translation service to exclude or cut out the portions of the recording corresponding to non-speech and background noise. *See id.* at 33 (citing Ex. 2016 ¶¶ 75–76); *see also id.* at 37 (similar argument, citing Ex. 2016 ¶¶ 79–80). According to Patent Owner, because multimedia messages include audio recordings and video recordings, which are known to include portions lacking speech and having background noise, Araki is incompatible with Newman and the combination would render the application inoperative or unsatisfactory for its intended purpose of recording multimedia messages. *See id.* at 33 (citing Ex. 2016 ¶¶ 75–76); *see also id.* at 37–38 (similar argument, citing Ex. 2016 ¶¶ 79–80). Patent Owner further argues that for these reasons there is no motivation to modify Newman's email application or text message feature with Araki's translation device. *See id.* at 33; *see also id.* at 38 (similar argument, citing Ex. 2016 ¶¶ 79–80).

In Reply, Petitioner asserts that Araki's storage is irrelevant because the Petition points to Newman for the claimed recording functionality. *See* Pet. Reply 8. Petitioner further asserts that Patent Owner's argument improperly relies on physically combining the devices of Newman and Araki, when the articulated combination points to Araki simply for teachings regarding determining an operating mode based on a duration of a button's activation. *See id.* (citing *In re Mouttet*, 686 F.3d 1322, 1332–33 (Fed. Cir. 2012)). Petitioner further points out that the '059 Patent expressly contemplates removing non-speech and background noise because a user may intend to record the audio signal without noise. *See id.* (quoting Ex. 1001, 9:13–25). In the Sur-reply, Patent Owner contends that the Reply confirms that there is no motivation to combine by faulting Petitioner for not addressing Patent Owner's arguments and Dr. Cromarty's testimony that the combination would render Newman's recording feature unsatisfactory and inoperable for its intended use. *See* PO Sur-reply 5–6 (citing Ex. 2016 ¶¶ 79–80).

We do not agree with Patent Owner's arguments because they are premised on a combination of the teachings of Newman and Araki not proposed by Petitioner. The Petition does not rely on Araki for teaching recording, and does not rely on Araki's teachings of excluding or cutting out non-speech or background noise. *See generally* Pet. As explained previously, the Petition proposes modifying Newman's recording application in view of Araki's teachings of selecting between push-to-talk and tap-to-start modes based on a comparison of the duration of the activation time to a configurable timing parameter such that Newman's recording application is modified to include Araki's selection between push-

to-talk and tap-to-start modes, and, therefore, also modified to be an adaptive recording application. *See* Pet. 21–27, 33–34.

Based on the entire trial record, we that determine that Petitioner has shown by a preponderance of the evidence that the combination of Newman and Araki, as well as the combination of Newman, Araki, and Trewin, teaches or suggests “selecting in response to said detection of said activation of said interface element, one of a plurality of communication modes for recording said media message by said adaptive recording application based on said comparison of said duration of said activation of said interface element with one or more configurable timing parameters,” as recited in claim 1.

(7) Objective Indicia of Nonobviousness

We next consider Patent Owner’s proffered evidence of objective indicia of nonobviousness before reaching our conclusion on obviousness as to the subject matter of claim 1. *See WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1328 (Fed. Cir. 2016). Patent Owner asserts that nonobviousness of the subject matter of claim 1 is supported by objective indicia including commercial success, industry adoption, copying, long-felt need, and industry praise. *See* PO Resp. 41–47 (reproducing Ex. 2004, 8, 73; citing Ex. 2004, 71, 73–74, 76, 89, 99; Ex. 2016 ¶¶ 82–86; Ex. 2018), 55–58 (reproducing Ex. 1001, Fig. 2; Ex. 1016, 2–3 (statement of reasons for allowance); Ex. 2001, 48 (statement of reasons for allowance); Ex. 2002, Fig. 2; citing Ex. 2001; Ex. 2002, 1:14–18; Ex. 2005; Ex. 2011; Ex. 2022; Ex. 2016 ¶¶ 94–97). In support of its arguments, Patent Owner presents evidence focused on the commercial success, industry adoption, and copying of the major update to the Snapchat application first released in December 2012

(*see id.* at 41–47, 58) and evidence of copying, providing a solution to a long-felt need, and industry praise based on U.S. Patent Application No. 13/570,188 (Ex. 2001), which issued as U.S. Patent No. 8,428,453 B1 (Ex. 2002, “Spiegel Patent”) (*see* PO Resp. 55–58).

Factual inquiries for an obviousness determination include evaluation and crediting of evidence of objective indicia of nonobviousness (sometimes also called “secondary considerations”). *Graham*, 383 U.S. at 17 (1966).

“For objective evidence of secondary considerations to be accorded substantial weight, its proponent must establish a nexus between the evidence and the merits of the claimed invention.” *ClassCo, Inc. v. Apple, Inc.*, 838 F.3d 1214, 1220 (Fed. Cir. 2016). Ultimately, “[t]he patentee bears the burden of showing that a nexus exists.” *WMS Gaming, Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1359 (Fed. Cir. 1999).

The Board uses a two-step analysis in evaluating nexus between the claimed invention and objective evidence. *Lectrosonics, Inc. v. Zaxcom, Inc.*, IPR2018-01129, Paper 33 at 33 (PTAB Jan. 24, 2020) (precedential). First, we consider whether a patent owner has demonstrated that the “products are coextensive (or nearly coextensive) with the challenged claims,” resulting in a rebuttable presumption of nexus. *Id.* “Whether a product is coextensive with the patented invention, and therefore whether a presumption of nexus is appropriate in a given case, is a question of fact.” *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373 (Fed. Cir. 2019). “[T]he purpose of the coextensiveness requirement is to ensure that nexus is only presumed when the product tied to the evidence of secondary considerations ‘is the invention disclosed and claimed.’” *Id.* at 1374 (quoting *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387,

1392 (Fed. Cir. 1988)). “[T]he degree of correspondence between a product and the patent claim falls along a spectrum. At one end of the spectrum lies perfect or near perfect correspondence. At the other end lies no or very little correspondence.” *Id.* “A patent claim is not coextensive with a product that includes a ‘critical’ unclaimed feature that is claimed by a different patent and that materially impacts the product’s functionality.” *Id.* at 1375.

