Trials@uspto.gov
571-272-7822

Paper: 46
Date: December 13, 2021

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS, LLC,
Petitioner,

v.

VOICE TECH CORPORATION,
Patent Owner.

IPR2020-01018
Patent 10,491,679 B2

Before GEORGIANNA W. BRADEN, JOHN F. HORVATH, and MICHAEL T. CYGAN, *Administrative Patent Judges.*

HORVATH, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background and Summary

Unified Patents, LLC ("Petitioner"), filed a Petition requesting *inter partes* review of claims 1–8 ("the challenged claims") of U.S. Patent No. 10,491,679 B2 (Ex. 1001, "the '679 patent"). Paper 1 ("Pet."), 2. Voice Tech Corporation ("Patent Owner") filed a Preliminary Response. Paper 7 ("Prelim. Resp."). Upon consideration of the Petition and Preliminary Response, we instituted *inter partes* review of all challenged claims on all grounds raised. Paper 10 ("Dec. Inst.").

Patent Owner filed confidential (Paper 16) and public (Paper 17) versions of a Response to the Petition. *See* Paper 17 ("PO Resp.").[1] Petitioner filed confidential (Paper 28) and public (Paper 30) versions of a Reply. *See* Paper 30 ("Pet. Reply"). Patent Owner filed confidential (Paper 34) and public (Paper 35) versions of a Sur-Reply, which included argument relying on evidence (Exhibits 2038–2041) other than the deposition transcripts of the cross-examination of a Reply witness. *See* Paper 35 ("PO Sur-Reply");

Petitioner moved to strike Exhibits 2038–2041 as against Board policy and to deny consideration of those portions of the Sur-Reply that rely on these Exhibits. *See* Paper 39, 1; *see also* Patent Trial and Appeal Board Consolidated Trial Practice Guide at 73 (Nov. 2019)[2] ("The sur-reply may not be accompanied by new evidence other than the deposition transcripts of the cross-examination of any reply witness."). Patent Owner opposed. *See* Paper 40. We granted Petitioner's motion, and expunged Exhibits 2038–

[1] Unless noted otherwise, we cite to the public versions of the papers filed by the parties.
[2] Available at https://www.uspto.gov/TrialPracticeGuideConsolidated

2041 from the record. Paper 43, 6. We do not consider and give no weight to any arguments first presented in Patent Owner's Sur-Reply that rely on any of Exhibits 2038–2041. An oral hearing was held on September 21, 2021, and the hearing transcript is included in the record. *See* Paper 45 ("Tr.").

We have jurisdiction under 35 U.S.C. § 6(b). This is a Final Written Decision under 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons set forth below, we find Petitioner has demonstrated by a preponderance of evidence that claims 1–8 of the '679 patent are unpatentable.

B. Related Matters

Petitioner and Patent Owner identify the following as a matter that can affect or be affected by this proceeding: *Voice Tech Corp. v. Mycroft AI Inc.*, 4:20-cv-00111 (W.D. Mo.). Pet. 96; Paper 6, 2. In addition, Patent Owner identifies U.S. Patent No. 9,794,348 as a patent and U.S. Patent Application Nos. 16/655,047; 16/655,054; 16/655,061; 16/677,351; 16/677,332; 16/677,369; 16/710,539; 16/710,692; 16/896,673; 16/896,693; and 16/896,743 as patent applications that can affect or be affected by this proceeding. Prelim. Resp. 1.

C. Evidence Relied Upon[3]

Reference		Effective Date	Exhibit
Wong	US 2006/0235700 A1	Oct. 19, 2006	1004
Beauregard	US 6,438,545 B1	Aug. 20, 2002	1005
Ben-Efraim	US 7,203,721 B1	Apr. 10, 2007	1006
Balakrishnan	US 6,233,559 B1	May 15, 2001	1007

[3] Petitioner also relies upon the Declarations of Bruce McNair (Exs. 1003, 1032) and Kevin Jakel (Ex. 1028).

D. Instituted Challenges to Patentability

We instituted review on the following challenges:

Ground	Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1	1–8	103(a)	Wong, Beauregard
2	1–8	103(a)	Ben-Efraim, Balakrishnan

II. ANALYSIS

A. Real Parties-in-Interest

Petitioner and Patent Owner identify themselves, respectively, as the only real parties-in-interest. Pet. 96; Paper 6, 2.

Patent Owner disagrees that Petitioner is the only real party-in-interest, arguing that "one of Petitioner's subscription members, Mycroft AI Inc. ('Mycroft') is also an RPI," basing that argument on an analysis of the factors set forth in *RPX Corporation v. Applications In Internet Time, LLC*, IPR2015-01750, Paper 128 at 2 (Oct. 2, 2020 PTAB) (precedential). *See* PO Resp. 12, 16–22. Specifically, Patent Owner argues Mycroft is an unnamed RPI because (1) Unified's business model is to invalidate or license patents on behalf of its members, (2) Mycroft had a preexisting "membership" relationship with Unified prior to the filing of the Petition, (3) Unified knew Mycroft had been sued for infringement of the '679 patent when it filed the Petition, and refused to discuss the Petition with Mycroft in a "willfull[y] blind[]" effort to avoid having to name Mycroft as an RPI, (4) Mycroft wants to have the '679 patent found unpatentable, and stands to gain if it is found unpatentable, (5) Unified and Mycroft exchanged communications before the Petition was filed, and (6) Unified is representing Mycroft's interest in seeking to have the '679 patent found unpatentable. *Id.* at 16–22.

Patent Owner, therefore, "asks that this IPR be terminated due to Petitioner's failure to identify all RPIs." *Id.* at 23; *see also* PO Sur-Reply 2–14.

Petitioner replies that "[t]he Board need not address whether a party is an unnamed RPI, as no time bar or estoppel provisions under 35 U.S.C. § 315 are implicated." Pet. Reply 15 (citing *SharkNinja Operating LLC v. iRobot Corp.*, IPR2020-00734, Paper 11 at 18 (Oct. 6, 2020, PTAB) (precedential). Petitioner further argues that Mycroft is not an RPI because Petitioner (1) deters assertions of invalid patents by non-practicing entities without coordinating with its members, (2) never acts as a middleman for its members, discusses lawsuits with its members, or helps extricate its members from lawsuits, (3) can and has challenged its own member's patents, (4) has never been paid by Mycroft, (5) decided to challenge the '679 patent and hired a prior art search firm and expert witness to help challenge the '679 patent before Mycroft became a member, (6) engaged in limited communications with Mycroft to explain that it does not coordinate with its members and would not be working on Mycroft's behalf, (7) acts at its own behest and has sole control, discretion, and funding over this proceeding, and (8) has no incentive, financial or otherwise, to represent Mycroft's interests in this proceeding. *Id.* at 16–26.

For the following reasons, and without deciding whether Mycroft is an unnamed RPI, we are not persuaded by Patent Owner's argument that this proceeding should be terminated for failure to identify all RPIs. First, Patent Owner's argument is based on an incorrect premise that 35 U.S.C. § 312(a) is a jurisdictional statute that must be satisfied to give the Board jurisdiction. This premise is contrary to the Board's precedential decision in *Lumentum Holdings, Inc. v. Capella Photonics, Inc.*, IPR2015-00739, Paper 38, 5 (PTAB Mar. 4, 2016) (precedential) ("§ 312(a) is not jurisdictional").

Lumentum makes clear that § 312(a) is not jurisdictional because a party may rectify non-compliance with the statute. *Id.*, Paper 38 at 5. The Federal Circuit has upheld the Board's finding that § 312(a) is not jurisdictional. *See Mayne Pharma Int'l Pty. Ltd. v. Merck Sharp & Dohme Corp.*, 927 F.3d 1232, 1240 (Fed. Cir. 2019) ("[I]f a petition fails to identify all real parties in interest under § 312(a)(2), the Director can, and does, allow the petitioner to add a real party in interest.").

Second, the facts in *RPX* are clearly distinguishable from the facts in this case. In *RPX*, the Board's analysis was limited to determining "whether the § 315(b) time-barred entity Salesforce should have been identified as an RPI or privy." *RPX*, Paper 128, 7. Upon finding "RPX ha[d] not shown, by a preponderance of the evidence, that Salesforce was not an RPI," the Board terminated RPX's petition as also time-barred under § 315(b). *Id.* at 35. Here, by contrast, the evidence establishes that Mycroft was not a time-barred party when Unified filed the Petition. *See* Tr. 34:4–10 (counsel for Patent Owner admitting Mycroft was not time-barred based on the filing of the Texas infringement complaint); *see also* Ex. 2034 (showing Mycroft was sued in Missouri on March 22, 2020); Pet. 99 (showing the Petition was filed on June 5, 2020); 35 U.S.C. § 315(b) (setting forth the 1 year time-bar, i.e, March 22, 2021 based on the filing date of the Missouri complaint and assuming immediate service of the complaint). Consequently, even if we were to determine that Mycroft is an RPI of Unified, there is no basis to deny or terminate the Petition under § 315(b), which is not implicated.

Moreover, estoppel under § 315(e) only arises after "a final written decision under section 318(a)" has issued with respect to a challenged claim. *See* 35 U.S.C. §§ 315(e)(1),(2). This decision will be the first such final written decision as to any claim of the '679 patent. Thus, even if we were to

determine that Mycroft is an unnamed RPI, § 315(e)(1) would prevent Mycroft from requesting a *future* proceeding challenging a claim at issue in this proceeding on a basis that has been raised or reasonably could have been raised in this proceeding, but does not require termination of this proceeding. It will be left to the sound judgment of the District Court for the Western District of Missouri to determine whether Mycroft is estopped under § 315(e)(2) from challenging the validity of any claim challenged in this proceeding on a basis that has been raised or reasonably could have been raised in this proceeding.

Accordingly, because we determine that neither the time bar nor estoppel provisions of 35 U.S.C. § 315 are implicated in this case, "we need not address whether [Mycroft] is an unnamed RPI." *SharkNinja*, Paper 11 at 18.

