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B Filed: 04/08/2020

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CAPTIONCALL, L.L.C., Petitioner,

v.

ULTRATEC, INC., Patent Owner.

Cases

IPR2013-00540 (Patent 6,233,314 B1) IPR2013-00541 (Patent 5,909,482) IPR2013-00542 (Patent 7,319,740 B2) IPR2013-00543 (Patent 7,555,104 B2) IPR2013-00544 (Patent 8,213,578 B2) IPR2013-00545 (Patent 6,594,346 B2) IPR2013-00549 (Patent 6,603,835 B2) IPR2013-00550 (Patent 7,003,082 B2) IPR2014-00780 (Patent 6,603,835 B2)

Before WILLIAM V. SAINDON, BARBARA A. BENOIT, and LYNNE E. PETTIGREW, *Administrative Patent Judges*.

PER CURIAM.

DECISION ON REMAND 35 U.S.C. § 318(a); 35 U.S.C. § 144

Case: 19-2003Document: 46-1Page: 9Filed: 04/08/2020IPR2013-00540 (Patent 6,233,314)IPR2013-00541 (Patent 5,909,482)IPR2013-00542 (Patent 7,319,740)IPR2013-00543 (Patent 7,555,104)IPR2013-00544 (Patent 8,213,578)IPR2013-00545 (Patent 6,594,346)IPR2013-00549 (Patent 6,603,835)IPR2013-00550 (Patent 7,003,082)IPR2014-00780 (Patent 6,603,835)IPR2013-00550 (Patent 7,003,082)

I. INTRODUCTION

At issue in this Decision are nine petitions filed by CaptionCall, L.L.C. ("Petitioner") requesting an *inter partes* review of certain claims in eight patents owned by Ultratec, Inc. ("Patent Owner"). Petitioner filed the first eight petitions on the same day. See IPR2013-00540 ("IPR540"), Paper 2 (challenging U.S. Patent No. 6,233,314 B1); IPR2013-00541 ("IPR541"), Paper 1 (challenging U.S. Patent No. 5,909,482); IPR2013-00542 ("IPR542"), Paper 1 (challenging U.S. Patent No. 7,319,740 B2); IPR2013-00543 ("IPR543"), Paper 1 (challenging U.S. Patent No. 7,555,104 B2); IPR2013-00544 ("IPR544"), Paper 1 (challenging U.S. Patent No. 8,213,578 B2); IPR2013-00545 ("IPR545"), Paper 1 (challenging U.S. Patent No. 6,594,346 B2); IPR2013-00549 ("IPR549"), Paper 1 (challenging U.S. Patent No. 6,603,835 B2); IPR2013-00550 ("IPR550"), Paper 1 (challenging U.S. Patent No. 7,003,082 B2). We instituted reviews based on the first eight petitions. While these reviews were proceeding in parallel, Petitioner filed a ninth petition seeking a second inter partes review of the patent challenged in IPR549 (i.e., U.S. Patent No. 6,603,835 B2), but challenging claims other than those under review in IPR549. See IPR2014-00780 ("IPR780"), Paper 7 (challenging U.S. Patent No. 6,603,835 B2).

In due course we issued nine final written decisions determining that Petitioner had shown by a preponderance of the evidence that all of the reviewed claims were unpatentable. IPR540, Paper 78, 53 (Final Written

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Decision); IPR541, Paper 76, 74 (Final Written Decision); IPR542, Paper 66, 29 (Final Written Decision); IPR543, Paper 66, 28 (Final Written Decision); IPR544, Paper 74, 54 (Final Written Decision); IPR545, Paper 65, 39 (Final Written Decision); IPR549, Paper 71, 33 (Final Written Decision); IPR550, Paper 57, 24 (Final Written Decision); and IPR780, Paper 35, 55 (Final Written Decision). Patent Owner appealed each of our final written decisions to the United States Court of Appeals for the Federal Circuit. The court issued its decision vacating our nine final written decisions and remanding these cases to the Board on August 28, 2017. *Ultratec, Inc. v. CaptionCall LLC*, 872 F.3d 1267 (Fed. Cir. 2017).

A. The Inter Partes Reviews

1. The Challenged Patents

The challenged patents describe various systems and methods for assisting deaf, hard of hearing, or otherwise hearing-impaired individuals in using telephones. *See, e.g.*, IPR542, Ex. 1001, 1:26–29. A conventional system uses a device that includes a keyboard, a display, and a specific type of modem, and is known as a telecommunication device for the deaf (TDD), a text telephone (TT), or a teletype (TTY). *Id.* at 1:37–43. When a hearing person who does not have access to a TDD wishes to communicate with a hearing-impaired person who uses a TDD, the parties may utilize a relay system, in which a human intermediary, known as a "call assistant," communicates with the hearing user by voice and with the hearing-impaired user by using a TDD. *Id.* at 1:66–2:11. In a conventional relay system, the

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call assistant types, at a TDD keyboard, the words spoken by the hearing user and voices to the hearing user the words received on the TDD from the hearing-impaired user. *Id.* at 2:11–16. The challenged patents relate to various alleged improvements for providing a captioned telephone service.

Some of the challenged patents relate to using voice recognition software at the relay. For example, instead of typing the hearing user's words, the call assistant re-voices those words into a microphone that transmits the voice of the call assistant to a computer with voice recognition software trained specifically to the voice of the call assistant. *Id.* at 6:18–37. Using the voice recognition software, the computer translates the words of the call assistant to digital text, which is sent to a display of the hearingimpaired user. *Id.* at 6:50–57.

Many of the challenged patents describe a captioned telephone device at the site of the assisted user. *Id.* at 9:18–10:4. Figure 4 of the '740 patent, reproduced below, illustrates the setup of a telephone call involving captioned telephone device 72:



As shown in Figure 4, a hearing user at telephone 62 communicates with relay 66 through telephone line 64. *Id.* at 9:20–22. The relay communicates

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both the voice of the hearing user and a transcription of the text of the conversation through telephone line 68 to an assisted user. *Id.* at 9:22–23. At the assisted user's site are captioned telephone device 72, which includes a display for text, and conventional telephone 70. *Id.* at 9:23–27. The functions of captioned telephone device 72 and telephone 70 may be combined into a single device. *Id.* at 9:36–43. The arrangement shown in Figure 4 sometimes is referred to as "single line" because only one line is used at the assisted user's site. The single line carries both the text transcription and the voice of the hearing user between the assisted user's site and the relay.

Some arrangements, however, involve two lines at the assisted user's site—one line to connect the assisted user with the hearing user and another line to connect the assisted user with the relay. This arrangement is sometimes referred to as "two-line." For example, Figure 5 of the '740 patent, reproduced below, shows such an arrangement.



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IPR2013-00540 (Paten	t 6,233,314)	IPR2013-0054	41 (Patent 5,909,482)
IPR2013-00542 (Paten	t 7,319,740)	IPR2013-0054	43 (Patent 7,555,104)
IPR2013-00544 (Paten	t 8,213,578)	IPR2013-0054	45 (Patent 6,594,346)
IPR2013-00549 (Paten	t 6,603,835)	IPR2013-0055	50 (Patent 7,003,082)
IPR2014-00780 (Paten	t 6,603,835)		``````````````````````````````````````

As shown in Figure 5, this embodiment utilizes voice-only telephone line 64 between telephone 62 of the hearing user and telephone 70 at the assisted user's location, and a separate connection—telephone line 78 carrying text and voice between relay 76 and captioned telephone device 74 at the assisted user's location. *Id.* at 9:44–54. The voice of the hearing user is received at telephone 70 and transferred to telephone line 78 for transmission to relay 76, which converts the spoken words to a text stream to be returned to the assisted user via telephone line 78. *Id.* at 9:54–57, 10:16– 21.

2. The Challenges

In its challenges, Petitioner collectively asserted eleven references and relied on expert testimony of Mr. Benedict Occhiogrosso. In its Responses in six proceedings (IPR540, IPR541, IPR544, IPR545, IPR549, and IPR780), Patent Owner relied on expert testimony of Mr. Paul W. Ludwick. In the other three proceedings (IPR542, IPR543, and IPR550), Patent Owner relied on expert testimony of Mr. James A. Steel, Jr.

More specifically, Petitioner collectively asserted the following references as prior art against various challenged claims across the nine proceedings:

"Alshawi"—U.S. Patent No. 5,815,196.

"Choi"—W. Choi et al., Splitting and Routing Audio Signals in Systems with Speech Recognition, IBM TECHNICAL DISCLOSURE BULLETIN, Vol. 38, No. 12, 503–04 (December 1995).

"Engelke '405"—U.S. Patent No. 5,724,405.

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"Jones"—PCT International Publication No. WO 95/00946.

"Liebermann"—U.S. Patent No. 5,982,853.

"McLaughlin"—U.S. Patent No. 6,181,736 B1.

"Mukherji"— U.S. Patent No. 7,117,152 B1.

"Ryan"—U.S. Patent No. 5,809,112.

"Vasile"—U.S. Patent No. 5,289,523.

"Wycherley"—U.S. Patent No. 5,163,081.

"Yamamoto"-Seiichi Yamamoto & Masanobu Fujioka, New Applications of Voice Recognition, Proc. JASJ Conf. (March 1996).

The prior art references were considered in the nine proceedings in the

following specific grounds:

IPR/Patent	Reference(s)	Basis	Claim(s)
IPR540	Ryan (Ex. 1004)		1 and 2
US 6,233,314			
	Wycherley (Ex. 1002) and Yamamoto	§ 103	1 and 2
	$(Ex. 1005, 1006)^1$		
IPR541	Ryan (Ex. 1004)	§ 102	1 and 5
US 5,909,482			
	Wycherley (Ex. 1002) and Yamamoto	§ 103	1 and 5
	(Ex. 1005, 1006)		
	Wycherley, Yamamoto, and Jones	§ 103	2, 7, and 8
	(Ex. 1008)		
	Wycherley, Yamamoto, and Choi		3, 10, and 11
	(Ex. 1009)		
	Wycherley, Yamamoto, and Vasile	§ 103	4, 13, and 14
	(Ex. 1003)		
	Wycherley, Yamamoto, and Liebermann	§ 103	6
	(Ex. 1010)		

¹ Ex. 1005 is in Japanese; Ex. 1006 is a certified English translation.

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IPR/Patent	Reference(s)	Basis	Claim(s)
IPR541	Wycherley, Yamamoto, Jones, and	§ 103	9
US 5,909,482	Liebermann		
	Wycherley, Yamamoto, Choi, and	§ 103	12
	Liebermann		
	Wycherley, Yamamoto, Vasile, and	§ 103	15
	Liebermann		
IPR542	McLaughlin (Ex. 1009) and Ryan	§ 103	1 and 2
US 7,319,740	(Ex. 1004)		
IPR543	McLaughlin (Ex. 1012) and Ryan	§ 103	1 and 2
US 7,555,104	(Ex. 1005)	-	
IPR544	Ryan (Ex. 1004)	§ 102	7
US 8,213,578			
	Wycherley (Ex. 1005) and Yamamoto	§ 103	7
	$(Ex. 1006, 1007)^2$		
	Ryan and McLaughlin (Ex. 1009)	§ 103	7-11
IPR545	Ryan (Ex. 1005) and Alshawi (Ex. 1010)	§ 103	1 and 2
US 6,594,346		Ŭ	
IPR549	Liebermann (Ex. 1008) and	§ 103	1–5 and 7
US 6,603,835	Engelke '405 (Ex. 1005)	-	
IPR550	McLaughlin (Ex. 1006)	§ 102	1
US 7,003,082			
IPR780	Liebermann (Ex. 1008), Engelke '405	§ 103	6 and 8
US 6,603,835	(Ex. 1005), and Mukherji (Ex. 1009)		

Of particular relevance here are three prior art references-

McLaughlin, Ryan, and Yamamoto-and testimony of Petitioner's expert,

² Ex. 1006 is in Japanese; Ex. 1007 is a certified English translation.

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IPR2013-00540 (Patent	6,233,314)	IPR	2013-0054	1 (Patent 5,909,482)
IPR2013-00542 (Patent	7,319,740)	IPR	2013-0054	3 (Patent 7,555,104)
IPR2013-00544 (Patent	8,213,578)	IPR	2013-0054	5 (Patent 6,594,346)
IPR2013-00549 (Patent	6,603,835)	IPR.	2013-0055	0 (Patent 7,003,082)
IPR2014-00780 (Patent	6,603,835)			

Mr. Occhiogrosso, concerning the disclosures of those references and his opinion that the challenged claims are unpatentable.

McLaughlin describes a simultaneous voice and data (SVD) modem used in connection with a relay service in which an operator mediates communications between a hearing person and a hearing-impaired person. IPR542, Ex. 1009, 30:13–31:63. McLaughlin describes a hearing-impaired user using an answering device or system comprising two SVD modems connected to two communication links, Line A and Line B. Id. at 30:59–63, 32:17–19. When a voice call from the hearing user arrives on the first line (Line A), the answering device sets up an SVD link with the relay service on the second line (Line B). Id. at 31:35–40. Voice sounds received from the hearing user on Line A are sent to the relay operator on Line B. Id. at 31:41–43. The relay operator translates the voice sounds into text, which is sent over Line B to appear on the screen of the hearing-impaired user's answering device. *Id.* at 31:43–47. The hearing-impaired user also types responses back to the relay operator over Line B. *Id.* at 31:47–49. The relay operator voices the text, and the relay operator's voice sounds are carried on Line B to the hearing-impaired user's answering device and passed over to Line A to be heard by the hearing user. *Id.* at 31:49–52. Conversation among all three parties is "full duplex," so that all parties may talk or type simultaneously. Id. at 31:55-62.

McLaughlin also provides details about how its SVD modems can be used to provide legacy services such as "voice carry over" (VCO) and "hearing carry over" (HCO). *Id.* at 29:65–30:12. Details regarding

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McLaughlin's ability to operate in a number of modes are described in the section titled "Hearing/Speaking Persons Calling Deaf and/or Speech Impaired Persons," which includes a number of subsections discussing the features of the invention. *See generally id.* at 29:18–34:56. One issue in these post-remand proceedings concerns expert testimony of Mr. Occhiogrosso regarding these various subsections in McLaughlin.

Issues in these post-remand proceedings also involve Mr. Occhiogrosso's testimony concerning Ryan's voice recognition software and its location. Ryan describes a relay interface system for communication between a standard telephone set used by a hearing user and a TDD used by a hearing-impaired person. IPR542, Ex. 1004, Abstract, 1:6–10. Figure 1 of Ryan is set forth below:





As shown in Figure 1, Ryan's relay interface 10 includes operator/relay terminal 12 and connects standard telephone set 14 with TDD 16 having associated display 17. *Id.* at 3:43–48. Telecommunications link 18 connects telephone 14 with relay interface 10 through agent

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device 20, and telecommunications link 22 connects TDD 16 with relay interface 10 through relay terminal 12. *Id.* at 3:48–52. An operator or relay agent typically is responsible for manipulating relay terminal 12 using keyboard 26 to relay messages between telephone 14 and TDD 16. *Id.* at 4:19–21. Ryan indicates, however, that speech recognition software could be used to automate the relay function so that an operator or relay agent would not be required. *Id.* at 4:21–24. Ryan specifically describes using speech recognition software at agent device 20 to interpret a voice message from a caller at telephone 14 and convert the message from a voice format to a data format. *Id.* at 4:24–27. Ryan further provides:

If the software is specifically designed to recognize the voice of particular relay agents, the accuracy of the relay service may be improved by having one of these agents listen to the caller and repeat the voice message into a terminal adapted to convert the agent's voice message into a data message.

Id. at 4:33–38.

A related issue in these post-remand proceedings involves Mr. Occhiogrosso's testimony concerning the location of software in Yamamoto. Yamamoto describes tests of voice recognition systems. IPR540, Ex. 1006, 34–36. Along with other examples, Yamamoto describes a test with an operator assistance system for international calling, noting a preliminary step in an operator assistance system for international calling is "voice recognition of an operator repeating the question from the [international calling] user" to increase efficiency. *Id.* at 35 (§ 3.2). IPR2013-00540 (Patent 6,233,314)IPR2013-00541 (Patent 5,909,482)IPR2013-00542 (Patent 7,319,740)IPR2013-00543 (Patent 7,555,104)IPR2013-00544 (Patent 8,213,578)IPR2013-00545 (Patent 6,594,346)IPR2013-00549 (Patent 6,603,835)IPR2013-00550 (Patent 7,003,082)IPR2014-00780 (Patent 6,603,835)IPR2013-00550 (Patent 7,003,082)

B. Post-Remand Proceedings

In its opinion vacating the Board's final written decisions and remanding these proceedings to the Board, the Federal Circuit provided the following instructions regarding the remand of these proceedings:

On remand, the Board shall admit and consider Mr. Occhiogrosso's trial testimony [from *Ultratec, Inc. v. Sorenson Communications, Inc.*, No. 13-CV-00346 (W.D. Wis.)]. If the Board finds he gave inconsistent testimony, the Board shall consider the impact on the specific patents at issue in the trial testimony *as well as* on his credibility as a whole.

Ultratec, Inc. v. CaptionCall LLC, 872 F.3d 1267, 1275 (Fed. Cir. 2017).

We requested the parties submit proposals on the conduct of the remanded proceedings. *See, e.g.*, IPR540, Paper 104 ("Remand Order"), 4. After discussing their respective proposals in a conference call with the parties, we issued an order regarding the scope of remand, briefing, and supplementing the evidentiary record. *See, e.g.*, Remand Order; IPR540, Ex. 2029 (Transcript of conference call).

1. Supplementing the Evidentiary Record

The Federal Circuit directed us to "admit and consider Mr. Occhiogrosso's trial testimony" but did not specify whether all of Mr. Occhiogrosso's district court trial testimony, or only portions of it, should be admitted. *Ultratec*, 872 F.3d at 1275; Remand Order 9. Petitioner proposed that Patent Owner be permitted to supplement the evidentiary record with the portions of Mr. Occhiogrosso's district court trial testimony on cross examination that Patent Owner alleges is inconsistent with his testimony in

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these *inter partes* reviews. Remand Order 9 (citing Ex. 2029, 10:2–15; Ex. 3004, 4).³ Petitioner further proposed that Petitioner be permitted to supplement the record with additional trial testimony from Mr. Occhiogrosso as necessary to counter Patent Owner's allegations of inconsistency. *Id.* (citing Ex. 2029, 10:16–25; Ex. 3004, 4).

Patent Owner proposed that it be permitted to supplement the record with Mr. Occhiogrosso's allegedly inconsistent testimony and additional testimony as needed for context, or all of Mr. Occhiogrosso's trial testimony if the Board believed that would be helpful. *Id.* (citing Ex. 2029, 24:16–22).

After considering the parties' proposals and the Federal Circuit's remand instructions, we indicated having all of Mr. Occhiogrosso's trial testimony entered into the record of these proceedings would be beneficial. *Id.* We then ordered Patent Owner to submit a transcript of all of Mr. Occhiogrosso's district court trial testimony as an exhibit or exhibits in each of these proceedings. *Id.* Subsequently, Patent Owner filed Mr. Occhiogrosso's trial testimony in each proceeding as Exhibit 2031 (October 16, 2014 morning testimony), Exhibit 2032 (October 16, 2014 afternoon testimony), and Exhibit 2033 (October 17, 2014 testimony).

2. Authorized Briefing

Regarding briefing during the post-remand proceeding, Petitioner indicated that the remand from the Federal Circuit was narrow and was

³ Citations in the Remand Order are to exhibits in IPR540 unless otherwise noted.

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limited to consideration of Mr. Occhiogrosso's district court trial testimony as directed by the Federal Circuit. Remand Order 4 (citing Ex. 2029, 5:24– 6:8; Ex. 3004, 1–2). In particular, Petitioner asserted that the Board should determine as a threshold issue whether Mr. Occhiogrosso gave inconsistent testimony, and then if, and only if, the Board determines he did, the Board should determine whether such inconsistent testimony impacts the patents at issue in these proceedings and Mr. Occhiogrosso's credibility as a whole. *Id.* (citing Ex. 3004, 1–2). Petitioner proposed that briefing by the parties should address both issues. Remand Order 4 (citing Ex. 3004, 2).

Patent Owner proposed that several topics should be briefed by the parties and considered by the Board on remand. *Id.* First, Patent Owner requested briefing to identify and explain alleged inconsistencies in Mr. Occhiogrosso's testimony as they span topically across the proceedings and to explain the impact of Mr. Occhiogrosso's credibility on the outcome of the proceedings. *Id.* (citing Ex. 2029, 12:21–13:20; Ex. 3004, 2). In this regard, Patent Owner's proposal regarding Mr. Occhiogrosso's testimony is similar to Petitioner's proposal described above. *Id.*

Patent Owner also sought to bring additional issues into the scope of the remanded proceedings. *Id.* at 5. In light of the recent expiration of the subject patents, Patent Owner proposed that the parties have the opportunity to brief what claim constructions, if any, would change under the standard set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc), and the impact of any revised constructions. *Id.* (citing Ex. 2029, 14:9–16:20; Ex. 3004, 2). Patent Owner further proposed that it be

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permitted to submit, along with accompanying trial testimony, documentary evidence related to secondary considerations that had been designated under the district court's protective order but has been unsealed since briefing closed in the original *inter partes* review proceedings. *Id.* (citing Ex. 2029, 16:21–19:14, 20:13–15; Ex. 3004, 2). Patent Owner also requested briefing to explain the impact of such additional evidence on these proceedings. *Id.* (citing Ex. 3004, 2). Finally, Patent Owner sought targeted additional discovery and briefing on the issue of whether Petitioner identified all the real parties in interest. *Id.* (citing Ex. 2029, 20:22–24:8; Ex. 3004, 2). Patent Owner proposed a first round of briefing to address all topics except identification of real parties in interest, which Patent Owner proposed to address in a second round of briefing overlapping with the first. *Id.* (citing Ex. 3004, 1).

Mindful of the Federal Circuit's remand instructions, we authorized Patent Owner to file a brief that (i) identifies with particularity portions of Mr. Occhiogrosso's district court trial testimony that Patent Owner alleges is inconsistent and explains how it is inconsistent with specific testimony provided by Mr. Occhiogrosso in these proceedings, and (ii) explains how the allegedly inconsistent testimony impacts specific unpatentability determinations in the Board's final written decisions in these proceedings as well as how it impacts Mr. Occhiogrosso's credibility as a whole. *Id.* at 5–6.

We authorized Petitioner to file a responsive brief addressing the same issues as Patent Owner's brief. *Id.* at 6. We indicated that Petitioner may

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cite additional portions of Mr. Occhiogrosso's trial testimony to counter Patent Owner's allegations of inconsistency. *Id.*

Regarding logistics, we authorized each party to prepare a single brief addressing these issues with respect to all of the proceedings and submit that brief in each proceeding, making clear the proceeding in which any particular paper or exhibit was entered. *Id*.

Subsequently, Patent Owner filed its Consolidated Brief on Remand (*see, e.g.*, IPR540, Paper 106, "PO Br.") and Petitioner filed its Response (*see, e.g.*, IPR540, Paper 107, "Pet. Br.").

3. Patent Owner's Requests for Additional Briefing

In our Remand Order, we also explained that, if we determined based on the parties' initial remand briefs that Mr. Occhiogrosso provided inconsistent testimony and that any inconsistency impacted, in a material way, our unpatentability determinations regarding the patents at issue or Mr. Occhiogrosso's credibility as a whole, we would consider at that time whether to authorize briefing directed to the additional issues identified by Patent Owner. Remand Order 6–7.

In addition, in our Remand Order, we specifically addressed Patent Owner's request to bring claim construction issues into the post-remand proceedings. *Id.* at 5, 7–9. We indicated that we were aware that the *Phillips* standard of claim construction generally applies to patents that have expired. *Id.* at 7. We addressed the two cases cited by Patent Owner in support of its position that it should have the opportunity at this juncture to address the effect of any claim constructions that might change under the

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Phillips standard. Id. (citing Ex. 2029, 14:17–15:12 (citing In re CSB-System Int'l, Inc., 832 F.3d 1335, 1340–41 (Fed. Cir. 2016); Facebook, Inc. v. Pragmatus AV, LLC, 582 F. App'x 864, 869 (Fed. Cir. 2014))). We noted that in *CSB-System*, the Federal Circuit held that when a patent expires during an appeal from an examiner's final rejection in an ex parte reexamination, the Board must apply a *Phillips* claim construction. *Id.* (citing 832 F.3d at 1341). We also noted that in *Facebook*, the Federal Circuit construed claim terms under *Phillips* when patents subject to *inter partes* reexamination expired during the pendency of the appeal of the Board's decisions to the Federal Circuit. Id. (citing 582 F. App'x at 868– 69). We concluded that these cases were not particularly on point because neither one involves an *inter partes* review proceeding or addresses whether the Board in a remand proceeding, especially one with specific, tailored instructions from the Federal Circuit, necessarily must reinterpret under a *Phillips* framework any previously construed claim terms when a patent expires during the pendency of the remand. Id.

In opposition to Patent Owner's position, Petitioner cited *Personal Web Technologies, LLC v. Apple, Inc.*, 848 F.3d 987 (Fed. Cir. 2017), in support of its position that we should not allow briefing on how claim terms would be construed under *Phillips*. Remand Order 8 (citing Ex. 2029, 26:18–27:14). We explained in our Remand Order that, in *Personal Web*, a patent subject to *inter partes* review expired after the Board's final written decision but while a rehearing request was pending before the Board. *Id.* (citing *Personal Web*, 848 F.3d at 990). On appeal to the Federal Circuit,

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the parties disputed whether the Board properly applied a broadest reasonable interpretation standard in construing claim terms at issue, with the Director of the Patent and Trademark Office arguing in support of the Board's approach. *Id.* (citing *Personal Web*, 848 F.3d at 990). The court, however, determined that it need not resolve the dispute because the Board's construction was correct under either standard. *Id.* (citing *Personal Web*, 848 F.3d at 990). In our Remand Order, we concluded that, although Petitioner contends that *Personal Web* presents a situation similar to the one here, the Federal Circuit ultimately did not address the issue. *Id.*

In conclusion, we determined that the parties had not identified, and we were not aware of, any authority requiring us to reconsider on remand all of our earlier unpatentability determinations just because the patents have since expired. *Id.* Through its reasoning and explicit instructions to consider Mr. Occhiogrosso's trial testimony and the impact of any inconsistencies on the challenged patents and Mr. Occhiogrosso's credibility, the Federal Circuit carefully delineated the scope of the remand in these proceedings. *Id.* We further indicated that, if we determined in the course of following the court's remand instructions that inconsistencies in Mr. Occhiogrosso's testimony require us to reevaluate the patentability of any claims, we would at that point consider Patent Owner's requests for additional briefing on specific topics, including claim construction under the *Phillips* standard. *Id.* at 8–9.

Neither party requested rehearing of our Remand Order that indicated how the post-remand proceedings would be conducted. *See*

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37 C.F.R. § 42.71(d) (providing that a party dissatisfied with a decision may file a single request for rehearing without prior authorization from the Board and any such request must be filed within 14 days of the entry of a non-final decision). Patent Owner's counsel, however, contacted the Board on February 28, 2018 (eight weeks after entry of our Remand Order on January 3, 2018, and nearly four weeks after Patent Owner filed its Remand Brief on February 2, 2018) and again on May 8, 2018. Patent Owner sought confirmation that Patent Owner would be given the opportunity to put its arguments and evidence on the record regarding its arguments on real party in interest, claim construction, and purported additional evidence that Petitioner copied the claimed inventions, regardless of our ultimate conclusion on whether Mr. Occhiogrosso's testimony warrants revisiting the merits of these proceedings.