The inquiry does not end if finding a presumption of nexus is inappropriate. *See Lectrosonics*, Paper 33 at 33 (quoting *Fox Factory*, 944 F.3d at 1375). A patent owner “is still afforded an opportunity to prove nexus by showing that the evidence of secondary considerations is the ‘direct result of the unique characteristics of the claimed invention.’” *Id.* (quoting *Fox Factory*, 944 F.3d at 1373–74). Patent Owner may do so by demonstrating that there is a “nexus to some aspect of the claim not already in the prior art.” *In re Kao*, 639 F.3d 1057, 1068–69 (Fed. Cir. 2011); *see WBIP*, 829 F.3d at 1331).

(a) *Nexus*

Before we address the weight of Patent Owner’s evidence of objective indicia of nonobviousness, we must first determine if Patent Owner has shown it is entitled to a presumption of nexus or has demonstrated an actual nexus. Patent Owner contends there is a presumption of nexus because the evidence of objective indicia of nonobviousness “is tied to [Petitioner’s] Snapchat application and its single button camera interface, which embodies the claimed features and is coextensive with them.” PO Resp. 54–55 (citing Ex. 2016 ¶ 93). More specifically, Patent Owner explains, with supporting evidence, how the Snapchat application is coextensive with each of the limitations of claim 1. Referencing the limitations of claim 1, Patent Owner

points out that the Snapchat application: (1) is a camera application that helps people communicate through short video and images; (2) is downloaded, installed, and executed on a mobile communication running Android OS or Apple iOS; (3) records media messages such as photo snaps, video snaps, long snaps, and multi snaps on mobile communication devices; (4) includes a touch-selectable camera button; (5) detects a user's touch on the camera button which activates the camera button to initiate recording of a media message; (6) determines whether the activation of the camera button corresponds to a "tap" or a "press and hold"; (7) includes one or more parameters or settings which are configurable with values related to counting or timing; (8) compares the difference between one or more parameter or setting values and one or more values corresponding to the length or duration of the activation of the camera button; and (9) selects a communication mode for recording the media message based on the comparison or difference, such as, selecting a video snap or photo snap based on whether the Snapchat application determines a "tap" or a "press and hold" or selecting one of a "multi-snap" mode and a "long snap" mode based on whether the Snapchat application determines "a press and hold for more than 10 seconds" or a "tap or hold the camera button repeatedly." *See* PO Resp. 47–54 (reproducing Ex. 2004, 104, Fig. 2; Exs. 2020–2021; quoting Ex. 2004, 24, 99, 104; Ex. 2017, 83:23–84:17; Exs. 2019–2021; citing Ex. 2016 ¶¶ 87–92; Ex. 2017, 58:19–59:10, 93:3–14; Ex. 2018).

Petitioner contends that the Snapchat application camera button does not read on the challenged claims. *See* Pet. Reply 18. Petitioner points out that a key limitation of the challenged claims is the ability to select "one of a plurality of communication modes," where "communication mode" is

“defined as ‘a mode for **initiating and terminating recording** of a media message on a communication device.’” *Id.* at 19 (citing Ex. 1001, 2:67–3:3). Petitioner asserts that a key assumption of Patent Owner’s analysis is that taking a photo in Snapchat and recording a video in Snapchat supply two “communication modes.” *See id.* Petitioner asserts that taking a photo cannot supply one of the plurality of communication modes because unlike video or audio, the concept of “initiating and terminating” a recording does not apply to a still photo. *See id.* According to Petitioner, “[t]aking a still photo image involves instantaneous capture of a visual image without initiation and termination of any ‘recording’ process.” *Id.* (citing Ex. 1024 ¶ 47). Petitioner asserts that Patent Owner does not contend that the Snapchat application supports a plurality of “communication modes” with respect to recording video. *See id.* Petitioner further asserts that Patent Owner’s expert conceded that he never used Snapchat, and did not perform an analysis of whether the Snapchat application reads on the challenged claims. *See id.* (citing Ex. 1025, 40:13–25, 41:1–12). Petitioner asserts that Patent Owner is not entitled to a presumption of nexus because Patent Owner has not shown that the Snapchat application embodies the claimed features and the Snapchat application is not coextensive with the challenged claims. *See id.* at 20 (quoting *SightSound Techs LLC v. Apple Inc.*, 809 F.3d 1307, 1319 (Fed. Cir. 2015)).

Patent Owner disagrees with Petitioner’s argument, asserting that Petitioner completely ignores Patent Owner’s and Dr. Cromarty’s showing that Snapchat’s video snap mode and multi snap mode also meets the claim limitations. *See* PO Sur-reply 20 (quoting PO Resp. 51–52; citing PO Resp. 49–52; Ex. 2031 ¶ 32). Patent Owner contends that Petitioner and Mr.

Schmandt ignore this mapping of the claim limitations to the Snapchat Application features. Patent Owner points out that Mr. Schmandt stated multiple times during his deposition that he did not test the multiple snap mode and had no knowledge of the multiple snap mode. *See id.* at 20–21 (citing Ex. 2023, 9:8–10:13, 10:24–11:6). Patent Owner asserts that Dr. Cromarty’s testimony that a video snap mode and a multiple snap mode constitute the plurality of communication modes remains un rebutted. *See id.* at 21 (citing Ex. 2016 ¶¶ 89–92).