B. The '679 Patent

The '679 patent is directed to a system and method "for using voice commands from a mobile device to remotely access and control a computer." Ex. 1001, 1:30–34. The system includes mobile device 102, which can be "a cellular phone, smart phone, touch-screen device, personal digital assistant, tablet device, notebook device, laptop device, or other suitable mobile device." *Id.* at 2:31–35. The system also includes general purpose computer 104 having "mobile device interface 106, audio command interface 108, operating system interface 110, and native applications 112." *Id.* at 2:38–43.

"Mobile device interface 106 receives voice or data information from mobile device 102," "perform[s] voice recognition and other suitable processing," and "provide[s] voice data to audio command interface 108." *Id.* at 3:13–14, 3:51–54. To do so, mobile device interface 106 "monitor[s]

communications medium 114," such as a public switched telephone network (PSTN), local area network, digital subscriber line (DSL) or cable modem, or other suitable network connections, and "determine[s] whether mobile device 102 has transmitted data to general purpose computer 104." *Id.* at 3:14–32.

Audio command interface 108 "receive[s] data from mobile device interface 106 and detect[s] audio commands in the data." *Id.* at 3:46–48. Audio command interface 108 can "provide a list of available commands to the person using mobile device 102" and execute detected commands. *Id.* at 3:59–62. Audio command interface 108 can have "one or more states, such that certain audio commands are available depending upon the state of audio command interface 108." *Id.* at 3:65–4:1.

"Operating system interface 110 allows audio command interface 108 to activate various operating system commands" such as "a search command, a run command, [or] a program list command." *Id.* at 4:7–9, 6:35–39. Native applications 112, i.e., applications that can be "accessed and controlled at general purpose computer 104," can be interfaced with audio command interface 108 "by installing an applications program interface (API) or other suitable data into audio command interface 108 that identifies native applications 112 and provides available commands for audio command interface 108 to interface with native applications 112." *Id.* at 4:26–43.

Figure 4 of the '679 patent, reproduced below, illustrates a method "for using voice commands from a mobile device to remotely access and control a general purpose computer." *Id.* at 7:50–53.

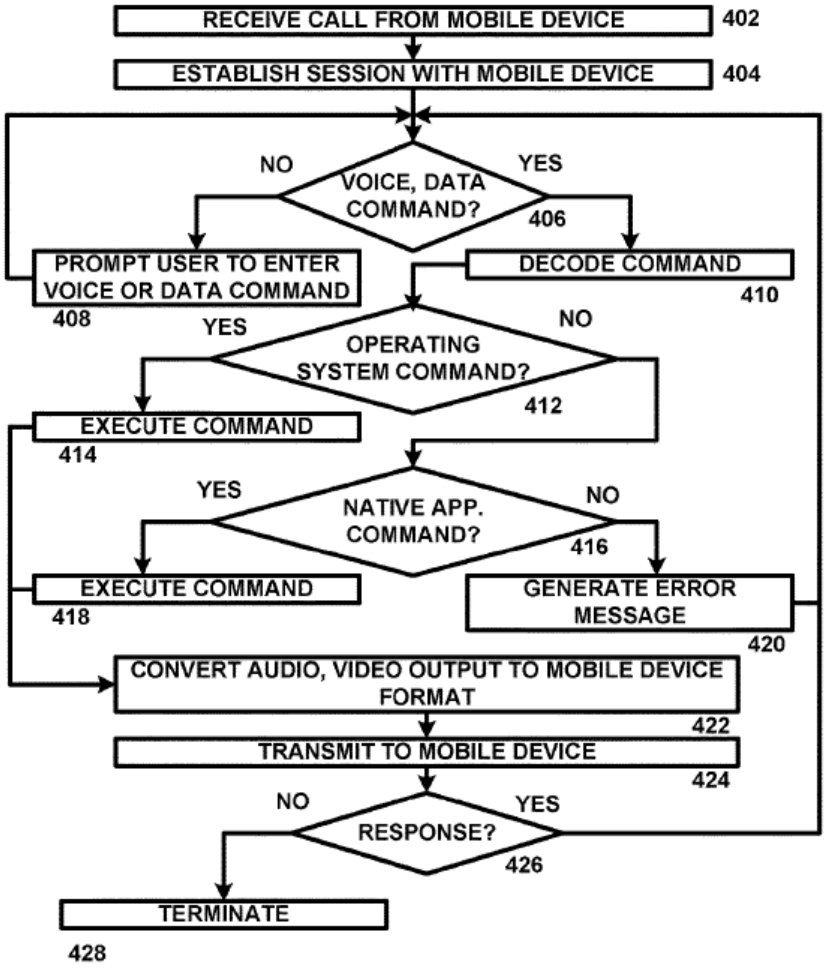

Figure 4 of the '679 patent is a flow chart "for using voice commands from a mobile device to remotely access and control a general purpose computer." *Id.* The method begins at 402/404 "where a call is received from a mobile device" and "a session is established with the mobile device." *Id.* at 7:53–55, 7:61. "At 406, it is determined whether a voice or data command has been received," and if so, the method "proceeds to 410," where "the voice or data command is decoded." *Id.* at 8:10–11, 8:23–25. "At 412, it is determined whether the command is an operating system command," and if it is, the method "proceeds to 414 where the operating system command is executed." *Id.* at 8:32–36. If the received command is not an operating

system command, the method "proceeds to 416 where it is determined whether a native application command has been received," and if so, "the method then proceeds to 418 where the command is executed." *Id.* at 9:39–42, 9:46–49. Otherwise, "the method proceeds to 420 where an error message is generated." *Id.* at 9:50–52.

Regardless of whether an operating system or native application command is executed at steps 414 or 418, respectively, "[a]t 422, the audio output data, video output data, or audio and video output data, generated at the computer is converted to a mobile device format." *Id.* at 8:61–63. At 424, the converted data is then "transmitted to the mobile device." *Id.* at 9:11–13. "The method then proceeds to 426," where "it is determined whether a response has been received from the mobile device." *Id.* at 9:26–29. "If no response has been received, the method proceeds to 428 and terminates." *Id.* at 9:29–30. Conversely, if a response is received, "the method then returns to 406." *Id.* at 9:37–38.

C. Illustrative Claim

Claims 1, 3, 5, and 7 are independent claims, and claims 2, 4, 6, and 8, respectively, depend from them. Ex. 1001, 10:7–12:16. Claim 1 is illustrative of the challenged claims and is reproduced below.

> 1. A method of accessing and controlling a computer from a mobile device, comprising:
>
> receiving audio data from the mobile device, at the computer, at an audio command interface;
>
> the audio command interface decodes the audio data into a command;
>
> the audio command interface selects, from at least one operating system and at least one application, one operating system or one application, wherein the audio command interface decides is the appropriate operating system or

> application to execute at least one process in response to the command;
>
> executing with the selected operating system or application the at least one process in response to the command;
>
> generating output data in response to the selected operating system or application executing the at least one process; and
>
> transmitting the output data to the mobile advice.

Ex. 1001, 10:7–25.

D. Level of Ordinary Skill in the Art

Petitioner identifies a person of skill in the art ("POSITA") at the time of the invention as someone that would have had "at least a bachelor's degree in electrical engineering, computer science, or a related subject or the equivalent or closely-related field . . . , and one or more years of experience working with audio input systems." Pet. 8 (citing Ex. 1003 ¶¶ 29–31). Patent Owner does not dispute Petitioner's description of the educational requirements of a person of ordinary skill in the art, but argues the field of invention is "computer operating systems, and more specifically . . . using voice commands from a mobile device to remotely access and control a computer." PO Resp. 3–4. Therefore, Patent Owner argues, a person skilled in the art "would need at least 5 years of experience working on actual implementations of the above disciplines in industry, government, and/or academia." *Id.* at 4 (emphasis omitted).

"[T]he level of skill in the art is a prism or lens through which a judge, jury, or the Board views the prior art and the claimed invention." *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). The level of skill in the art should be commensurate with the problems and solutions disclosed in the prior art. *See In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). For the reasons discussed in § II.F.3, *infra*, we find the field of invention is voice

activated computing. Accordingly, we determine a person of ordinary skill in the art would have had a bachelor's degree in electrical engineering, computer science, or a related field, and three years of experience working on voice activated computing.

E. Claim Construction

In *inter partes* reviews, we interpret a claim "using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b)." 37 C.F.R. § 42.100(b) (2019). Under that standard, the "words of a claim 'are generally given their ordinary and customary meaning.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc). The ordinary and customary meaning of a claim term applies "unless the patentee demonstrated an intent to deviate from [it] . . . by redefining the term or by characterizing the invention in the intrinsic record using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." *Teleflex, Inc. v. Ficosa N. America Corp.*, 299 F.3d 1313, 1327 (Fed. Cir. 2002); *see also Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014). Thus, although we "look to the specification and prosecution history to interpret what a patentee meant by a word or phrase in a claim," we do not read "extraneous limitations . . . into the claims from the specification or prosecution history" absent an express definition or clear disavowal of claim scope. *Bayer AG v. Biovail Corp.*, 279 F.3d 1340, 1348 (Fed. Cir. 2002). Only those claim terms in controversy need to be construed, and only to the extent necessary to resolve the controversy. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

Petitioner avers that because "the claims are obvious under any reasonable construction . . . no claim requires construction beyond its plain

meaning." Pet. 8. Patent Owner argues the terms "audio command interface" and "mobile device interface" require construction. *See* PO Resp. 4–12.

1. Audio Command Interface

Patent Owner argues this limitation should be construed to mean:

> [A] functional component of a computer, which may be implemented in hardware, software, or a suitable combination of hardware and software, that enables a mobile device to access and control one or more operating systems and/or one or more applications at the computer without requiring voice command interoperability between the mobile device and each separate operating system or application.

PO Resp. 6. Patent Owner argues its proposed construction is supported by the Specification, prosecution history, and a dictionary definition of "interface." *Id.* at 7–9 (quoting Ex. 1001, 2:38–45, 4:45–57, 7:36–49; Ex. 1008, 379–380, 476–492; Ex. 2002, 193; citing Ex. 2013 ¶ 45).[4]

Petitioner replies that Patent Owner's construction (a) improperly reads limitations from the rest of the claim into the audio command interface, (b) cites to portions of the Specification that either do not describe the audio command interface or that describe exemplary embodiments, and (c) cites to a prosecution history that failed to limit the meaning or disavow claim scope for an audio command interface. Pet. Reply 2.