Our Remand Order unambiguously delineated the scope of authorized briefing: only whether Mr. Occhiogrosso's district court trial testimony was inconsistent with his testimony in these *inter partes* review proceedings and the impact of any inconsistency. Remand Order 5. Our Remand Order explained that this authorization reflected the Federal Circuit's specific instructions on the scope of remand (Remand Order 5) and repeated those instructions (Remand Order 2):

On remand, the Board shall admit and consider Mr. Occhiogrosso's trial testimony [from *Ultratec, Inc. v. Sorenson Communications, Inc.*, No. 13-CV-00346 (W.D. Wis.)]. If the Board finds he gave inconsistent testimony, the Board shall

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consider the impact on the specific patents at issue in the trial testimony *as well as* on his credibility as a whole.

Ultratec, 872 F.3d at 1275.

In view of the unambiguous instructions of the Federal Circuit reflected in our Remand Order, we view Patent Owner's request for "confirmation" of its ability to present evidence and arguments outside the scope of remand as a request for rehearing of our order defining the scope of these post-remand proceedings. Patent Owner's request was made six weeks after the deadline for filing a request for rehearing. We deny Patent Owner's request because Patent Owner failed to comply with the 14-day requirement to file a request for rehearing. 37 C.F.R. § 42.71(d); see 37 C.F.R. § 42.25(b) ("Delay in seeking relief may justify a denial of relief sought."). Moreover, in our Remand Order, we explained reasons for our determination of the scope of post-remand proceedings, particularly the clear instructions from the Federal Circuit as noted above. Remand Order 3–10. We also specifically explained our reasons for disagreeing with Patent Owner's request to revisit the merits of all nine proceedings under the *Phillips* claim construction standard. *Id.* at 5, 7–9. In addition, the administrative record for each proceeding includes Patent Owner's proposed scope of remand (Ex. 3004) and transcript of the conference call in which Patent Owner described the arguments and evidence it sought to be included in the scope of remand (Ex. 2029), each of which was cited in the Remand Order.

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IPR2014-00780 (Patent	t 6,603,835)		

II. ANALYSIS

As mentioned above, Patent Owner alleges that Petitioner's expert, Mr. Occhiogrosso, gave inconsistent testimony regarding the McLaughlin, Ryan, and Yamamoto references. We first address the testimony regarding McLaughlin, then the testimony regarding Ryan's disclosure on voice recognition software, and finally the testimony regarding software location, the latter of which involves Ryan and Yamamoto.

A. Testimony Regarding McLaughlin

Patent Owner states that "[a] central issue in these proceedings is whether *McLaughlin* discloses a captioned telephone device that provides both voice and text." PO Br. 12. Patent Owner states that, in IPR550, we "relied on Occhiogrosso's testimony that *McLaughlin* disclosed all of the claim elements in a 'single system.'" *Id.* at 13. That the claim elements be disclosed in a single system is relevant because our holding in IPR550 is one of anticipation.⁴ According to Patent Owner, Mr. Occhiogrosso testified

⁴ Anticipation prohibits the combination of distinct embodiments of a single reference. *See, e.g., Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008) ("[I]t is not enough that the prior art reference . . . includes multiple, distinct teachings that [an ordinary] artisan might somehow combine to achieve the claimed invention."). Our analysis in the Final Written Decision in IPR550 uses the phrase "single system," which should be understood to mean a disclosure describing a device arranged as claimed, sufficient for purposes of anticipation. IPR550, Paper 57, 20 ("McLaughlin's disclosure . . . is describing options for a single system, not separate embodiments."); *see also Net MoneyIN*, 545 F.3d at 1369 n.5 ("[C]ourts are not constrained to proceed example-by-example when

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before us that McLaughlin disclosed a single system described in multiple sections of McLaughlin's specification, but "undermined that position at [the district court] trial." *Id.* at 15; *see also id.* at 18–19 (listing the three passages Patent Owner believes support its position). Patent Owner concludes that Mr. Occhiogrosso cited to different sections of McLaughlin as if they disclosed a single system before us, but allegedly testified that they were different at the district court trial. *Id.* at 20.

reviewing an allegedly anticipating prior art reference. Rather, the court must, while looking at the reference as a whole, conclude whether or not that reference discloses all elements of the claimed invention arranged as in the claim."). Further, we distinguish between the features of a single system (i.e., a collection of components that operate together) and the features housed inside a single, contiguous box. In our Final Written Decision in IPR550, when we construed "captioned telephone device," we noted that the specification of the '082 patent made clear that various features of the device could be located in separate physical structures. IPR550, Paper 57, 9 (pointing out that the audio function may be separate from the text function (citing Ex. 1001, 9:20–32, 9:15–20, 10:67–11:3, and Figs. 4–6)). We reiterated that position in our Decision on Rehearing. IPR550, Paper 59, 4 ("[T]here was no requirement for all features of the claims to be found in one housing or a 'single device.'"). Thus, when we say McLaughlin discloses a "single system," we mean that McLaughlin discloses a collection of components that operate together. Contrary to Patent Owner's allegations, we are not referring to the combination of multiple embodiments. See PO Br. 23-24. This distinction is relevant because in our Final Decision, the testimony of Mr. Occhiogrosso, and the arguments of Patent Owner may each use the word "system" slightly differently in different contexts, and it is that context that must be considered to understand the meaning.

Petitioner asserts that Mr. Occhiogrosso has been consistent in his testimony throughout the PTAB and district court proceedings. In particular, Petitioner directs us to several passages in the testimony from the district court proceeding where Mr. Occhiogrosso indicates that he considers the various passages of McLaughlin to all describe "the same device," consistent with his testimony in the IPRs. Pet. Br. 10 (citing Ex. 2032, 89:10–21); *id.* at 13 (citing Ex. 2032, 87:24–88:8); *id.* at 15 (citing Ex. 2032, 23:11–24:7); *id.* at 16 (citing Ex. 2032, 40:19–41:2). Petitioner addresses the three passages cited by Patent Owner and sets forth its explanation for why that testimony is not inconsistent. *Id.* at 10–14. Petitioner asserts that Mr. Occhiogrosso's testimony was consistent before both tribunals. *Id.* at 16.

Having reviewed the arguments and evidence before us, we find Mr. Occhiogrosso's district court testimony to be consistent with his IPR testimony regarding McLaughlin. In our analysis below, we address in turn the three passages from Mr. Occhiogrosso's district court testimony cited by Patent Owner as evidence of inconsistency.⁵ We then address the

⁵ The parties and the testimony reference various "sections" of McLaughlin, which refer to various headings in the body of that text. Section "A" is directed to column 29, line 64 to column 30, line 12. Section "B" is column 30, line 13 to column 33, line 54. Section "C" is column 33, line 55 to column 34, line 56. *See also, e.g.*, PO Br. 19 ("Occhiogrosso admitted that Section A discloses"); Ex. 2032, 89:10–21 ("Q. Do you know, as you're sitting there right now, whether this system disclosed in section b) . . . is disclosing a different system than the other two sections that you cited?"). Sections A, B, and C are subsections of the larger section titled

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implications of this analysis on the Final Written Decisions in which we determined claims were unpatentable on grounds based at least in part on McLaughlin.

1. Trial Testimony, Passage 1

Patent Owner alleges that Mr. Occhiogrosso testified in district court that Section A of McLaughlin discloses a one-modem system while Section B discloses a two-modem system. PO Br. 18 (citing Ex. 2033, 39:19–40:8; Ex. 2032, 89:22–90:10). Petitioner responds that Mr. Occhiogrosso explains (at the portion immediately prior to Patent Owner's cite) that he understands McLaughlin to be discussing the same device in those different sections. Pet. Br. 10–11 (citing Ex. 2032, 89:10–21). Reviewing these passages, it is clear to us that Mr. Occhiogrosso's testimony is not inconsistent, and Patent Owner is only arguing semantics.

In the passage reproduced by Patent Owner at page 18 of its brief, Mr. Occhiogrosso is asked whether the Section A disclosure "is discussing a system in which the user *uses* one SVD modem." Ex. 2033, 39:19–21 (emphasis added). Mr. Occhiogrosso answers in the affirmative. *Id.* at 39:22. Similarly, Mr. Occhiogrosso is asked about "the *use* of two SVD modems" in Section B, to which he answers in the affirmative again. *Id.* at 40:6–8 (emphasis added). The *use* of a system is different than its structure—a system must have at least the structure used, but it may have

[&]quot;Hearing/Speaking Persons Calling Deaf and/or Speech Impaired Persons." *See supra* Section I.A.2.

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other structures not used in that particular passage. There is nothing in the above testimony that indicates that Mr. Occhiogrosso believes that sections A and B describe separate embodiments having different numbers of modems; he merely describes how many modems are *used* by the system in each section. This is entirely consistent with his testimony throughout the district court trial that McLaughlin teaches a single system having many features:

Q. Do you know, as you're sitting there right now, whether this system disclosed in section b) *New Techniques For Hearing/Speaking Persons to Call . . . Deaf and/or Speech Impaired Persons*, do you know whether this section is disclosing a different system than the other two sections that you cited?

A. My understanding of the specification is it's a versatile device that is capable of operating in a number of configurations, so it was my interpretation of the specifications that it's the same device.

Ex. 2032, 89:10–21.

Q. And you can't tell me, as you sit here right now, whether you cited two different sections?

A. Oh, no. They're clearly different sections.

Q. Are they different systems?

A. I don't believe they're different systems. They're a system deployed in a different context, one in a LAN/WAN, one in a WAN with two SVD links connected to it. So I couldn't categorically say they're two different systems. I don't think that was your earlier question perhaps or maybe I misunderstood it.

Id. at 87:24–88:8.

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Q. Do you understand -- do you have an understanding as to whether those are separate devices?

A. My understanding is it's an integrated device.

Q. An integrated device that what?

A. May have different operating modes.

Q. Would you turn, please, to page 006 of Exhibit 1913, which is column 3, lines 47 through 50? This is also a text in the McLaughlin patent?

A. Yes.

Q. Would you read that first sentence there in that paragraph?

A. "Different embodiments of the invention may include some but not others of the various modes and features."

Q. As a person of ordinary skill in the art, would you have read that section or that line before you read section 4?

A. Yes.

Ex. 2033, 24:3–19.

Q. This was a system in which there were two users who were connected directly to one another on a LAN or WAN connection, correct?

A. That's what's posited here, yes.

Q. So this is a different system than the system in section b) and a different system than the system in section a), correct?

A. No, I don't see that. In other words, to me it's another operating mode.

Id. at 40:19–41:2.

In IPR550, we based our finding that McLaughlin teaches a single system at least in part on Mr. Occhiogrosso's testimony before us, consistent

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with his testimony before the district court, that McLaughlin teaches a single system having many features. IPR550, Paper 57, 20.

2. Trial Testimony, Passage 2

Patent Owner alleges that Mr. Occhiogrosso "admitted that the Section A one-modem system discloses a traditional [Voice Carry Over] call, which uses a one-line arrangement." PO Br. 19 (citing Ex. 2032, 90:7– 19). Petitioner correctly points out that Mr. Occhiogrosso was not asked about McLaughlin's system here, but rather was asked a hypothetical question about a "traditional VCO call." Pet. Br. 11. The relevant portion of the testimony is reproduced below:

Q. In a VCO call, *in a traditional VCO call*, that's a one-line arrangement, correct?

A. Yes.

Q. So the deaf user is connected on one line to the relay, correct?A. *In a traditional VCO*, yes.

Ex. 2032, 90:14–19 (emphasis added).

We find no admission here regarding McLaughlin; Patent Owner is attempting to re-characterize Mr. Occhiogrosso's discussion of a hypothetical *traditional* VCO system into a discussion of McLaughlin's system. As additional evidence that Mr. Occhiogrosso's testimony is consistent, we note that Mr. Occhiogrosso also expresses confusion over Patent Owner's attempts to conflate McLaughlin's disclosure of the "use" of certain components of the system in different sections with disclosures of multiple systems. When asked whether Section A "only us[es] one SVD

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modem," Mr. Occhiogrosso responds that the singular word is used, but then expresses confusion as to why Patent Owner thinks this is important. Mr. Occhiogrosso responds that the use of a single modem does not mean that there are not more modems, and pushes back on Patent Owner's attempts to elicit a different response. The entire discussion is reproduced below:

Q. Do you know, as you're sitting there right now, whether this system disclosed in section b) *New Techniques For Hearing/Speaking Persons to Call* . . . *Deaf and/or Speech Impaired Persons*, do you know whether this section is disclosing a different system than the other two sections that you cited?

A. My understanding of the specification is it's a versatile device that is capable of operating in a number of configurations, so it was my interpretation of the specifications that it's the same device.

Q. Okay. We just talked about how, in section a) *VCO/HCO With SVD Modems*, that system uses a relay. And then I think you agreed, over on column 33, the section c) *New Techniques For VCO/HCO Access*, that system does not use a relay, correct?

A. Correct.

Q. Now, let's compare that with section a) in column 29, *VCO/HCO With SVD Modems*. That section discloses the user is only using one SVD modem; isn't that correct?

A. I see it is singular word, "a SVD modem." But I fail to, what's the word I'm looking for, appreciate the depth of your question; in other words, what's the big deal to equip the device with one or two modems.

Q. In a VCO call, in a traditional VCO call, that's a one-line arrangement, correct?

A. Yes.

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Q. So the deaf user is connected on one line to the relay, correct?

A. In a traditional VCO, yes.

Q. So doesn't that inform us here that when McLaughlin is talking about a VCO call, he's talking about one connection and therefore one SVD modem?

A. I suppose you could have the two-line architecture still talk to the relay.

Q. That's not what McLaughlin says in section a) though, correct?

A. He really doesn't say. Where do you see where he says that? Ex. 2032, 89:10–91:3.

Taking this discussion in context, Mr. Occhiogrosso testifies that the specification describes "the same device," and then is asked about whether the device uses various components in various modes, to which Mr. Occhiogrosso answers in a manner consistent with his "same device" opinion. Mr. Occhiogrosso does not understand "what's the big deal" with one or two modems because *using* a certain number of modems in one mode is different from *having* a certain number of modems.⁶ Mr. Occhiogrosso later clarifies this when he responds that use of the VCO mode would only require one of the two modems ("I suppose you could have the two-line architecture still talk to the relay."). In sum, the testimony of Mr.

⁶ Patent Owner argues that this "what's the big deal" statement undermines Mr. Occhiogrosso's position (PO Br. 21), but Patent Owner again conflates the description of a device using certain components with a device being limited only to those components, and also conflates Mr. Occhiogrosso's confusion with Patent Owner's questions with lack of understanding the technology.

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Occhiogrosso is that McLaughlin discloses a single device and, in his opinion, the silence of McLaughlin as to what to do with an unused modem in one mode that does not need that modem is not itself important.

3. Trial Testimony, Passage 3

Patent Owner alleges "Occhiogrosso admitted that Section A and Section C disclose 'different systems' because one discloses a relay and one does not." PO Br. 19 (citing Ex. 2032, 88:9–15). Petitioner responds that Occhiogrosso makes clear, immediately prior to Patent Owner's cited portion of the testimony, that he does not believe they are independent embodiments but rather different sections addressing the features of a multifeatured system. Pet. Br. 13–14. We reproduce the testimony cited by both parties below:

Q. And you can't tell me, as you sit here right now, whether you cited two different sections?

A. Oh, no. They're clearly different sections.

Q. Are they different systems?

A. I don't believe they're different systems. They're a system deployed in a different context, one in a LAN/WAN, one in a WAN with two SVD links connected to it. So I couldn't categorically say they're two different systems. I don't think that was your earlier question perhaps or maybe I misunderstood it.

Q. Does the system spanning -- that's described in the paragraph spanning column 29 to 30 use a relay?

A. Yes.

Q. So looking back to your slide, this morning you cited two different systems, one that uses a relay and one that doesn't, correct?

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A. I would have to say you are correct.

•••

Q. Let's turn to McLaughlin and look at where those citations fall. Let's just start with column 31, line 43 to 47. And then let's trace back up column 31 and back up column 30 to column 30, lines 13 to 14. Do you see that your citations on this slide are to yet a third different system disclosed in McLaughlin?

A. What makes you believe this is a third different system?

Q. Do you know, as you're sitting there right now, whether this system disclosed in section b) *New Techniques For Hearing/Speaking Persons to Call . . . Deaf and/or Speech Impaired Persons*, do you know whether this section is disclosing a different system than the other two sections that you cited?

A. My understanding of the specification is it's a versatile device that is capable of operating in a number of configurations, so it was my interpretation of the specifications that it's the same device.

Ex. 2032, 87:24-89:21.

Just as in the prior passages, Mr. Occhiogrosso is consistent in his testimony that McLaughlin discloses a single system that uses the appropriate components when operating in different contexts. The testimony regarding "one [system] that uses a relay and one that doesn't" is not inconsistent with his position because Mr. Occhiogrosso is again testifying as to which components are *used*. That Mr. Occhiogrosso uses the word "system" as a stand-in for what he had previously called "context[s]" is merely arguing semantics. The substance of what Mr. Occhiogrosso is saying is clear based on the surrounding testimony, where he states that McLaughlin discloses a system having multiple features. *E.g.*, Ex. 2032,

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18–21 ("My understanding of the specification is it's a versatile device that is capable of operating in a number of configurations, so it was my interpretation of the specifications that it's the same device."). That Mr. Occhiogrosso possibly used a word imprecisely once during the day of oral testimony does not change his repeated statements that McLaughlin has a single device having certain features, even if some of them are not described as being used at the same time as other features.

4. Conclusion on Occhiogrosso's Testimony Regarding McLaughlin

Reviewing the arguments and evidence before us, we find that Mr. Occhiogrosso provided consistent testimony regarding McLaughlin in the district court and before us in the IPRs. Thus, we find that his testimony before us remains credible with regard to McLaughlin. Furthermore, contrary to Patent Owner's arguments, we explain below why any alleged inconsistencies, even if they existed, do not impact the Final Written Decisions in IPR542, IPR543, IPR544, and IPR550, the only decisions addressing grounds based on McLaughlin.

a. IPR2013-00542, IPR2013-00543, and IPR2013-00544

In our Final Written Decisions in IPR542, IPR543, and IPR544, we determined that claims 1 and 2 of the '740 patent, claims 1 and 2 of the '104 patent, and claims 8–11 of the '578 patent are unpatentable as obvious over the combination of McLaughlin and Ryan. IPR542, Paper 66, 29; IPR543, Paper 66, 28; IPR544, Paper 74, 54.⁷ In each of these decisions, we

⁷ On rehearing, we modified our analysis regarding the rationale for

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found that McLaughlin teaches a captioned telephone device as required by the claims. IPR542, Paper 66, 20 (citing Ex. 1009, 30:46–48, 30:59–63, 31:41–47, 32:41–52); IPR543, Paper 66, 19–20 (citing Ex. 1012, 30:46–48, 30:59–63, 31:41–47, 32:41–52); IPR544, Paper 74, 51 (citing Ex. 1009, 30:46–48, 30:59–63, 31:41–47, 32:41–52). Notably, all portions of McLaughlin explicitly cited in our analysis of that claim limitation appear in what Patent Owner refers to as Section B. Therefore, Patent Owner's contention regarding Mr. Occhiogrosso's allegedly inconsistent testimony that he admitted in district court that different sections of McLaughlin (i.e., Sections A, B, and C) disclose different systems but testified before us that they disclose the same system—would not affect the result in these three decisions, even if the allegation were true, which it is not for the reasons explained above.

Moreover, Patent Owner's entire argument regarding Mr. Occhiogrosso's testimony on McLaughlin relates to our anticipation finding in IPR550, which, according to Patent Owner, relied on Mr. Occhiogrosso's testimony that McLaughlin discloses all the claim elements in a "single system." PO Br. 13. Thus, we agree with Petitioner that Patent Owner fails to explain how any alleged inconsistencies on this point implicate the obviousness determinations in IPR542, IPR543, and IPR544. *See* Pet.

combining McLaughlin and Ryan, but did not reconsider our findings that McLaughlin teaches a captioned telephone device. *See* IPR542, Paper 68, 2–7 (Rehearing Decision); IPR543, Paper 68, 2–7 (Rehearing Decision); IPR544, Paper 76, 10–13 (Rehearing Decision).

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Br. 18. Furthermore, even if our decisions in these cases had relied on disclosure from different sections of McLaughlin for teaching the captioned telephone device recited in the claims of the '740 patent, '104 patent, and '578 patent, such reliance would not preclude a conclusion of obviousness, even if the different sections described different systems (which, as explained above, was not Mr. Occhiogrosso's testimony in either the district court trial or the IPRs).

Finally, Patent Owner argues that in making our unpatentability determinations in IPR542, IPR543, and IPR544, we "explicitly credited [Mr.] Occhiogrosso's opinions over those of [Patent Owner's expert, Mr.] Steel."⁸ PO Br. 22–23 (citing IPR542, Paper 66, 20, 24; IPR543, Paper 66, 20; IPR544, Paper 74, 51, 53). In our decisions, however, we first made findings as to McLaughlin's teaching of a captioned telephone device, supported by ample citation to McLaughlin, and explained why Patent Owner's arguments were unpersuasive. *See, e.g.*, IPR542, Paper 66, 20. Then, "based on our review of McLaughlin," we credited Mr. Occhiogrosso's testimony over that of Patent Owner's declarants. *Id.* In other words, Mr. Occhiogrosso's testimony only confirmed our independent

⁸ Patent Owner fails to recognize that in IPR544 it relied on the testimony of Mr. Ludwick, rather than that of Mr. Steel, in support of its unpatentability arguments, and we likewise referred to Mr. Ludwick's testimony in the Final Written Decision. *See e.g.*, IPR544, Paper 74, 51 (citing Ex. 2010 ¶¶ 32–34).

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reading of McLaughlin, and, for the reasons discussed above, Mr. Occhiogrosso's district court testimony aligns with his testimony before us.

b. IPR2013-00550

Patent Owner points out that we relied on the testimony of Mr. Occhiogrosso when we found in IPR550 that McLaughlin describes a microphone, a speaker, and a visually readable display. PO Br. 23-25. Indeed, in our analysis of claim 1 of the '082 patent, we relied on Mr. Occhiogrosso's testimony when we found that a "person of ordinary skill in the art would consider McLaughlin to be disclosing a device capable of all of the HCO/VCO features described therein." IPR550, Paper 57, 20 (citing IPR550, Ex. 1030 ¶ 23–24). Patent Owner is incorrect, however, when it states "the Board cited no other evidence [besides Occhiogrosso] to support its findings that McLaughlin discloses a captioned telephone device." PO Br. 24. Our analysis of claim 1 does not require citation to Mr. Occhiogrosso's testimony because we repeatedly cite to and rely on the McLaughlin reference itself. See generally IPR550, Paper 57, 15-24. Even as to the portion of the decision where we cited to Mr. Occhiogrosso's testimony, we had already found "the microphone, speaker, and display limitations properly read on the device described in McLaughlin." *Id.* at 19; see also id. at 18–19 (citing to the various portions of McLaughlin disclosing these features). It was only in addressing Patent Owner's arguments that we cited Mr. Occhiogrosso's testimony. Id. at 19-20 (stating, "To the extent Patent Owner is arguing ...," followed by our response to that potential argument). Accordingly, we have found Mr. Occhiogrosso's testimony

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reliable and trustworthy, but even if we had not, it would not affect the outcome of IPR550.

B. Testimony Regarding Ryan

Patent Owner argues that during the district court trial,

Mr. Occhiogrosso made "several related admissions" concerning his testimony "surrounding" Ryan. PO Br. 28. Specifically, Patent Owner contends that Mr. Occhiogrosso's trial testimony was inconsistent with his opinion, provided in six of the proceedings before us,⁹ that Ryan describes voice recognition software "trained to the voice of the call assistant," as required by the claims at issue in those cases. *Id.* Patent Owner cites several excerpts of allegedly inconsistent trial testimony, which, when reordered, comprise the following single passage of testimony:

Q. Let's focus on the sentence [from Ryan] we have highlighted, "If the software is specifically designed to recognize the voice of particular relay agents." And if we could now compare with claim 1 of the '482 patent, please, read along with me in the middle paragraph. "The digital computer using voice recognition computer software trained to the voice of the call assistant." The sentence you cited in Ryan does not say "trained to the voice of the call assistant," does it?

A. Could you put the sentence back up? The word *trained* does not appear in the sentence.

Q. Would you agree the act of designing software means developing a set of requirements and codifying those requirements into instructions in some kind of programming

⁹ IPR540, IPR541, IPR542, IPR543, IPR544, and IPR545.
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language that would subsequently be compiled, in most instances, or interpreted and executed as a process?

A. That's one variation of software design.

Q. And that's your definition of the act of designing a software, isn't it?

A. I don't recall. Is that from another transcript? Perhaps. Sounds like something I might have said.

Q. Do you agree with that definition of the act of designing software?

A. I think that's a fair characterization of it.

Q. Earlier today you were talking about speaker-dependent voice recognition software and I believe you indicated that users train the software so it can learn their voice, correct?

A. Yes.

Q. The software isn't predesigned to recognize the voice when it's speaker dependent, correct?

A. Of course not.

Ex. 2032, 78:3–79:10.

Patent Owner alleges this trial testimony is inconsistent with Mr. Occhiogrosso's IPR testimony in three ways. First, Patent Owner contends that Mr. Occhiogrosso "admitted that Ryan did not say that its disclosed software was 'trained to the voice of the call assistant." PO Br. 30 (citing Ex. 2032, 78:3–13). As set forth above, Mr. Occhiogrosso's actual testimony was that the word "trained" does not appear in the portion of the sentence from Ryan quoted to him during cross-examination. This testimony does not reveal an inconsistency, as Patent Owner does not allege Mr. Occhiogrosso testified during the IPRs that the applicable phrase from

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Ryan uses the word "trained." Further, a reference need not satisfy an *ipsissimis verbis* test to anticipate, *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009), so Mr. Occhiogrosso's acknowledgment that the specific word "trained" does not appear in Ryan does not contradict his testimony in the IPRs that Ryan describes software "trained to the voice of the call assistant," as recited in the claims at issue.

Second, Patent Owner argues that Mr. Occhiogrosso's district court testimony regarding his definition of "designing software" is inconsistent with his opinion before the Board that Ryan's disclosure of software "specifically designed to recognize the voice of particular relay agents" teaches software trained to the voice of the call assistant. PO Br. 29–30 (citing Ex. 2032, 78:14–79:2). Again, the cited trial testimony does not show an inconsistency. As Petitioner points out, Mr. Occhiogrosso earlier provided the same definition of "designing software" during a deposition for the first eight IPR proceedings, including the six with unpatentability grounds based on Ryan. *See* Pet. Br. 22 (citing, *e.g.*, IPR540, Ex. 2007, 270:13–19). We fail to see how Mr. Occhiogrosso's agreement with that definition during his cross-examination at trial can be the basis for an inconsistency with his testimony in the proceedings before us when the definition in the question posed to Mr. Occhiogrosso was taken directly from his IPR deposition testimony.

Moreover, Mr. Occhiogrosso characterized that definition of "designing software" as just "one variation of software design." Ex. 2032, 78:14–79:2. Significantly, he did not apply the definition directly to Ryan's

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disclosure of software that is "specifically designed." Because Mr. Occhiogrosso's trial testimony regarding a definition of "designing software" is not tied to the disclosure of Ryan itself, the testimony does not reveal an inconsistency with Mr. Occhiogrosso's IPR testimony that Ryan teaches software trained to the voice of the call assistant. Indeed, immediately after providing that definition in his IPR testimony, Mr. Occhiogrosso turned to Ryan and confirmed that software "specifically designed" as disclosed means that the developers "built into the software the ability to recognize the voice of a particular agent," which would be achieved with "whatever speaker-dependent speech recognition algorithm that they elected to adopt and . . . codify into software." *E.g.*, IPR540, Ex. 2007, 270:20–271:9.