We agree with Petitioner that the aspect of Snapchat application that includes the feature of using a camera button to select one of a taking a photo or recording a video is not entitled to a presumption of a nexus. Specifically, we agree with Petitioner’s persuasive arguments that taking a photo is not a “communication mode” as defined as “a mode for initiating and terminating a recording.” To the extent that Patent Owner now argues that the Snapchat application includes a feature of using a camera button to select one of a video snap mode and a multi snap mode based on a comparison between one or more parameter values and one or more values corresponding to the duration of the activation of the camera button (*see* PO Sur-reply 20–21), this argument is belated and unsupported by the evidence of record. Instead, Patent Owner argued, and Dr. Cromarty testified with the following two examples:

[(1)] the Snapchat application is programmed to select a “video snap” mode or “photo snap” mode based on whether the Snapchat application determines a “tap” or “press and hold” based on comparing or measuring the difference between the duration of the activation with the parameter[]; and

[(2)] the Snapchat application is programmed to select one of a “multi snap” mode or “long snap” video or photo mode based

on whether the Snapchat application determines a “press and hold” for more than 10 seconds or “tap or hold the camera button repeatedly” based on comparing or measuring the difference between the duration of the activation with the parameter.

PO Resp. 51–52; Ex. 2016 ¶ 92. In other words, Patent Owner’s argument in its Response and Dr. Cromarty’s testimony does not assert that the Snapchat application is programmed to select between a video snap mode and a multi snap mode, as argued in the Sur-reply. *See* PO Resp. 51–52; Ex. 2016 ¶ 92; *see also* Ex. 1036, 25:8–27:1 (Dr. Cromarty’s Sur-reply deposition testimony regarding the multi snap feature). Patent Owner’s remaining evidence cited to support its belated argument also does not support its contentions. *See* Ex. 2016 ¶¶ 89–92; Ex. 2031 ¶¶ 23, 31–32. At best, Dr. Cromarty’s testimony at paragraphs 90–92 parenthetically quotes repeatedly, without sufficient explanation, the following two sentences from “Snapchat Support: Create a Snap” (Exs. 2020, 2021): “Press and hold the button to record a video Snap!” from the section entitled “Creating Photo and Video Snaps” and “Keep holding the [camera] button even after the time runs out – it’ll automatically start recording another Snap!” from the section entitled “Creating Multi Snaps.” Ex. 2016 ¶¶ 90–92; Exs. 2020, 2021. Accordingly, based on Patent Owner’s showing, we determine the Snapchat application is not coextensive with challenged claim 1, and, therefore, not entitled to a presumption of nexus. For these same reasons, Patent Owner’s assertion of actual nexus also fails because it is based on a conclusion that the evidence presented is reasonably commensurate with the scope of the claims. *See* PO Resp. 54 (citing Ex. 2016 ¶ 93).

(b) Summary of Analysis of Objective Indicia of Nonobviousness

In sum, we determine that Patent Owner has not shown entitlement to a presumption of nexus and has not shown an actual nexus between the objective indicia of nonobviousness and the claimed invention. Therefore, Patent Owner's evidence of objective indicia of nonobviousness is entitled to minimal weight.

(8) Conclusion Regarding Analysis of Claim 1

After considering the parties' arguments, the entirety of the record, and weighing the evidence of obviousness and nonobviousness of the subject matter of claim 1, we determine that Petitioner's showing of obviousness is strong and outweighs the minimally weighted evidence of objective indicia of nonobviousness. Accordingly, based on the entire trial record, Petitioner has established by a preponderance of the evidence that the subject matter of claim 1 would have been obvious over the combined teachings of Newman and Araki, as well as over the combined teachings of Newman, Araki, and Trewin.

e. Analysis of Independent Claim 18

Petitioner asserts that most of the limitations of independent claim 18 are substantively identical to the limitations of claim 1. *See* Pet. 37 (citing Ex. 1002 ¶¶ 150–155). Petitioner notes that, different from claim 1, claim 18 “recite[s] selecting a communication mode is ‘based on one or a combination of’ steps 18[e] and 18[f]”—“a comparison of said duration of said activation of said interface element with one or more configurable timing parameters” and “a determination of one of a presence and an absence of a media signal during and/or after said activation of said interface element.” *Id.* Petitioner asserts that because claim 18 only requires that the

selection of a communication mode is based on one of the recited options, and does not require selecting a communication mode based on the presence or absence of a media signal, Newman, Araki, and Trewin disclose the limitations of claim 18 for the same reasons as those presented for claim 1. *See id.* at 37–38.

Patent Owner does not address substantively the limitations of claim 18 and Petitioner’s contentions regarding claim 18. *See generally* PO Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

Based on the entire trial record and for the same reasons as those explained above addressing claim 1, Petitioner has established by a preponderance of the evidence that the subject matter of claim 18 would have been obvious over the combined teachings of Newman and Araki, as well as over the combined teachings of Newman, Araki, and Trewin.

f. Analysis of Independent Claim 30

Claim 30 recites similar limitations as those recited in independent claims 1 and 18, in the form of a system that includes a processor, a non-transitory computer readable storage medium, and several modules. *Compare* Ex. 1001, 29:59–30:21 (claim 30), *with id.* at 26:35–55 (claim 1), *and id.* at 28:23–45 (claim 18). We have reviewed Petitioner’s contentions and supporting evidence addressing how Newman, Araki, and Trewin, as combined by Petitioner, teach or suggest the limitations of independent claim 30. *See* Pet. 38–43.

Patent Owner does not address substantively the limitations of independent claim 30 and Petitioner’s contentions regarding claim 30. *See*

generally PO Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

Based on the entire trial record and for the same reasons as those explained above addressing claims 1 and 18, Petitioner has established by a preponderance of the evidence that the subject matter of claim 30 would have been obvious over the combined teachings of Newman and Araki, as well as over the combined teachings of Newman, Araki, and Trewin.

g. Analysis of Independent Claim 46

Claim 46 recites similar limitations as those recited in independent claim 30, but utilizes the term “computer program code[]” in place of “module” recited in claim 30. *See* Pet. 45; *compare* Ex. 1001, 32:33–56 (claim 46), *with id.* at 29:59–30:21 (claim 30). We have reviewed Petitioner’s contentions and supporting evidence addressing how Newman, Araki, and Trewin, as combined by Petitioner, teach or suggest the limitations of independent claim 46, including the recited “computer program code.” *See* Pet. 44–45.