We agree with Petitioner. Neither the Specification nor the prosecution history defines or limits the plain and ordinary meaning of an audio command interface; nor do any of the passages cited by Patent Owner.

[4] Patent Owner cites to pages 476–492 of Exhibit 1002. *See* PO Resp. 9; Ex. 1002. The subject matter Patent Owner describes, however, can be found in Exhibit 1008, the prosecution history of the parent to the '679 patent. *See* Ex. 1008, 476–492. We correct the citation here.

See PO Resp. 7–9 (citing/quoting Ex. 1001, 2:38–45, 4:45–57, 7:36–49). Although the Specification describes audio command interface 108 as a component of system 100 "implemented in hardware, software, or a suitable combination of hardware and software," system 100 is an "exemplary" embodiment rather than a limiting embodiment. Ex. 1001, 2:21–24, 2:38–45. In any event, all computer components can be implemented as hardware, software or suitable combinations of hardware and software.

Similarly, although the Specification distinguishes system 100 over prior art systems requiring "voice command interoperability," it does not identify audio command interface 108 as the component that distinguishes system 100 over the prior art. *Id.* at 4:45–57. Regardless, as discussed above, system 100 is described as an "exemplary" rather than a limiting embodiment. *Id.* at 2:21–24. Moreover, contrary to Patent Owner's contention, the prosecution history did not limit the plain and ordinary meaning of an audio command interface. *See* PO Resp. 9. Although the applicant amended claims to recite an audio command interface and argued the audio command interface eliminated the need for "voice command interoperability," the amended claims were subsequently abandoned after further rejection by the Examiner. *See* Ex. 1008, 477–486 (amending claims 1–12 to recite an audio command interface); *id.* at 416 (continued rejection of claims 1–12), *id.* at 304 (cancellation of claims 1–12).

Finally, although the Specification discloses "system 300 provides an audio command interface that allows a person to use voice commands from mobile device 102 to access and control native applications or operating system functions," it does not limit the audio command interface to one that receives voice commands from a mobile device. Ex. 1001, 7:36–49. First, like system 100, system 300 is an "exemplary" rather than a limiting

embodiment. *Id.* at 5:62–64. Second, all of the independent claims *expressly* require the audio command interface to receive data from a mobile device. *Id.* at 10:9–10, 10:32–33, 10:55–57, 11:15–17. This strongly suggests the audio command interface is not limited to receiving data from a mobile device. *See Phillips*, 415 F.3d at 1314 (explaining that "the context in which a term is used in the asserted claim can be highly instructive," for example, a claim referring to steel baffles "strongly implies that the term 'baffles' does not inherently mean objects made of steel."); *see also Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1237 (Fed. Cir. 2016) ("Construing a claim term to include features of that term already recited in the claims would make those expressly recited features redundant."). Third, the Specification discloses the audio command interface can receive data from non-mobile devices. For example, it discloses "audio command interface 108 receives data from mobile device interface 106," which includes network interface 202, which "can monitor a modem, such as a PSTN modem, cable modem, DSL modem, or other suitable modems for incoming data traffic that indicates mobile device 102 *or other suitable devices* are attempting to interface with general purpose computer 104." Ex. 1001, 3:45–48, 4:64–67, 5:8–14, Fig. 2 (emphasis added).

Accordingly, for all of the reasons discussed above, we find the term "audio command interface" has its plain and ordinary meaning and does not require express construction.

2. Mobile Device Interface

Patent Owner argues this limitation should be construed to mean "a functional component of a computer, which may be implemented in hardware, software, or a suitable combination of hardware and software, that enables the computer to communicate with a mobile device through an

appropriate communications medium." PO Resp. 10. Patent Owner argues this construction is supported by the Specification and a dictionary definition of "interface." *Id.* at 10–12 (quoting/citing Ex. 1001, 2:1–3, 3:13–43, 4:64–5:5; 5:20–52, Fig. 2; Ex. 2002, 193; Ex. 2013 ¶ 46). Petitioner argues this limitation does not need construction, but "agrees that P[atent] O[wner's] construction is reasonable." Pet. Reply 2. Patent Owner responds that because the meaning of this term "is not immediately apparent," it requires express construction. PO Sur-Reply 2 (citing Ex. 2013 ¶ 46).

In the institution phase, we preliminarily agreed with and adopted Patent Owner's construction of this term as our own. *See* Dec. Inst. 11. However, as noted above, the Specification discloses mobile device interface 106 can monitor a network interface card or "a PSTN modem, cable modem, DSL modem, or other suitable modems for incoming data traffic that indicates mobile device 102 or *other suitable devices* are attempting to interface with general purpose computer 104." Ex. 1001, 4:64–67, 5:8–14, Fig. 2 (emphasis added). Thus, a mobile device interface is not limited to an interface between a computer and a mobile device. Regardless, because our Decision does not depend on the precise meaning of this term, we construe mobile device interface to *include* hardware, software, or a combination thereof that enables communication between a computer and a mobile device. *See Nidec*, 868 F.3d at 1017.

F. Obviousness over Wong and Beuaregard

Petitioner argues claims 1–8 are unpatentable as obvious over Wong and Beauregard. Pet. 9–55. Patent Owner disagrees. PO Resp. 28–49. For the reasons discussed below, Petitioner has established by a preponderance of evidence that claims 1–8 are unpatentable over Wong and Beauregard.

1. Wong

Wong discloses a system and method allowing "mobile electronic device users to access and manipulate collections of electronic files stored on a computer from their mobile device using voice commands." Ex. 1004 ¶ 12. Wong's method is illustrated in Figures 3 and 4a. Figure 3 is reproduced below.

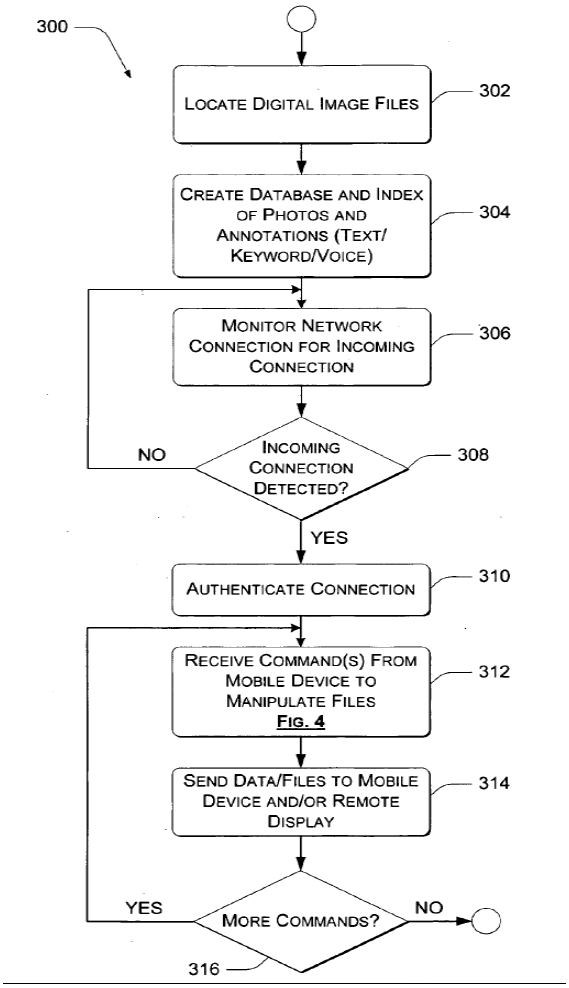

Figure 3 of Wong is a flow chart illustrating an exemplary method for using a mobile device to process electronic files. *Id.* ¶ 34. At steps 302/304, photo server application 220 on PC (personal computer) 210 creates keyword database 225 and index 227 for stored digital photos 224. *Id.* ¶ 35, Figs. 2, 3. At steps 306–310, photo server application 220 monitors

Internet 208 for a connection request from smart phone 202 and, upon receiving a request, authenticates smart phone 202. *Id.* ¶¶ 35–36, Figs. 2, 3. At step 312, photo server application 220 receives one or more commands from smart phone 202; these can include commands to "send[] a list of keywords to the device, send[] a particular photo to the device, [or] store a voice recording . . . about a particular photo" in database 225. *Id.* ¶ 37. The commands can be "voice commands or commands related through . . . key strokes, mouse inputs, stylus inputs, etc." *Id.* ¶ 38. At step 314, "PC 210 executes the commands received at block 312 and transmits data and/or files to the [smart phone] device (or some other device) as required by the received command." *Id.* ¶ 41.

As indicated above, the command received at step 312 may be a voice command. *Id.* ¶ 38. If so, the command is processed according to the method depicted in Figure 4a of Wong, which is reproduced below.

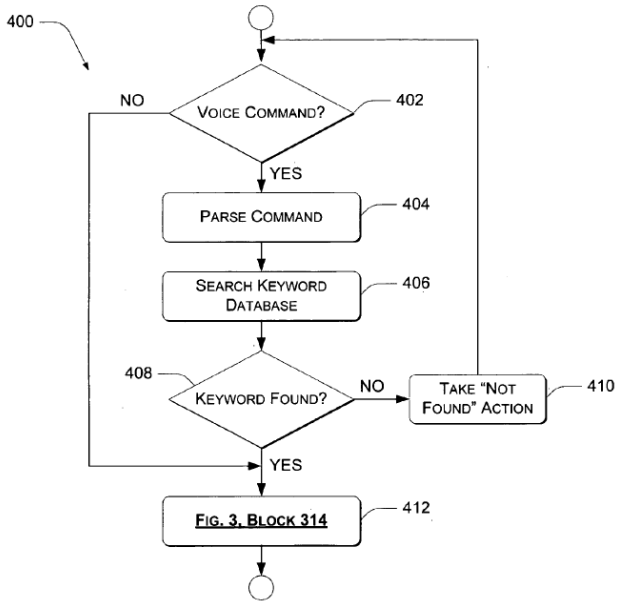

Figure 4a of Wong is a flow chart illustrating audio command processing by PC 210. *Id.* At steps 402/404, speech engine 213 in PC 210 determines whether a received command is a voice command and, if it is, parses the

command to identify a command word and a keyword. *Id.* ¶¶ 38–39, Figs. 2, 4a. At steps 406–412, PC 210 or photo server application 220 searches keyword database 225 "to identify a match with the parsed command." *Id.* ¶ 39. "If a matching keyword is found . . . then the command is executed at block 412 (which is, in effect, block 314 of FIG. 3)," and PC 210 "transmits data and/or files to the [smart phone] device (or some other device) as required by the received command." *Id.* ¶¶ 40–41.