Finally, Patent Owner argues that with his answers to the last two questions in the trial testimony passage quoted above (Ex. 2032, 79:3–10), Mr. Occhiogrosso admitted that speaker-dependent software is not "*predesigned* to recognize the voice." PO Br. 29 (emphasis added). Patent Owner apparently contends this testimony contradicts Mr. Occhiogrosso's opinion in the IPRs that Ryan's disclosure of software "specifically designed to recognize the voice of particular relay agents" teaches software "trained to the voice of the call assistant," as recited in the claims. *See id.* at 31. As with the preceding excerpt, however, this trial testimony does not address Ryan's disclosure of "specifically designed" software, and therefore is not inconsistent with Mr. Occhiogrosso's IPR testimony that Ryan describes software trained to the voice of a call assistant. *See, e.g.*, IPR540, Ex. 1053

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¶ 41. Furthermore, portions of Mr. Occhiogrosso's district court testimony that do specifically address Ryan corroborate his testimony in the IPRs that the claimed voice recognition software "trained to the voice of the call assistant" is met by Ryan's disclosure of software "specifically designed to recognize the voice of particular relay agents." Ex. 2031, 65:17–66:7 (providing opinion that Ryan satisfies the claim language); Ex. 2033, 21:10–22:6 (explaining that a person of ordinary skill in the art would understand Ryan specifically designed software to include speaker-dependent speech recognition software that has been trained).

For these reasons, we conclude that the passage from Mr. Occhiogrosso's trial testimony quoted above (Ex. 2032, 78:3–79:10) does not conflict with his IPR testimony. Accordingly, there is no impact of these alleged inconsistencies concerning Ryan on the Final Written Decisions in IPR540, IPR541, IPR542, IPR543, IPR544, and IPR545. We find that Mr. Occhiogrosso's testimony before us remains credible with regard to Ryan's teaching of voice recognition software that can be trained to the voice of the call assistant.

C. Testimony Regarding Software Location

Patent Owner contends that Mr. Occhiogrosso's trial testimony concerning whether the claims require, and whether the prior art references Ryan and Yamamoto disclose, voice recognition software stored at the call assistant workstation conflicts with his IPR testimony. PO Br. 34–46. Patent Owner asserts Mr. Occhiogrosso's trial testimony regarding software

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location conflicts with his testimony in IPR540 and IPR541 involving the following challenges:

Case	Patent	Reference(s)	Basis	Claim(s)
IPR540	6,233,314	Ryan	§ 102(e)	1 and 2
IPR541	5,909,482	Ryan	§ 102(e)	1 and 5
IPR541	5,909,482	Wycherley and Yamamoto	§ 103(a)	1 and 5
IPR541	5,909,482	Wycherley, Yamamoto, and Liebermann	§ 103(a)	6

PO Br. 34–46.

Having reviewed the parties' arguments and evidence, we find that there is no inconsistency in Mr. Occhiogrosso's trial and IPR testimony regarding whether the prior art discloses voice recognition software stored at the call assistant workstation. We also find that there is no inconsistency in Mr. Occhiogrosso's trial and IPR testimony regarding whether the claims require such a limitation. In our analysis below, we first address Patent Owner's contentions regarding Ryan, then Patent Owner's contentions regarding Yamamoto, and finally Patent Owner's contentions regarding claim scope.

1. Testimony Concerning Ryan

Patent Owner contends that at the district court trial Mr. Occhiogrosso acknowledged that Ryan does not disclose voice recognition software stored at the call assistant workstation. PO Br. 34 (citing Ex. 2032, 49:14–52:8, 56:25–58:13, 63:2–22), 38–39 (quoting Ex. 2032, 56:25–57). According to Patent Owner, Mr. Occhiogrosso testified at trial that Ryan discloses voice recognition software stored at the call agent's telephone device (Ryan's

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Device 20), not at the relay agent's terminal. PO Br. 34 (citing Ex. 2032, 49:14–52:8, 56:25–58:13, 63:2–22), 38–39 (quoting Ex. 2032, 56:25–58:13). But, according to Patent Owner, Mr. Occhiogrosso testified the opposite in the IPR testimony—that Ryan discloses voice recognition software stored at the call assistant workstation. PO Br. 34–35 (citing IPR540, Ex. 1014 ¶ 28, 32, 44; IPR541, Ex. 1014 ¶ 28, 32, 44). For the reasons explained below, we find no inconsistency between Mr. Occhiogrosso's district court trial and IPR testimony.

a. Trial Testimony

In the district court trial, under cross-examination, Mr. Occhiogrosso testified that voice recognition software stored in Ryan "could be employed at Device 20," which, according to Mr. Occhiogrosso, Ryan characterizes as the relay agent phone device. Ex. 2032, 56:25–57:17; PO Br. 38–39 (quoting Ex. 2032, 56:25–58:13). Notably, when asked to agree that Device 20 was not a workstation of a call assistant, Mr. Occhiogrosso did not agree, but equivocated that "one possibility" was that Device 20 was "just a phone" and not a call assistant workstation. Ex. 2032, 57:14–22¹⁰; PO Br. 38–39 (quoting Ex. 2032, 56:25–58:13).

¹⁰ Ex. 2032, 57:14–22 ("Q. Do you know what Device 20 is? . . . A. Device 20 is the agent device. Q. It's a telephone, isn't it? A. . . . yes, that's how it is characterized in the patent, agent phone device. Q. That's not a workstation of a call assistant, is it? A. Well, agent phone device, I mean, it could be, but I think the term *phone* may suggest that it's just a phone. That's one possibility.").

Moreover, Mr. Occhiogrosso testified at trial about another embodiment in Ryan in which a single composite terminal performs the functions of the relay agent's telephone (Device 20, which stores voice recognition software) and the functions of Terminal 12 (which, according to Petitioner, corresponds to the call assistant workstation required by the claims). Ex. 2032, $58:2-6^{11}$; *see* Ex. 2032, 59:10-11; PO Br. 39 (quoting Ex. 2032, 56:25-58:13); Pet. Br. 34–35 (citing Ex. 2032, 59:5-23). Mr. Occhiogrosso agreed with Patent Owner's counsel that Ryan does not disclose that voice recognition software is saved on the composite terminal. Ex. 2032, 58:7-13,¹² 59:12-15.¹³

b. IPR Testimony

Patent Owner and Petitioner both recognize, as do we, that in Mr. Occhiogrosso's reply declaration in the IPRs, he testified unequivocally

¹¹ Ex. 2032, 58:2–6 ("Well, I'm going to just interject that, you know, essentially in Ryan there is a passage that contemplates another embodiment where he reads, 'Of course a single composite terminal could be utilized to perform the functions of both Device 20 and Terminal 12.'"); Ex. 2032, 59:10–11 (Mr. Occhiogrosso testifying that "I also indicated that the passage in Ryan discloses that one could have a composite terminal.").

¹² Ex. 2032, 58:7–13 ("Q. But [Ryan] doesn't say the voice recognition software is saved on that combination terminal, does it? A. Ryan doesn't say that, but that's obvious to a person of ordinary skill that I could combine those two capabilities and essentially have – I mean, with all due respect, that's not rocket science to put those two boxes together.").

¹³ Ex. 2032, 59:12–15 ("Q. But [Ryan] does not disclose that the voice recognition software is saved on the terminal, correct? A. Well, that's my implication. Okay. Let me read it again.").

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that Ryan discloses voice recognition software stored at the relay agent's terminal. IPR540, Ex. 1053 ¶ 40; IPR541, Ex. 1053 ¶ 40; Pet. Br. 37 (citing IPR540, Ex. 1053 ¶ 40; IPR541, Ex. 1053 ¶ 40); PO Br. 37 (citing IPR540, Ex. 1053 ¶ 40; IPR541, Ex. 1053 ¶ 40). In his reply declaration, Mr. Occhiogrosso indicates that he "understand[s] that Patent Owner additionally asserts that Ryan fails to disclose that the relay agent's computer contains voice recognition software." IPR540, Ex. 1053 ¶ 40 (citing IPR540, Paper 30 (Patent Owner's Response), 25–26); see also IPR541, Ex. 1053 ¶ 40. Addressing Patent Owner's assertion, Mr. Occhiogrosso testifies that "Ryan clearly discloses that software located at the relay is in fact contained in 'terminal 12,' the relay agent's terminal." IPR540, Ex. 1053 ¶ 40 (citing Ex. 1004, 2:49–51); see also IPR541, Ex. 1053 ¶ 40. Mr. Occhiogrosso supports this testimony by relying on a passage in Ryan not discussed in his trial testimony. IPR540, Ex. 1053 ¶ 40 (citing Ex. 1004, 2:49–51); see also IPR541, Ex. 1053 ¶ 40. According to Mr. Occhiogrosso, Ryan discloses, in column two, that a relay terminal may include voice recognition software. IPR540, Ex. 1053 ¶ 40 (citing Ex. 1004, 2:49–51); see also IPR541, Ex. 1053 ¶ 40. Specifically, Mr. Occhiogrosso testifies:

I understand that Patent Owner additionally asserts that Ryan fails to disclose that the relay agent's computer contains voice recognition software. PO Response, pp. 25-26. However, Ryan clearly discloses that software located at the relay is in fact contained in "terminal 12," the relay agent's terminal. Ex. 1004, 2:49-51 ("The computer program may analyze the words prior to transmission to the TDD (if the

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program resides at the relay terminal)" (emphasis added)). Indeed, Patent Owner's argument appears to rest entirely on the assertion that the terminal referenced in the revoicing embodiment could be a different terminal than the one uniformly referred to through the patent, which is remote from the relay agent. PO Response, p. 24.

IPR540, Ex. 1053 ¶ 40; see also IPR541, Ex. 1053 ¶ 40.

c. Analysis

We do not find any inconsistency between Mr. Occhiogrosso's trial and IPR testimony regarding Ryan's disclosure of voice recognition software stored at a call assistant workstation. During the IPR proceedings, Mr. Occhiogrosso testified that Ryan discloses voice recognition software stored on "terminal 12." Patent Owner cites no trial testimony in which Mr. Occhiogrosso stated that voice recognition software is not stored on Ryan's "terminal 12." Rather, Patent Owner cites Mr. Occhiogrosso's testimony, during cross-examination at trial, that (i) Ryan expressly discloses voice recognition software at Device 20; (ii) Ryan expressly discloses a composite terminal that combines the functions of Device 20 and Terminal 12; (iii) but that Ryan has no express statements that voice recognition software is located on the composite terminal.

The fact that Mr. Occhiogrosso testified in the IPRs that Ryan discloses in another passage that voice recognition software is being stored on Terminal 12 does not conflict with his trial testimony that was limited to other passages in Ryan and that never directly indicated that voice recognition software was not stored in Terminal 12. Moreover, Patent Owner fails to address Mr. Occhiogrosso's testimony concerning a

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composite terminal having the functions of Device 20 and Terminal 12, which was given in the context of Mr. Occhiogrosso's trial testimony about Device 20. This further undermines Patent Owner's contentions of inconsistency.

2. Testimony Concerning Yamamoto

Patent Owner contends that Mr. Occhiogrosso provided district court trial testimony inconsistent with his IPR testimony when at trial he testified that Section 3.2 of Yamamoto "does not disclose anything about where voice recognition software is stored." PO Br. 40–41 (citing Ex. 2032, 63:2–22); Ex. 2032, 63:2–13.¹⁴

Regarding Mr. Occhiogrosso's IPR testimony, Patent Owner acknowledges that Mr. Occhiogrosso did not address in his reply declaration the issue of whether Yamamoto discloses where voice recognition software is stored. PO Br. 37 (citing IPR540, Ex. 1053 ¶¶ 54–62; IPR541, Ex. 1053 ¶¶ 54–62). Patent Owner, however, contends that, in the IPR proceedings, Mr. Occhiogrosso testified "that it was 'apparent' to one of ordinary skill in the art that Yamamoto disclosed 'speaker-dependent voice recognition' software at the 'operator system.'"). PO Br. 42 (citing IPR540, Ex. 1014 ¶ 41; IPR541, Ex. 1014 ¶ 41).

¹⁴ Ex. 2032, 63:2–13 ("Q. And I've got some language here from Section 3.2 of Yamamoto. . . . And this section of Yamamoto does not disclose anything about where voice recognition software is stored, correct? A. From my one reading of it, I would say that that statement that you had made is correct.").

The portion of Mr. Occhiogrosso's IPR testimony cited by Patent Owner, however, does not support Patent Owner's position. Mr. Occhiogrosso testified that Yamamoto discloses "using voice recognition on the voice 'of an operator repeating the question from the user" (referred to in many of the IPRs as "revoicing") and, though not expressly described in Yamamoto, that such a revoicing system would benefit from training the voice recognition system to the voice of the operator. IPR540, Ex. 1014 ¶ 41; IPR541, Ex. 1014 ¶ 41. Thus, this testimony concerns revoicing and the benefits of speaker-dependent voice recognition over speaker-independent voice recognition for an operator assistance system (as opposed to a fully automated voice recognition system). Mr. Occhiogrosso's testimony discusses revoicing functionality, not the location where voice recognition software is stored. We, therefore, do not agree that Mr. Occhiogrosso testifies in paragraph 41, as Patent Owner alleges, that "Yamamoto necessarily required speaker-dependent voice recognition software at the operator system." PO Br. 36 (citing IPR540, Ex. 1014 ¶ 41; IPR541, Ex. 1014 ¶ 41).

Because Patent Owner has not identified IPR testimony, and we are unaware of any, in which Mr. Occhiogrosso opined that Yamamoto discloses voice recognition software stored on the operator system, we do not perceive any IPR testimony that conflicts with Mr. Occhiogrosso's trial testimony that Yamamoto in Section 3.2 does not disclose where voice recognition software is stored.

3. Testimony Concerning Claim Scope

Patent Owner points to Mr. Occhiogrosso's trial testimony concerning the scope of certain claims as being inconsistent with his IPR testimony. PO Br. 34, 37–38 (citing Ex. 2032, 49:14–25, 50:12–51:3, 52:1–8). Patent Owner may be arguing that Mr. Occhiogrosso's trial testimony concerning whether the claims require voice recognition software stored at the call assistant workstation is inconsistent with Mr. Occhiogrosso's IPR testimony. *See* PO Br. 37 (indicating "[Mr.] Occhiogrosso testified at trial that the claims-at-issue require voice recognition software at the call assistant workstation and that neither Ryan nor Yamamoto disclose that element"); PO Br. 34, 37–38. But Patent Owner does not identify any IPR testimony that purportedly is inconsistent. Thus, we find that Mr. Occhiogrosso's trial testimony concerning the scope of the claims is not inconsistent with any IPR testimony concerning claim scope.

Patent Owner further contends that Mr. Occhiogrosso's conclusions in the IPRs that Ryan anticipates the claims and the claims would have been obvious over Yamamoto (in combination with other references) is "fundamentally contradictory and cannot be reconciled" with his trial testimony that "neither Ryan nor Yamamoto disclosed this element." PO Br. 34 ("At trial, Mr. Occhiogrosso agreed with [Patent Owner's] assessment" that the claims required voice recognition software at the call assistant workstation, and "further acknowledged that neither Ryan nor Yamamoto disclosed the element.") (citing Ex. 2032, 49:14–52:8, 56:25–58:13, 63:2– 22).

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IPR2013-00549 (Paten IPR2014-00780 (Paten	/ / /	IPK2013-0055	50 (Patent 7,003,082)

We understand Patent Owner to contend that concluding claims of the '314 patent and the '482 patent are anticipated by Ryan or would have been obvious over Yamamoto (in combination with other references) in the IPRs requires Mr. Occhiogrosso to conclude that Ryan and Yamamoto disclose voice recognition software stored at the call assistant workstation. PO Br. 34–35. And, as we understand Patent Owner, this position is inconsistent with his trial testimony that neither Ryan nor Yamamoto discloses voice recognition software located at the call assistant workstation in the IPRs. PO Br. 34–35.

We disagree. First, for the reasons discussed above, we do not agree with Patent Owner's broad conclusion that Mr. Occhiogrosso testified at trial that Ryan does not disclose voice recognition software stored at the call assistant workstation. Rather, at trial, Mr. Occhiogrosso testified concerning two passages in Ryan.

Second, we disagree that Mr. Occhiogrosso testified that Yamamoto does not disclose voice recognition software stored at the call assistant workstation. Rather, Mr. Occhiogrosso's trial testimony identified by Patent Owner was limited to a particular section of Yamamoto (Section 3.2). PO Br. 34 (citing Ex. 2032, 63:2–22). Mr. Occhiogrosso himself limited his testimony to the particular section of Yamamoto.¹⁵

¹⁵ Ex. 2032, 63:18–25 ("Q. And this section of Yamamoto [Section 3.2] does not disclose anything about where the voice recognition software is stored, correct? A. From my one reading of it, I would say that that statement that you ha[ve] made is correct. Q. And so in regard to the '482 patent and the '314 patent, I believe you had obviousness grounds that were based on

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Third, in its Brief, as in the IPRs, Patent Owner asserts that the claims require voice recognition software stored at the call assistant workstation. PO Br. 34. In our Final Written Decisions in IPR540 and IPR541, we concluded that the claims of the '314 and '482 patents do not require voice recognition software to be located at the call assistant workstation. IPR540, Paper 78, 10; IPR541, Paper 76, 12. Our conclusion was based on the plain language of the claims that require a computer only to use a voice recognition computer software package trained to the voice of the call assistant and do not expressly require the voice recognition computer software package to be stored on the call assistant's workstation, which is only one of various devices involved in the relay system. IPR540, Paper 78, 8–10; IPR541, Paper 76, 10–12. We also explained that

neither Patent Owner nor Mr. Ludwick [Patent Owner's expert] addresses sufficiently how a person of ordinary skill in the art would understand the limitation "the computer programmed *to use*" a software package to require the software package to be stored on the computer programmed to use the software package.

Thus, we will not construe "computer programmed to use a voice recognition computer software package trained to the voice of the call assistant" as requiring the software package to be stored on the computer programmed to use the software.

Yamamoto, correct? A. Yes. Q. And so to the extent that the claims of those patents require voice recognition software resident on a call assistant's workstation, the combinations involving Yamamoto would be missing this element, correct? A. With the citation to this paragraph only, yes. I think I would need to look at the remainder of Yamamoto to see if in fact there were other citations that were applicable").

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IPR540, Paper 78, 9 (emphasis in original); *see* IPR541, Paper 76, 11–12 (similar conclusion in the context of the claim language of the '482 patent).

Thus, because the broadest reasonable construction of the claims does not require storage of voice recognition software at the call assistant workstation, we do not agree with Patent Owner that Mr. Occhiogrosso's conclusion in the IPRs that the claims were anticipated by Ryan and would have been obvious over Yamamoto (and other references) "necessarily requires him to have concluded that Ryan and Yamamoto did disclose this element," requiring voice recognition software to be stored on the call assistant workstation. PO Br. 34–35 (citing IPR540, Ex. 1014 ¶¶ 28, 32, 44; IPR541, Ex. 1014 ¶¶ 28, 32, 44).

4. Conclusion on Mr. Occhiogrosso's Testimony Regarding Software Location

For these reasons, we conclude that Mr. Occhiogrosso's trial testimony concerning whether the claims require, and whether the prior art references Ryan and Yamamoto disclose, voice recognition software stored at the call assistant workstation does not conflict with his IPR testimony. Accordingly, there is no impact of these alleged inconsistencies concerning software location on the Final Written Decisions in IPR540 or IPR541. We find that Mr. Occhiogrosso's testimony before us remains credible with regard to software location.

D. Conclusion Regarding Mr. Occhiogrosso's Testimony

We have admitted and considered Mr. Occhiogrosso's district court testimony. Upon consideration, as explained above, we have found that

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Mr. Occhiogrosso's district court testimony is consistent with his testimony offered in these proceedings. Accordingly, we determine that the admitted district court testimony has no effect on Mr. Occhiogrosso's credibility as a whole across all the proceedings.

We also have found that the alleged inconsistencies have no impact on the Final Written Decisions in IPR540, IPR541, IPR542, IPR543, IPR544, IPR545, and IPR550, the specific cases alleged by Patent Owner to involve inconsistent testimony from Mr. Occhiogrosso. *See* PO Br. 22–25, 31–34, 42–44. Our reasons in support of those findings are set forth in the analysis above.

Two cases remain unaddressed: IPR549 and IPR780. These cases do not involve McLaughlin, Ryan, or Yamamoto. Patent Owner does not allege, nor do we see, how the allegedly inconsistent district court testimony is implicated in these cases, aside from its applicability to the general credibility of Mr. Occhiogrosso. To that point, however, we have found Mr. Occhiogrosso to be a credible witness based on our above review.

Furthermore, in IPR549, our reliance on Mr. Occhiogrosso is limited to supplementing our findings that are supported by other evidence of record. We cite to Mr. Occhiogrosso's testimony as a backup to our citations to Liebermann itself, finding that "Liebermann discloses a device having one telephone line between the hearing user and the assisted user, without a relay interposing on that line." IPR549, Paper 71, 17 (citing Liebermann as support for that finding, with Mr. Occhiogrosso's testimony cited as a "*see also*" cite). We then discussed how we did not find Patent

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IPR2013-00541 (Patent 5,909,482) IPR2013-00543 (Patent 7,555,104) IPR2013-00545 (Patent 6,594,346) IPR2013-00550 (Patent 7,003,082)

Owner's arguments or the testimony of its declarant, Mr. Steel, persuasive because they were in contrast to the specific teachings of Liebermann. *Id.* at 18.¹⁶ Only after discussing why Patent Owner's arguments and its declarant's testimony were not persuasive in view of Liebermann itself did we discuss Mr. Occhiogrosso's testimony. But there, we merely state that his testimony is consistent with Liebermann and that Mr. Steel's testimony was not consistent with Liebermann (which we had just discussed). Thus, we have found Mr. Occhiogrosso's testimony reliable and trustworthy, but even if we had not, it would not affect the outcome of IPR549.

Similarly, Patent Owner does not allege, nor do we see, how the allegedly inconsistent testimony in Exhibits 2031, 2032, and 2033 is implicated in IPR780, aside from its applicability to the general credibility of Mr. Occhiogrosso. To that point, however, we have found Mr. Occhiogrosso to be a credible witness based on our above review. In addition, as Petitioner correctly notes, in IPR780 Patent Owner had the opportunity as a matter of right to enter, and had the opportunity to cross-examine Mr. Occhiogrosso during routine discovery on, the testimony we now consider in Exhibits 2031, 2032, and 2033. Pet. Br. 6–7. Patent Owner declined to do so.

¹⁶ Patent Owner argued that Liebermann disclosed a "switch," but we found "Liebermann does not use or imply those words." *Id.* at 18. Then we discussed Patent Owner's arguments and Mr. Steel's testimony directed to the diagram in Figure 2 with further discussion of Liebermann. *Id.* Then we again addressed Patent Owner's "party call" argument with further citations to Liebermann regarding two cellular connections. *Id.*

Furthermore, our reliance on Mr. Occhiogrosso in IPR780 is limited to a single passage where we bolster our existing finding that the proposed combination would have been predictable (based on Mukherji), with further testimony from Mr. Occhiogrosso. IPR780, Paper 35, 36–37 (relying on Mukherji to respond to Patent Owner's argument), 37 (relying on "the disclosure of Mukherji itself" as evidence, and then, "[i]n addition," citing to Occhiogrosso). Accordingly, we have found Mr. Occhiogrosso's testimony reliable and trustworthy, but even if we had not, it would not affect the outcome of IPR780.

III. CONCLUSION

Upon remand, we were ordered to "admit and consider" the district court testimony of Mr. Occhiogrosso and "[i]f the Board finds he gave inconsistent testimony," to "consider the impact on the specific patents at issue in the trial testimony *as well as* on his credibility as a whole." *Ultratec*, 872 F.3d at 1275. As we have explained above, we do not find Mr. Occhiogrosso to have given inconsistent testimony, and we find him to remain a credible witness as a whole. We have thus discharged our duty on remand, and find that no changes to our prior decisions are warranted. Accordingly, our prior Final Written Decisions stand, in conjunction with this Decision on Remand, as our Final Written Decisions for these proceedings.

IPR2013-00540 (Patent 6,233,314)IPR2013-00541 (Patent 5,909,482)IPR2013-00542 (Patent 7,319,740)IPR2013-00543 (Patent 7,555,104)IPR2013-00544 (Patent 8,213,578)IPR2013-00545 (Patent 6,594,346)IPR2013-00549 (Patent 6,603,835)IPR2013-00550 (Patent 7,003,082)IPR2014-00780 (Patent 6,603,835)IPR2013-00550 (Patent 7,003,082)

IV. ORDER

In view of the foregoing, it is hereby

ORDERED that our Final Written Decisions in IPR2013-00540, IPR2013-00541, IPR2013-00542, IPR2013-00543, IPR2013-00544, IPR2013-00545, IPR2013-00549, IPR2013-00550, and IPR2014-00780 are hereby modified to include this Decision, but are otherwise not modified upon remand; and

FURTHER ORDERED that this is a final written decision under 35 U.S.C. § 318(a) and parties to the proceeding seeking judicial review of this Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2013-00541 (Patent 5,909,482) IPR2013-00543 (Patent 7,555,104) IPR2013-00545 (Patent 6,594,346) IPR2013-00550 (Patent 7,003,082)

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<u>Trials@uspto.gov</u> 571-272-7822 Paper No. 97 Entered: January 3, 2018

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CAPTIONCALL, L.L.C., Petitioner,

v.

ULTRATEC, INC., Patent Owner.

Cases IPR2013-00540 (Patent 6,233,314), IPR2013-00541 (Patent 5,909,482), IPR2013-00542 (Patent 7,319,740), IPR2013-00543 (Patent 7,555,104), IPR2013-00544 (Patent 8,213,578), IPR2013-00545 (Patent 6,594,346), IPR2013-00549 (Patent 6,603,835), IPR2013-00550 (Patent 7,003,082), IPR2014-00780 (Patent 6,603,835)¹

Before WILLIAM V. SAINDON, BARBARA A. BENOIT, and LYNNE E. PETTIGREW, *Administrative Patent Judges*.

PETTIGREW, Administrative Patent Judge.

ORDER Conduct of the Proceeding 37 C.F.R. §§ 42.5

¹ This Order addresses issues that are the same in all identified cases. We exercise our discretion to issue one Order to be filed in each case.

IPR2013-00540 (Patent 6,233,314), IPR2013-00541 (Patent 5,909,482), IPR2013-00542 (Patent 7,319,740), IPR2013-00543 (Patent 7,555,104), IPR2013-00544 (Patent 8,213,578), IPR2013-00545 (Patent 6,594,346), IPR2013-00549 (Patent 6,603,835), IPR2013-00550 (Patent 7,003,082), IPR2014-00780 (Patent 6,603,835)

INTRODUCTION

These proceedings are on remand from the United States Court of Appeals for the Federal Circuit. The court issued its decision vacating the Board's final written decisions and remanding these cases to the Board on August 28, 2017. *Ultratec, Inc. v. CaptionCall LLC*, 872 F.3d 1267 (Fed. Cir. 2017). In its opinion, the Federal Circuit provided the following instructions regarding the remand of these proceedings: "On remand, the Board shall admit and consider Mr. Occhiogrosso's trial testimony [from *Ultratec, Inc. v. Sorenson Communications, Inc.*, No. 13-CV-00346 (W.D. Wis.)]. If the Board finds he gave inconsistent testimony, the Board shall consider the impact on the specific patents at issue in the trial testimony *as well as* on his credibility as a whole." *Ultratec*, 872 F.3d at 1275. The Federal Circuit mandates issued on October 19, 2017. Ex. 3003.²

After the parties notified the Board they were in the process of conferring regarding their respective proposals on the conduct of remand proceedings, we instructed the parties to send a joint e-mail to the Board identifying any agreed-upon proposals as well as points not agreed upon. We received such an e-mail on December 5, 2017. *See* Ex. 3004.