Patent Owner does not address substantively the limitations of claim 46 and Petitioner’s contentions regarding claim 46. *See generally* PO Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

Based on the entire trial record and for the same reasons as those explained above addressing claims 1, 18, and 30, Petitioner has established by a preponderance of the evidence that the subject matter of claim 46 would have been obvious over the combined teachings of Newman and Araki, as well as over the combined teachings of Newman, Araki, and Trewin.

h. Analysis of Dependent Claims 2, 4–6, 21, 22, 32, 33, and 47

Claims 2 and 4–6 depend ultimately from claim 1, claims 21 and 22 depend from independent claim 18, claims 32 and 33 depend from independent claim 30, and claim 47 depends from independent claim 46. Ex. 1001, 26:56–59, 26:64–27:16, 28:55–29:3, 30:25–43, 32:57–64. We have reviewed Petitioner’s contentions and supporting evidence addressing how Newman, Araki, and Trewin teach or suggest the additional limitations recited in dependent claims 2, 4–6, 21, 22, 32, 33, and 47. *See* Pet. 34–38, 43–44, 46.

Patent Owner does not address substantively the limitations of dependent claims 2, 4–6, 21, 22, 32, 33, and 47 and Petitioner’s contentions addressing these dependent claims. *See generally* PO Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

Based on the entire trial record and including the reasons explained above addressing independent claims 1, 18, 30, and 46, Petitioner has established by a preponderance of the evidence that the subject matter of claims 2, 4–6, 21, 22, 32, 33, and 47 would have been obvious over the combined teachings of Newman and Araki, as well as over the combined teachings of Newman, Araki, and Trewin.

i. Summary

For all of the foregoing reasons, based on the entire trial record, Petitioner has established by a preponderance of the evidence that the subject matter of claims 1, 2, 4–6, 18, 21, 22, 30, 32, 33, 46, and 47 is unpatentable under 35 U.S.C. § 103 over Newman, Araki, and Trewin.

2. *Patentability Challenge to Claims 7–13, 15–19, 23–25, 30, 34–37, 46, and 48 over Newman, Araki, Trewin, and Ronkainen*

a. *Overview of Ronkainen (Ex. 1006)*

Ronkainen discloses a device and method of using a single button instead of multiple buttons to accomplish more than one functionality, where a long press of a button is used to perform a different function from a short press of the button. *See* Ex. 1006, 1:12–15, 2:26–27, 2:36–39. The invention includes describing for the user one of a plurality of possible alternative actions that can be caused by a button that is currently being operated. *See id.* at 2:26–30, 2:39–40. Users are often unaware of their options, especially when a function is rarely used. *See id.* at 1:48–49.

The device includes a button and a sensor for sensing when the button is pressed. *See* Ex. 1006, 4:59–61, Fig. 2. The sensor reports both the pressing of the button and the release of the button to a timer, which passes the information to a processing unit. *See id.* at 4:61–64, Fig. 2. The processing unit also controls a user display and the means for making the functions occur depending on when the button is released. *See id.* at 4:64–5:3, Fig. 2.

Figure 1 of Ronkainen is reproduced below.

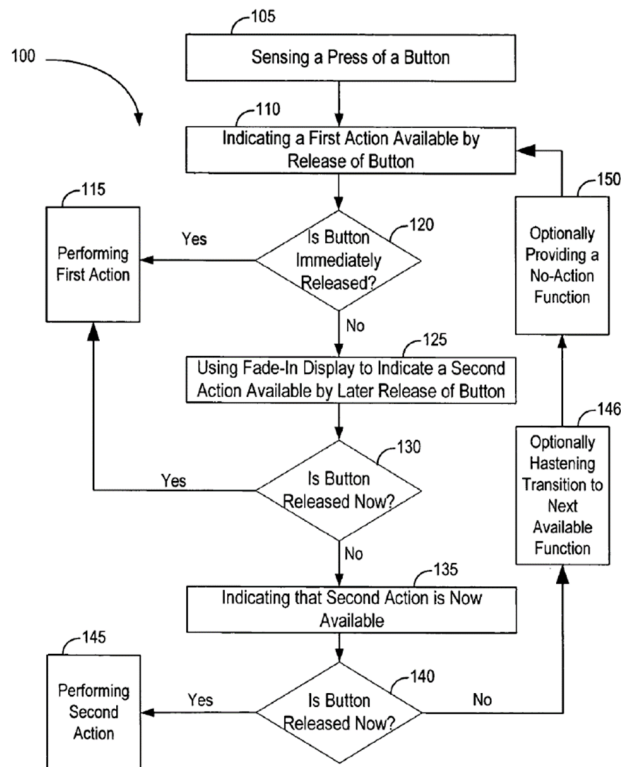


Figure 1 depicts a flowchart of a method for providing information regarding operation of a button on a device. *See* Ex. 1006, 4:3–4, 4:12–14. When a user presses the button, the device senses the button is pressed in step 105. *See id.* at 4:16–17. In step 110, the device provides information to the user during operation of the button that indicates a first action that the device can perform if the button were to be immediately released. *See id.* at 4:17–21. If the user immediately releases the button in step 120, the first action is performed in step 115. *See id.* If the button is not immediately released by the user in step 120, in step 125 the display shows to the user a second action that will be later available by releasing the button. *See id.* at 4:21–24. If the button is released in step 130 before the second action becomes available, the first action is performed in step 115. *See id.* at 4:24–25. If the button is not released in step 130, an indication is provided in step 135 notifying the

user that the second action is now available. *See id.* at 4:25–27. If the user releases the button in step 140 after the second action becomes available, the second action is performed in step 145. *See id.* at 4:27–29. The user may decide at step 140 not to release the button and instead wait for another action or actions become available. *See id.* at 4:29–31. The user may hasten the availability of another action in step 146, for example, by exerting extra pressure on the button. *See id.* at 4:32–33. The other action can optionally be a no-action function in step 150, or optionally be the first action 110. *See id.* at 4:34–36. Instead of waiting for a no-action function in step 150, it is also possible for the user to release the button, while avoiding any actions, by making a sound if the device is capable of audio recognition. *See id.* at 4:39–42. The user has the option to skip to the next functionality without having to wait for a time-out by pressing the button with extra pressure or saying a word, such as “skip,” if the device has audio recognition capability. *See id.* at 3:26–3:32.