2. Beauregard

Beauregard discloses "[a] system and method that allows a user to use their everyday language or user defined words to operate a computer in a highly efficient way." Ex. 1005, code (57). Beauregard's system includes a microkernel engine or MIKE 330, which is shown in Figure 4, reproduced below.

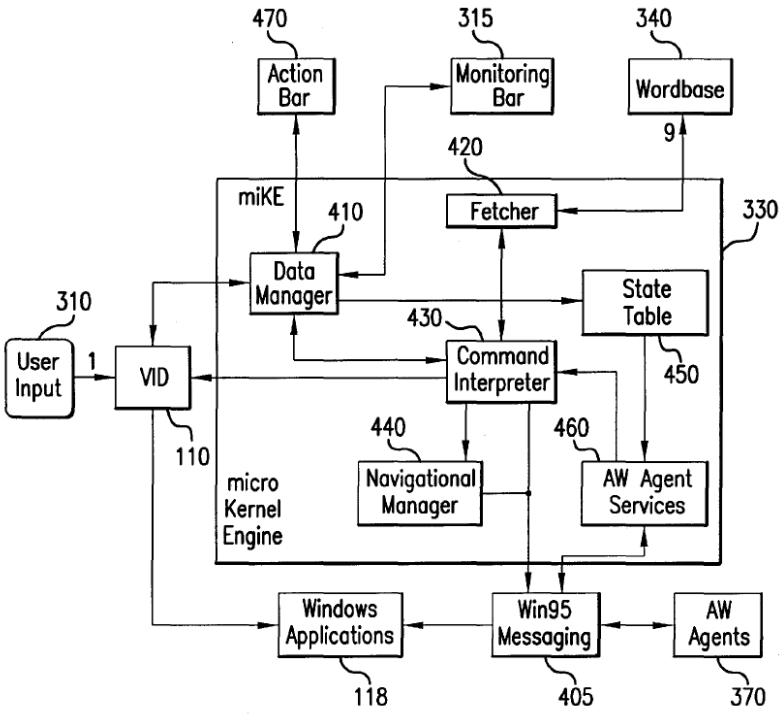

Figure 4 of Beauregard is block diagram showing a detailed view of Beauregard's MIKE 330. *Id.* at 28:18. At user input 310, a user can enter

input via a keyboard, mouse selection, or microphone. *Id.* at 16:47–62. If the user input is entered via microphone, the input is converted into text via conventional voice-to-text software. *Id.* at 14:5–8. The generated text is provided to command interpreter 430 via AW services 460. *Id. at* 28:65–29:1. Command interpreter 430 sends the text to fetcher 420, which searches wordbase 340 for matching action words. *Id.* at 28:56–64. Wordbase 340 is a repository "where all third party applications register their set of action words" and associated scripts. *Id.* at 17:24–36. The scripts contain one or more "commands [that] can range from a simple word replacement to a call to an application program." *Id.* at 30:3–5. When fetcher 420 finds a matching action word in wordbase 340, it sends the script associated with that action word to command interpreter 430, which executes the script. *Id.* at 5:40–46, 29:9–14. The script can be a command service that "causes an operation to be performed by a software application, a utility program, or by the operating system." *Id.* at 28:11–13.

3. Whether Wong and Beauregard are Combinable

Petitioner argues Wong and Beauregard are combinable because they are in the same field of endeavor, namely, "systems and methods of accessing and controlling a computer using voice commands." Pet. 13–14 (citing Ex. 1003 ¶¶ 51, 61; Ex. 1004 ¶¶ 12, 33, 68; Ex. 1005, 5:19–22). Patent Owner disagrees, arguing the teachings of Wong and Beauregard cannot be combined because Beauregard is not analogous art. PO Resp. 45–48. Patent Owner argues the field of endeavor of the '679 patent is "using voice commands from a mobile device to remotely access and control a computer" and that Beauregard is not in this field of endeavor because it uses a microphone to enter voice commands and "does not disclose or teach anything related to mobile devices." *Id. at* 46–48. Patent Owner further

argues that Beauregard is not reasonably pertinent to a problem confronting the inventor of the '679 patent because it "has nothing to do with the problems involved in the use of voice commands from a mobile device to access and control a computer." *Id.* at 48–49.

A reference is analogous art if it is (a) "within the field of the inventor's endeavor" or (b) "reasonably pertinent to the particular problem with which the inventor was involved." *In re Deminski*, 796 F.2d 436, 442 (Fed. Cir. 1986). The field of endeavor is determined "by reference to explanations of the invention's subject matter in the patent application, including the embodiments, function, and structure of the claimed invention." *In re Bigio*, 381 F.3d 1320, 1325–26 (Fed. Cir. 2004). A reference is within an inventor's field of endeavor when it has "essentially the same function and structure" as the claimed invention. *Deminski*, 796 F.2d at 442. A reference is reasonably pertinent to a problem the inventor was involved with if it "logically would have commended itself to an inventor's attention in considering his problem." *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992). The scope of analogous art is to be construed broadly. *See Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010) (indicating *KSR*[5] "directs us to construe the scope of analogous art broadly").

The '679 patent identifies its field of invention as "computer operating systems" or "using voice commands from a mobile device to remotely access and control a computer." Ex. 1001, 1:7–12. The mobile device can be a "laptop . . . or other suitable mobile device that allows communication with a computer via a wireless or wire-line network." *Id. at* 2:31–36, 2:62–

[5] *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 402 (2007)

65, Fig. 1. Figure 4 of the '679 patent illustrates a method "for using voice commands from a mobile device to remotely access and control a general purpose computer." *Id.* at 7:50–52. All steps of the method are performed by computer 104, which receives a call from a mobile device (step 402) by monitoring a network interface card or a modem connected to a wired communications medium for incoming data from a cell phone, tablet, laptop, or *other suitable devices*. *Id.* at 2:31–37, 2:62–3:2, 3:18–32, 4:64–5:16, 5:8–17, 7:53–9:65, Fig. 4. The incoming data need not be received from a cellular phone or over a wireless network. Accordingly, the field of endeavor of the '679 patent is voice activated computing. *See Unwired Planet, LLC v. Google Inc.*, 841 F.3d 995, 1001 (Fed. Cir. 2016) (finding the field of endeavor "is not limited to the specific point of novelty, the narrowest possible conception of the field, or the particular focus within a given field").

Wong discloses "voice activated mobile computing devices" and "processing files from mobile computing device using voice commands." Ex. 1004 ¶ 2. Wong's method allows "mobile electronic device users to access and manipulate collections of electronic files stored on a computer [PC 210] from the mobile device using voice commands." *Id.* ¶ 12. Thus, like the '679 patent, Wong's field of endeavor is voice activated computing.

Beauregard discloses a semantic user interface (SUI) for a computer that allows a user to access the computer via a set of user defined words. Ex. 1005, 1:11–16. The SUI allows a user "to enter action words and interact with the system to control the operations of the computer." *Id.* at 5:14–16. The action words can be entered by voice, in which case "voice-to-text software is provided to translate the voice signals." *Id.* at 8:36–40. Thus, like Wong and the '679 patent, Beauregard's field of

invention is also voice activated computing. Alternatively, because Beauregard discloses converting voice signals into action words to control a computer, Beauregard is reasonably pertinent to the invention claimed in the '679 patent and would have "commended itself to [the] inventor's attention in considering his problem." *Clay*, 966 F.2d at 659.

Accordingly, for the reasons discussed above, we find Wong and Beauregard are analogous art and, therefore, would have been combinable.

4. Reasons to Combine Wong and Beauregard

Petitioner argues that a person of ordinary skill in the art would have found it obvious "to incorporate *Beauregard's* teachings related to using natural-language commands . . . to select the appropriate operating system functionality or application to execute the command into *Wong's* system." Pet. 14 (citing Ex. 1003 ¶¶ 62–69). Petitioner argues this would entail modifying Wong "to implement *Beauregard's* teachings related to controlling an operating system and applications using natural-language commands using one or more components of MIKE 330 to access a database mapping such commands." *Id.* at 15 (citing Ex. 1003 ¶ 64). Petitioner argues this modification of Wong "would have simply required the application of known techniques . . . to improve a similar device . . . in the same way" because both Wong and Beauregard "are related to executing voice commands using keyword matching." *Id.*

Patent Owner does not dispute Petitioner's rationale for combining the teachings of Wong and Beauregard. *See* PO Resp. 57–60. Instead, Patent Owner argues that Petitioner's reasoning suffers from hindsight bias because Petitioner "failed to address why one of ordinary skill ***at the time of the invention*** . . . would be motivated to combine Wong and Beauregard." *Id.* at 57 (citing *InTouch Techs., Inc. v. VGO Commc'ns, Inc.*, 751 F3d 1327,

1352 (Fed. Cir. 2014)). Patent Owner also argues that Petitioner's obviousness analysis fails because "Petitioner failed to consider, or even mention, any objective evidence of nonobviousness in its Petition." *Id.* at 60.

Petitioner replies that any reasonable person would understand its reasons to combine Wong and Beauregard were provided as of June 4, 2007, because the Petition identified that date as the priority date of the '679 patent and its expert described the qualifications of a person of ordinary skill in the art as of that date. Pet. Reply 13–14 (citing Pet. 1, 14–18, Ex. 1003 ¶¶ 29–31). Petitioner further argues that it did not need to consider secondary considerations because Patent Owner "provided no evidence of secondary indicia of nonobviousness for Petitioner to consider." *Id.* at 14 (citing *In re GPAC Inc.*, 57 F.3d 1573, 1580 (Fed. Cir. 1995)).