On December 13, 2017, we held a conference call to discuss the parties' proposals regarding remand proceedings. Counsel for CaptionCall, L.L.C. ("Petitioner"), counsel for Ultratec, Inc. ("Patent Owner"), and

² Exhibit 3003 in the record of each case is the mandate for the appeal from the final written decision in that proceeding.

Case: 19-2003 Document: 46-1 Page: 66 Filed: 04/08/2020

IPR2013-00540 (Patent 6,233,314), IPR2013-00541 (Patent 5,909,482), IPR2013-00542 (Patent 7,319,740), IPR2013-00543 (Patent 7,555,104), IPR2013-00544 (Patent 8,213,578), IPR2013-00545 (Patent 6,594,346), IPR2013-00549 (Patent 6,603,835), IPR2013-00550 (Patent 7,003,082), IPR2014-00780 (Patent 6,603,835)

Judges Saindon, Benoit, and Pettigrew participated in the call. Patent Owner arranged for a court reporter to be on the call and submitted a transcript of the call on December 28, 2017. *See* IPR2013-00540, Ex. 2029.³

DISCUSSION

The Board's Standard Operating Procedure 9 provides guidance regarding the procedure for handling cases remanded from the Federal Circuit. See PTAB SOP 9 ("Procedure for Decisions Remanded from the Federal Circuit for Further Proceedings"). Under SOP 9, "the panel shall consider procedures proposed by the parties," but "ultimately will decide the procedures to be followed on remand." Id. at 5 (App'x 2). SOP 9 further provides that "[t]he panel will consider the scope of the remand, as determined from the reasoning and instructions provided by the Federal Circuit, as well as 'the effect . . . on the economy, the integrity of the patent system, the efficient administration of the Office, and the ability of the Office to timely complete proceedings." Id. at 6 (App'x 2) (quoting 35 U.S.C. §§ 316(b), 326(b)). With regard to additional briefing, SOP 9 states that it "will normally be limited to the specific issues raised by the remand." Id. (citing Microsoft Corp. v. Proxyconn, Inc., Case No. IPR2012-00026 (Paper 77) (PTAB Sept. 1, 2015); Dell Inc., v. Acceleron, LLC, Case No. IPR2013-00440 (Paper 46) (PTAB May 26, 2016)). SOP 9 also

³ For convenience, we cite the exhibit entered in IPR2013-00540. Patent Owner also submitted the transcript from the call in the other eight proceedings.

IPR2013-00540 (Patent 6,233,314), IPR2013-00541 (Patent 5,909,482), IPR2013-00542 (Patent 7,319,740), IPR2013-00543 (Patent 7,555,104), IPR2013-00544 (Patent 8,213,578), IPR2013-00545 (Patent 6,594,346), IPR2013-00549 (Patent 6,603,835), IPR2013-00550 (Patent 7,003,082), IPR2014-00780 (Patent 6,603,835)

provides guidance regarding supplementation of the evidentiary record on remand. *Id.* at 6–7 (App'x 2).

With this guidance in mind, we have considered the parties' proposals in determining the procedures to be followed on remand, as set forth below.

Scope of Remand and Briefing

Petitioner submits that the remand from the Federal Circuit is narrow and is limited to consideration of Mr. Occhiogrosso's district court trial testimony as directed by the Federal Circuit. Ex. 2029, 5:24–6:8; Ex. 3004, 1–2. In particular, Petitioner asserts that the Board should determine as a threshold issue whether Mr. Occhiogrosso gave inconsistent testimony, and then if, and only if, the Board determines he did, the Board should determine whether such inconsistent testimony impacts the patents at issue in these proceedings and Mr. Occhiogrosso's credibility as a whole. Ex. 3004, 1–2. Petitioner proposes that briefing by the parties should address both issues. *Id.* at 2.

Patent Owner proposes that several topics should be briefed by the parties and considered by the Board on remand. First, Patent Owner requests briefing to identify and explain alleged inconsistencies in Mr. Occhiogrosso's testimony as they span topically across the proceedings and to explain the impact of Mr. Occhiogrosso's credibility on the outcome of the proceedings. Ex. 2029, 12:21–13:20; Ex. 3004, 2. Patent Owner's proposal regarding Mr. Occhiogrosso's testimony is similar to Petitioner's proposal described above.

IPR2013-00550 (Patent 7,003,082), IPR2014-00780 (Patent 6,603,835)

Patent Owner also seeks to bring additional issues into the scope of the remanded proceedings. In light of the recent expiration of the subject patents, Patent Owner proposes that the parties have the opportunity to brief what claim constructions, if any, would change under the standard set forth in Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc), and the impact of any revised constructions. Ex. 2026, 14:9–16:20; Ex. 3004, 2. Patent Owner further proposes that it be permitted to submit, along with accompanying trial testimony, documentary evidence related to secondary considerations that had been designated under the district court's protective order but has been unsealed since briefing closed in the original *inter partes* review proceedings. Ex. 2029, 16:21-19:14, 20:13-15; Ex. 3004, 2. Patent Owner also requests briefing to explain the impact of such additional evidence on these proceedings. Ex. 3004, 2. Finally, Patent Owner seeks targeted additional discovery and briefing on the issue of whether Petitioner identified all the real parties-in-interest. Ex. 2029, 20:22–24:8; Ex. 3004, 2. Patent Owner proposes a first round of briefing to address all topics except identification of real parties-in-interest, which Patent Owner proposes to address in a second round of briefing overlapping with the first. Ex. 3004, 1.

Mindful of the Federal Circuit's remand instructions as well as the Board's SOP 9 governing remand procedures, at this time we authorize briefing directed only to whether Mr. Occhiogrosso's district court trial testimony was inconsistent with his testimony in these *inter partes* review proceedings and the impact of any inconsistency. Specifically, we authorize Patent Owner to file a brief that (i) identifies with particularity portions of

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IPR2013-00540 (Patent 6,233,314), IPR2013-00541 (Patent 5,909,482), IPR2013-00542 (Patent 7,319,740), IPR2013-00543 (Patent 7,555,104), IPR2013-00544 (Patent 8,213,578), IPR2013-00545 (Patent 6,594,346), IPR2013-00549 (Patent 6,603,835), IPR2013-00550 (Patent 7,003,082), IPR2014-00780 (Patent 6,603,835)

Mr. Occhiogrosso's district court trial testimony that Patent Owner alleges is inconsistent and explains how it is inconsistent with specific testimony provided by Mr. Occhiogrosso in these proceedings, and (ii) explains how the allegedly inconsistent testimony impacts specific unpatentability determinations in the Board's final written decisions in these proceedings as well as how it impacts Mr. Occhiogrosso's credibility as a whole. Patent Owner is to prepare a single brief addressing these issues with respect to all of the proceedings and submit that brief in each proceeding. The brief may cite to the record in any of the nine cases, making clear the proceeding in which any particular paper or exhibit was entered.⁴ Patent Owner's brief is limited to 10,000 words and shall be filed no later than February 2, 2018.

Petitioner is authorized to file a single responsive brief addressing the same issues as Patent Owner's brief. Petitioner may cite additional portions of Mr. Occhiogrosso's trial testimony to counter Patent Owner's allegations of inconsistency. Like Patent Owner, Petitioner shall submit the same brief in each proceeding and may cite to the record in any of the nine cases. Petitioner's brief is limited to 10,000 words and shall be filed no later than March 5, 2018. Patent Owner is not authorized to file a reply brief.

At this time, the parties are not authorized to file briefs addressing any other issues. If we determine based on the parties' initial remand briefs that Mr. Occhiogrosso provided inconsistent testimony and that any

⁴For example, a cite to "IPR2013-00540, Ex. 1001, 2–3" would be understood to cite to pages 2 through 3 of Exhibit 1001 in IPR2013-00540.

IPR2013-00540 (Patent 6,233,314), IPR2013-00541 (Patent 5,909,482), IPR2013-00542 (Patent 7,319,740), IPR2013-00543 (Patent 7,555,104), IPR2013-00544 (Patent 8,213,578), IPR2013-00545 (Patent 6,594,346), IPR2013-00549 (Patent 6,603,835), IPR2013-00550 (Patent 7,003,082), IPR2014-00780 (Patent 6,603,835)

inconsistency impacted in a material way our unpatentability determinations regarding the patents at issue or Mr. Occhiogrosso's credibility as a whole, we will consider at that time whether to authorize briefing directed to the additional issues identified by Patent Owner. Otherwise, in following the guidance of SOP 9, which directs us to limit briefing "to the specific issues raised by the remand," no supplemental briefing will be authorized.

We are aware that the *Phillips* standard of claim construction generally applies to patents that have expired. Patent Owner cites two cases in support of its position that it should have the opportunity at this juncture to address the effect of any claim constructions that might change under the Phillips standard. Ex. 2029, 14:17–15:12 (citing In re CSB-System Int'l, Inc., 832 F.3d 1335, 1340–41 (Fed. Cir. 2016); Facebook, Inc. v. Pragmatus AV, LLC, 582 Fed. App'x 864, 869 (Fed. Cir. 2014)). In CSB-System, the Federal Circuit held that when a patent expires during an appeal from an examiner's final rejection in an ex parte reexamination, the Board must apply a *Phillips* claim construction. 832 F.3d at 1341. In *Facebook*, the Federal Circuit construed claim terms under *Phillips* when patents subject to *inter partes* reexamination expired during the pendency of the appeal of the Board's decisions to the Federal Circuit. 582 Fed. App'x at 868–69. These cases are not particularly on point because neither one involves an *inter partes* review proceeding or addresses whether the Board in a remand proceeding necessarily must reinterpret under a *Phillips* framework any previously construed claim terms when a patent expires during the pendency of the remand.

IPR2013-00541 (Patent 5,909,482), IPR2013-00542 (Patent 7,319,740), IPR2013-00543 (Patent 7,555,104), IPR2013-00544 (Patent 8,213,578), IPR2013-00545 (Patent 6,594,346), IPR2013-00549 (Patent 6,603,835), IPR2013-00550 (Patent 7,003,082), IPR2014-00780 (Patent 6,603,835)

Petitioner cites *Personal Web Technologies*, *LLC v. Apple, Inc.*, 848 F.3d 987 (Fed. Cir. 2017), in support of its position that we should not allow briefing on how claim terms would be construed under *Phillips. See* Ex. 2029, 26:18–27:14. In that case, a patent subject to *inter partes* review expired after the Board's final written decision but while a rehearing request was pending before the Board. *Personal Web*, 848 F.3d at 990. On appeal to the Federal Circuit, the parties disputed whether the Board properly applied a broadest reasonable interpretation standard in construing claim terms at issue, with the Director of the Patent and Trademark Office arguing in support of the Board's approach. *Id.* The court, however, determined that it need not resolve the dispute because the Board's construction was correct under either standard. *Id.* Thus, although Petitioner contends that *Personal Web* presents a situation similar to the one here, the Federal Circuit ultimately did not address the issue.

Thus, the parties have not identified, and we are not aware of, any authority requiring us to reconsider on remand all of our earlier unpatentability determinations just because the patents have since expired. Through its reasoning and explicit instructions to consider Mr. Occhiogrosso's trial testimony and the impact of any inconsistencies on the challenged patents and Mr. Occhiogrosso's credibility, the Federal Circuit carefully delineated the scope of the remand in these proceedings. If we determine in the course of following the court's remand instructions that inconsistencies in Mr. Occhiogrosso's testimony require us to reevaluate the patentability of any claims, we will at that point consider Patent Owner's

IPR2013-00540 (Patent 6,233,314),

IPR2013-00541 (Patent 5,909,482), IPR2013-00542 (Patent 7,319,740), IPR2013-00543 (Patent 7,555,104), IPR2013-00544 (Patent 8,213,578), IPR2013-00545 (Patent 6,594,346), IPR2013-00549 (Patent 6,603,835), IPR2013-00550 (Patent 7,003,082), IPR2014-00780 (Patent 6,603,835)

requests for additional briefing on specific topics, including claim construction under the *Phillips* standard.

Supplementing the Evidentiary Record

The Federal Circuit directed us to "admit and consider Mr. Occhiogrosso's trial testimony" but did not specify whether all of Mr. Occhiogrosso's district court trial testimony, or only portions of it, should be admitted. *Ultratec*, 872 F.3d at 1275. Petitioner proposes that Patent Owner be permitted to supplement the evidentiary record with the portions of Mr. Occhiogrosso's district court trial testimony on crossexamination that Patent Owner alleges is inconsistent with his testimony in these *inter partes* reviews. Ex. 2029, 10:2–15; Ex. 3004, 4. Petitioner further proposes that Petitioner be permitted to supplement the record with additional trial testimony from Mr. Occhiogrosso as necessary to counter Patent Owner's allegations of inconsistency. Ex. 2029, 10:16–25; Ex. 3004, 4. Patent Owner proposes that it be permitted to supplement the record with Mr. Occhiogrosso's allegedly inconsistent testimony and additional testimony as needed for context, or all of Mr. Occhiogrosso's trial testimony if the Board believes it would be helpful. Ex. 2029, 24:16–22.

Having considered the parties' proposals and the Federal Circuit's remand instructions, we are of the view that it would be beneficial to have all of Mr. Occhiogrosso's trial testimony entered into the record of these proceedings. Accordingly, Patent Owner shall submit a transcript of all of Mr. Occhiogrosso's district court trial testimony as an exhibit or exhibits in each of these proceedings, which both parties shall cite.

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Case: 19-2003 Document: 46-1 Page: 73 Filed: 04/08/2020 IPR2013-00540 (Patent 6,233,314), IPR2013-00541 (Patent 5,909,482), IPR2013-00542 (Patent 7,319,740), IPR2013-00543 (Patent 7,555,104), IPR2013-00544 (Patent 8,213,578), IPR2013-00545 (Patent 6,594,346), IPR2013-00549 (Patent 6,603,835), IPR2013-00550 (Patent 7,003,082), IPR2014-00780 (Patent 6,603,835)

The parties are not authorized to submit any other new evidence at this time. If later we authorize additional briefing as described above, we will consider at that time whether to authorize further supplementation of the record.

ORDER

Accordingly, it is:

ORDERED that Patent Owner is authorized to file a brief that (i) identifies with particularity portions of Mr. Occhiogrosso's district court trial testimony that Patent Owner alleges is inconsistent and explains how it is inconsistent with specific testimony provided by Mr. Occhiogrosso in these proceedings, and (ii) explains how the allegedly inconsistent testimony impacts specific unpatentability determinations in the Board's final written decisions in these proceedings as well as how it impacts Mr. Occhiogrosso's credibility as a whole;

FURTHER ORDERED that Patent Owner's brief is limited to 10,000 words and shall be filed no later than February 2, 2018;

FURTHER ORDERED that Petitioner is authorized to file a responsive brief addressing the same issues;

FURTHER ORDERED that Petitioner's brief is limited to 10,000 words and shall be filed no later than March 5, 2018;

FURTHER ORDERED that Patent Owner, at its earliest convenience, but no later than February 2, 2018, shall submit as an exhibit or exhibits in each proceeding a transcript of all of Mr. Occhiogrosso's trial testimony in

Case: 19-2003 Document: 46-1 Page: 74 Filed: 04/08/2020

IPR2013-00540 (Patent 6,233,314), IPR2013-00541 (Patent 5,909,482), IPR2013-00542 (Patent 7,319,740), IPR2013-00543 (Patent 7,555,104), IPR2013-00544 (Patent 8,213,578), IPR2013-00545 (Patent 6,594,346), IPR2013-00549 (Patent 6,603,835), IPR2013-00550 (Patent 7,003,082), IPR2014-00780 (Patent 6,603,835)

Ultratec, Inc. v. Sorenson Communications, Inc., No. 13-CV-00346 (W.D.

Wis.); and

FURTHER ORDERED that no other issues shall be briefed and no other new evidence shall be submitted at this time.

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Trials@uspto.gov Tel: 571–272–7822 Paper 71 Entered: March 3, 2015

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CAPTIONCALL, LLC, Petitioner,

v.

ULTRATEC, INC., Patent Owner

Case IPR2013-00549 Patent 6,603,835 B2

Before WILLIAM V. SAINDON, BARBARA A. BENOIT, and LYNNE E. PETTIGREW, *Administrative Patent Judges*.

SAINDON, Administrative Patent Judge.

DECISION

Final Written Decision 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

We have jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73.

With respect to the grounds asserted in this trial, we have considered the papers submitted by the parties and the evidence cited therein. For the reasons discussed below, we determine that Petitioner has shown, by a preponderance of the evidence, that the subject matter of claims 1–5 and 7 of U.S. Patent No. 6,603,835 B2 (Ex. 1001, "the '835 patent") is unpatentable.

A. Procedural History

CaptionCall, LLC ("Petitioner") filed a Petition requesting an *inter partes* review of claims 1–8 of the '835 patent. Paper 1 ("Pet."). Petitioner included a Declaration of Mr. Benedict J. Occhiogrosso. Ex. 1010. Ultratec, Inc. ("Patent Owner") filed a Preliminary Response to the Petition. Paper 6 ("Prelim. Resp.").

In our Decision Instituting *Inter Partes* Review, we granted review as to claims 1–5 and 7 of the '835 patent but not as to claims 6 and 8. Paper 7 ("Inst. Dec."). Patent Owner filed a Response to the Petition (Paper 24, "PO Resp."), which included declarations by Mr. James A. Steel, Jr. (Ex. 2001), Ms. Brenda Battat (Ex. 2003), and Ms. Constance Phelps (Ex. 2004). Petitioner filed a Reply to the Response (Paper 37, "Pet. Reply"), which included a Supplemental Declaration of Mr. Occhiogrosso (Ex. 1038).

On November 19, 2014, all parties were present for an oral hearing.

This Decision includes our decision on Patent Owner's Motion to Exclude Evidence (Occhiogrosso) (Paper 47, "PO Mot. Excl."). Petitioner

filed an opposition to Patent Owner's motion (Paper 54, "Pet. Opp. Mot. Excl.") and Patent Owner filed its reply (Paper 55, "PO Reply Mot. Excl.").

B. Related Matters

Petitioner states that the '835 patent was asserted against its parent company, Sorenson Communications, Inc., in *Ultratec, Inc. v. Sorenson Communications, Inc.*, No. 13-CV-00346 (W.D. Wis.). Pet. 2. Petitioner states that the lawsuit included certain other patents asserted against its parent company and that Petitioner has filed concurrently other petitions for *inter partes* review. *Id.*

Case	Patent
IPR2013-00540	US 6,233,314
IPR2013-00541	US 5,909,482
IPR2013-00542	US 7,319,740
IPR2013-00543	US 7,555,104
IPR2013-00544	US 8,213,578
IPR2013-00545	US 6,594,346
IPR2013-00550	US 7,003,082

The concurrently filed petitions are as follows:

Additionally, Petitioner filed IPR2014-00780, which is directed to the same patent as this proceeding. IPR2014-00780 is an *inter partes* review of claims 6 and 8 of the '835 patent; those claims are not at issue in this proceeding.

C. Technology Background

A teletype (TTY), or telecommunications device for the deaf (TDD), is a device having a keyboard and display that permits a deaf person to communicate over telephone lines. Ex. 1001 at 1:30–33. If the deaf person is to communicate with a hearing person, a relay service is utilized. With a

relay service, a relay operator voices the deaf user's typed words to the hearing user, and types the hearing user's voiced words to the deaf person's TTY. *Id.* at 1:60–2:13. Traditionally, the relay service maintains a separate telephone connection with both the hearing and assisted users, with the relay service acting, as the name implies, as a relay. A traditional relay service is found in figure 2 of U.S. Patent No. 5,724,405 (Ex. 1005, "Engelke '405 patent"). Figure 2 of Engelke '405 is depicted below:



Figure 2 of Engelke '405 depicts a traditional relay service arrangement in which a hearing caller speaks with a relay operator over one telephone line while the relay operator types back and forth with the assisted user over a second telephone line, using a TTY machine. Ex. 1005, 6:11–14.

D. The '835 Patent

The '835 patent describes another way to provide a relay service. In particular, the '835 patent describes two separate connections: one between the assisted and non-assisted user, and one between the assisted user and the relay service. Ex. 1001, 9:33–43, Fig. 5. Figure 5 depicts this arrangement:



Figure 5 of the '835 patent depicts a typical, voice-only connection between the hearing user and assisted user, with a second, simultaneous text and voice connection between the assisted user and the relay service. *Id.* at 9:33–43. The relay service and the hearing user are connected at the assisted user's location to allow the relay operator to hear the hearing user's spoken words and to voice the assisted user's typed words. *Id.* at 9:45–60. Notably, the hearing and assisted users are connected directly over a telephone connection, whereas the hearing user and the relay service are connected indirectly, by way of the assisted user's separate connection to the relay service. *Id.* at 9:37–43.

E. Illustrative Claim

Of the challenged claims, 1 and 7 are independent, with claims 2–5 depending from claim 1. Claim 1 is reproduced below.

1. A method for providing captioned telephone service to an assisted user communicating with a hearing user, the assisted user using a telephone station to communicate with a relay having speech to text translation capability, the hearing user speaking words in voice, the method comprising the steps of:
- initiating a telephone call over a first telephone line directly between the assisted user and the hearing user;
- the assisted user initiating a telephone connection over a second telephone line to the relay;
- at the station of the assisted user, the station transmitting the voice of the hearing user over the second telephone line to the relay;
- at the relay, converting the words spoken by the hearing user into text;
- transmitting the text created by the relay back to the station of the assisted user over the second telephone line; and
- displaying the text to a captioned telephone display device within sight of the assisted user such that captioning of the communication session is provided to the assisted user.

Independent claim 7 includes a limitation specifying that the voice to text conversion is performed using "voice recognition computer software."

F. Asserted Ground and Prior Art

We instituted an *inter partes* review on the ground of obviousness of claims 1-5 and 7 of the '835 patent over the teachings of Liebermann¹ and Engelke '405.²

¹ U.S. Patent No. 5,982,853 (issued Nov. 9, 1999) (Ex. 1008).

² U.S. Patent No. 5,724,405 (issued Mar. 3, 1998) (Ex. 1005).

II. ANALYSIS

A. Claim Construction

We interpret the claims of an unexpired patent using the broadest reasonable interpretation in light of the specification of the patent. 37 C.F.R. § 42.100(b); *see also In re Cuozzo Speed Techs.*, *LLC*, No. 2014-1301, slip op. at 11–19 (Fed. Cir. Feb. 4, 2015). Under the broadest reasonable interpretation standard, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech. Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definition for a claim term must be set forth with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

1. Assisted User / Hearing User

These terms are found in independent claims 1 and 7. We previously construed "assisted user" as "the individual making use of the transcribed text, regardless of the individual's actual hearing abilities." Inst. Dec. 8–9. We previously construed "hearing user" as "the individual in communication with the assisted user." *Id.* at 9.

These constructions have not been challenged. While these terms are not at issue in this Decision, their constructions are useful in understanding the claimed subject matter.

2. Directly Between

Independent claims 1 and 7 both recite "a first telephone line directly between the assisted user and the hearing user." We previously construed this phrase to mean "a first telephone line with the hearing user over a first

telephone connection between the assisted user and the hearing user, without a relay intervening on that connection." Inst. Dec. 9–11. We maintain this construction; it has not been challenged.

3. Initiating a Telephone Connection

Independent claims 1 and 7 both recite "the assisted user initiating a telephone connection over a second telephone line to the relay." The '835 patent does not define whether any particular action is required by a user to initiate the second telephone connection. The '835 patent includes, as an exemplary embodiment, a user operating a button to initiate the second telephone connection. Ex. 1001, 10:40–43. This particular form of initiation is recited more broadly in claims 6 and 8 of the '835 patent ("the assisted user operating a control"), but is not recited in the challenged claims.

We have no evidence before us that one of ordinary skill in the art would consider the "initiating" step to be performed by a certain action, structure, or series of events. Likewise, neither the claims nor the written description of the '835 patent clearly limits the step to a certain action, structure, or series of events. Accordingly, we interpret the term "initiating" in "the assisted user initiating a telephone connection" to mean that, *but for an action of the assisted user, the telephone connection would not have been made*.

B. The Testimony of Mr. Occhiogrosso is not Excluded

Patent Owner seeks to exclude the testimony of Mr. Benedict Occhiogrosso (Exs. 1010, 1038, 2005, 2006, and 2012) on the theory that he is not qualified as an expert under Federal Rule of Evidence 702 ("FRE

702").^{3,4} PO Mot. Excl. 1–2. FRE 702 permits expert testimony if a witness is qualified, "by [his or her] knowledge, skill, experience, training, or education," and if his or her testimony "will help the trier of fact to understand the evidence or to determine a fact at issue," *inter alia*. Testimony on the issue of unpatentability proffered by a witness who is not "qualified in the pertinent art" generally is not admissible under FRE 702. *Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1363–64 (Fed. Cir. 2008).⁵ In determining who is "qualified in the pertinent art" under FRE 702, we need not find a complete overlap between the witness's technical qualifications and the problem confronting the inventor or the field of endeavor for a witness to qualify as an expert. *SEB S.A. v. Montgomery Ward & Co., Inc.*, 594 F.3d 1360, 1372–73 (Fed. Cir. 2010) (upholding

³ Patent Owner also seeks to *exclude* Mr. Occhiogrosso's testimony under 37 C.F.R. § 42.65. PO Mot. Excl., 1. Rule 42.65, however, addresses (a) the weight given to expert testimony that does not disclose underlying facts or data on which the opinion is based, (b) the showing required if a party seeks to rely on a technical test or data from such a test, and (c) the exclusion of expert testimony on United States patent law or patent examination practice. As such, Rule 42.65 does not apply to a determination whether to exclude Mr. Occhiogrosso's testimony.

⁴ With some enumerated exceptions, the Federal Rules of Evidence apply to an *inter partes* review. 37 C.F.R. § 42.62.

⁵ In Sundance, the court was concerned with allowing improper testimony in jury trials. *Sundance*, 550 F.3d at 1365, n.8. The Board, on the other hand, sitting as a non-jury tribunal with administrative and technical expertise, is well-positioned to determine and assign appropriate weight to evidence presented. *Gnosis S.P.A. v. S. Alabama Medical Science Foundation*, IPR2013-00118, slip op. at 43 (PTAB June 20, 2014) (Paper 64); *see also Donnelly Garment Co. v. NLRB*, 123 F.2d 215, 224 (8th Cir. 1941) ("One who is capable of ruling accurately upon the admissibility of evidence is equally capable of sifting it accurately after it has been received.").

admission of the testimony of an expert who admittedly lacked expertise in the design of the patented invention, but had experience with materials selected for use in the invention); *Mytee Prods., Inc. v. Harris Research, Inc.*, 439 Fed. App'x 882, 886–87 (Fed. Cir. 2011) (non-precedential) (upholding admission of the testimony of an expert who "had experience relevant to the field of the invention," despite admission that he was not a person of ordinary skill in the art).