b. Analysis of Independent Claim 12

(1) A computer implemented method for determining a communication mode for recording a media message on a communication device, comprising:

Petitioner contends that the recited method is taught by and would have been obvious over Newman, Araki, Trewin, and Ronkainen, as explained below addressing the limitations recited in the body of claim 12. *See* Pet. 59. Patent Owner does not dispute Petitioner’s assertions addressing the preamble. *See generally* PO Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

Based on the entire trial record and for the reasons highlighted below addressing the limitations set forth in the body of claim 12, we determine that Petitioner has shown by a preponderance of the evidence that the combination of Newman, Araki, Trewin, and Ronkainen teaches or suggests “[a] computer implemented method for determining a communication mode for recording a media message on a communication device,” as recited in claim 12.

- (2) providing an adaptive recording application executable by at least one processor configured to record said media message on said communication device,*
- (3) detecting activation of an interface element on said communication device for initiating said recording of said media message by said adaptive recording application;*

Petitioner asserts that Newman and Araki, alone or further in view of Trewin, teach or suggest these limitations for the same reasons as those addressed by Petitioner with respect to the identical limitations of claim 1. *See* Pet. 60 (citing Ex. 1002 ¶¶ 235–236). Patent Owner does not dispute Petitioner’s assertions addressing these limitations. *See generally* PO Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

Based on the entire trial record and for the same reasons as those explained above addressing the identical limitations of claim 1, we determine that Petitioner has shown by a preponderance of the evidence that the combination of Newman and Araki, as well as the combination of Newman, Araki, and Trewin, teaches or suggests “providing an adaptive recording application executable by at least one processor configured to record said media message on said communication device” and “detecting

activation of an interface element on said communication device for initiating said recording of said media message by said adaptive recording application,” as recited in claim 12.

(4) determining one of a presence and an absence of a media signal during and/or after said activation of said interface element; and

(5) selecting, in response to said detection of said activation of said interface element, one of a plurality of communication modes for recording said media message by said adaptive recording application based on said determination of said one of said presence and said absence of said media signal.

Petitioner acknowledges implicitly that the combination of Newman, Araki, and Trewin does not teach determining the presence or absence of a media signal during and/or after user interface activation and, in response to detecting user interface activation, selecting a communication mode based on the determination of the presence or absence of the media signal. *See* Pet. 60–61. Petitioner incorporates by reference its analysis addressing claims 1, 7, and 10. *See id.* (citing Ex. 1002 ¶¶ 238–241). Specifically, Petitioner asserts that Ronkainen teaches a skipping effect that allows a user to skip to the long press functionality without having to wait for the time out interval for the current function using audio recognition capability to monitor for audio input. *See id.* at 53–54 (citing Ex. 1006, 3:27–33, 6:29–34 (claims 6 and 7)); *see also id.* at 57–58 (“Ronkainen discloses a ‘skipping effect’ that uses audio recognition (i.e., ‘**a presence...of a media signal**’) to skip-to a second function before a time-out associated with a first function elapses.”) (alteration in original). Petitioner contends that the use of Ronkainen’s skipping effect to select a communication mode, as taught by the combination of Newman, Araki, and Ronkainen, would entail

determining a presence and absence of a media signal while Newman's button was pressed. *See id.* at 60 (citing Ex. 1006, 3:32–34; Ex. 1002 ¶ 238). Petitioner further contends that in the combination taught by Newman, Araki, and Ronkainen, Ronkainen's "skipping effect" would be used in response to detecting a button press and would entail selecting a communication mode for recording a media message by the adaptive recording application based on determining a presence and absence of a media signal. *See id.* at 61 (citing Ex. 1002 ¶ 241).

Petitioner contends that it would have been obvious to one of ordinary skill in the art to modify the combined teachings of Newman and Araki or the combined teachings of Newman, Araki, and Trewin to include determining the presence or absence of a media signal and selecting a communication mode based on the presence or absence of a media signal, as taught by Ronkainen, in order to "allow[] brief messages to be retained, by detecting the input of voice as an immediate indication to skip to the push-to-talk (PTT) mode." Pet. 54 (citing Ex. 1002 ¶ 212). Petitioner points out that in the tap-to-start (TTS) mode of Araki, in which the user presses and holds the microphone only for a short duration, the message recording does not begin until after the button is released. *See id.* at 53 (citing Ex. 1005 ¶ 71). Petitioner asserts that this creates a potential problem for recording brief voice messages, where the application interprets the user's action as a short press and activates the tap-to-start mode, where the recording begins only after the button is released, thereby disregarding the brief message provided by the user. *See id.* (citing Ex. 1002 ¶ 212). According to Petitioner:

a skilled artisan would have recognized that Ronkainen's technique would have improved Araki's technique of selecting tap-to-start or push-to-talk by helping to resolve the usability issues that Araki expressly recognized, and would further Araki's goal of "determin[ing] more appropriately the starting position and ending position of speech recognition, even when the timing with which the user presses the microphone button is inaccurate."

Id. at 55 (quoting Ex. 1005 ¶ 89; citing Ex. 1002 ¶ 213) (alteration in original).