We find Petitioner has articulated sufficient reasoning with rational underpinning to demonstrate why a person of ordinary skill in the art would have been motivated to combine the teachings of Wong and Beauregard at the time of the invention. Petitioner's analysis relies on and cites the declaration of Mr. McNair. *See* Pet. 14–18 (citing Ex. 1003 ¶¶ 62–69). Mr. McNair testifies that he had been informed "that a person cannot obtain a patent . . . if the differences between the invention and the prior art are such that the subject matter as a whole would have been obvious to a person having ordinary skill in the art . . . at the time of the invention." Ex. 1003 ¶ 12. Mr. McNair further testifies that he had been informed "that for a patent claim to be found obvious, the proper perspective to consider is that of a person having ordinary skill in the art . . . at the time of the invention." *Id.* ¶ 14. Based on this testimony, we conclude that Petitioner's reasoning for why a person skilled in the art would have combined the teachings of

Wong and Beauregard pertain to why that person would have done so at the time of the invention. *Id.* ¶¶ 62–66. To find otherwise would be to adhere to a "[r]igid preventative rule[] that den[ies] factfinders recourse to common sense," which the Supreme Court found is "neither necessary under our case law nor consistent with it." *KSR*, 550 U.S. at 421.

The *InTouch* decision does not dissuade us from reaching this conclusion. The Federal Circuit's holding in *InTouch* was "that there [was] no evidence, much less substantial evidence, from which the jury could conclude that [the prior art] disclose[d] [a claimed element], notwithstanding [the expert's] conclusory opinion to the contrary." *InTouch*, 751 F.3d at 1351. The Federal Circuit's other findings in *InTouch*, upon which Patent Owner relies, are *dicta* predicated on the assumption that the prior art had in fact disclosed the claim element the Federal Circuit found to be missing. *Id.* ("Even assuming [the prior art] disclosed the [missing claim element] there is insufficient evidence on this record of a reason or motivation for one of ordinary skill in the art at the time of the invention to combine [the prior art].").

Moreover, the dicta in *InTouch* are not particularly relevant given the particular facts in this case. First, the Federal Circuit faulted the *InTouch* expert for failing "to provide the necessary 'articulated reasoning with some rational underpinning' to support a conclusion of invalidity based on the[] combinations" of references asserted in that case. *Id.* (quoting *KSR*, 550 U.S. at 418). By contrast, Mr. McNair has opined that a person of ordinary skill in the art would have modified Wong to use Beauregard's database in order to control multiple applications or the operating system because doing so amounted to applying "known techniques . . . to improve a similar device . . . in the same way." Pet. 15 (citing Ex. 1003 ¶ 64). The Supreme Court

has expressly endorsed this type of reasoning. *See KSR*, 550 U.S. at 417 ("if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill").

Second, the Federal Circuit faulted the *InTouch* expert for failing "to address why one of ordinary skill in the art *at the time of the invention* . . . would be motivated to combine these references." *InTouch*, 751 F.3d at 1352. By contrast, Mr. McNair's opinions regarding combining the teachings of Wong and Beauregard are made with the understanding that "the obviousness inquiry should be done through the eyes of a person having ordinary skill in the art *at the time of the invention*," and that "the proper perspective to consider is that of a person having ordinary skill in the art . . . *at the time of the alleged invention*." Ex. 1003 ¶¶ 12, 14, 63–64 (emphases added).

Third, the Federal Circuit faulted the *InTouch* expert for failing "to account for objective evidence of nonobviousness" that had been introduced by the patentee in that case. *InTouch*, 751 F.3d at 1348, 1352. By contrast, Patent Owner has not introduced any evidence of secondary considerations of nonobviousness in this case despite bearing the burden of producing such evidence. *See* PO Resp. 1–60; PO Sur-Reply 1–25; *see also GPAC*, 57 F.3d at 1580; *see also Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1360 (Fed. Cir. 2007) (placing burden on the opponent of invalidity to come forward with evidence to counter evidence of invalidity); *Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1350 (Fed. Cir. 2000) (placing burden on patentee to introduce object indicia of non-obviousness). Accordingly, there was no secondary considerations evidence for Petitioner or its expert to consider.

5. Claim 1

a) Receiving audio data from a mobile device at a computer's audio command interface

Claim 1 recites a method of accessing and controlling a computer from a mobile device, comprising receiving audio data from the mobile device, at the computer, at an audio command interface. Ex. 1001, 10:7–10.

Notwithstanding Patent Owner's arguments to the contrary, discussed *infra*, Petitioner demonstrates how the combination of Wong and Beauregard teaches this limitation. *See* Pet. 18–27. First, Petitioner demonstrates how Wong discloses an audio command interface that receives audio data from a mobile device. *See* Pet. 18–23 (citing Ex. 1004 ¶¶ 12, 25, 30–33, 37–39, 43, Figs. 2, 3, 4a; Ex. 1003 ¶ 69). Wong discloses "a way for mobile electronic device users to access and manipulate collections of electronic files stored on a computer" by receiving voice commands sent from mobile device 202 at speech engine 213 in PC 210 in order to control application 220. Ex. 1004 ¶¶ 12, 32, Figs. 2, 3, 4a. Second, for the reasons discussion in § II.F.4, *supra*, Petitioner demonstrates why a person skilled in the art "would have been motivated to modify, and would have reasonably expected success in modifying, *Wong's* speech engine to incorporate *Beauregard's* more specific teaches related to the logic of an audio command interface (e.g., MIKE 330)." Pet. 27.

Patent Owner argues Wong's speech engine is not an audio command interface because it (a) "merely performs speech-to-text translation" and (b) "does not enable a mobile device to access and control one or more operating systems and/or one or more applications . . . without requiring voice command interoperability between the mobile device and each separate operating system or application" (i.e., it doesn't meet Patent

Owner's proposed construction of the term "audio command interface"). *See* PO Resp. 31–32. We disagree.

First, for the reasons discussed in § II.E.1, *supra*, we disagree with Patent Owner's proposed construction of the term "audio command interface," and find the term has its plain and ordinary meaning. Second, we find Wong's speech recognition engine 213 meets that plain and ordinary meaning because it is an interface between smart phone 202 and application 220 that receives a command from smart phone 202 (Figure 3, step 312) and "parses the command" (Figure 4a, step 404) in order to "identify voice commands and keywords" that can be executed to control operation of application 220. Ex. 1004 ¶¶ 32, 39, 41, Figs. 2, 3, 4a.

Moreover, when Wong's speech engine 213 is modified to include Beauregard's logic to locate scripts associated with commands and to execute the scripts in order "to launch [] application program(s) 118 or to control functions and features of application program(s) 118," the combination teaches accessing and controlling one or more operating systems or applications without requiring voice command interoperability. *See In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) ("[T]he test [for obviousness] is whether the references, taken as a whole, would have suggested appellant's invention to one or ordinary skill in the . . . arts at the time the invention was made. . . . Thus, [Wong] must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole.").

Patent Owner further argues that the audio command interface limitation is not met because a person skilled in the art "would not have looked to Beauregard's teachings related to MIKE 330 if the [person] was considering modifying Wong's speech engine for receiving audio data"

because Beauregard's MIKE 330 receives text recognized by third-party voice recognition software and "has nothing to teach regarding receiving audio data." PO Resp. 32–33. We disagree.

Petitioner does not propose modifying Wong's system to bodily incorporate MIKE 330. *See* Pet. 14–18. Instead, Petitioner proposes modifying Wong's speech engine 213 to allow it to select at least one operating system or at least one application in response to receiving an audio command based on Beauregard's teachings. *See* Pet. 15 (arguing a person skilled in the art "would have been motivated to modify *Wong's* system to implement *Beauregard's* teachings related to controlling an operating system and applications using natural-language commands using one or more components of MIKE 330 to access a database mapping such commands"); *id.* at 14 (arguing that when "[c]ombined with *Beauregard's* teachings, *Wong's* speech engine would include logic . . . to access a database, like *Beauregard's* wordbase, that maps voice input to commands for various operating system and application functions, as opposed to a database dedicated to a single application."). "Non-obviousness cannot be established by attacking references individually where the [challenge] is based upon the teachings of a combination of references." *Merck*, 800 F.2d at 1097.

b) decoding the audio data into a command at the audio command interface

Claim 1 requires the audio command interface to decode the audio data into a command. Ex. 1001, 10:11–12. Notwithstanding Patent Owner's arguments to the contrary, discussed *infra*, Petitioner demonstrates how the combination of Wong and Beauregard teaches this limitation. *See* Pet. 27–29 (citing Ex. 1003 ¶¶ 49, 55–59, 63–69). First, Petitioner demonstrates

how Wong's speech recognition engine 213 decodes received audio data into a command. *Id.* at 27–28 (citing Ex. 1004 ¶¶ 25, 32, 39, 43, Fig. 4a). Wong discloses PC 210 receives voice commands from smart phone 202 and speech recognition engine 213 "parses the command[s]" in order to "identify voice commands and keywords." Ex. 1004 ¶¶ 32, 37–39. Second, Petitioner demonstrates how Beauregard's MIKE 330 includes logic for recognizing a command from received audio data that has been converted into text. *See* Pet. 28–29 (citing Ex. 1005, 28:58–29:12, 30:1–7, Fig. 4). Beauregard discloses converting voice data to text, and providing the text to MIKE 330's command interpreter 430. Ex. 1005 28:65–29:1, Fig. 4. Command interpreter 430 passes the text to fetcher 420, which searches wordbase 340 for matching action words. *Id.* at 28:56–59. If a matching action word is found, fetcher 420 sends a script associated with the action word back to command interpreter 430. *Id.* at *29:9–12.*

Patent Owner argues this limitation is not met because Wong's speech recognition engine "parses" audio data (i.e., performs simple speech-to-text translation) rather than decoding the audio data into a command. PO Resp. 34–35 (citing Ex. 1004 ¶ 45). We disagree.