Patent Owner contends that, to qualify as an expert under FRE 702, Mr. Occhiogrosso must be a person of ordinary skill in the art, and that Mr. Occhiogrosso is not a person of ordinary skill in the art because he does not have "general knowledge and understanding of the telecommunications needs of the deaf and HOH [(hard of hearing)]" or "experience with the development of assistive telecommunications technology for such individuals." *Id.* at 1–5; *see also id.* at 5–7 (discussing Mr. Occhiogrosso's experience with respect to these factors).

Petitioner responds that Patent Owner's definition of the level of ordinary skill in the art conflates a requirement for skill in the relevant technical art ("telecommunications systems [having] voice-to-text transcription") with skill in one particular commercial sector that applies that technical art ("telecommunications services *specifically* designed for the deaf or hard of hearing"). Pet. Opp. Mot. Excl. 1. Petitioner also points out that, even if we were to adopt Patent Owner's proposed level of ordinary skill in the art, Mr. Occhiogrosso has experience with developing a telecommunications system for the deaf and hard of hearing. *Id.* at 12–15.

Patent Owner's arguments are unpersuasive at the outset because, to testify as an expert under FRE 702, a person need not be a person of

ordinary skill in the art, but rather simply "qualified in the pertinent art." *Sundance*, 550 F.3d at 1363–64; *SEB*, 594 F.3d at 1372–73; *Mytee*, 439 Fed. App'x at 886–87. Notwithstanding, for the reasons we express below in Section II.C, we find Mr. Occhiogrosso to be qualified to testify as to the level of ordinary skill in the art. Patent Owner's arguments are also unpersuasive because they attempt to constrict the "pertinent art," i.e., the pertinent technology, to a particular subset of individuals who use the pertinent technology, rather than the pertinent technology itself. *See also* Pet. Opp. Mot. Excl. 4–5 (arguing that the problems in the pertinent art are not "uniquely related to . . . the deaf and hard-of-hearing").

The technology at issue in the '835 patent "relates to the general field of telephone communications." Ex. 1001, 1:18–19. The '835 patent focuses on a particular application of that technology: people who need assistance in using telecommunications devices. Id. 1:19–2:29 (describing various prior art assistive technologies to help frame the evolution of assistive technologies). Patent Owner would have us define the pertinent art in the narrowest way: "telecommunications technology for the deaf and hard of hearing." PO Mot. Excl. 3 (emphasis added); see also id. (additionally characterizing the technology as "assistive telecommunications technology"). The Federal Circuit in Sundance, however, used the phrase "qualified in the pertinent art," however, and did not set forth a rule requiring an expert in the specific technological solution recited in the claims or the particular motivation behind the inventors' invention. Sundance, 550 F.3d at 1363–64. We determine the pertinent art to be telecommunications systems, because any communications technology would be pertinent art to the '835 patent. While assistive technology may be

more pertinent, and assistive technology for the deaf and hearing impaired, using voice-to-text relays, may be most pertinent, anything in the telecommunications technology field would be pertinent to the inventors when considering their problem.

Mr. Occhiogrosso has established that he has knowledge, experience, and education in the field of telecommunications systems. Ex. 1010 ¶¶ 5– 10; Ex. 1038 ¶¶ 4–11. As such, Mr. Occhiogrosso is qualified sufficiently in the pertinent art to testify under FRE 702 in this proceeding, because his testimony helps us to understand aspects of telecommunications technology used in the '835 patent.

Moreover, to the extent Mr. Occhiogrosso is more familiar with general telecommunications technology and less familiar with voice-to-text or its application to the deaf or hearing-impaired, or to the extent that Mr. Occhiogrosso's testimony is inconsistent or unsupported, we will weigh Mr. Occhiogrosso's testimony accordingly, taking into account the extent of his expertise in these areas. See, e.g., Yorkey v. Diab, 601 F.3d 1279, 1284 (Fed. Cir. 2010) (holding the Board has discretion to give more weight to one item of evidence over another "unless no reasonable trier of fact could have done so"); In re Am. Acad. of Sci. Tech Ctr., 367 F.3d 1359, 1368 (Fed. Cir. 2004) ("[T]he Board is entitled to weigh the declaration and conclude that the lack of factual corroboration warrants discounting the opinions expressed in the declarations."); see also PO Mot. Excl. 5-7 and PO Reply Mot. Excl. 2-4 (arguing Mr. Occhiogrosso does not have sufficient experience with the deaf or hearing impaired); PO Mot. Excl. 8 and PO Reply Mot. Excl. 4–5 (arguing that Mr. Occhiogrosso's statements are unsupported and unreliable).

Under the totality of these circumstances, we decline to exclude the testimony of Mr. Occhiogrosso. Accordingly, Patent Owner's Motion to Exclude to Mr. Occhiogrosso's testimony is *denied*.

C. Mr. Occhiogrosso Is Qualified to Testify as to the Level of Ordinary Skill in the Art

The hypothetical person of ordinary skill in the art is attributed with knowledge "of all prior art in the field of the inventor's endeavor and of prior art solutions for a common problem even if outside that field." *In re Nilssen*, 851 F.2d 1401, 1403 (Fed. Cir. 1988). As we explained above in Section II.**Error! Reference source not found.**, the pertinent art is telecommunication systems. Thus, a person of ordinary skill in the art is a person familiar with at least that technology, by way of background and/or experience. The prior art in the record before us is highly indicative of the level of ordinary skill in this art. *Okajima v. Bourdeau*, 261 F.3d. 1350, 1355 (Fed. Cir. 2001) (the prior art itself can reflect the appropriate level of skill in the art.)

Patent Owner argues that Mr. Occhiogrosso has no particular experience in telecommunication relay services ("TRS") for the deaf and hard of hearing and, as such, is not qualified to testify as to the level of ordinary skill in the art. PO Resp. 7–8. Petitioner replies that Mr. Occhiogrosso has "comprehensive industry experience" that includes experience "relating to each of the component technologies at issue" as well as "applications for the deaf and hard-of-hearing." Pet. Reply 2 (citing Ex. 1038 ¶¶ 4–11).

Patent Owner's argument is, essentially, that Mr. Occhiogrosso is not qualified sufficiently in this field because he has insufficient experience with

a particular intended end user of the claimed invention. PO Resp. 7–8. Although those end users may be a large segment of users of this technology, the same technology is used in other contexts, such as translation of spoken languages and captioning of voices, and Mr. Occhiogrosso has experience in those contexts. Ex. 1038 ¶¶ 7, 9–11. Thus, Patent Owner's argument is unpersuasive. Moreover, Mr. Occhiogrosso testifies he has experience with voice-to-text technology specifically for deaf and hard-of-hearing persons. *Id.* ¶ 11.

Reviewing the testimony of Mr. Occhiogrosso and his supporting documentation (Exs. 1010, 1011, 1038, 2005, 2006, and 2012), we are persuaded that he is qualified to testify as to the level of ordinary skill in the art in this proceeding.

D. The Liebermann-Engelke Ground

Petitioner asserts that the teachings of Liebermann and Engelke '405, in combination, would have rendered obvious the subject matter of claims 1–5 and 7. Pet. 38–43, 48–49. We first discuss the relevant teachings of Liebermann and Engelke '405. Then, we discuss Petitioner's ground and Patent Owner's arguments with respect to claim 1, including Patent Owner's evidence of secondary considerations of non-obviousness. Finally, we turn to independent claim 7 and dependent claims 2–5.

1. Liebermann

Liebermann discloses a method for providing captioned telephone service to an assisted user communicating with a hearing user. The assisted user and hearing user first connect over a telephone connection. Ex. 1008, 6:64–65 ("[t]he normally hearing person who calls a deaf person dials the

deaf person's phone number"), 7:5–6 ("the line between the normally hearing person and the deaf person is analog for voice content only"). Then, the assisted user's device connects to the relay on another line and arranges for all parties to be on line, thus facilitating the captioning service. *Id.* at 7:1–3, 7–9, Fig. 4. The relay converts the spoken words of the hearing user into text, which is displayed to the assisted user. *Id.* at 7:10–17, Fig. 8 (showing the assisted user's display, including the hearing user's spoken words as text). Figure 4 is illustrative of the method by which Liebermann initiates the captioning service:



Reproduced above is a portion of Figure 4 of Liebermann, depicting the method by which a deaf user receives a call from an outside, hearing caller and initiates a captioning service on a second line.

2. Engelke '405

Engelke '405 describes a text-enhanced telephone, which allows for the assisted user to have both a voice connection with the hearing user and a text connection with the relay service at the same time. Ex. 1005, 3:31–37, Fig. 4. Figure 4 of Engelke '405 is illustrative:



FIG. 4

Figure 4 of Engelke '405 depicts a text-enhanced telephone connection in which assisted user's telephone 50 can send and receive both text and voice, such that the hearing user (at telephone 42), assisted user, and relay operator (at relay 44) can all speak and hear each other, and the assisted user's TTY machine and the relay operator's TTY machine can send text back and forth.

The benefit of this type of system is that it allows users with some hearing or speaking capability to continue to use a telephone and to augment the spoken words of the hearing user with text from the relay service. *Id.* at 2:9–27. Thus, the system allows the assisted user to speak directly to the hearing user or to hear directly from the hearing user, with the relay service providing assistance as needed. *Id.* at 6:48–52. The ability of a relay service to convey the assisted user's voice to the hearing user is called "voice carry over" ("VCO"). *Id.* at 5:64–6:3.

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E. Petitioner Has Established That the Combination of Liebermann and Engelke '405 Teaches Each Element of Claim 1

Patent Owner characterizes the '835 patent as directed to a "two-line" approach to captioned telephone services, allowing the captioning service to benefit hearing-impaired users (i.e., as opposed to only deaf users). *See* PO Resp. 3–4. In general, Petitioner cites to Liebermann to show that the two-line approach was known for deaf users and to Engelke '405 to show it was known to use captioned telephone to modify systems originally designed for deaf users to benefit the hearing impaired. Pet. 38–42. We review each of Petitioner's assertions and Patent Owner's arguments against for each limitation of claim 1.

1. Liebermann discloses "initiating a telephone call over a first telephone line directly between the assisted user and the hearing user."

Liebermann discloses a device having one telephone line between the hearing user and the assisted user, without a relay interposing on that line. Ex. 1008, 6:64–65 ("The [hearing user] who calls [an assisted user] dials the [assisted user's] phone number"), 7:7–9 ("the line between the [hearing user] and the [assisted user] is analog . . . while the line between the [assisted user and the relay] is analog but transfers both voice and data"); 7:25–26 ("the cellular phone maintains two cellular connections . . . one to the [relay] . . . and one to the [hearing user]."); *see also* Ex. 1038 ¶¶ 29–31 (Mr. Occhiogrosso testifying that Liebermann discloses two separate lines). Using Liebermann's device, a hearing user may call an assisted user at the assisted user's phone number directly (i.e., in lieu of calling a relay first). *Id.* at 6:64–65; *see* Fig.4 ("Caller and deaf's station are connected"). Patent Owner argues that the connection in Liebermann between the hearing user, assisted user, and the relay operator is a "party call" such that the relay interposes on the connection between the hearing and assisted users. PO Resp. 14–17. Patent Owner points out that our construction of *directly connected* prevents the relay from being interposed between the hearing and assisted users, and thus, according to Patent Owner, the "party call" format of Liebermann means that there is no direct connection between the hearing and assisted users.

Patent Owner's argument is unpersuasive because it misunderstands what Liebermann means by "party call." Patent Owner argues that each party is connected to a central "switch," which "allow[s] for the three parties to be on the call simultaneously." Id. at 15 (citing Ex. 2001 ¶ 26). Neither Patent Owner nor its declarant, Mr. Steel, explains where Liebermann describes such a central switch; Liebermann does not use or imply those words. The only support Patent Owner offers for its position is a schematic drawing showing the arrangement of the parties on the party call, Figure 2 of Liebermann. Id. at 15–16; Ex. 2001 ¶ 26. However, Figure 2 of Liebermann merely shows how the hearing user and the assisted user are "communicating," not that they are all connected to an undisclosed central switching facility. Ex. 1008, 5:40-41, Fig. 2. In addition, even if Patent Owner were to show persuasively that one embodiment of Liebermann contemplated a "party call" in the manner Patent Owner argues, Liebermann explicitly discloses an embodiment that has two separate lines, with one to the hearing user and one to the relay. Ex. 1008, 7:25–26 ("the cellular phone maintains two cellular connections on line, one to the [relay] and one to the [hearing user]").

We credit the testimony of Mr. Occhiogrosso over that of Mr. Steel on this issue because Mr. Occhiogrosso's testimony closely comports with the explicit disclosure of Liebermann, whereas Mr. Steel's testimony is based on conjecture and the extrapolation of a schematic at the expense of the explicit disclosure. Patent Owner has not set forth sufficient facts to support its assertion that Liebermann's "party call" is switched centrally. Instead, we are persuaded by the evidence cited by Petitioner and its declarant, Mr. Occhiogrosso, that Liebermann has separate telephone connections from the assisted user to the hearing user and to the relay, such that the relay does not interpose on the connection between the assisted user and the hearing user.

In view of the above, we are persuaded that Liebermann discloses a step of "initiating a telephone call over a first telephone line directly between the assisted user and the hearing user."

2. Liebermann discloses "the assisted user initiating a telephone connection over a second telephone line to the relay."

Liebermann discloses that the assisted user has a designated line to the relay, i.e., a second line, separate from the line connecting the assisted user and the hearing user. Ex. 1008, 6:65–7:1 ("a single line which is the [assisted user's] designated line to the [relay]"), 7:7–9 ("the line between the [hearing user] and the [assisted user] is analog . . . while the line between the [assisted user and the relay] is analog but transfers both voice and data"); 7:25–26 ("the cellular phone maintains two cellular connections . . . one to the [relay] . . . and one to the [hearing user]."); *see also* Ex. 1038 ¶¶ 29–31 (Mr. Occhiogrosso testifying that Liebermann discloses two separate lines). Liebermann's device calls the relay automatically *after* receiving the hearing user's call. Ex. 1008, Fig. 4 (noting the order of events). Petitioner's

declarant, Mr. Occhiogrosso, testifies that a person of ordinary skill in the art would understand that the assisted user would provide some indication that they were available to communicate before calling the relay, because otherwise, if the device automatically answered every call, there would be some calls answered where no one was available to communicate. Ex. 1038 ¶ 28.

Patent Owner argues that the device in Liebermann, not the assisted user, initiates the connection to the relay. PO Resp. 17. Our construction of the term "initiating" requires some action on the part of the user before the connection on the second telephone line is made, but not proximal causation, as Patent Owner implicitly would require. Even if Liebermann automatically connects to the relay, we are persuaded by Mr. Occhiogrosso's testimony that one of ordinary skill in the art would recognize to have some initiating act from the user indicating his or her availability to communicate before placing the second call on the second telephone line. This is also a matter of common sense; it makes little sense to waste time and money connecting to the first caller or to the relay if the assisted user is not available to communicate.

Patent Owner also argues that there is no second telephone line because all parties are on a "party call" through a central switch. PO Resp. 17–20. This is the same argument we discussed with respect to the previous limitation. As we explained in our analysis there, we are not persuaded Liebermann describes a "party call" switch in the manner alleged by Patent Owner. In view of the above, we are persuaded that Liebermann discloses "the assisted user initiating a telephone connection over a second telephone line to the relay."

3. Liebermann discloses "at the station of the assisted user, the station transmitting the voice of the hearing user over the second telephone line to the relay."

Liebermann discloses that, after having connected to the hearing user on the first telephone line and to the relay on the second telephone line, the hearing user's voice is sent to the relay for voice recognition. Ex. 1008, 7:1– 12 and 18–19, Fig. 4 ("Circuitry in the [assisted user's] station enables the [hearing user], the [relay,] and the [assisted user] to all be on line."). Liebermann indicates that both first and second telephone lines remain open, such that the circuitry Liebermann discusses must be in the assisted user's station. *Id.* at 7:5–9; 7:25–26; *see also* Ex. 1038 ¶¶ 29–30 (Mr. Occhiogrosso testifying that there are two separate lines, and the assisted user's station receives the hearing user's voice over the first line and transfers it over the second line to the relay).

Patent Owner argues, "[a]ll three parties . . . are in fact connected to a switch that is located in the service provider's switching network." PO Resp. 20 (emphasis removed). We have determined already that this argument is not compelling.

In view of the above, we are persuaded that Liebermann discloses "at the station of the assisted user, the station transmitting the voice of the hearing user over the second telephone line to the relay."

4. Liebermann discloses "at the relay, converting the words spoken by the hearing user into text."

Liebermann discloses that the hearing user's voice "undergoes speech recognition in the [relay]." Ex. 1008, 7:10–12. Specifically, the hearing user "talks on his or her conventional telephone in the normal and regular way," then "[h]is or her voice is carried on line . . . to the [relay] where speech recognition algorithms convert the spoken word to text." *Id.* at 5:14–23. "The [relay] will accommodate appropriate speech recognition (i.e., automatic, continuous and speaker independent." *Id.*

Patent Owner argues that Liebermann does not use a "revoicing technique" to convert the words spoken by the hearing user into text. PO Resp. 22. Patent Owner offers no cogent explanation as to why the claims are so limited to a particular embodiment described in the specification of the '835 patent. It is well settled that broad claims are not limited to specific embodiments described in the specification outside of an express indication in the specification to so limit the invention. *See, e.g., In re Bigio,* 381 F.3d 1320, 1325 (Fed. Cir. 2004) ("[a]bsent claim language carrying a narrow meaning, the PTO should only limit the claim based on the specification or prosecution history when those sources expressly disclaim the broader definition."). There is no "re-voicing" limitation in the claim, and even if the '835 patent uses re-voicing in an embodiment, the specification does not unambiguously limit the voice-to-text conversion to re-voicing technology.

In view of the above, we are persuaded that Liebermann discloses "at the relay, converting the words spoken by the hearing user into text."

5. Liebermann discloses "transmitting the text created by the relay back to the station of the assisted user over the second telephone line."

Liebermann discloses that the hearing user's voice is converted to text at a relay, and then "[t]he text is sent from the [relay] to the [assisted user's] device via telephone lines." Ex. 1008, 7:10–14, 5:21–25.

Patent Owner argues that Lieberman does not convert the hearing user's words to text and then transmit that text to the assisted user. PO Resp. 22–23. Patent Owner states that Liebermann actually translates voice to text, then to signing content, and then finally to text again. *Id.* at 23. First, we note that Liebermann explicitly states that "[t]he text is sent from the [relay] to the [assisted user's] device via telephone lines." Ex. 1008, 7:10– 14, 5:21–25. The claim limitation directly reads on this disclosure. Second, even if Liebermann's text underwent several conversions, as Patent Owner alleges, such a process results in the claimed step, which is simply "transmitting the text created by the relay." The claim, by its own words or in view of the specification, does not limit to a specific process of converting the words to text, nor does it preclude the particular voice-to-text process of Liebermann.

In view of the above, we are persuaded that Liebermann discloses "transmitting the text created by the relay back to the station of the assisted user over the second telephone line."

6. Liebermann discloses "displaying the text to a captioned telephone display device within sight of the assisted user such that captioning of the communication session is provided to the assisted user."

Liebermann describes a visual display for providing signing images and text of the hearing user's voice. Ex. 6:31–36, Fig. 8 ("Incoming Text Screen"). Patent Owner does not contest that Liebermann discloses this step

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in its Response. We are persuaded that Liebermann discloses "displaying the text to a captioned telephone display device within sight of the assisted user such that captioning of the communication session is provided to the assisted user."

7. It was known in the art to configure telephone services to provide various levels of user assistance.

Liebermann's device is a two-line device for deaf users and, as such, it does not describe explicitly a use by hearing-impaired users. Petitioner proposes that it would have been obvious to a person of ordinary skill in the art to modify Liebermann to include known services to assist hearing- and speech-impaired users.⁶ To that effect, Petitioner's declarant, Mr. Occhiogrosso, testifies that one of ordinary skill in the art would have been aware of various services available to assist hearing and speech-impaired users. Ex. 1010 ¶ 36. Several such technologies were known at the time of invention, such as "voice carry over" (VCO), "hearing carry over" (HCO), and captioned telephone. *Id.* VCO is where the voice of the assisted user is sent to the hearing user is sent to the assisted user. *Id.* (explaining HCO). Captioned telephone, also known as text-enhanced telephone, is where the voice of the hearing user as well as transcribed text of the hearing user are sent to the assisted user. Ex. 1005, 2:31–38. As evidence in support of this

⁶ We discern no claim limitation Petitioner is attempting to address by the modification. Given the nature of the proposed modification, Petitioner appears to be proposing the modification in an abundance of caution, such as if we construed an assisted user to mean a user who was hearing impaired but not deaf.

testimony, Mr. Occhiogrosso offers citations to several patents, each of which we discuss below.

Engelke '405 recognized that, while devices were available to assist deaf users, those who were hearing impaired could benefit from text assistance while using their telephones. Ex. 1005, 1:9–27. These people can often speak, so Engelke '405 discusses using a known VCO mode to allow deaf or hearing deficient users to speak to the hearing user. *Id.* at 5:64–6:3. At the same time, Engelke '405 also discusses to provide text translation of the hearing user's voice, and to provide both the hearing user's voice and the text of the hearing user's voice, so as to allow the text to supplement a hearing-impaired user's hearing. *Id.* at 2:31–38. Engelke '405 characterizes this service as "text enhanced telephone," which is also known as captioned telephone. *Id.*; Ex. 1001, 3:12–15.

U.S. Patent No. 5,163,081 (issued Nov. 10, 1992 to Wycherley) (Ex. 1013) discusses a device wherein a user could request HCO and VCO modes by switching the device to indicate how he or she wished to use the device. Ex. 1013, 1:40–52.

U.S. Patent No. 6,181,736 (issued Jan. 30, 2001 to McLaughlin) (Ex. 1006) discusses that HCO and VCO modes are known in the art to be used according to the particular needs of the user. Ex. 1006, 29:28–44.

F. Petitioner Has Established a Reason to Combine the Teachings of Liebermann and Engelke '405 in the Manner Proposed

Petitioner asserts that it would have been obvious "to configure the two-line device disclosed in Liebermann to provide both voice and text to a user who, as described in Engelke '405, had attenuated but functional hearing." Pet. 39. The evidence before us, discussed above in Section

II.E.7, establishes that this reasoning has rational underpinnings.

Specifically, a person of ordinary skill in the art would have known by the time of the invention that devices originally created for deaf users may be upgraded to benefit hearing-impaired users. A person of ordinary skill in the art would have recognized several options, including captioned telephone. That person would have also recognized that such features could be utilized to accommodate the particular needs of the user. In sum, the prior art identified a known problem (need for varying levels of assistance) for which there was a known solution (captioned telephone). See KSR Int'l Co. v. *Teleflex, Inc.*, 127 S. Ct. 1727, 1742 (2007). To provide such a known improvement for Liebermann's device, therefore, would have been within the level of ordinary skill in the art and obvious. Accordingly, Petitioner has shown sufficiently a reason with rational underpinnings for modifying Liebermann's device to provide both voice and text to a user. Id. at 1741 ("there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.") (quoting In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)).

We have reviewed Patent Owner's arguments to the contrary and do not find them persuasive. Patent Owner argues at length the deficiencies it perceives in Liebermann as a commercial product. PO Resp. 28–33. The simple matter is that even if Liebermann found little commercial success, that does not undo what the reference discloses. What matters is whether the objective reach of the claim would have been obvious in view of the prior art to a person of ordinary skill in the art at the time of the invention. As we set forth in Section II.E above, Petitioner's proposed combination of the teachings of Liebermann and Engelke '405 addresses each limitation of

claim 1, and, as we explained above, Petitioner's proposed combination is supported by a reason with rational underpinnings.

Patent Owner next argues that Petitioner has not established a rationale for combining Liebermann and Engelke '405. PO Resp. 34–37. Patent Owner hinges its arguments here on its prior, unsuccessful argument that Liebermann did not teach all claim limitations. *Id.* at 34–35.

Patent Owner then argues that the voice and text transmission taught in Engelke '405 was not implemented commercially. *Id.* at 35–37. As we stated above, prior art need not be commercially successful to be prior art. Further, to the extent that Patent Owner is arguing here that Engelke '405 is not enabled, we note that Patent Owner has provided no evidence to that effect, and that, even if Patent Owner had, the prior art need not be enabled at the time of its publication to render claims obvious. *See Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F. 3d 1313, 1355 (Fed. Cir. 2003) (holding that a reference asserted in an obviousness context is presumed to be enabled and it is patentee's burden to prove nonenablement); *id.* at 1357 ("Under § 103 . . . a reference need not be enabled; it qualifies as a prior art, regardless, for whatever is disclosed therein").

Patent Owner next argues that there is no motivation to provide both voice and text to the user in Liebermann, who is a deaf user (and thus, cannot hear the voice). PO Resp. 36. This argument presumes a reference may never be modified and ignores the combination Petitioner proposes, which is to modify Liebermann to include voice and text, *to enable the device to be used by the hearing impaired*, as taught in Engelke '405.

Patent Owner then argues that the proposed modification would change the principle of operation of Liebermann. PO Resp. 37–40. This

argument relies on Patent Owner's unpersuasive interpretation of Liebermann's "party call," which we addressed above in Section II.E.1.

Patent Owner lastly argues that the proposed combination does not provide "the anonymity that the system disclosed in the '835 Patent provided." *Id.* at 38–39. Patent Owner fails to explain how this is relevant here, and does not direct us to any limitation of claim 1 of the '835 patent that would require some form of "anonymity." *In re Self*, 671 F.2d 1344, 1348 (CCPA 1982) ("[these] arguments fail from the outset because . . . they are not based on limitations appearing in the claims").

In view of the above, we are persuaded that it would have been obvious "to configure the two-line device disclosed in Liebermann to provide both voice and text to a user who, as described in Engelke '405, had attenuated but functional hearing." Pet. 39. As such, Petitioner has established a reason with rational underpinnings for combining the teachings of Liebermann and Engelke '405 in the manner proposed.

G. Patent Owner's Evidence of Secondary Considerations is Unavailing

Factual inquiries for an obviousness determination include secondary considerations based on evaluation and crediting of objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). Notwithstanding what the teachings of the prior art would have suggested to one with ordinary skill in the art at the time of the '835 patent's invention, the totality of the evidence submitted, including objective evidence of nonobviousness, may lead to a conclusion that the challenged claims would not have been obvious to one with ordinary skill in the art. *In re Piasecki*, 745 F.2d 1468, 1471–72 (Fed. Cir. 1984). Secondary considerations may include any of the following: long-felt but unsolved need, failure of others,

unexpected results, commercial success, copying, licensing, and praise. *See Graham*, 383 U.S. at 17; *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007).

To be relevant, evidence of nonobviousness must be commensurate in scope with the claimed invention. *In re Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011) (citing *In re Tiffin*, 448 F.2d 791, 792 (CCPA 1971)); *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998). Thus, to be accorded substantial weight, there must be a nexus between the merits of the claimed invention and the evidence of secondary considerations. *In re GPAC Inc.*, 57 F.3d 1573, 1580 (Fed. Cir. 1995). "Nexus" is a legally and factually sufficient connection between the objective evidence and the claimed invention, such that the objective evidence should be considered in determining nonobviousness. *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988). The burden of showing that there is a nexus lies with the Patent Owner. *Id.*; *see In re Paulsen*, 30 F.3d 1475, 1482 (Fed. Cir. 1994).