Patent Owner argues that the prior art does not teach or suggest determining the presence or absence of a media signal. *See* PO Resp. 33–34. More specifically, Patent Owner argues that Ronkainen does not disclose any type of recording application and Ronkainen is not designed for recording sound. *See id.* at 34.

We do not agree with Patent Owner's arguments. Patent Owner's arguments are misplaced and address the teachings of Ronkainen alone instead of addressing the teachings of Newman, Araki, Trewin, and Ronkainen, as combined by Petitioner. One cannot show nonobviousness by attacking references individually. *See In re Merck*, 800 F.2d at 1097. Contrary to Patent Owner's arguments, the Petition does not rely on Ronkainen alone for teaching a recording application. Rather, the Petition relies on the combined teachings of Newman, Araki, and Trewin, as modified by Ronkainen to detect audio input for skipping ahead to the long-press button functionality, instead of waiting for a time-out. *See* Pet. 53–54, 57–58, 60–61.

Patent Owner further asserts that Ronkainen discloses only one phrase relating to a purported media signal: "or by saying a word like 'skip.'" *See*

PO Resp. 34 (citing Ex. 1006, 3:30–32). According to Patent Owner, “[w]ithout more, Ronkainen’s recitation of this alternative embodiment of using the word skip is not an enabled disclosure because it does not show a person of ordinary skill in the art how to make it.” *Id.* (citing Ex. 2016 ¶ 77). Patent Owner asserts that the alternative embodiment cannot be produced without undue experimentation. *See id.* (citing Ex. 2016 ¶ 77). Patent Owner contends that “at the time of the invention, a person of ordinary skill in the art would not have known how to modify Newman’s recording application in order to avoid recording the spoken “skip” of Ronkainen.” *Id.* (citing Ex. 2016 ¶ 77).

In Reply, Petitioner asserts that Federal Circuit law is clear that the disclosures of Ronkainen, which is an issued patent, are presumed enabling. *See* Pet. Reply 9 (citing *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1354–55 (Fed. Cir. 2003)); *see also In re Antor Media Corp.*, 689 F.3d 1282, 1287–89 (discussing presumption of enablement)); *Apple Inc. v. Corephotonics, Ltd.*, 2021 WL2577597 at *4 (Fed. Cir. June 23, 2021) (unpublished) (the presumption of enablement applies to AIA proceedings). Petitioner contends that Patent Owner has not overcome this presumption. *See id.* Petitioner further asserts that there is no evidence that a skilled artisan would have experienced any difficulty in implementing the skipping feature of Ronkainen. *See* Pet. Reply 10 (citing Ex. 1024 ¶¶ 22–23). Petitioner contends that the ’059 Patent itself refutes Patent Owner’s arguments by taking voice activity entirely for granted by disclosing no specific details about implementing this feature beyond referencing “well known” techniques for performing voice activity detection. *See id.* (citing Ex. 1001, 13:40–44; Ex. 1024 ¶ 22). Petitioner

contends that Dr. Cromarty acknowledged that off-the-shelf tools existed to enable developers to incorporate speech recognition techniques. *See id.* (citing Ex. 1025, 38:5–12, 39:2–9).

We agree with Petitioner and are not swayed by Patent Owner’s arguments that Ronkainen does not provide an enabling disclosure. Patent Owner’s Response and Dr. Cromarty’s testimony overlooks that the Petition cites, and relies on, Ronkainen’s disclosure at column 3, lines 27–33 (*see* Pet. 53–54), describing that the “skipping effect can be accomplished by pressing a button with extra pressure for an instant. Or, the skipping effect can be accomplished by simultaneously pressing another button, or by saying a word like ‘skip’ (if the device has audio recognition capability).” Ex. 1006, 3:27–33 (emphasis added); *see* PO Resp. 33–34; Ex. 2016 ¶ 77. Patent Owner does not produce sufficient evidence or argument to support its assertion that Ronkainen “is not an enabled disclosure,” and “does not show a person of ordinary skill in the art how to make it.” PO Resp. 33–34; Ex. 2016 ¶ 77. Patent Owner does not dispute Petitioner’s definition of a person of ordinary skill in that art as someone who possessed at least a bachelor’s degree in electrical engineering or computer science, and two years of work experience in multimedia data communications and user interfaces. *See generally* PO Resp.; *see* Ex. 2016 ¶ 34. Patent Owner, however, does not explain why such a person of ordinary skill in the art would be unable to utilize audio recognition capability disclosed in Ronkainen to detect the spoken word “skip” to accomplish the skipping effect. *See* Ex. 1006, 3:27–33. Likewise, Patent Owner does not explain sufficiently why “it cannot be produced without undue experimentation.” PO Resp. 34; Ex. 2016 ¶ 77. Patent Owner, for example, does not provide

any evidence or argument addressing any unpredictability of the art, or the quantity of experimentation necessary. *See Vasudevan Software, Inc. v. MicroStrategy, Inc.*, 782 F.3d 671, 684 (Fed. Cir. 2015) (quoting *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988)). In sum, we conclude that Ronkainen is presumed an enabling disclosure, and, therefore, remains available as a prior art reference for establishing obviousness of the claimed subject matter.⁷

Patent Owner also contends that, based on its assertions that Ronkainen is not an enabling reference, “a person of ordinary skill in the art would not have been motivated to combine Newman’s application with Ronkainen.” PO Resp. 34 (citing Ex. 2016 ¶ 77). Patent Owner further asserts that the combination is based on impermissible hindsight. *See id.* (citing Ex. 2016 ¶ 77). Patent Owner’s unavailing arguments that Ronkainen is not an enabling disclosure also are inadequate to overcome Petitioner’s showing regarding the motivation to combine Ronkainen’s teachings with other prior art of record or demonstrate that Petitioner’s combination is based on hindsight.