First, Wong *expressly* discloses "speech recognition engine 213 [] is configured to *identify* voice commands and keywords." Ex. 1004 ¶ 32 (emphasis added). Second, Patent Owner's argument that Wong's speech engine translates audio data into text without identify a command is based on an embodiment of Wong that Petitioner *does not* rely on. Petitioner's argument relies on Wong's first embodiment in which speech recognition engine 213 on PC 210 identifies commands in voice data received from smart phone 202. *See* Pet. 27–28 (citing Ex. 1004 ¶¶ 25, 32, 39, 43, Fig. 4a); *see also* Ex. 1004 ¶ 43 (describing Figure 4a as depicting an embodiment

that "records a voice command at the mobile device and downloads the voice command to the home PC 210 as an audio note"). By contrast, Patent Owner's argument relies on Wong's second embodiment in which speech recognition module 240 on smart phone 202 performs text recognition on voice data at smart phone 202 and sends a text message to PC 210. *See* PO Resp. 35 (quoting Ex. 1004 ¶ 45); *see also* Ex. 1004 ¶ 45 ("FIG. 4b is a flow diagram 220 that depicts an exemplary command processing technique performed on a mobile device.")

Patent Owner further argues that the decoding limitation isn't met because "Beauregard discloses the audio data being sent to a third-party voice-to-text software . . . and the translated text [being] sent to the fetcher." PO Resp. 37. Therefore, Patent Owner argues, "Beauregard does not disclose or teach an audio command interface that decodes audio data into a command.

Patent Owner's argument does not dissuade us from finding that Petitioner has demonstrated how *the combination* of Wong and Beauregard teaches the decoding limitation. As discussed in § II.F.5.a, *supra,* Petitioner identifies Wong's speech engine 213 as an audio command interface and proposes modifying speech engine 213 to include logic from Beauregard's MIKE 330 to allow it to identify commands for at least one operating system and at least one application, i.e., to identify commands for operating systems and applications in addition to Wong's application 220. "Non-obviousness cannot be established by attacking references individually where the [challenge] is based upon the teachings of a combination of references." *Merck*, 800 F.2d at 1097.

c) selecting an operating system or application to execute a process in response to the command at the audio command interface

Claim 1 further requires the audio command interface to select one operating system or one application from at least one operating system and at least one application that the audio command interface decides is the appropriate operating system or application to execute at least one process in response to the command. Ex. 1001, 10:13–18. Notwithstanding Patent Owner's arguments to the contrary, discussed *infra*, Petitioner demonstrates how the combination of Wong and Beauregard teaches this limitation. *See* Pet. 29–32 (citing Ex. 1005, 5:42–46, 9:5–26, 10:12–21, 10:41–65, 16:41–46, 17:37–41, 27:47–28:16, Figs. 4, 10; Ex. 1003 ¶¶ 63–69).

As discussed above, Wong's speech recognition engine 213 is an audio command interface that receives audio data from a mobile device and decodes the audio data into a command. *See* Ex. 1004 ¶¶ 12, 32, 39, Figs. 2, 3, 4a. Wong then searches keyword database 225 "to identify a match with the parsed command" (Figure 4a, step 406) and executes the command to control application 220 upon finding a match (Figure 4a, step 412). *Id.* ¶¶ 40–41, Figs. 2, 4a.

Beauregard stores a plurality of user-defined action words in a database (wordbase 340) together with service scripts associated with the action words. Ex. 1005, 5:12–26, 5:39–42, 17:33–36, Fig. 4. User input 310 entered into a microphone is converted to text that is forwarded to command interpreter 430 inside MIKE 330. *Id.* at 15:60–63, 28:65–29:5. Command interpreter 430 forwards the input to fetcher 420, which searches wordbase 340 for matching action words and their associated service scripts. *Id.* at 9:17–20, 28:56–64. When a match is found, fetcher 420 sends the service script associated with the action word to command interpreter 430,

which executes the script. *Id.* at 5:44–46, 29:9–14, 16:41–46. The service script may perform "a content, retrieval, navigation or command service." *Id.* at 5:42–44, 17:37–41. A content service "alters the user's text content in some way," e.g., by "automatically capitalizing the first letter of proper nouns." *Id.* at 27:53–58. A command service "causes an operation to be performed by a software application, a utility program, or by the operating system (e.g., opening a word processing document)." *Id.* at 28:11–14. The scripts that can be executed by command interpreter 430 allow users "to launch applications, navigate within applications and control application functions by using their natural language." *Id.* at 5:49–51, 9:22–26, 10:41–44.

Petitioner argues that a person skilled in the art would have found it obvious to modify Wong's system, including speech recognition engine 213 and keyword database 225, "to incorporate *Beauregard's* teachings related to logic capable of interpreting natural-language voice commands to select from a database (e.g., wordbase [340])" commands to control a variety of services, including commands for the operating system and multiple applications. Pet. 32 (citing Ex. 1003 ¶¶ 63–69). We agree for the reasons discussed in § II.F.4, *supra*. Thus, the combination of Wong and Beauregard teaches an audio command interface that selects an operating system or application to execute a process in response to a received command that the audio command interface decides is the appropriate operating system or application to execute the process.

Patent Owner argues the combination of Wong and Beauregard fails to disclose the selecting limitation. *See* PO Resp. 39–44. Patent Owner argues that "Wong and Beauregard are both systems where the user preconfigures [a] database with specific instructions to be carried out when a

command is given" and "employ a matching function with a database to locate the user's preconfigured instructions or service scripts, which tell the computer exactly what to do." *Id.* at 43. Therefore, Patent Owner argues, because the user "preconfigures the system with specific instructions," the combination fails to teach or suggest "a component that decides the appropriate operating system or application to execute at least one process in response to the command and then selects, from at least one operating system and at least one application, one operating system or one application." *Id.* at 42.

Petitioner responds that the selecting limitation "do[es] not prohibit preconfiguration" of the computer to respond to commands and that a person skilled in the art "would have understood that . . . computer systems 'decide' to perform operations based on preconfigured instructions." Pet. Reply 10 (citing Ex. 1032 ¶¶ 7–13). Petitioner further responds that, like its proposed combination, the '679 patent "teaches an audio command interface that 'can determine whether voice data corresponds to one of two or more predetermined audio commands' and may include a 'file of available commands' that 'can be matched with voice data.'" *Id.* (quoting Ex. 1001, 3:55–59, 4:7–15, 6:7–10) (emphasis omitted).

We agree with Petitioner. First, we credit the testimony of Mr. McNair that a person skilled in the art at the time of the invention would have known that computers "decide" which operations to perform based on preconfigured instructions. *See* Ex. 1032 ¶ 7. Second, the audio command interface described in the '679 patent operates in the same way as the audio command interface in Petitioner's proposed combination, i.e., by recognizing and executing predetermined commands. For example, the '679 patent discloses "audio command interface 108 can determine whether voice

data corresponds to one of two or more *predetermined* audio commands." Ex. 1001, 3:55–59 (emphasis added); *see also id.* at 6:7–10, Fig. 3 (disclosing audio command interface 108 includes voice to command conversion 302, which "receives voice data and determines whether the voice data matches one or more *predetermined* commands") (emphasis added). To recognize predetermined commands for the operating system, audio command interface 108 "*include[s] a file of available operating system commands*." *Id. at* 4:7–11 (emphasis added). To recognize predetermined commands for applications, native applications 112 install "an applications program interface (API) or other suitable data into audio command interface 108 that identifies native applications 112" and provides "*certain predetermined commands for native applications 112*." *Id.* at 4:26–36 (emphasis added).

d) Executing with the selected operating system or application the process in response to the command

Claim 1 further requires executing the at least one process with the selected operating system or application. Ex. 1001, 10:19–21. Petitioner demonstrates how the combination of Wong and Beauregard teaches this limitation. *See* Pet. 32–37 (citing/quoting Ex. 1004 ¶¶ 33, 37, 40, 41, Figs. 2, 3, 4a; Ex. 1005, 5:42–46, 8:36–47, 9:5–26, 15:49–51, 17:33–36, 18:8–12, 18:45–57). Patent Owner does not dispute these contentions. *See* PO Resp. 28–49.

Wong's speech engine 213 parses received audio data to identify a command. Ex. 1004 ¶¶ 32, 39, Fig. 4a. Wong then searches a database to identify and execute a matching command. *Id.* ¶ 40. When Wong's speech engine 213 is modified to include logic from Beauregard's MIKE 330 to search Beauregard's wordbase 340, the modified speech engine can include

Beauregard's fetcher 420 and command interpreter 430. Fetcher 420 receives text corresponding to an action word (command), searches wordbase 340 for a matching action word and, when a matching action word is found, sends an associated service script to command interpreter 430, which executes the service script. Ex. 1005, 5:44–46, 16:41–45, 17:21–22, 17:33–36, 28:65–29:14. The service script can "launch[] application programs, control[] application program operations, replace[] . . . text, retriev[e] . . . information, and the like." *Id.* at 9:5–12.

e) Generating output data in response to executing the process

Claim 1 further requires generating output data in response to the selected operating system or application executing the at least one process. Ex. 1001, 10:22–24. Petitioner demonstrates how the combination of Wong and Beauregard teaches this limitation. *See* Pet. 37–39 (citing/quoting Ex. 1004 ¶¶ 37, 41, 54, 55, 68; Ex. 1005, 10:32–40, 10:58–65, 41:9–18, 46:25–30, 48:53–65). Patent Owner does not dispute these contentions. *See* PO Resp. 28–49.

Wong teaches when PC 210 executes voice commands received from a mobile device, it "transmits data and/or files to the device . . . as required by the received commands." Ex. 1004 ¶ 41. When Wong's speech engine 213 is modified to include logic from Beauregard's MIKE 330 (e.g., command interpreter 430 as discussed above), command interpreter 430 can execute a service script and "send[] all keyboard related actions (replacements, special keys, and the like) associated with [the] fetched action words . . . to the applications 118." Ex. 1005, 10:22–40, 29:13–17. Thus, the combination of Wong and Beauregard teaches generating output data in response to the selected operating system or application executing the process.

f) Transmitting the output to the mobile device

Claim 1 further requires transmitting the output data to the mobile device. Ex. 1001, 10:25. Petitioner demonstrates how the combination of Wong and Beauregard teaches this limitation. *See* Pet. 39–41 (citing/quoting Ex. 1004 ¶¶ 41, 68, Fig. 3; Ex. 1003 ¶¶ 63–68). Patent Owner does not dispute these contentions. *See* PO Resp. 28–49.