Patent Owner alleges "substantial praise for the inventions claimed in [Patent Owner's] patents, including the '835 patent, the long-felt but unresolved need of the deaf and hard of hearing community, the commercial success of the products and services embodying the invention, and the failure of others to provide a relay service or other solution that provided the benefits of the claimed inventions." PO Resp. 41. For support, Patent Owner proffers declarations by Ms. Battat (Ex. 2003) and Ms. Phelps (Ex. 2004) describing general innovations of Patent Owner's CapTel Service and its CapTel phone and describes their benefits to the deaf and hard of hearing community. PO Resp. 41. In an attempt to establish the requisite

nexus, Patent Owner relies on a declaration of Mr. Ludwick (Ex. 2007) asserting that his expert declaration "explain[s], on a feature by feature basis, the nexus between those secondary considerations and the claimed design" and "illustrates, in chart form, that the CapTel system and various models of CapTel phones embody the claims of the present invention." PO Resp. 41–42.

Patent Owner's Response contains no substantive arguments. *See id.* Instead, Patent Owner merely lists the names of various common forms of secondary evidence, without exposition. This does not provide sufficient analysis for us to determine whether Patent Owner has provided adequate evidence of secondary considerations and a nexus between any such evidence and the merits of the claimed invention. Thus, Patent Owner's broad contentions regarding secondary considerations in its Patent Owner Response do not demonstrate nonobviousness.

Notwithstanding, turning to Patent Owner's declarations submitted as evidence of secondary considerations, we find that Patent Owner has failed to establish a nexus between the merits of the claimed invention and the evidence of secondary considerations. To show a nexus, Patent Owner relies on Mr. Ludwick's declaration. That declaration describes his visit to CapTel, Inc.'s relay center in Madison, Wisconsin. Ex. 2007 ¶ 54. Mr. Ludwick's chart presents his conclusions based on personal observation that the CapTel Service meets each claim limitation of the '835 patent. *Id.* ¶ 55 (pp. 36–42). For example, regarding "the assisted user initiating a telephone connection over a second telephone line to the relay," recited in claim 1, Mr. Ludwick asserts:

I personally observed that the CapTel Service meets this element to the extent the CapTel Phones

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> are operated in twoline mode. I observed that a connection over the second telephone line is made to the relay when the user turns 'on' the captioning service on a CapTel Phone. I further confirmed this from my own knowledge of CapTel Service and my observation of CapTel Phones. The CapTel Service has always involved performance of the claimed method to the extent the commerciallysold CapTel Phones are operated in two-line mode.

Ex. 2007 ¶ 55 (p. 37); *see also id.* ¶ 55 (p. 40–41) (making the same observation for the same limitation in claim 7).

Because Mr. Ludwick's conclusions are based on personal observations, without sufficient supporting facts or data, his testimony has little probative value. *See In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1368 (Fed. Cir. 2004) ("[T]he Board is entitled to weigh the declaration and conclude that the lack of factual corroboration warrants discounting the opinions expressed in the declarations."); *see also* Fed. R. Evid. 702 (providing one may testify in the form of an opinion if the testimony is based on sufficient facts or data). As such, Mr. Ludwick's conclusory assertions do not provide a sufficient connection between objective evidence and the claimed invention, and so do not establish the requisite nexus between the merits of the claimed invention and the evidence of secondary considerations.

In addition, the evidence proffered by Patent Owner is unconvincing. The evidence provided is divided generally into three claim features: revoicing, simultaneous voice and text, and two-line service. *See, generally*, Exs. 2003, 2004, 2007. As we discussed above in Section II.E.4, the '835 patent does not require re-voicing. *See Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1312-13 (Fed. Cir. 2006) (finding uncompelling secondary

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evidence directed to unclaimed features). As to simultaneous voice and text, no limitation in the '835 patent requires such a feature. *See id.* Finally, as to two-line service, Liebermann discloses this feature, as we discussed in Sections II.E.1–3 above. Even if we were to consider Patent Owner's showings here as tending to demonstrate commercial success, *arguendo*, success in something already known in the art is not pertinent. *Ormco*, 463 F.3d at 1312 ("if the feature that creates the commercial success was known in the prior art, the success is not pertinent").

Accordingly, Patent Owner fails to provide sufficient credible evidence to support its allegations of nonobviousness based on secondary considerations.

H. The Subject Matter of Claim 1 Would Have Been Obvious

Having reviewed the papers submitted by the parties and the evidence cited therein (which includes the evidence of secondary considerations), we determine that Petitioner has shown, by a preponderance of the evidence, that the subject matter of claim 1 of the '835 patent would have been obvious to a person of ordinary skill in the art in view of the teachings of Liebermann and Engelke '405.

I. Petitioner Has Shown that the Subject Matter of Claim 7 Would Have Been Obvious in View of Liebermann and Engelke '405

Petitioner's treatment of claim 7 is substantially similar to its treatment of claim 1. Pet. 48–49 (citing to the entries for claim 1 in its claim chart). Claim 7 additionally requires that the voice-to-text conversion be performed "using voice recognition computer software." As we identified above in Section II.E.4, Liebermann discloses using voice recognition computer software. Patent Owner does not set forth separate arguments.

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Having reviewed the papers submitted by the parties and the evidence cited therein, we determine that Petitioner has shown, by a preponderance of the evidence, that the subject matter of claim 7 of the '835 patent would have been obvious to a person of ordinary skill in the art in view of the teachings of Liebermann and Engelke '405.

J. Petitioner Has Shown that the Subject Matter of Claims 2–5 Would Have Been Obvious in View of Liebermann and Engelke '405

Petitioner addresses each limitation of claims 2–5, which depend from claim 1. Pet. 42–43. Patent Owner again argues that the first and second telephone lines in Liebermann are not separate and distinct. PO Resp. 27. We did not find this argument persuasive in Section II.E above, nor do we find it persuasive here.

Having reviewed the papers submitted by the parties and the evidence cited therein, we determine that Petitioner has shown, by a preponderance of the evidence, that the subject matter of claims 2–5 of the '835 patent would have been obvious to a person of ordinary skill in the art in view of the teachings of Liebermann and Engelke '405.

K. Conclusion

Petitioner has shown, by a preponderance of the evidence, that the subject matter of claims 1–5 and 7 of the '835 patent would have been obvious in view of the teachings of Liebermann and Engelke '405.

III.ORDER

In view of the foregoing, it is hereby:

ORDERED that Petitioner has shown by a preponderance of the evidence that claims 1–5 and 7 of the '835 patent are unpatentable; and

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FURTHER ORDERED that this is a final written decision and that 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.

IPR2013-00549 US 6,603,835 B2 PETITIONER:

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Case: 19-2003

Document: 46-1 Page: 110 Filed: 04/08/2020

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CAPTIONCALL, LLC, Petitioner,

V.

ULTRATEC, INC., Patent Owner.

Case IPR2013-00549 Patent 6,603,835 B2

Before WILLIAM V. SAINDON, BARBARA A. BENOIT, and LYNNE E. PETTIGREW, *Administrative Patent Judges*.

SAINDON, Administrative Patent Judge.

DECISION Patent Owner's Request for Rehearing 37 C.F.R. § 42.71

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I. INTRODUCTION

CaptionCall, LLC ("Petitioner") filed a Petition requesting an *inter partes* review of claims 1–8 of U.S. Patent No. 6,603,835 B2 (Ex. 1001, "the '835 patent"). Paper 1 ("Pet."). In our Decision Instituting *Inter Partes* Review, we granted review of claims 1–5 and 7. Paper 7 ("Inst. Dec.").¹ In our Final Written Decision, we determined that Petitioner had shown, by a preponderance of the evidence, that claims 1–5 and 7 were unpatentable. Paper 71 ("Final Dec." or "Final Decision"). Patent Owner requests a rehearing of the Final Decision. Paper 72 ("Req. Reh'g" or "Request"). Having considered Patent Owner's Request, we modify our Final Decision as outlined below, but decline to modify our conclusion that Petitioner has shown that claims 1–5 and 7 are unpatentable.

A. Applicable Standard of Review

In *inter partes* review, the petitioner has the burden of showing unpatentability by a preponderance of the evidence. 35 U.S.C. § 316(e). The standard of review for rehearing requests is set forth in 37 C.F.R. § 42.71(d), which states:

> The burden of showing a decision should be modified lies with the party challenging the decision. The request must specifically identify all matters the party believes the Board misapprehended or overlooked, and the place where each matter was previously addressed in a motion, an opposition, or a reply.

¹ We later instituted review of claims 6 and 8 in IPR2014-00780.

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B. Analysis

Petitioner alleges that we: (1) misapprehended the law of obviousness and improperly discounted evidence of secondary considerations (Req. Reh'g 1–5); (2) misapprehended administrative law in disregarding evidence of nexus and secondary considerations (*id.* at 5–8); (3) misapprehended Liebermann's discussion of a party call (*id.* at 10–14); (4) misapprehended Liebermann's disclosure of converting voice signals (*id.* at 14–15); (5) misapprehended the content of Liebermann in our background discussion of the reference (*id.* at 15); and (6) improperly issued our Final Decision with a different panel of judges than those that instituted trial (*id.* at 8–10). We address these allegations in turn.

1. Law of Obviousness

Patent Owner alleges that we "first determine[d] obviousness and then analyze[d] secondary considerations." Req. Reh'g 1–2. This is a mischaracterization of our Final Decision. In our Final Decision, we agreed with Petitioner's statement that "it would have been obvious 'to configure the two-line device disclosed in Liebermann to provide both voice and text to a user who, as described in Engelke '405, had attenuated but functional hearing." Final Dec. 25 (quoting Pet. 39). This was not a determination that any claim would have been obvious, but rather our indication that we were persuaded by Petitioner's reason for combination. Confirming this, our next sentence was "[a]s such, Petitioner has established a reason with rational underpinnings for combining the teachings [of the prior art] in the manner proposed." Our analysis then discussed, over five pages, Patent Owner's evidence of secondary considerations. Final Dec. 28–32. Only after that did we discuss the ultimate conclusion of obviousness of the

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claimed subject matter. *Id.* at 32. Accordingly, Patent Owner's argument is premised on a mischaracterization of the Final Decision.

Patent Owner then argues that "there was no finding by the Board that Liebermann by itself taught all limitations of claims 1–5 or 7 relating to the two-line captioned telephone service feature." Req. Reh'g. 3–5 (emphasis omitted). It is well settled that obviousness need not be established by a single reference; likewise, there is no requirement for Liebermann to teach all aspects of the claims. We were persuaded that Petitioner had shown by a preponderance of the evidence that Liebermann discloses the two-line feature insofar as it teaches separate connections between the hearing user and assisted user and between the assisted user and the relay. See, e.g., Final Dec. 17–19 (discussing how Liebermann shows two lines). Our statement that Liebermann teaches that two-line service was known in the prior art is based on this understanding. See Final Decision 32 ("as to two-line service, Liebermann discloses this feature"). Whether Liebermann discloses twoline *captioned telephone service* is a strawman argument and not a component of Petitioner's asserted ground nor a basis for us finding such ground persuasive.

In view of the above, Patent Owner's Request does not persuade us that we misapprehended or overlooked any matter previously raised regarding this topic.

2. Administrative Law

In our Final Decision, we considered the testimony of Mr. Ludwick regarding secondary considerations, but found it to be unsupported by facts or data and determined that "his testimony has little probative value." Final Dec. 30–31. Patent Owner complains that we improperly disregarded the

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testimony of its declarant here because "[t]here is no rule requiring documentary, rather than testimonial, evidence of how a system operates." Req. Reh'g 5–6. We cited proper authority in the Final Decision for why we gave Mr. Ludwick's testimony little probative value.² Final Dec. 31 (citing *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1368 (Fed. Cir. 2004) and Fed. R. Evid. 702); *see also* 37 C.F.R. § 42.65 ("testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight").

Patent Owner next alleges that its Response "contained arguments identifying strong objective indicia of non-obviousness" and "set[] out its arguments concerning secondary considerations and explaining the relevance of Patent Owner's factual support." Req. Reh'g 6–7. Patent Owner's "arguments" and "expla[nation]," however, are three paragraphs that contain virtually no substance. The first paragraph is legal boilerplate. PO Resp. 40–41. The third paragraph is a generic conclusion. *Id.* at 42. The second paragraph is, at best, a list of common things that could be raised during a secondary considerations discussion, but it contains no meaningful argument. *Id.* at 41–42. Patent Owner's only citations are to three exhibits *in their entirety*, with no meaningful discussion. *Id.* at 41 (citing Exs. 2003, 2004, 2007). Such a course of action by Patent Owner does not comply with our Rules, which prohibit incorporation by reference and require specific arguments to be made in the briefs. *See, e.g.*, 37 C.F.R. § 42.23 (requiring a patent owner's response to state the relief requested in the response); *id.*

² We did not "dismiss" or "disregard" Mr. Ludwick's testimony, as Patent Owner complains; we gave it little probative value. Final Dec. 31 ("Mr. Ludwick's conclusory assertions do not provide a sufficient connection between the objective evidence and the claimed invention").

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§ 42.120 (designating a patent owner response as an opposition subject to rule 42.23); *id.* § 42.6(a)(3) (prohibiting incorporation by reference). Patent Owner's Response essentially invited us to read other documents and then to step into Patent Owner's shoes. We declined to do so in our Decision. Final Dec. 30 ("Patent Owner's Response contains no substantive arguments. ... Thus, Patent Owner's broad contentions regarding secondary considerations in its Patent Owner Response do not demonstrate nonobviousness"). We could not have overlooked arguments not made.

Lastly, Patent Owner complains that we "did not apply such a rigorous standard to Petitioner, and relied on arguments presented only in Petitioner's affidavits and not even cited." Req. Reh'g 8. In the examples provided by Patent Owner, however, we cited specific portions of Petitioner's evidence as further support for detailed arguments *already made* by Petitioner with citations to evidence.

In contrast, Patent Owner cited to no paragraphs or portions of the evidence it sought to rely upon, and developed no cogent arguments. PO Resp. 40–42. Instead, it listed the names of common arguments made in nearly all secondary considerations analyses. *See, e.g., id.* at 41 ("Submitted with the present Response are declarations . . . establishing the substantial praise for the inventions . . . , the long-felt but unresolved need . . . , and the failure of others"). We require the parties' papers to contain more than mere pleadings. 37 C.F.R. § 42.22(a)(2) (requiring papers to provide "A full statement of the reasons for the relief requested, including a detailed explanation of the significance of the evidence including material facts, and the governing law, rules, and precedent"); *see also id.* §§ 42.23(a), 42.120(a)
(holding patent owner responses, as oppositions, to the content requirements for motions). Accordingly, we held neither party to a different standard.

In view of the above, Patent Owner's Request does not persuade us that we misapprehended or overlooked any matter previously raised regarding this topic.

3. Liebermann's Party Call Disclosure

Patent Owner complains that we did not find its argument regarding Liebermann's disclosure of "party call" compelling. Req. Reh'g 10–14. For example, Patent Owner argues that Petitioner never rebutted Patent Owner's theory that Liebermann's "party call" was centrally-switched, versus switched by the Liebermann device as alleged by Petitioner. *Id.* at 10–12. Patent Owner complains that we placed the burden of proof on it for this reason. Id. at 11. This is incorrect. We made clear in our Decision that Petitioner has the burden of proof. See, e.g., Final Dec. 1 ("we determine that Petitioner has shown, by a preponderance of the evidence"); *id.* at 32 (determining that "Petitioner has shown, by a preponderance of the evidence . . . that the subject matter of claim 1 . . . would have been obvious"). We considered Patent Owner's argument regarding a centrally switched party call mechanism (see, e.g., Final Dec. 18) and found it unconvincing; this does not mean we placed any burden on Patent Owner. Further, we provided an explanation for why Patent Owner's argument was unpersuasive—namely, that the disclosure of Liebermann provided factual support for Petitioner's position but not Patent Owner's. See Final Dec. 18.

Patent Owner lastly complains that our explanation for why Petitioner's assertions were correct "was not part of the adopted ground on which the Board instituted trial." Req. Reh'g 13–14. Patent Owner, by

these words, appears to have a misunderstanding of *inter partes* review. Notably, at no point does the Board "adopt" or "rely" on a ground in an *inter partes* review. In other words, in an *inter partes* review, the grounds belong to, and are advocated exclusively by, Petitioner. The Board's part is to first serve a gatekeeper role as to which grounds are sufficient to permit trial and second, if a trial is permitted, to then review the instituted grounds to determine if Petitioner has met its burden by a preponderance of the evidence. 35 U.S.C. § 314(a); *id.* § 318(a). In making these determinations, the Board provides its explanation for why it believes one side or the other has the better argument, but it is not stepping into the shoes of either. *See* 35 U.S.C. § 316(e) (placing the burden on Petitioner to show unpatentability); 37 C.F.R. § 42.104 (requiring Petitioner to set forth grounds with specificity).

In our Final Decision, we explained why we were persuaded that Liebermann discloses two-line, device-switched calling as required by the claims, rather than centrally switched calling as alleged by Patent Owner. Final Dec. 17–21. *See id.* For example, we explained that no such central switch was disclosed in the text of Liebermann. *Id.* at 18. On the other hand, we found the evidence to support Petitioner's argument that the device provided the switching (Pet. 40–42; Pet. Reply 3–5) where Liebermann disclosed two distinct lines. Final Dec. 17–21 (discussing the disclosures of Liebermann relating to two lines and switching). We discussed the disclosures that supported Petitioner's assertion that Liebermann showed two separate lines: one between the assisted and hearing users, and one between the assisted user and the call center. Final Dec. 17 (citing Ex. 1008, 7:7–9, 25–26, describing two separate lines); *see also id.* at 19–20 (setting

forth the evidence in the record supporting Petitioner's assertions); *id.* at 21 (disclosures supporting Petitioner's assertion that Liebermann discloses switching at the device).

In contrast to this evidence, Patent Owner only offered up a theory based on an interpretation of the phrase "'party call'" in Liebermann (Ex. 1008, 7:3) to mean a centrally switched calling scheme, based on extrinsic evidence provided by its declarant. *See* PO Resp. 14–16. As we explained in our Decision, however, Petitioner's position is better supported by the record because Patent Owner's assertion was not supported by any express disclosure in Liebermann whereas Petitioner's was, and indeed Patent Owner's assertion runs contrary to the examples in Liebermann, cited above, that explicitly discuss two separate lines. *See generally* Final Dec. 17–21.

Further, to the extent Patent Owner's complaint is that we bolstered our understanding of how Liebermann's device works by citing to portions of Liebermann not cited in the Petition, we fail to see any prejudice in the matter in this instance because the Petition still provided the ground we found convincing. Our citation to, for example, Exhibit 1008, column 7, lines 25–26 (*see, e.g.*, Final Dec. 19) was merely to show the propriety of Petitioner's position. Specifically, the disclosure of Liebermann relied on by Petitioner (Pet. 40–41, citing Ex. 1008, 6:64–7:3, 7:10–14) had a missing word³ and the disclosure later in that column, where "operation is much the same" (Ex. 1008, 7:18–19), we found the same arrangement described

³ Ex. 1008, 6:64–7:14 includes the following summary sentence that is missing a word, presumably "center": "Thus, the line between the normally hearing person and the deaf person is analog for voice content only, while the line between the deaf person [and the center] (and now the normally hearing person too) is analog but transfers both voice and data."

without a missing word, which supported Petitioner's original interpretation. *Compare* Ex. 1008, 7:7–9 *with* 7:25–26; *see also* Req. Reh'g 13 (Patent Owner acknowledging that the operation of Liebermann described in column 7, lines 25–26 is much the same as in column 7, lines 7–9). In both portions, talking about the same arrangement, we were persuaded that there were two separate lines, not a centrally switched call.⁴ Thus, our cited portion merely supported our understanding of the portion discussed earlier in Liebermann to which Petitioner originally cited. Lastly, we note that Patent Owner was aware of this teaching in Liebermann and it was discussed without objection during the Oral Hearing, i.e., Patent Owner had an opportunity for its views on the matter to be heard and considered. Tr. 158:13–24.

In view of the above, Patent Owner's Request does not persuade us that we misapprehended or overlooked any matter previously raised regarding the party call limitation.

4. Converting Voice Signals Limitation

Patent Owner argues that claims 1 and 7 require "at the relay, converting the words spoken by the hearing user into text using voice recognition software," and that "[w]hile *Liebermann* may transmit text created by the Center, that text is not the type of text recited in the claims." Req. Reh'g 14–15. Patent Owner's Request is a rehash of previous arguments that we found unpersuasive. *Compare* Req. Reh'g 14–15 *with* PO Resp. 22–23. We found that Liebermann describes sending text as claimed and we noted that Patent Owner offered no persuasive argument or

⁴ The only difference between the two examples is one uses cell phones and one uses "hard wire telephone"; thus, the arrangement of the connections between each party is otherwise the same. Ex. 1008, 7:18–19, 7:24–25.

claim construction in support of adding the limitations it wishes to read into the claims. *See* Final Dec. 23. In view of the above, Patent Owner's Request does not persuade us that we misapprehended or overlooked any matter previously raised regarding the voice signals limitation.

5. Background Discussion in Liebermann

In our Final Decision, we set forth various background information regarding Liebermann and, in relevant part, we stated that "Liebermann discloses a method for providing *captioned telephone service* to an assisted user communicating with a hearing user." Final Dec. 14 (emphasis added). Patent Owner argues we mischaracterized Liebermann to the extent it disclosed "providing captioned telephone service." Req. Reh'g 15. Patent Owner does not argue that any error in fact or law was made in consequence of this statement. *See id*.

We agree that we misspoke in this respect, and Patent Owner's Request is *granted* insofar as we modify this sentence to read: "Liebermann discloses a method for providing <u>voice-to-text</u> telephone service to an assisted user communicating with a hearing user." This correction does not affect any portion of our analysis.

6. Panel Composition

Patent Owner asserts we exceeded our authority by issuing a Final Written Decision with less than a "full panel." Req. 9–10. Panel composition for an *inter partes* review is specified in 35 U.S.C. § 6(c), which states "[e]ach . . . inter partes review shall be heard by at least 3 members of the Patent Trial and Appeal Board, who shall be designated by the Director." The Director's authority under 35 U.S.C. § 6 to designate

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panels has been delegated to the Chief Judge. *See* Patent Trial and Appeal Board Standard Operating Procedure 1 (Rev. 14) (May 8, 2015) ("PTAB SOP 1").

As acknowledged by Patent Owner (Req. 9–10), the Final Decision was decided by three administrative patent judges, who are members of the Board. *See* 35 U.S.C. § 6(a) (indicating that administrative patent judges, along with various members of the United States Patent and Trademark Office, constitute the Patent Trial and Appeal Board). The three administrative patent judges were designated by the Chief Judge according to PTAB SOP 1, titled "Assignment of Judges to Merits Panels, Interlocutory Panels, and Expanded Panels." The Board, therefore, complied with the statutory requirements for panel composition. Accordingly, we did not issue the Final Decision "with less than a full panel," as Patent Owner contends.

Moreover, the Chief Judge has discretion to designate judges to decide *inter partes* reviews. *See* PTAB SOP 1 at 2 (§ II.D) ("In general, the Chief Judge will designate a judge or judges, as appropriate, for all matters for AIA reviews."); *see also AOL Inc. v. Coho Licensing LLC*, Case IPR2014-00771, slip op. at 2 (PTAB Mar. 24, 2015) (Paper 12) (informative) (setting forth that the designation of panel members is within the sole authority of the Chief Judge, as delegated by the Director). Patent Owner's Request, therefore, does not show the composition of the panel that issued the Final Decision was arbitrary, capricious, or an abuse of discretion by the Board.

7. Request for Expanded Panel

Patent Owner suggests an expanded panel is warranted to decide the Request in view of the panel composition and various allegations that we misapprehended the law. Req. 1. For the reasons given, Patent Owner does not persuade us that we misapprehended the law or the panel of three judges was deficient. Further, the Board's procedures provide examples of reasons for expanding a panel, none of which apply here. PTAB SOP 1 at 3 (§ III.A). For example, an expanded panel may be appropriate when "serious questions have been raised about the continuing viability of an apparently applicable precedential decision of the Board, or a panel of the Board renders a decision that conflicts with a precedential decision of the Board or an authoritative decision of the Board's reviewing courts." *Id.* Patent Owner's Request does not show a conflict or other reason that weighs in favor of panel expansion. Even so, the panel informed the Chief Judge, who has authority to expand a panel, of Patent Owner's request, and the Chief Judge declined to expand the panel. See PTAB SOP 1 at 4 (§ III.C). ("The Chief Judge will determine when an expanded panel is to be designated."); see also Apple Inc. v. Rensselaer Polytechnic Inst., Case IPR2014-00319, slip op. at 2 n.1 (PTAB Dec. 12, 2014) (Paper 20) (indicating only the Chief Judge, acting on behalf of the Director, may act to expand a panel and panels do not authorize panel expansion).

C. Conclusion

Having reviewed Patent Owner's Request, we are not persuaded we misapprehended or overlooked any argument previously presented. Thus, we decline to modify the substance of our Decision. In view of our discussion in Section 6 above, we modify our Decision to replace the word

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"captioned" with "voice-to-text" in the identified passage on page 14 of the Final Decision.

II. ORDER

It is hereby ORDERED that Patent Owner's Request for Rehearing is *denied* insofar as we do not modify the outcome of our Final Decision; and

FURTHER ORDERED that Patent Owner's Request for Rehearing is *granted* insofar as we replace the word "captioned" with "voice-to-text" in the first sentence of Section II.D.1, near the bottom of page 14 of the Final Decision.

IPR2013-00549 Patent 6,603,835 B2 PETITIONER:

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PATENT OWNER:

Michael Jaskolski Martha Snyder Nikia L. Gray Michael J. Curley QUARLES & BRADY LLP michael.jaskolski@quarles.com martha.snyder@quarles.com nikia.gray@quarles.com Michael.curley@quarles.com IPR2013-00540 (Patent 6,233,314), IPR2013-00541 (Patent 5,909,482), IPR2013-00542 (Patent 7,319,740), IPR2013-00543 (Patent 7,555,104), IPR2013-00544 (Patent 8,213,578), IPR2013-00545 (Patent 6,594,346), IPR2013-00549 (Patent 6,603,835), IPR2013-00550 (Patent 7,003,082), IPR2014-00780 (Patent 6,603,835)

inconsistency impacted in a material way our unpatentability determinations regarding the patents at issue or Mr. Occhiogrosso's credibility as a whole, we will consider at that time whether to authorize briefing directed to the additional issues identified by Patent Owner. Otherwise, in following the guidance of SOP 9, which directs us to limit briefing "to the specific issues raised by the remand," no supplemental briefing will be authorized.

We are aware that the *Phillips* standard of claim construction generally applies to patents that have expired. Patent Owner cites two cases in support of its position that it should have the opportunity at this juncture to address the effect of any claim constructions that might change under the Phillips standard. Ex. 2029, 14:17–15:12 (citing In re CSB-System Int'l, Inc., 832 F.3d 1335, 1340–41 (Fed. Cir. 2016); Facebook, Inc. v. Pragmatus AV, LLC, 582 Fed. App'x 864, 869 (Fed. Cir. 2014)). In CSB-System, the Federal Circuit held that when a patent expires during an appeal from an examiner's final rejection in an ex parte reexamination, the Board must apply a *Phillips* claim construction. 832 F.3d at 1341. In *Facebook*, the Federal Circuit construed claim terms under *Phillips* when patents subject to inter partes reexamination expired during the pendency of the appeal of the Board's decisions to the Federal Circuit. 582 Fed. App'x at 868–69. These cases are not particularly on point because neither one involves an *inter partes* review proceeding or addresses whether the Board in a remand proceeding necessarily must reinterpret under a *Phillips* framework any previously construed claim terms when a patent expires during the pendency of the remand.