Based on the entire trial record, we determine that Petitioner sets forth sufficient articulated reasoning with rational underpinning to support the conclusion that it would have been obvious to one of ordinary skill in the art

⁷ Petitioner also presents a back-up argument that Ronkainen in combination with Newman and Araki’s disclosures provides an enabling disclosure. *See* Pet. Reply 9 (quoting *Raytheon Techs. Corp. v. General Elec. Co.*, 993 F.3d 1374, 1380 (Fed. Cir. Apr. 16, 2021)). Patent Owner responds to this Reply argument. *See* PO Sur-reply 1–4. We need not address these Reply and Sur-reply arguments because Ronkainen is presumed to be enabled and the presumption has not been sufficiently rebutted.

to modify the combined teachings of Newman and Araki or the combined teachings of Newman, Araki, and Trewin. *See* Ex. 1002 ¶ 212; *KSR*, 550 U.S. at 418. Accordingly, we conclude that Petitioner has shown by a preponderance of the evidence that the combination of Newman, Araki, and Ronkainen, as well as the combination of Newman, Araki, Trewin, and Ronkainen, teaches or suggests “determining one of a presence and an absence of a media signal during and/or after said activation of said interface element” and “selecting, in response to said detection of said activation of said interface element, one of a plurality of communication modes for recording said media message by said adaptive recording application based on said determination of said one of said presence and said absence of said media signal,” as recited in claim 12.

(6) Summary of Analysis of Claim 12

Patent Owner does not assert that its evidence of objective indicia of nonobviousness applies to the subject matter of independent claim 12. *See* PO Resp. 41–58 (Patent Owner’s arguments do not address the limitations of independent claim 12, which does not include the limitations “determining a duration of said activation of said interface element” and “selecting . . . one of a plurality of communication modes . . . based on said comparison,” recited in claim 1). Based on the entire trial record, Petitioner has established by a preponderance of the evidence that the subject matter of claim 12 would have been obvious over the combined teachings of Newman, Araki and Ronkainen, as well as the combined teachings of Newman, Araki, Trewin, and Ronkainen.

c. Analysis of Independent Claims 18, 30, 46

As pointed out by Petitioner, claim 18 only requires that the selection of a communication mode be based on one of the recited options, and does not require selecting a communication mode based on the presence or absence of a media signal. *See* Pet. 37–38, 65. Based on the entire trial record and for the same reasons as those explained above in Sections II.D.1.d. through II.D.1.g. addressing the unpatentability of claims 1, 18, 30, and 46 over Newman, Araki, and Trewin, Petitioner has established by a preponderance of the evidence that the subject matter of claims 18, 30, and 46 would have been obvious over the combined teachings of Newman, Araki, and Ronkainen, as well as the combined teachings of Newman, Araki, Trewin, and Ronkainen. Similarly, because claim 18 only requires that the selection of a communication mode be based on one of the recited options, claim 18 does not require selecting a communication mode based on the duration of the activation signal. Based on the entire trial record and for the same reasons as those explained above addressing independent claim 12, Petitioner has established by a preponderance of the evidence that the subject matter of claims 18, 30, and 46 would have been obvious over the combined teachings Newman, Araki, Trewin, and Ronkainen.

d. Analysis of Dependent Claims 13, 15–17, 19, 23–25, 34–37, and 48

Claims 13 and 15–17 depend from independent claim 12, claims 19 and 23–25 depend ultimately from independent claim 18, claims 34–37 depend ultimately from independent claim 30, and claim 48 depends from independent claim 46. Ex. 1001, 28:1–6, 28:10–22, 28:46–51, 29:4–25, 30:44–31:11, 32:65–33:2. We have reviewed Petitioner’s contentions and supporting evidence addressing how Newman, Araki, Trewin, and

Ronkainen teach or suggest the additional limitations recited in dependent claims 13, 15–17, 19, 23–25, 34–37, and 48. *See* Pet. 61–70.

Patent Owner does not substantively address the limitations of dependent claims 13, 15–17, 19, 23–25, 34–37, and 48 and Petitioner’s contentions addressing these claims. *See generally* PO Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

Based on the entire trial record and including the reasons explained above addressing independent claims 1, 18, 30, and 46, Petitioner has established by a preponderance of the evidence that the subject matter of claims 13, 15–17, 19, 23–25, 34–37, and 48 would have been obvious over the combined teachings of Newman, Araki, and Trewin.

e. Analysis of Dependent Claim 7

Claim 7 depends from claim 1 and further recites:

wherein said one or more configurable timing parameters comprise a lower threshold time and an upper threshold time, and wherein said comparison of said duration of said activation of said interface element with said one or more configurable timing parameters by said adaptive recording application comprises comparing said duration of said activation of said interface element with said lower threshold time and said upper threshold time.

Ex. 1001, 27:17–25.

Petitioner asserts that the combination of Newman, Araki, and Trewin teach a configurable timing parameter in the form of a duration of time (e.g., one second) used to determine whether to select a push-to-talk mode or a tap-to-start mode. *See* Pet. 46–47 (incorporating by reference Pet. 23–27). Petitioner contends that the duration of the timing parameter could also be

configured using Trewin's techniques based on the user's interaction with Newman's application button. *See id.* at 47. Petitioner implicitly acknowledges that the combination of Newman, Araki, and Trewin does not teach two configurable timing parameters, a lower threshold time, and an upper threshold time, as required by dependent claim 7. *See id.* Petitioner asserts that Ronkainen teaches a lower threshold time and an upper threshold time based on Ronkainen's disclosure of a time duration associated with a quick button press and release (e.g., the time between steps 105 and 120 in Figure 1) and a time duration associated with a time-out of "short-press functionality" (e.g., after the time between steps 105 and 134 in Figure 1 has elapsed). *See id.* at 47–50 (reproducing Ex. 1006, Fig. 1 (with annotations); quoting Ex. 1006, 2:42–45; citing Ex. 1006, 3:15–18, 4:60–5:3, 5:12–25; Ex. 1002 ¶ 205).