Wong teaches when PC 210 executes voice commands received from a mobile device, it "transmits data and/or files to the device . . . as required by the received commands" over a GPRS[6] network. Ex. 1004 ¶¶ 41, 68. Thus, Petitioner demonstrates that when Wong's system is modified to incorporate the teachings of Beauregard, "[t]he combined system would generate output data. . . and transmit the data to the mobile device." Pet. 41.

g) Conclusion

For the reasons discussed above, Petitioner has demonstrated by a preponderance of evidence that all of the limitations of claim 1 are taught by the combination of Wong and Beauregard and that a person of ordinary skill in the art would have had a rational reason to combine the teachings from these references at the time of the invention. Accordingly, Petitioner has demonstrated by a preponderance of evidence that claim 1 is unpatentable over Wong and Beauregard.

6. Claim 3

Claim 3 recites a method that is substantially similar to the method recited in claim 1. *Compare* Ex. 1001, 10:30–45, *with id.* at 10:7–25. The method of claim 3 differs from the method of claim 1 in the types of entities the audio command interface can select in response to a received command.

[6] General Packet Radio Service, e.g., a 2G or 3G cellular network.

In claim 1, the audio command interface can select an operating system or an application from among at least one operating system and at least one application. *Id.* at 10:13–18. In claim 3, the audio command interface can select an application from among two or more applications. *Id.* at 10:36–40.

Notwithstanding Patent Owner's arguments to the contrary, discussed *infra*, Petitioner demonstrates how the combination of Wong and Beauregard teaches all the limitations of claim 3. *See* Pet. 48–50. First, given the substantial similarity between claims 1 and 3, Petitioner demonstrates how the combination teaches the claim 3 limitations requiring a method of controlling a computer from a mobile device by receiving audio data at an audio command interface, decoding the audio data into a command, executing the command with a selected application, generating output data, and transmitting the output data to the mobile device by relying on its analysis of claim 1. *See* Pet. 48; §§ II.F.5.a, II.F.5.b, and II.F.5.d–f, *supra*.

Second, Petitioner demonstrates how the combination teaches the audio command interface selects an application from among two or more applications that the audio command interface decides is the appropriate application to execute a process in response to the received command. *See* Pet. 49–50 (quoting Ex. 1005, 16:31–46; citing Ex. 1003 ¶¶ 63–69). Beauregard teaches using action words to "control functions and features of application program(s) 118. Each function is performed by a service script, which is associated with each action word within the wordbase 340." Ex. 1005, 16:41–46. Application programs 118 can include "word processors, spread sheets, presentation software, utilities, and the like." *Id.* at 16:36–38. Thus, a user might use action words such as "msw" "to launch Microsoft Word, 'mse' to launch Microsoft Excel, 'msp' to launch

Microsoft Powerpoint, 'msa' to launch Microsoft Access, and so on." *Id.* at 16:23–26. When Wong's speech recognition engine is modified to include these teachings from Beauregard, it can select an application from among two or more applications (MS Word, MS Excel) that it decides is the appropriate application to execute a process in response to a received command.

Patent Owner argues Petitioner's analysis fails for the same reasons discussed above with respect to claim 1. *See* PO Resp. 33, 34, 38, 44, 45. We disagree for the reasons discussion in §§ II.F.5.a–f, *supra*.

Accordingly, for the reasons discussed above, Petitioner has demonstrated by a preponderance of evidence that claim 3 is unpatentable over Wong and Beauregard.

7. Claims 5 and 7

Claims 5 and 7 are independent claims. Petitioner argues "[c]laim 5 is substantively similar to claims 1 and 2. Therefore, these limitations are obvious for the same reasons as the corresponding limitations in claims 1 and 2." Pet. 50. Likewise, Petitioner argues "[c]laim 7 is substantively similar to claims 1, 3, and 5. The corresponding limitations of [c]laims 1, 3, and 5 . . . show how each limitation of claim 7 is disclosed." *Id.* at 54. In our Institution Decision, we agreed with this analysis, and characterized claims 5 and 7 as system claims that perform the methods recited in claims 1 and 3, respectively. *See* Dec. Inst. 25.

Patent Owner disagrees that the limitations recited in claims 1 and 3 are substantially similar to the limitations recited in claims 5 and 7, respectively. *See* PO Resp. 23–27. First, Patent Owner argues the audio command interface recited in claims 5 and 7 differs from the audio command interface recited in claims 1 and 3 because it performs the

additional steps of "executing" and "generating." *Id.* at 26. Second, Patent Owner argues that claims 5 and 7 recite a "mobile device interface" for transmitting output data and Petitioner failed to mention the "mobile device interface" and, therefore, "failed to raise arguments or submit evidence that the 'mobile device interface' limitation would have been obvious." *Id.* at 23–25 (citing Pet. 52, 55; *Elbit Systems of America, LLC v. Thales Visionix, Inc.*, 881 F.3d 1354, 1357–58 (Fed. Cir. 2018); *Choirock Contents Factory Co., Ltd. v. Saucier*, 801 Fed. Appx. 754 (Fed. Cir. 2020)).

Although we agree with Patent Owner that claims 5 and 7 recite an audio command interface that performs "executing" and "generating" steps, Petitioner's mapping of the Wong/Beauregard combination to the limitations of claims 1 and 3, respectively, demonstrates how the combination's audio command interface performs these "executing" and "generating" limitations. For example, Petitioner's claim 1 analysis demonstrates how the Wong/Beauregard audio command interface—i.e., Wong's speech engine 213 modified to include logic from Beauregard's MIKE 330—"executes with the selected operating system or application the at least one process . . . in response to the command" because once speech engine 213 identifies a command from audio data, fetcher 420 searches wordbase 340 for a matching command, and command interpreter 430 executes a script associated with that command, which causes an application or the operating system to execute a process. *See* Pet. 32–37; § II.F.5.d, *supra*.

Similarly, Petitioner's claim 1 analysis demonstrates how the Wong/Beauregard audio command interface "generates output data in response to the selected operating system or application executing the at least one process" because when command interpreter 430 executes a script it "sends all keyboard related actions (replacements, special keys, and the like)

associated with [the] fetched action words . . . to the applications 118." Ex. 1005, 10:22–40, 29:13–17. Thus, Wong's modified speech engine 213 and a selected operating system or application generate output data in response to the selected application or operating system executing a process. *See*, e.g., Pet. 31 (citing Ex. 1005, 19:13–20:10) (explaining how command interpreter 430 can "execut[e] a service script at the operating system to search a file directory in Windows 95"); Ex. 1006, 20:6–10 (indicating when such a script is executed it "erases the last word type[d]—activates the winstart key—types the letter 'f' that triggers the windows find tool—closes the winstart key—waits for 600 ms—and calls in the last word typed—and presses enter to launch the find operation").

Petitioner's claim 3 analysis demonstrates how the Wong/Beauregard audio command interface performs the "executing" and "generating" functions recited in claim 7 for the same reasons discussed above with respect to claims 1 and 5. *See* § II.F.6, *supra.*

Regarding the "mobile device interface" limitation recited in claims 5 and 7, Petitioner's tables that cross-reference claim 5 and 7 limitations to the analysis of corresponding claim 1 and 3 limitations recite only the function performed by the mobile device interface limitation (i.e., "transmitting output data to the mobile device") and omit the structure that performs that function (i.e., the "mobile device interface"). *See* Pet. 52, 55; Ex. 1001, 10:25, 11:4–5, 12:11–12. Petitioner contends that after noting the substantial similarity between claims 1 and 5 and claims 3 and 7, respectively, it referenced its claim 1 analysis of the "transmitting" limitation to show how the last limitation in claims 5 and 7 was "obvious for the same reasons." Pet. Reply 2–3 (citing Pet. 50, 51, 54, 90, 94). Petitioner then argues that its claim 1 analysis of the "transmitting" limitation

explained how a person skilled in the art would have known that Wong's computer would have used "built-in services of the computer operating system . . . to provide means to transmit output data to other . . . devices," and how these built-in services meet Patent Owner's construction of a "mobile device interface." *Id.* at 3 (citing/quoting Pet. 39, 41; Ex. 1003 ¶¶ 63–68; Dec. Inst. 26–27).

Patent Owner contends this argument is an improper new argument that is based on the Board's Institution Decision rather than the Petition, and that the Board "does not have the authority 'to raise, address, and decide patentability theories never presented by the petitioner and not supported by record evidence.'" PO Sur-Reply 14–15 (quoting *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016).

We disagree, and find Petitioner has demonstrated how the combination of Wong and Beauregard teaches the mobile device interface limitation recited in claims 5 and 7. Although Petitioner's cross-referencing tables misquote the "mobile device interface" limitation by reciting the function performed and omitting the structure that performs that function, Petitioner's analysis refers back to its claim 1 analysis of a limitation that performs the same "transmitting" function. *See* Pet. 52, 55. Moreover, Petitioner's claim 1 analysis demonstrates not only how the combination of Wong and Beauregard performs the "transmitting" function, but identifies the structure that performs the function. *Id.* at 39–41 (citing/quoting Ex. 1004 ¶¶ 41, 68, Fig. 3).

Specifically, Petitioner demonstrates that Wong's PC 210 transmits generated output data to mobile device 202 over a GPRS network. *Id.* at 40–41; Ex. 1004 ¶ 68, Fig. 3. Petitioner also demonstrates, based on the unrebutted testimony of Mr. McNair, that a person skilled in the art would

have known that "computer applications generally used built-in services of the computer operating system to provide a means to transmit output data to other . . . devices." *Id.* at 41 (citing Ex. 1003 ¶¶ 63–68). This testimony—which is not needed to demonstrate how the claim 1 "transmitting" limitation is met—demonstrates how the combination of Wong and Beauregard teaches the claim 5 and 7 limitation that not only requires the same "transmitting" function to be performed, but also requires the structure that performs that function, i.e., the mobile device interface. Thus, although Petitioner's cross-referencing tables erroneously state the last limitation of claims 5 and 7, Petitioner's cross-referenced analysis demonstrates how the "built-in services" of Wong's computer operating system map to a "mobile device interface at the computer [that] transmits the output data to a mobile device." *See* Pet. 41, 52, 55; § II.E.2, *infra* (construing "mobile device interface" to include "hardware, software, or a combination thereof that enables communication between a computer and a mobile device").