IPR2013-00540 (Patent 6,233,314), IPR2013-00541 (Patent 5,909,482), IPR2013-00542 (Patent 7,319,740), IPR2013-00543 (Patent 7,555,104), IPR2013-00544 (Patent 8,213,578), IPR2013-00545 (Patent 6,594,346), IPR2013-00549 (Patent 6,603,835), IPR2013-00550 (Patent 7,003,082), IPR2014-00780 (Patent 6,603,835)

Petitioner cites *Personal Web Technologies, LLC v. Apple, Inc.*, 848 F.3d 987 (Fed. Cir. 2017), in support of its position that we should not allow briefing on how claim terms would be construed under *Phillips. See* Ex. 2029, 26:18–27:14. In that case, a patent subject to *inter partes* review expired after the Board's final written decision but while a rehearing request was pending before the Board. *Personal Web*, 848 F.3d at 990. On appeal to the Federal Circuit, the parties disputed whether the Board properly applied a broadest reasonable interpretation standard in construing claim terms at issue, with the Director of the Patent and Trademark Office arguing in support of the Board's approach. *Id.* The court, however, determined that it need not resolve the dispute because the Board's construction was correct under either standard. *Id.* Thus, although Petitioner contends that *Personal Web* presents a situation similar to the one here, the Federal Circuit ultimately did not address the issue.

Thus, the parties have not identified, and we are not aware of, any authority requiring us to reconsider on remand all of our earlier unpatentability determinations just because the patents have since expired. Through its reasoning and explicit instructions to consider Mr. Occhiogrosso's trial testimony and the impact of any inconsistencies on the challenged patents and Mr. Occhiogrosso's credibility, the Federal Circuit carefully delineated the scope of the remand in these proceedings. If we determine in the course of following the court's remand instructions that inconsistencies in Mr. Occhiogrosso's testimony require us to reevaluate the patentability of any claims, we will at that point consider Patent Owner's

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Paper 35 Entered: December 1, 2015

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CAPTIONCALL, L.L.C., and SORENSON COMMUNICATIONS, INC., Petitioner,

ν.

ULTRATEC, INC., Patent Owner.

Case IPR2014-00780 Patent 6,603,835 B2

Before WILLIAM V. SAINDON, BARBARA A. BENOIT, and LYNNE E. PETTIGREW, Administrative Patent Judges.

SAINDON, Administrative Patent Judge.

DECISION

Final Written Decision 35 U.S.C. § 318(a); 37 C.F.R. § 42.73

Denying Patent Owner's Motion to Exclude 37 C.F.R. § 42.64(c)

I. INTRODUCTION

We have jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73.

With respect to the grounds asserted in this trial, we have considered the papers submitted by the parties and the evidence cited therein. For the reasons discussed below, we determine that Petitioner has shown, by a preponderance of the evidence, that the subject matter of claims 6 and 8 of U.S. Patent No. 6,603,835 B2 (Ex. 1001, "the '835 patent") is unpatentable. In addition, we deny Patent Owner's Motion to Exclude.

A. Procedural History

We initially denied review of claims 6 and 8 of the '835 patent in a prior proceeding. *CaptionCall, L.L.C. v. Ultratec, Inc.*, Case IPR2013-00549 (PTAB) (Paper 7, Decision Instituting Review on claims 1–5 and 7 but not claims 6 and 8 of the '835 patent). On June 13, 2014, CaptionCall, L.L.C., and Sorenson Communications, Inc. (collectively, "Petitioner") filed a Corrected Petition to institute an *inter partes* review (Paper 7, "Pet.") of claims 6 and 8 of the '835 patent. Pet. 1. Ultratec, Inc. ("Patent Owner") filed a Preliminary Response on September 5, 2014. Paper 10 ("Prelim. Resp.").

On December 4, 2014, we instituted an *inter partes* review of claims 6 and 8 of the '835 patent. Paper 11 ("Inst. Dec."). Patent Owner then filed its Response to the Petition (Paper 14, "PO Resp."), to which Petitioner filed its Reply (Paper 17, "Pet. Reply"). An oral hearing was held on July 14, 2015. Paper 34 ("Tr.").

Patent Owner filed a Motion to Exclude Evidence. Paper 24 ("PO Mot. Excl."); *see also* Paper 29 (Petitioner's Opposition, "Pet. Opp. Mot. Excl."); Paper 30 (Patent Owner's Reply, "PO Reply Mot. Excl.").

B. Related Matters

The '835 patent is the subject of *Ultratec, Inc. v. Sorenson Communications, Inc.*, Case No. 3:13-CV-00346 (W. D. Wis.).¹ Pet. 2–3; Paper 6, 2. Claims 1–5 and 7 of the '835 patent were determined to be unpatentable in another *inter partes* review. *CaptionCall, L.L.C.*, Case IPR2013-00549 (Paper 71, Final Written Decision); *see also* Pet. 3; Paper 6, 3 (listing several other related PTAB cases).

The '835 patent is related to a number of other patents currently involved in the above-identified litigation, as well as in many pending *inter partes* reviews. Pet. 3; Paper 6, 3.

C. The '835 Patent (Ex. 1001)

The '835 patent discusses a way to assist deaf, hard of hearing, or otherwise impaired individuals to use telephones. Ex. 1001, 1:18–22. The typical solution is a device having a keyboard and display, called, interchangeably, a teletype (TTY) or telecommunications device for the deaf (TDD). *Id.* at 1:30–33. A relay service is utilized when only one of the parties uses a TTY (e.g., in a phone conversation between a hearing and deaf person), wherein a relay operator voices the deaf user's typed words to the hearing user, and types the hearing user's voiced words to the deaf person's TTY. *Id.* at 1:60 to 2:13. Traditionally, the relay service maintains a separate telephone connection with both the hearing and assisted users, with the relay service acting, as the name implies, as a relay.

The methods claimed in the '835 patent describe another way to provide a relay service. In particular, the '835 patent describes methods wherein there are two separate connections: one between the assisted and non-assisted user, and one

¹ CaptionCall, L.L.C. is a wholly owned subsidiary of Sorenson Communications, Inc. Pet. 2.

between the assisted user and the relay service. Ex. 1001, 9:33–43, Fig. 5.

Figure 5 depicts this arrangement:



Figure 5 of the '835 patent depicts a typical, voice-only connection between the hearing user and assisted user, with a second, simultaneous text and voice connection between the assisted user and the relay service. *Id.* at 9:33–43. The relay service and the hearing user are connected at the assisted user's location to allow the relay operator to hear the hearing user's spoken words and to voice the assisted user's typed words. *Id.* at 9:45–60. Notably, the hearing and assisted user are connected directly over a telephone connection, whereas the hearing user and the relay service are connected indirectly, by way of the assisted user's separate connection to the relay service. *Id.* at 9:37–43.

In some embodiments, a control on the assisted user's device can be operated during a conversation to initiate the relay service. *Id.* at 9:61–63 ("The main advantage of the two-line approach to captioned telephone is that the captioned telephone service can be added to a telephone call already in progress."); *see also* claims 6 and 8 (reciting this control feature). In other embodiments, the relay service operates using voice recognition software. *Id.* at 10:8–10; *see also* claim 8 (reciting this voice recognition feature).

D. Exemplary Claim

Independent claims 6 and 8 are the sole challenged claims of the '835 patent.

Claim 6 is reproduced below:

- 6. A method for providing captioned telephone service to an assisted user communicating over a first telephone line with a hearing user using a captioned telephone device, the hearing user speaking words in voice, the method comprising the steps of
- while the assisted user is conversing over the first telephone line with the hearing user over a first direct telephone connection between the assisted user and the hearing user, the assisted user operating a control on the captioned telephone device to initiate a captioning service;
- the captioned telephone device initiating a telephone connection over a second telephone line to the relay;
- the captioned telephone device transmitting the voice of the hearing user over the second telephone line to the relay so that the relay can convert the words of the hearing user into text;
- the relay transmitting the text created by the relay back to the station of the assisted user over the second telephone line to the captioned telephone device; and
- the captioned telephone device displaying the text within the sight of the assisted user such that captioning of the words spoken by the hearing user is provided to the assisted user.

E. Prior Art & Asserted Grounds

The sole ground in this trial is whether the subject matter of claims 6 and 8 is unpatentable in view of Liebermann,² Engelke '405,³ and Mukherji.⁴

II. ANALYSIS

We first address Patent Owner's Motion to Exclude. We then turn to the claim constructions relevant to this proceeding, the relevant prior art, and finally to Petitioner's asserted ground of unpatentability.

A. Patent Owner's Motion to Exclude

Patent Owner moves to exclude Exhibits 1010, 1026, 2005, 2013, each involving Petitioner's declarant, Mr. Occhiogrosso. PO Mot. Excl. 1–2. Patent Owner also moves to exclude Exhibits 1023, 1024, and 1025 as cumulative and untimely. *Id.* at 2. Reviewing the arguments and evidence before us, Patent Owner's motion is denied.

1. Mr. Occhiogrosso

Patent Owner argues that Mr. Occhiogrosso's testimony should be excluded on a theory that he is not a person of ordinary skill in the art. *See* PO Mot. Excl. 3– 4, 5–7. Patent Owner acknowledges that it raised this issue in IPRs 2013-00540, 541, 542, 543, 544, 545, 549, and 550, and that we ruled against Patent Owner in those cases. *Id.* at 2. Patent Owner notes that it brings this motion in order to preserve its objection for further review. *Id.* Because the facts in this case are substantially similar to those in the prior cases, we deny Patent Owner's motion

² U.S. Patent No. 5,982,853, issued Nov. 9, 1999 (Ex. 1008).

³ U.S. Patent No. 5,724,405, issued Mar. 3, 1998 (Ex. 1005).

⁴ U.S. Patent No. 7,117,152 B1, filed June 30, 2000, issued Oct. 3, 2006 (Ex. 1009).

here, for similar reasons. *See, e.g., CaptionCall, L.L.C.*, Case IPR2013-00549, Paper 71, 8–13 (denying Patent Owner's Motion to Exclude Mr. Occhiogrosso, finding that "Mr. Occhiogrosso is qualified sufficiently in the pertinent art to testify under FRE 702 in this proceeding").⁵

2. Allegedly Untimely or Cumulative Exhibits

Patent Owner argues that Exhibit 1023⁶ should be excluded under 37 C.F.R. § 42.23(b) as untimely on a theory that it should have been submitted with the Petition. PO Mot. Excl. 7–8. In relevant part, 37 C.F.R. § 42.23(b) states: "A reply may only response to argument raised in the corresponding opposition or patent owner response."

As will be addressed in further detail in our claim construction analysis, Patent Owner argues in its Response that a step of revoicing should be read into one or both of the claims. *See* PO Resp. 26–27. In its Reply, Petitioner argues that revoicing is not required. Pet. Reply 14–15. Mr. Occhiogrosso cites to Exhibit 1023 when testifying that the concept of revoicing was not required by the claims and was known in the prior art. Supplemental Declaration of Benedict J. Occhiogrosso, Ex. 1026 ¶¶ 6, 59–60 (citing Ex. 1023).

Patent Owner's argument is that Petitioner knew of Patent Owner's position regarding revoicing from another proceeding and it should have supplied Exhibit 1023 in the Petition accordingly. *See* PO Mot. Excl. 7–8. This argument is unpersuasive. Mr. Occhiogrosso's citation to Exhibit 1023 is in response to an argument made in the Patent Owner Response.

⁵ The patent at issue in IPR2013-00549 is the same patent as in this proceeding. ⁶ U.S. Patent No. 5,809,112, issued Sept. 15, 1998 to Ryan (Ex. 1023).

Patent Owner next argues that Exhibits 1024⁷ and 1025⁸ should be excluded under Federal Rule of Evidence 403⁹ as cumulative, or under 37 C.F.R. § 42.23(b) as untimely. PO Mot. Excl. 7–10. In its Response, Patent Owner argues that the claims require "simultaneous text and voice transmission" and that Engelke '405 did not teach such a feature. PO Resp. 37–38. In Reply, Petitioner argues that "simultaneous voice and text" is not required by the claims, and even if it were, it was taught in the art. Pet. Reply 23–24. Petitioner's declarant, Mr. Occhiogrosso, testifies that fast communications protocols were known in the art, citing Exhibits 1024 and 1025. Ex. 1026 ¶ 28.

We are not persuaded that the probative value of these Exhibits "is substantially outweighed by a danger" of needlessly presenting cumulative evidence, nor are we persuaded that they are untimely. Patent Owner fails to address the "substantially outweighed" aspect of the Rule. In addition, these Exhibits were presented in response to Patent Owner's argument that the claims required a certain amount of speed; they tend to show that the prior art was sufficiently speedy.

In view of the above, Patent Owner's Motion to Exclude is denied.

B. Mr. Occhiogrosso is Qualified to Testify as to the Level of Ordinary Skill in the Art

Patent Owner argues that Mr. Occhiogrosso is "neither a POSA nor an expert in the relevant technology and is not qualified to submit expert declarations

⁷ U.S. Patent No. 5,432,837, issued July 11, 1995 to Engelke.

⁸ U.S. Patent No. 5,327,479, issued July 5, 1994 to Engelke.

⁹ Fed. R. Evid. 403: "The court may exclude relevant evidence if its probative value is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence."

in this proceeding." PO Resp. 6–8. Patent Owner alleges the relevant technology is "TRS [(Telephone Relay Systems)] for the deaf and HOH [(Hard of Hearing)]." *Id.* at 7. We have heard already Patent Owner's arguments on this issue and ruled against it. *See, e.g., CaptionCall, L.L.C.*, Case IPR2013-00549, Paper 71, 13–14 (upon review of Mr. Occhiogrosso's qualifications, finding that "he is qualified to testify as to the level of ordinary skill in the art in this proceeding"); *see also id.* at 8–13 (also discussing the pertinent field and the qualifications for testifying in the pertinent art). As we found in IPR2013-00549:

We determine the pertinent art to be telecommunications systems, because any communications technology would be pertinent art to the '835 patent. While assistive technology may be more pertinent, and assistive technology for the deaf and hearing impaired, using voice-totext relays, may be most pertinent, anything in the telecommunications technology field would be pertinent to the inventors when considering their problem.

Id. at 11–12.

This proceeding involves the same patent; the pertinent art is generally the same. Thus, we consider Mr. Occhiogrosso suitably qualified to testify as to the level of ordinary skill in the art, given his background, training, and experience. *See* Ex. 1010 ¶¶ 10–11 (testifying to experience in "call centers," "speech recognition algorithms," "relay services and assistive technologies," and "captioning of meetings"); *see also CaptionCall, L.L.C.*, Case IPR2013-00549, Paper 71, 8–14 (setting forth in detail why Mr. Occhiogrosso is qualified to testify).

C. Claim Construction

We interpret the claims of an unexpired patent using the broadest reasonable interpretation in light of the specification of the patent. 37 C.F.R. § 42.100(b); *In re Cuozzo Speed Techs.*, *LLC*, 793 F.3d 1268, 1276 (Fed. Cir. 2015). Under the

broadest reasonable interpretation standard, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

We have construed already several terms in the '835 patent in a prior decision. *CaptionCall, L.L.C.*, Case IPR2013-00549, Paper 7, 8–12 (PTAB Mar. 5, 2014) (Decision to Institute, discussing "assisted user," "hearing user," "directly between," and the control limitation); *id.*, Paper 71, 7–8 (Final Written Decision, discussing "assisted user," "hearing user," "directly between," and "initiating"). Petitioner submits that those prior constructions should be applied to this proceeding. Pet. 11–13. Patent Owner does not contest our prior constructions. PO Resp. 8. For purposes of this decision, we adopt our prior constructions, which are reproduced below, for convenience. We also address a limitation in claim 8 requiring voice recognition.

1. "assisted user"

The individual making use of the transcribed text, regardless of the individual's actual hearing abilities.

2. "hearing user"

The individual in communication with the assisted user.

3. "direct telephone connection"

A line or connection between the parties without a captioning service intervening on that line or connection.

4. "initiating"

The term "initiating," as found in claims 6 and 8, is used in a different context than in claims 1 and 7. In claims 1 and 7, there is a step of "the assisted

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user initiating a telephone connection." This step does not occur in claims 6 or 8; rather, there is "the captioned telephone device initiating a telephone connection." Thus, our construction for claims 1 and 7 is not applicable to the term as used in claims 6 and 8. This term is not at issue in this proceeding and no express construction is necessary.

5. The Control Limitation

The following limitation of claims 6 and 8 of the '835 patent has been deemed the "control limitation":

while the assisted user is conversing over the first telephone line with the hearing user over a first direct telephone connection between the assisted user and the hearing user, the assisted user operating a control on the captioned telephone device to initiate a captioning service.

We construed this limitation to set forth several elements. First, the limitation sets forth a timing element: "while the assisted user is conversing . . . with the hearing user." Second, the limitation sets forth a context element: the "conversing" occurs over the "direct telephone connection" discussed above. Third, the limitation sets forth an action element: "the assisted user operating a control." We construed "control" to mean "an object that can be manipulated by a user to direct and regulate a process or sequence of events."

6. Voice Recognition

Claim 8 requires a step of "the relay . . . convert[ing] the words of the hearing user into text using voice recognition software to create the text." Patent Owner argues that the step of "using voice recognition software to create text" in claim 8 implies an additional step where a call assistant at the relay revoices the words of the hearing user into a machine that uses voice recognition software to create the text. PO Resp. 26–27.

Patent Owner does not make a persuasive claim construction argument justifying reading that limitation into the claims. Instead, Patent Owner simply alludes to "the strong focus in the '835 Patent on revoicing relays" and "that one of the main advantages of the invention is . . . the use of the revoicing technique . . . which dramatically increases the speed of communication between the hearing user and assisted user." *Id.* at 27 (citing Ex. 1001, 2:30–48, 5:54–8:60).

Nothing in the '835 patent, however, expresses an intention to limit the scope of "using voice recognition software" to only those uses where revoicing is used. It is well settled that claims generally should be construed broadly enough to encompass at least one preferred embodiment but need not be limited to any embodiment, even if there is only one embodiment, absent disclaimer. *Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1581 (Fed. Cir. 1996) (claim interpretation that would exclude the inventor's device is rarely the correct interpretation); *Superguide Corp. v. DirecTV Enter., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment); *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (discussing cases wherein the court expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment).

The claim language is plainly broader than the particular embodiment Patent Owner seeks to incorporate. We recognize that the '835 patent describes an embodiment utilizing voice recognition for revoicing, but we are not apprised of any disclosure that so limits the claims. Likewise, there is nothing structurally present in the claims that would limit or imply that revoicing is used.

Patent Owner's declarant, Mr. Ludwick, repeats, almost word-for-word, the argument Patent Owner made in its Reply, without further factual support. Declaration of Paul W. Ludwick, Ex. 2001 ¶ 62. The crux of Mr. Ludwick's argument is that the speed advantage touted by the '835 patent would be "utterly defeated if claim 8 was interpreted *not* to require revoicing." *Id.* Hyperbole aside, this statement is logically unsound. On its face, voice recognition without revoicing would be faster than voice recognition with revoicing, as it saves the intermediary step of the call assistant revoicing. Thus, using voice recognition without revoicing would not negate any speed advantage. Mr. Ludwick's logic for narrowing voice recognition to voice recognition with revoicing is unpersuasive.

In view of the record before us, we find insufficient support for Patent Owner's proposed narrowing of "voice recognition" to voice recognition in conjunction with a revoicing method. Therefore, we construe "voice recognition" under the plain and ordinary meaning to a person of ordinary skill in the art.

D. The Prior Art—Liebermann, Engelke '405, and Mukherji 1. Liebermann (Ex. 1008)

Liebermann discloses a method for providing text-assisted telephone service to an assisted user communicating with a hearing user. The assisted user and hearing user first connect over a telephone connection. Ex. 1008, 6:64–65 ("[t]he normally hearing person who calls a deaf person dials the deaf person's phone number"), 7:5–6 ("the line between the normally hearing person and the deaf person is analog for voice content only"); 7:25–26 ("the cellular phone maintains two cellular connections . . . one to the [relay] . . . and one to the [hearing user]."). Then, the assisted user's device connects to the relay on another line and arranges for all parties to be on line, thus facilitating the captioning service. *Id.* at 7:1–9. The relay converts the spoken words of the hearing user into text, which is

displayed to the assisted user. *Id.* at 7:10–17, Fig. 8 (showing the assisted user's display, including the hearing user's spoken words as text). Using Liebermann's device, a hearing user may call an assisted user at the assisted user's phone number directly (i.e., in lieu of calling a relay first). *Id.* at 6:64–65.

2. Engelke '405 (Ex. 1005)

Engelke '405 describes a text-enhanced telephone (TET), which provides to the assisted user text and voice simultaneously, with both the relay service's text and the hearing user's voice. Ex. 1005, 3:31–37, Fig. 4. Figure 4 of Engelke '405 is illustrative:



FIG. 4

Figure 4 of Engelke '405 depicts a text-enhanced telephone connection in which assisted user's telephone 50 can send and receive both text and voice, such that the hearing user (at telephone 42), assisted user, and relay operator (at relay 44) can all speak and hear each other, and the assisted user's TTY machine and the relay operator's TTY machine can send text back and forth.

Engelke '405 discusses how assisted communications solutions have been available for the deaf but not for the hard of hearing. *Id.* at 2:9–27. The benefit of the system of Engelke '405 is that it allows users with some hearing or speaking capability to continue to use a telephone and to augment the spoken words of the hearing user with text from the relay service. *Id.* Thus, the system allows the assisted user to speak directly to the hearing user or to hear directly from the

hearing user, with the relay service providing supplemental assistance as needed. *Id.* at 6:48–52.

3. Mukherji (Ex. 1009)

Mukherji recognizes that, in some circumstances, it is necessary to supplement voice communications with text. Ex. 1009, 4:35–38. Mukherji describes a text assistance feature as one that could be enabled "[d]uring setup or at any other appropriate time during the session." *Id.* at 3:19–22, 6:65–7:4. A graphical user interface is provided on the communications device for controlling the session. *Id.* at 6:33–42. Figure 4 of Mukherji is reproduced below:



Figure 4 of Mukherji depicts a flowchart of a process for handling a communications session between users. Upon establishing communications (70),

the process looks to see if a text enhanced session has been chosen by either user (72, 74). If not, a voice-only session is begun (76). If yes, a text link is added to the voice session (82). During the voice-only session, the process checks to see if a text enhanced session is required (78), and if so, adds the text link (82). Accordingly, Mukherji provides text assistance on demand.

E. Analysis of Petitioner's Obviousness Ground

Petitioner sets forth in its claim charts where it asserts Liebermann, Engelke '405, and Mukherji describe the limitations of claims 6 and 8. Pet. 31–37. With respect to claim 6, Petitioner cites to Liebermann for the limitations requiring a direct telephone connection between a hearing user and an assisted user (*id.* at 32 (citing Ex. 1008, 6:64–7:3)), a connection over a second telephone line to a relay (*id.* at 33 (citing Ex. 1008, 5:48–52, 6:64–7:3, Fig. 4)), and sending the hearing user's voice to the relay to be converted into text for display at the assisted user's station (*id.* at 33–36 (citing Ex. 1008, 5:14–25, 5:48–52, 6:31–36, 6:64–7:3, 7:10–14, Fig. 4)). Petitioner cites to Engelke '405 for many of the same limitations (*see id.* at 31–36), and also to describe how hard-of-hearing assisted user's voice using the device of Engelke '405 (*id.* at 35 (citing Ex. 1005, 2:32–37)). Petitioner cites to Mukherji for the aspect of the control limitation wherein users are conversing and then the assisted user operates a control to request a captioning service on demand. *Id.* at 32–33 (citing Ex. 1009, 6:36–39, 6:65–7:4, 8:35–37, Fig. 4).

Petitioner offers several reasons why it would have been obvious to take the two-line configuration of Liebermann and modify it to include any combination of voice and text. *Id.* at 20–21. For example, Petitioner asserts that Engelke '405 evidences that using various combinations of voice and text to tailor features to the impairments users are known to have is a feature already "known in the art." *Id.* at

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21. Petitioner also offers a number of reasons why it would have been obvious to configure the device of Liebermann to provide the captioning service upon demand of the user. *Id.* at 22–30. For example, Petitioner asserts that Mukherji provides a known technique to improve a device ready for improvement. *Id.* at 28–29.

Petitioner's discussion of claim 8 is substantially similar, with the added discussion of the limitation in claim 8 requiring the relay to convert the hearing user's voice to text using voice recognition software. *Id.* at 36–37 (citing Ex. 1005, 14:35–48).

Patent Owner challenges several aspects of Petitioner's ground; we address each challenge in turn.

1. Two-Line Configuration

Patent Owner argues that claims 6 and 8 include a "two-line configuration" wherein there are two telephone lines, one between the assisted user and the hearing user, and one between the assisted user and the relay. PO Resp. 10–11. Patent Owner argues that Petitioner's assertion that Liebermann describes such an arrangement is incorrect. *Id.* at 11–13. Instead, according to Patent Owner, Liebermann discloses a "party call" in which a central switch is used. *Id.* Petitioner responds and argues that we have determined already that Liebermann discloses a two-line configuration as claimed. Pet. Reply 3–4.¹⁰

¹⁰ Petitioner argues in its Reply Brief that Patent Owner is estopped under 37 C.F.R. § 42.73(d)(3) from making these and other arguments relating to issues decided against Patent Owner in IPR2013-00549, which also involves the '835 patent. Pet. Reply 1–2. The time for appeal of the Final Written Decision in that case has not expired as of this Decision. Under the circumstances presented here, we are not persuaded that estoppel operates to preclude Patent Owner from raising these arguments.

We are persuaded that Liebermann discusses a two-line configuration as claimed. *See* Ex. 1008, 6:64–7:28. Liebermann states that the hearing user calls the assisted user directly, i.e., not through a relay. *Id.* at 6:64–65. Liebermann uses a separate, "designated line to the [relay]." *Id.* at 6:65–7:1. Thus, Liebermann discusses two lines.

Patent Owner's arguments suggesting otherwise are contrary to the disclosure of Liebermann. For example, Liebermann clarifies that the "dedicated line" (sic, designated line) between the assisted user and the relay carries both voice and data. *Id.* at 7:3–5. If this arrangement were a centrally-switched "party call" in the manner Patent Owner argues, there would be no point to Liebermann's designated line to carry voice; the assisted user in Liebermann is deaf. As another example, Liebermann discusses two separate lines-the one between the assisted user and the hearing user is "analog for voice content only" and the other is "analog but transfers both voice and data." Id. at 7:5-9. Again, if this were describing a centrally-switched "party call" in the manner Patent Owner argues, there would be no reason for Liebermann to discuss two lines carrying two different sets of information. Instead, this disclosure is consistent with Petitioner's position that the assisted user's device provides for switching, in that the voice of the hearing user comes into the device and out to the relay, where data is sent back to the assisted user.¹¹ Indeed, Liebermann explicitly states that the "deaf person's device arranges for switching." Id. at 7:1. Read in context, this disclosure means what it literally says: that the assisted user's device acts as the switch between the two separate lines. As a final example, we note that Liebermann discloses a

¹¹ Likewise, going in the other direction would be data encoding the assisted user's communications to the relay where they are turned into voice, then back to the assisted user's device and through that back to the hearing user.

cellular phone embodiment that works in the same manner as just described, but uses a cellular phone instead of landlines. *See id.* at 7:18–26. In this example as well there are two separate lines: one to the relay for voice and data, and one to the hearing user (for voice only). *Id.* Again, it makes little sense for this disclosure to be discussing a centrally-switched party call when two separate lines are disclosed and operate in a manner consistent with the assisted user's device acting as the switch.