Petitioner contends that it would have been obvious to one of ordinary skill in the art to modify the combined teachings of Newman, Araki, and Trewin to include a lower threshold time and upper threshold time, as taught by Ronkainen, such that Newman's communication device, as modified to include the single-button tap-to-start and push-to-talk teachings of Araki, would initiate a tap-to-start communication mode in response to a quick tap (e.g., under 100 ms) of the respond button or initiate a push-to-talk communication mode in response to pressing the respond button for a longer duration (e.g., 1 second or longer) in order to provide multiple functions for a single button and during an intermediate time interval inform the user what will happen if the button continues to be pressed (i.e., push-to-talk recording mode). *See* Pet. 50–53 (quoting Ex. 1006, 1:27–31, 1:40–48, 3:1–7; citing Ex. 1005 ¶ 25; Ex. 1002 ¶¶ 207–216). Petitioner reproduces Ronkainen's

explanation that the utilization of a few buttons on a limited interface is enhanced by separating a short press of a button from a longer duration press. *See id.* at 52 (quoting Ex. 1006, 1:27–31). Petitioner further reproduces Ronkainen’s explanation that when the function resulting from a long key press is not obvious, or is a hidden feature of the interface, the feature may be left unused or the user may have to guess what will happen. *See id.* (quoting Ex. 1006, 1:40–48). Petitioner also reproduces Ronkainen’s explanation that the long-press presentation gives information about what the extra functionality is, which can be important in user interfaces where it is unclear what happens, and which can happen in some cases when the button count is extremely limited (e.g., only one button). *See id.* (quoting Ex. 1006, 3:1–7). Petitioner contends that the concerns expressed in Ronkainen are echoed in Araki, which discusses issues when a user may not understand how the recording button operates. *See id.* (citing Ex. 1005 ¶ 25).

Patent Owner does not address substantively the limitations of dependent claim 7 and Petitioner’s contentions regarding claim 7. *See generally* PO Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

Based on the entire trial record, we determine that Petitioner sets forth sufficient articulated reasoning with rational underpinning to support the conclusion that it would have been obvious to one of ordinary skill in the art to modify the combined teachings of Newman, Araki, and Trewin to include a lower threshold time and upper threshold time, as taught by Ronkainen. *See* Ex. 1002 ¶¶ 207–216; *KSR*, 550 U.S. at 418. For the reasons above and including the reasons explained above addressing claim 1, we conclude that

Petitioner has established by a preponderance of the evidence that the subject matter of dependent claim 7 would have been obvious over the combined teachings of Newman, Araki, Trewin, and Ronkainen.

f. Analysis of Dependent Claims 8–11

Claims 8–11 depend from claim 7, and ultimately depend from claim 1. We have reviewed Petitioner’s additional contentions and supporting evidence addressing how Newman, Araki, Trewin, and Ronkainen teaches or suggests the additional limitations recited in dependent claims 8–11. *See* Pet. 56–59.

Patent Owner does not substantively address the limitations of dependent claims 8–11. *See generally* PO Resp. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

Based on the entire trial record and including the reasons explained above in addressing claims 1 and 7, Petitioner has established by a preponderance of the evidence that the subject matter of claims 8–11 would have been obvious over the combined teachings of Newman, Araki, Trewin, and Ronkainen.

g. Summary

For all of the foregoing reasons, based on the entire trial record, Petitioner has established by a preponderance of the evidence that the subject matter of claims 7–13, 15–19, 23–25, 30, 34–37, 46, and 48 is unpatentable under 35 U.S.C. § 103 over Newman, Araki, Trewin, and Ronkainen.

*3. Patentability Challenge to Claims 12, 13, and 15–17 over
Newman, Araki, and Ronkainen*

Our analysis above addressing Petitioner’s challenge to patentability based on Newman, Araki, Trewin, and Ronkainen also applies to Petitioner’s challenge to patentability based on Newman, Araki, and Ronkainen. Independent claim 12 does not recite “one or more configurable timing parameters,” as recited in independent claims 1, 18, 30, and 46, for which the Petition relies on the teachings of Trewin. *Compare* Ex. 1001, 27:50–67 (claim 12), *with id.* at 26:35–55 (claim 1), 28:23–45 (claim 18), 29:59–30:21 (claim 30), 32:33–56 (claim 46); *see* Pet. 28–32. In addition, as explained above addressing claim 1, we determine that Petitioner establishes sufficiently that the combination of Newman and Araki teaches or suggests “an adaptable recording application,” also recited in claim 12, and sets forth a sufficient articulated reasoning with rational underpinning to support the proposed modification of Newman in view of Araki.

Based on the entire trial record and including the reasons explained above addressing claims 12, 13, and 15–17, Petitioner has established by a preponderance of the evidence that the subject matter of claims 12, 13, and 15–17 is unpatentable under 35 U.S.C. § 103 over Newman, Araki, and Ronkainen.

III. CONCLUSION

Petitioner has shown by a preponderance of the evidence that claims 1, 2, 4–13, 15–19, 21–25, 30, 32–37, and 46–48 of the ’059 Patent are unpatentable.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that Petitioner has shown by a preponderance of the evidence that claims 1, 2, 4–13, 15–19, 21–25, 30, 32–37, and 46–48 of the '059 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.

In summary:

Claims	35 U.S.C. §	Reference(s) / Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1, 2, 4–6, 18, 21, 22, 30, 32, 33, 46, 47	103	Newman, Araki, Trewin	1, 2, 4–6, 18, 21, 22, 30, 32, 33, 46, 47	
7–13, 15–19, 23–25, 30, 34–37, 46, 48	103	Newman, Araki, Trewin, Ronkainen	7–13, 15–19, 23–25, 30, 34–37, 46, 48	
12, 13, 15–17	103	Newman, Araki, Ronkainen	12, 13, 15–17	
Overall Outcome			1, 2, 4–13, 15–19, 21–25, 30, 32–37, 46–48	

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