We disagree with Patent Owner's contentions that Petitioner never raised this argument in the Petition and that the more fulsome explanation provided in Petitioner's Reply was new argument. As noted above, despite a clerical error reciting the transmitting function of claims 5 and 7 but omitting the structure that performs that function, the Petition's analysis cross-references the Petition's analysis of the same transmitting function recited in claim 1. *See* Pet. 52, 55. Moreover, the Petition's analysis of claim 1's transmitting function demonstrates not only that Wong's computer performs the function, but identifies the built-in operating system services in Wong's computer that performs the function. *Id.* at 41 (citing Ex. 1003 ¶¶ 63–68). The additional explanation provided in Petitioner's Response, which demonstrates how the "built-in services" of Wong's computer

operating system satisfies our construction of a "mobile device interface" is allowable under our rules. *See* 37 C.F.R. § 42.23(b) (allowing a petitioner to "respond to arguments raised in the corresponding . . . patent owner response"); *see also* Consolidated Trial Practice Guide (Nov. 2019)[7] at 73 (allowing "the petitioner, in its reply brief, to address issues discussed in the institution decision").

To the extent Patent Owner disagrees that a person skilled in the art would have understood that an operating system has "built-in services" that transmit output data to other devices or that such "built-in services" meet our construction of a mobile device interface, Patent Owner had the opportunity to depose Mr. McNair and make that argument in its Sur-Reply. *See* Paper 11, 8 (authorizing Patent Owner to file a sur-reply); Paper 26, 1 (stipulation moving Petitioner's Reply date to June 28, 2021 and Patent Owner's Sur-Reply date to August 11, 2021); 37 C.F.R. § 42.53(d)(2) (authorizing cross-examination testimony to take place after "the direct testimony has been filed and more than a week before the filing date for any paper in which the cross-examination testimony is expected to be used"). Patent Owner chose not to avail itself of that opportunity.

Finally, we disagree with Patent Owner's contention that the Federal Circuit's decisions in *Elbit* or *Choirock* dictate a different outcome. Patent Owner cites *Elbit* for the proposition that Petitioner failed to meet its burden because it failed to mention the "mobile device interface" limitation in the Petition and Mr. McNair failed to mention the limitation in his declaration. *See* PO Resp. 25; PO Sur-Reply 16. Patent Owner cites *Choirock* for the proposition that Petitioner failed to meet its burden because it failed to

[7] Available at https://www.uspto.gov/TrialPracticeGuideConsolidated.

clearly identify where the prior art taught the "mobile device interface" limitation. *See* PO Resp. 25; PO Sur-Reply 17.

Petitioner argues *Elbit* is inapposite because in *Elbit* "the prior art and the claims employed different steps," whereas the combination of Wong and Beauregard "teaches the same steps as the claims." Pet. Reply 4. Petitioner argues *Choirock* is inapposite because "the [*Choirock*] petition did not cross-reference" a limitation the petitioner subsequently tried to rely on, whereas the Petition cross-references the claim 1 "transmitting" limitation to demonstrate how the claim 5 and 7 mobile device interface limitation is met. *Id.* at 4–5.

We agree with Petitioner. In *Elbit*, the Federal Circuit affirmed a Board finding that the petitioner had not met its burden of proof because it was "undisputed" that a method step in the challenged claim was "not explicitly disclosed" in the prior art. *Elbit*, 881 F3d. at 1357. Moreover, although the *Elbit* petitioner's expert testified that the steps in the prior art were "mathematically equivalent" to the claimed method step, the Board found that testimony was "unsupported" and entitled to "little weight," and the Federal Circuit affirmed because "[t]he PTAB [i]s entitled to weigh the credibility of the witnesses" and "the weight and credibility of the evidence is the special province of the trier of fact." *Id.* at 1358 (internal citations omitted). Here, unlike in *Elbit*, we find Mr. McNair's testimony that an operating system's "built-in services" are a means to transmit output data to a mobile device to be credible, and agree with Petitioner that such "built-in services" map to our construction of a "mobile device interface." *See* Pet. 41 (identifying "built-in services" as the "means to transmit output data"); Pet. Reply 3 (demonstrating how "built-in services" map to our construction of a mobile device interface).

In *Choirock*, the Federal Circuit affirmed the Board's finding that the *Choirock* petitioner's claim limitation analysis, which cross-referenced an earlier claim limitation analysis, was deficient because the earlier claim limitation analysis did not mention the latter claim limitation "let alone explain[] how that requirement was met." *Choirock*, 801 Fed. Appx. at 765. Here, by contrast, the Petition's analysis of claims 5 and 7 reference the Petition's analysis of claim 1, and the Petition's analysis of claim 1 explains how an operating system's "built-in services" are a "means to transmit output data to other . . . devices," which is the only function a mobile device interface is required to perform per Patent Owner's own construction. Pet. 41, 52, 55; § II.E.2, *supra*. Although the Petition's claim 1 analysis does not call these "built-in services" a "mobile device interface," the test for whether the prior art teaches or suggests a claim limitation "is not an 'ipsissimis verbis' test." *In re Bond*, 910 F.2d 831, 832–833 (Fed. Cir. 1990); *see also In re Gleave*, 500 F.3d 1331, 1334 (Fed. Cir. 2009) (a prior art reference "need not satisfy an *ipsissimis verbis* test"). Moreover, Petitioner's Reply, in addition to identifying the "built-in-services" of Wong's computer operating system as the structure that transmits output data to a mobile device, demonstrates how those built-in services map to our construction of a "mobile device interface," which includes Patent Owner's own proposed construction. *See* Pet. Reply 3; *see also* § II.E.2, *supra* (construing "mobile device interface" to include Patent Owner's proposed construction).

Accordingly, for the reasons discussed above, we find Petitioner has demonstrated by a preponderance of evidence that the limitations of claims 5 and 7 have been met for substantially the same reasons that the limitations of claims 1 and 3 have been met. Therefore, Petitioner has demonstrated by a

preponderance of evidence that claims 5 and 7 are unpatentable over Wong and Beauregard for the same reasons as claims 1 and 3.

8. Claims 2, 4, 6, and 8

Claim 2 depends from claim 1 and requires (a) the mobile device and computer not to be physically connected and (b) the application selected by the audio command interface to be installed on the computer. Ex. 1001, 10:26–29. Claim 4 depends from claim 3 and recites the same limitations. *Id.* at 10:46–49. Claims 6 and 8 depend from claims 5 and 7, respectively, and recite the same limitations. *Id.* at 11:6–9, 12:12–15

Petitioner demonstrates how the combination of Wong and Beauregard teaches these limitations. *See* Pet. 41–47, 50, and 53–55 (citing/quoting Ex. 1004 ¶¶ 13, 31, 33, 40, 41, 66, Figs. 2, 3, 4a; Ex. 1005, 5:19–22, 36:49–51, 55:42–58, Figs. 3, 4). Patent Owner does not dispute this. *See* PO Resp. 28–49.

Wong discloses a system in which smart phone 202 is physically separated from PC 210 by mobile network 206, yet controls application 220 installed on PC 210 to browse stored files 224 via commands interpreted by speech engine 213. *See* Ex. 1004 ¶¶ 13 (disclosing using mobile device such as smart phone 202 to browse files from a remote location), *id.* ¶ 31 (disclosing PC 210 is configured to communicate with smart phone 202), *id.* ¶ 33 (disclosing PC 210 stores application 220 and files 224), *id.* ¶ 41 (disclosing PC 210 executes a received command to transmit data to mobile device/smart phone 202), *id.* ¶ 61 (disclosing PC 210 and smart phone 202 need not be in proximity), Figs. 2, 3, 4a.

Accordingly, for the reasons discussed above, we find Petitioner has demonstrated by a preponderance of evidence that claims 2, 4, 6, and 8 are unpatentable over Wong and Beauregard.

G. Obviousness over Ben-Efraim and Balakrishnan

As discussed in §§ II.F.3–II.F.8, *supra*, Petitioner has shown by a preponderance of evidence that claims 1–8 of the '679 patent are unpatentable as obvious over Wong and Beauregard. This finding is dispositive of Petitioner's challenge to the patentability of all of the challenged claims. Accordingly, we need not address whether Petitioner has further shown, by a preponderance of evidence, that these claims also are unpatentable as obvious over the combination of Ben-Efraim and Balakrishnan. *See Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423 (Fed. Cir. 1984) (finding an administrative agency is at liberty to reach a decision based on a single dispositive issue because doing so "can not only save the parties, the [agency], and [the reviewing] court unnecessary cost and effort," but can "greatly ease the burden on [an agency] faced with a . . . proceeding involving numerous complex issues and required by statute to reach its conclusion within rigid time limits").

III. CONCLUSION

We have reviewed the Petition, Patent Owner Response, Petitioner Reply, and Patent Owner Sur-Reply. We have considered all of the evidence and arguments presented by Petitioner and Patent Owner. We find, on this record, Petitioner has demonstrated by a preponderance of evidence that claims 1–8 of the '679 patent are unpatentable as obvious over Wong and Beauregard.[8]

[8] Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this Decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. *See* 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application

Claims	35 U.S.C. §	Reference(s) /Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1–8	103(a)	Wong, Beauregard	1–8	
1–8	103(a)	Ben-Efraim, Balakrishnan	Not Decided	Not Decided
Overall Outcome			1–8	

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that Petitioner has shown on this record that claims 1–8 of the '679 patent are unpatentable under 35 U.S.C. § 103(a) over Wong and Beauregard; and

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

or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. *See* 37 C.F.R. §§ 42.8(a)(3), (b)(2).

FOR PETITIONER:

Jordan M. Rossen
Roshan Mansinghani
Michelle Callaghan
UNIFIED PATENTS LLC
jordan@unifiedpatents.com
roshan@unifiedpatents.com
micelle@unifiedpatents.com

FOR PATENT OWNER:

Eric M. Adams
Tod T. Tumey
TUMEY LLP
eadams@tumeyllp.com
ttumey@tumeyllp.com