Patent Owner cites to the testimony of its declarant in support of its position, but we do not find Mr. Ludwick's testimony persuasive on this point. See, e.g., PO Resp. 11 (citing Ex. 2001 ¶ 34). Mr. Ludwick states his opinion that Liebermann discloses a centrally-switched party call, i.e., the switch is not the user's device as stated in Liebermann but rather the switch is somewhere within the telephone service provider's switching network. Ex. 2001 ¶ 36 (citing Ex. 1008, 6:64–7:3). But Mr. Ludwick does not explain how the cited passage of Liebermann (the same passage discussed immediately above) discloses a central switch provided by the service provider; such features appear nowhere in the cited passage. Indeed, as we discussed above, Liebermann at this passage discloses two separate lines, each transmitting different information in a manner consistent with the prior disclosure of the assisted user's device acting as a switch between two separate lines. Mr. Ludwick does not address these disclosures and instead starts discussing another passage (Ex. 2001 ¶ 38 (citing Ex. 1008, 5:48–52)) which, even if it supported Mr. Ludwick's point, fails to negate the clear disclosure in columns six and seven of Liebermann. Accordingly, having reviewed Mr. Ludwick's testimony on this issue, we find it unpersuasive because it fails to address adequately the disclosure of Liebermann upon which Petitioner basis its ground.

In view of the record before us, we are persuaded that Petitioner has shown, by a preponderance of the evidence, that Liebermann discloses the claimed twoline configuration.

2. The Control Limitation

Patent Owner argues that "an allegation that each element could be found in separate references would not be sufficient to show the clams are obvious because the interrelation of the elements would not be present." PO Resp. 14–15. Patent Owner does not present any legal support to its statement. The relevant inquiry is whether the claim extends to that which is obvious, not whether a single limitation is found in one reference. *See In re Mouttet*, 686 F.3d 1322, 1332–33 (Fed. Cir. 2012) ("the test for obviousness is what the combined teachings of the references would have suggested to those having ordinary skill in the art"); *Hartness Int'l, Inc. v. Simplimatic Eng'g Co.*, 819 F.2d 1100, 1108 (Fed. Cir. 1987) ("the inquiry is not whether each element existed in the prior art, but whether the prior art made obvious the invention as a whole").

In our uncontested prior claim construction of the control limitation, we determined that there are timing, context, and action elements to the limitation. Patent Owner does not address the elements separately but rather addresses them in an amalgamated section. PO Resp. 13–24. Petitioner argues that it is the combination of references that shows the claimed limitation, and that each element is shown in the prior art. Pet. Reply 4–14. We have the reviewed the arguments and address the relevant points as we discuss each aspect of the control limitation.

a. Timing

The timing element recognizes that the claims require the assisted user and the hearing user to be conversing prior to initiation of the captioning service. Petitioner cites to Mukherji, which describes "text enhanced communications"

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being provided for voice communication upon "<u>a request from the user</u>." Pet. 32– 33 (citing Ex. 1009, 6:65–7:4, Fig. 4); *see also* Pet. Reply 8–12 (further explaining Petitioner's position). Figure 4 of Mukherji, reproduced above, depicts a flowchart wherein a text-enhanced session may begin at any time, even during the middle of an initially voice-only session.¹²

Patent Owner argues that Liebermann discloses connecting to the relay before the assisted user is conversing. PO Resp. 16. This is not germane because Mukherji discloses the timing element in Petitioner's proposed combination and addressing Liebermann alone is nonresponsive to Petitioner's ground. Patent Owner then argues that Mukherji does not disclose a captioning service or a twoline embodiment. *Id.* at 21–22. These arguments again discuss the references in isolation without consideration of the combination of teachings. Patent Owner also argues that Mukherji shows captioning always being generated; the control only being whether the text is displayed. *Id.* at 22–24. This argument is based on a miscomprehension of how Petitioner's ground utilizes Mukherji, and of Mukherji in general.

As we discussed above, Petitioner cites to Figure 4 of Mukherji, which shows voice-to-text communications that may begin at any time during the call. Patent Owner's arguments discuss Figures 5 and 6 and, therefore, fail to respond to Petitioner's ground. Further, Figures 5 and 6 are directed to a different process flow than Figure 4. Figure 4 is directed to establishing and negotiating voice and

¹² For example, if decisions at 72 and 74 were "NO," then the voice session would begin without text. Ex. 1008, Fig. 4. According to the decision at 78, the text enhanced session could be started at any time as the in-process call loops between 76->78->80, then back to 76, etc., unless 78= "YES" (or the call ends) at which time the loop shifts into 82->84->86, then back to 84, etc. until the call ends. *Id.* The decision at 78 can be triggered in many ways, including a request from the user or the remote user's device. *Id.* at 7:1–4.

text communications between users. Ex. 1009, 2:27–29; 6:43–7:24. The Figure 4 process runs during the entire communication session, allowing text communication to begin at any time. *See id.* at Fig. 4 (noting the last decision is 80, "SESSION COMPLETE?"). Figure 5, in contrast, is the process for processing input into the user's device. *Id.* at 7:25–28. The process in Figure 5 is, essentially, what captures the user's voice, by encoding microphone input into packets and communicating the packets. *See generally id.* at Fig. 5 (noting the device is controlling the microphone and sending/receiving packets). Figure 6 is the process explaining what the device does with packets received from the remote location. *Id.* at 8:1–3; *see generally id.* at Fig. 5 (noting the device is now processing received packets according to packet type and outputting speech, text, and or text-to-speech, as appropriate). Thus, Figure 4 shows the user-to-user communications process, Figure 5 shows the local voice input and transcription process, and Figure 6 shows the local data handling process. The Figure 4 process is what enables user-to-user voice-to-text communication to begin.

Accordingly, although Patent Owner is correct that Figure 5 shows automatically encoding a user's voice into text, and displaying that text upon that user's option (items 108, 110 in Figure 5), this is a different teaching from the one on which Petitioner relies. Petitioner relies on Figure 4 (Pet. 32–33), which shows that the initiation of the voice-to-text service *between the users* occurs at any time before or during the call (*see* Figure 4). It is the teaching of voice-to-text service between users, not the voice-to-text encoding of the local user (Figure 5) on which Petitioner relies and which Petitioner argues teaches the limitation. Pet. 32–33. Accordingly, Patent Owner's arguments are unpersuasive.

b. Context

The context element recognizes that the claims require the assisted user and the hearing user to be conversing on a first telephone line and that the relay will be on a second telephone line. In effect, this element requires a two-line configuration. Petitioner cites to Liebermann for the two-line configuration. Pet. 32 (citing Ex. 1008, 6:64–7:3). Petitioner cites to Engelke '405 for the notion of an assisted user and a hearing user conversing,¹³ because Petitioner's combination is that Liebermann's two-line setup is combined with Engelke '405's teaching to provide voice and text according to an assisted user's impairments. *See* Pet. 21. Thus, the combination provides a two-line configuration in which voice and text are used, such that a conversation may occur between the assisted and hearing users.

Patent Owner argues that none of the cited references disclose the claimed two-line configuration. PO Resp. 16. As explained above, we are persuaded that Petitioner has shown, by a preponderance of the evidence, that Liebermann teaches the claimed two-line configuration.

c. Action

The action element recognizes that the claims require an action, "operating a control on the captioned telephone device," to occur to initiate the captioning service. Petitioner first cites to Engelke '405 for its disclosure of a control for operating a text-enhanced telephone. Pet. 32 (citing Ex. 1005, 4:54–58, 13:33–35). In particular, Engelke '405 discloses a "bypass circuit," controlled by an on/off switch that allows for bypassing the text-enhanced telephone (i.e., rendering it a

¹³ Here we understand "conversing" to be something different from voice-to-text because "conversing" occurs prior to initiating the captioning service and the captioning service provides voice-to-text. For example, ordinary voice-to-voice communications could be "conversing."

regular telephone). Ex. 1005, 4:54–58. Petitioner cites to Mukherji for its disclosure of a "graphical user interface 50 containing any combination and arrangement of features for controlling a voice and text communication session," as well as its disclosure of enabling the voice-to-text of a remote user feature upon "<u>a request from the user</u> or the remote device." Pet. 32–33 (citing Ex. 1009, 6:36–39, 6:65–7:4). Accordingly, Petitioner has established that Mukherji uses a control for initiating the voice-to-text service upon demand feature, via the graphical user interface that controls the voice and text communication session. Petitioner also has established, as background information, that Engelke '405 shows how traditional relay-based text-enhanced telephone systems had user controls (albeit not with the particular on-demand feature claimed).

Patent Owner argues that Engelke '405 does not disclose the claimed action element control. PO Resp. 16–21. Patent Owner's arguments, however, misconstrue Petitioner's ground. *See* Pet. Reply 13–14. Engelke '405 merely shows that some form of control on assisted user devices was known. Specifically, it allows the feature to be turned off. *Id.*; *see* Ex. 1005, 4:54–58. It is Mukherji that shows a control that initiates the voice-to-text on demand at any time during the call. Ex. 1009, Fig. 4. Thus, Patent Owner's focus on Engelke '405 is unconvincing. Further, Patent Owner's arguments that Mukherji does not initiate captioning service, insofar as the argument is that Mukherji does not disclose a relay-based voice-to-text service, is unpersuasive. Mukherji's contribution to the combination is the notion that it was known in the art at the time of the invention to have on-demand voice-to-text service, and a control for starting it. Patent Owner's argument that Mukherji does not disclose the full captioning service, including a relay (PO Resp. 21–22), argues the references in isolation. It is the combination of

Liebermann, Engelke '405, and Mukherji that is relied upon to show the claims would have been obvious.

d. Conclusion for Control Element

Petitioner has shown, by a preponderance of the evidence, that the combination of Liebermann, Engelke '405, and Mukherji describes each limitation of the control element. Our discussion regarding rationale for combination is addressed later in this Decision.

3. Limitations [b], [c], and [e] of Claims 6 and 8

Patent Owner argues that these limitations (as identified by Petitioner, *see* Pet. 33–35), which each recite an action taken over the second telephone line, are not shown in Petitioner's ground because "none of the references disclose[] the two-line configuration." PO Resp. 24–26. We have determined already that this argument is unpersuasive.

4. Claim 8 – Voice Recognition Limitation

We determined in our claim construction section that Patent Owner improperly attempts to import a step of "revoicing" into the voice recognition limitation. Accordingly, Patent Owner's argument that the prior art does not describe revoicing is not commensurate in scope with the claims. *See* PO Resp. 26–28.

5. Reasons for Combining the Teachings of the Prior Art References

Petitioner proposes that the subject matter of claims 6 and 8 would have been obvious to one of ordinary skill in the art at the time of the invention in view the teachings of Liebermann, Engelke '405, and Mukherji, and provides several explanations why. Pet. 20–31. In general, Petitioner first proposes to take the twoline configuration in Liebermann and the simultaneous voice and text
configuration of Engelke '405, in order to broaden the users that could use the device to the hard of hearing. *Id.* at 21 ("to cater to the particular impairment of a user"); *see* Ex. 1005, 2:9–27. Petitioner then proposes to take these teachings and add in the teaching of Mukherji to allow the voice-to-text aspect of the communication to be added at any time, on demand. *Id.* at 28 ("*Mukherji* explicitly identified that in some circumstances, it might be desirable to begin a call with text assistance and in other circumstances . . . to invoke text assistance after a conversation was already going on") (citing Ex. 1009, 6:52–7:15, Fig. 4).

Patent Owner makes several arguments that it would not have been obvious to combine the teachings of the references. PO Resp. 28–47. Petitioner offers several arguments in reply. Pet. Reply 15–22. We address Patent Owner's arguments in turn.

a. Problem Solved by the '835 Patent

First, Patent Owner argues that the '835 patent recognized and solved a problem that the prior art did not acknowledge: "that HOH users need the ability to initiate a captioning service during ongoing telephone calls." PO Resp. 29; *see also id.* at 29–32 (setting forth Patent Owner's argument in detail). Patent Owner argues that such recognition is a precursor to an obviousness conclusion. *Id.* at 29 (citing *Leo Pharm. Prod., Ltd. v. Rea*, 726 F.3d 1346, 1354 (Fed. Cir. 2013). Patent Owner's characterization of the law is inconsistent with *Graham, KSR*, and *Leo. See Graham v. John Deere Co.*, 383 U.S. 1 (1966); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007); *see also* Pet. Reply 15–17 (arguing Patent Owner's position is inconsistent with *KSR* and *Leo*).

There is nothing in the *Graham* factors or in *KSR* that supports Patent Owner's narrow conception of the law. Instead, *KSR* directly rejects the notion that the prior art must solve the same problem as that facing the patentee: "[i]n

determining whether the subject matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls." *KSR*, 550 U.S. at 419. Instead, it is "error [to hold] that courts . . . should look only to the problem the patentee was trying to solve." *Id.* at 420. Further, the Federal Circuit in *Leo* did not carve out an exception to *KSR*; Patent Owner mischaracterizes the holding.

In Leo, the Federal Circuit observed that "an invention can often be the recognition of a problem." Leo, 726 F.3d at 1353 (citing Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 381 F.3d 1371, 1377 (Fed. Cir. 2004) ("There can of course arise situations wherein identification of the problem is itself the invention.")). The Federal Circuit never held, however, that recognition of the problem is a precursor to any obviousness showing. Instead, the court's observation is derived from the particular facts in *Leo*. Of particular importance, the Federal Circuit looked at the totality of the facts before it, and did not rely solely on the lack of recognition of the problem. This was important because Leo dealt with *unpredictable* chemical technologies. The background of the invention in the Leo patent explained how, at the time of the invention, no one recognized that storage stability was an issue. See Leo, 726 F.3d at 1349. When looking at the prior art, the Federal Circuit found significant evidence teaching away from the claimed invention, even though the general form behind the formulation was known. Id. at 1352–54, 1356. Given that there was significant teaching in the art away from the claimed invention, the Federal Circuit held that "a person of ordinary skill in the art would not have been motivated to try, let alone make, the claimed invention of the '013 patent." Id. at 1354-55. The Federal Circuit stated that it was not obvious to try, in this circumstance, because "[t]he problem was not

known, the possible approaches to solving the problem were not known or finite, and the solution was not predictable." *Id.* at 1356–57.

The facts in the current case are significantly different from those in *Leo*. The technology here, relative to that of *Leo*, is predictable; the specifications of the '835 patent and the prior art are written at a high, functional level, without presenting much, if any, technical explanation for how the particular software and hardware work. The background of the '835 patent does not paint a picture of a problem unrecognized and solved by the '835 patent. Further, the cited prior art references all recognize the issue of communications impairments, including providing advances such as extending devices for the deaf to the hard-of-hearing (Engelke '405), and extending text transcriptions to everybody when voice communications become difficult to understand (Mukherji). Accordingly, Patent Owner's argument that the prior art references did not acknowledge that HOH users need the ability to initiate a captioning service during ongoing telephone calls is not persuasive.

Furthermore, we are not convinced the problem faced by the inventors, even if such an inquiry were controlling, should be defined so narrowly as that proposed by Patent Owner. There is no indication in the '835 patent that such was a problem facing the inventors. *See, e.g.*, Ex. 1001, 2:32–58 (silent on the issue of initiation of captioning during a call).¹⁴ The '835 patent itself discusses that its system is directed to "systems to assist telephone communications by those persons who are deaf, hard of hearing, or otherwise have impaired hearing capability." *Id.* at 1:18–22. Thus, the problems faced by the inventors and addressed in the '835 patent are

¹⁴ We are not implying that the problem(s) faced by inventors must be listed explicitly in the written description; we merely point out that this particular problem is neither listed nor implied.

those problems faced when designing and using telephone communications devices, particularly assisted telephone communication devices. Although the patent specifically focuses on assisted devices for use by a particular subset of users of assisted telephone communications devices (e.g., deaf, hard of hearing), those problems faced by inventors in designing assisted telephone communications and telephone communications more generally may be analogous and may offer obvious improvements.

In view of the above, Patent Owner's argument that it would not have been obvious to combine the prior art references because they do not identify the same problem Patent Owner alleges the inventors faced is unpersuasive.

b. Liebermann

Patent Owner argues that a person of ordinary skill in the art "would never have looked to the Liebermann reference when attempting to design a system like that disclosed in the '835 Patent." PO Resp. 32; *see also id.* at 32–35. Patent Owner then goes on to disparage Mr. Liebermann's patent. *Id.* at 32–33. This line of argument is not compelling. Whatever faults may or may not have existed with the system and device in the Liebermann patent, or of any attempt to commercialize it, does not take away from his contribution to the art of the twoline system. In particular, that two-line system allows the hearing user to dial the assisted user directly, by having a separate dedicated line to the relay. Ex. 1008, 6:64–7:9.

Not only has Patent Owner failed to offer sufficient evidence to establish that an issued patent is non-enabled,¹⁵ the portions of Liebermann Patent Owner

¹⁵ Amgen Inc. v. Hoechst Marion Roussel, Inc., 314 F.3d 1313, 1355 (Fed. Cir. 2008) ("a presumption arises that both the claimed and unclaimed disclosures in a prior art patent are enabled" and holding "[the patent owner] bore the burden of proving the nonenablement of [the prior art]").

criticizes are not germane to the combination proposed by Petitioner. A proposed combination of references is not limited to a bodily incorporation of the features of one reference into another. In re Keller, 642 F.2d 413, 425 (CCPA 1981) ("The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference"). Thus, the proposed combination need not include those aspects of Liebermann irrelevant to the proposed combination. For example, Patent Owner points to Liebermann's disclosure of recognizing signing gestures and translating them into text and speech as unworkable. PO Resp. 33–34. The image capture and translation is not relevant in Petitioner's ground and, as such, Patent Owner's argument of bodily incorporation is unpersuasive. See In re Kuhle, 526 F.2d 553 (CCPA 1975) (omission of an unnecessary feature may be obvious if the only result is the removal of that feature); In re Nievelt, 482 F.2d 965, 968 (CCPA 1973) ("Combining the *teachings* of references does not involve an ability to combine their specific structures."). Petitioner cites to Liebermann for the manner in which the call is set up and run between the hearing user, the assisted user, and the relay (a two-line arrangement). Pet. 31–36. There is no indication that the Petition seeks to utilize the teachings of Liebermann relating to the image translation in its ground, and in fact, Petitioner's ground implicitly does not rely on this functionality because Petitioner cites to Engelke '405 for the notion of simultaneous voice and text, obviating the need for the sign language image translation.¹⁶ In either event, there is no evidence that such features were

¹⁶ We do not understand Petitioner's ground to *rely* on the removal of the signing feature; we merely point out that it is not necessary for the combination. The record provides ample evidence that video signing was known to occur in relay services (albeit by video rather than coded representations of movements). *See*, *e.g.*, Ex. 2007, 1 (noting Video Relay Service is reimbursed by the Telephone

nonenabled and, thus, we are not persuaded by Patent Owner's argument that a person of ordinary skill in the art would not look to Liebermann.

Petitioner has shown that Liebermann teaches a two-line voice-to-text service for use by deaf users. We are not persuaded by Patent Owner's arguments that a person of ordinary skill in the art would not have considered this reference.

c. Reasons for Combining Teachings of Liebermann and Engelke '405

Patent Owner argues that there is no reason to combine the teachings of Liebermann and Engelke '405. PO Resp. 35–39. Patent Owner argues that Petitioner's conclusion that it would have been obvious to utilize the teachings of Engelke '405 to cater to the particular impairments of the user is "flatly wrong." *Id.* at 36. Patent Owner then attacks Mr. Liebermann's invention (rather than the scope of its disclosure) and asserts that the industry did not address the needs of hard of hearing users distinct from those of deaf users. *Id.* Engelke '405, however, recognized that need prior to the '835 patent: "[w]hile the TDD communications system has a constituency within the deaf community, it is not widely used by persons who are deficient in hearing capability, but would not describe themselves as deaf." Ex. 1005, 2:9–27. Accordingly, Engelke '405 shows that the needs of hard of hearing users were acknowledged in the prior art, separate from those of deaf users. Further, this disclosure also shows motivation to modify the capabilities of those devices used by deaf users so that they could be used by hard of hearing users, in order to service that market.

Patent Owner next argues that "Liebermann does not disclose a two-line configuration," an argument we have found already to be unpersuasive. PO Resp. 36–37. Patent Owner then argues that "a POSA would not, at that time, have had

Relay Service Fund).

reason to provide 'any combination of voice and/or text' to a user." *Id.* at 37. As we found above, however, Engelke '405 provides sufficient reasoning for providing a combination of voice and/or text – to provide for the recognized needs of deaf and hard of hearing individuals.¹⁷ Ex. 1005, 2:9–27, 5:47–6:10. Patent Owner then goes on to argue which commercial devices and services were or were not available at some point in time, PO Resp. 37–38, but these arguments are not directed to the prior art at issue.

Patent Owner then argues that Liebermann's system focused on deaf individuals, so there was no reason to add features for hard of hearing users. *Id.* at 38. As we just explained, however, Engelke '405 provides evidence that there was a desire in the art to expand devices for the deaf to the hard of hearing. Patent Owner lastly argues that the combination of Liebermann and Engelke '405 "would have resulted in an unworkable system." *Id.* at 38–39. The argument made by Patent Owner, however, presumes bodily incorporation (and also repeats the same unpersuasive arguments regarding Liebermann's two-line configuration).

In view of the above, Patent Owner's arguments that Petitioner has not shown sufficient reasoning for combining the teachings of Liebermann and Engelke '405 are unpersuasive.

d. Principle of Operation of Liebermann

Patent Owner argues that the Liebermann/Engelke '405 combination would have changed the principle of operation of Liebermann. PO Resp. 39–41. Patent Owner first argues that "Liebermann's system is <u>incompatible</u> with revoicing technology" and that Liebermann's party call is not a two-line configuration. PO

¹⁷ For example, hard of hearing users would use voice and text, deaf and speaking users would use text and voice carry over, and deaf and not speaking users would use just text.

Resp. 40. Given that revoicing is not a limitation in the claims, and we have found Liebermann to describe a two-line configuration, this argument is unpersuasive.

e. Mukherji

Patent Owner argues that a person of ordinary skill in the art would not have looked to Mukherji. PO Resp. 41–44. Patent Owner argues that Mukherji does not solve the particular problem allegedly faced by the inventors of the '835 patent. *Id.* at 41. Even if there were evidence that the inventors faced such a problem, which Patent Owner has failed to establish, the law states that the obviousness inquiry is not limited to only the problem facing the inventors. *KSR*, 550 U.S. at 419 ("neither the particular motivation nor the avowed purpose of the patentee controls"); *id.* at 420 (it is error to "look only to the problem the patentee was trying to solve"). Any reason for combining teachings of the references may render the claims obvious. *Id.* at 419 ("What matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid"), *id.* at 420 ("any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed").

Mukherji describes a system to assist in telephone communications, just as in the '835 patent. *Compare* Ex. 1009, 1:7–9 (the "invention relates generally to voice communications and more particularly to . . . assisted voice communications") *with* Ex. 1001, 1:19–23 ("the invention relates to systems to assist telephone communications"). Mukherji does not address its applicability to any particular group of individuals. Liebermann is focused on the deaf (Ex. 1008, Abstract), whereas Engelke '405 and the '835 patent are focused on the deaf and hard of hearing (Ex. 1005, 2:9–27, 30–37; Ex. 1001, 1:19–23). But the fact that Mukherji does not limit by whom the voice-to-text services are used does not

preclude Mukherji from consideration by one of ordinary skill. That is because both Mukherji and the '835 patent are in the same fields of endeavor (assisted telephone communications, telecommunications) and that Mukherji offers a solution to a problem in those fields (as well as to the more narrow use-defined subset of that field: hard of hearing or deaf users using assisted telephone communications). Patent Owner's argument essentially asks a person of ordinary skill in the art to be blind to any advancement in his or her own industry unless the advancement is directed solely to the deaf and hard of hearing. This makes little sense; we decline to focus our inquiry so narrowly. *See KSR*, 550 U.S. at 420 (explaining that it is error to focus too narrowly on a particular problem when the subject matter addresses many problems).

Instead, we find evidence that supports Petitioner's assertion that one of ordinary skill in the art would have considered Mukherji and considered it obvious to utilize its on-demand voice-to-text features. Mukherji, in fields of telephone communications and in assisted telephone communications, teaches a solution to a problem in those fields by providing on-demand voice-to-text when voice communications become difficult, or when simply desired by a user. Ex. 1009, 6:65–7:11 ("if a condition requiring a text enhanced session has been detected," such as "upon a request from [either party]," voice-to-text transmission begins). We acknowledge Patent Owner's argument that it was degradation in communication quality of the transmission medium that seems to have originally motivated Mukherji's invention. *See, e.g., id.* at 1:21–24. The Supreme Court has held, however, that it is error to only consider prior art for those things it was designed to solve. *KSR*, 550 U.S. at 420 (it is error to "assum[e] that a person of ordinary skill attempting to solve a problem will be led only to those elements of prior art designed to solve the same problem"). A person of ordinary skill in the

art knew that hard of hearing persons would benefit from voice-to-text services. Ex. 1005, 2:9–27, 30–37. Mukherji provides a voice-to-text service. Ex. 1009, Abstract. Mukherji also teaches an improvement in voice-to-text service, to make it on-demand. *Id.* at 6:65–7:11. Faced with these teachings, we are persuaded that this is a case of "a technique . . . 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." *KSR*, 550 U.S. at 417.

Patent Owner's arguments repeat a theme of Petitioner allegedly failing to cite to a particular "motivation" that specifically instructs a person of ordinary skill in the art to add an on-demand feature to Liebermann/Engelke '405. *See, e.g.*, PO Resp. 42 ("none of the references recognize the need to provide selectively generated captions and thus could not motivate a POSA to develop the invention of claims 6 and 8"). This argument is unpersuasive because Mukherji does recognize the need to provide selectively generated captions, whether in the event of communications quality issues or simply because either user desired it. Ex. 1009, 6:65–7:11. That Mukherji does not explicitly state "and then go add this feature to devices intended for use by the deaf and hard of hearing" is not outcome determinative because the Supreme Court has held that requiring an explicit teaching, suggestion, or motivation in the prior art is inconsistent with the *Graham* analysis. *KSR*, 550 U.S. at 419.

Patent Owner then argues that Mukherji is not compatible with relay-based captioning services. PO Resp. 42–43. This argument presumes bodily incorporation and fails to persuade us that the proposed combination is beyond the level of ordinary skill, or otherwise unpredictable. The Liebermann/Engelke '405 combination has a relay and it is the teaching of on-demand voice-to-text that is being taken from Mukherji. *See, e.g.*, Pet. 28–29 (the proposed combination

"include[s] a feature to initiate text assistance upon a request by a user, as taught by *Mukherji*"). Patent Owner argues that Mukherji provides "a complete replacement for the relay-based captioning services," PO Resp. 42-43, but this argument also presumes bodily incorporation. Petitioner's ground does not propose to incorporate the entirety of Mukherji. See Pet. 31-37 (citing to Mukherji for the on-demand feature and as further evidence that voice recognition software was known). Patent Owner also argues that it would not make sense to look to Mukherji because Mukherji teaches using the voice-to-text feature when call quality drops and, when that happens, transcribing the voice locally. PO Resp. 43. Patent Owner ignores the disclosure in Mukherji that the voice-to-text feature could be used at any time, not just when call quality drops. Ex. 1009, 6:65–7:11; see also id. at 4:38–39 (service could also be used as a language translator). Further, the local user's device transcribes only the local user's voice; thus, even if call quality drops, Mukherji must still transmit data to provide voice-to-text of the other user. See id., Fig. 4 (tests to determine whether to establish text link); Fig. 5 (captures local user's voice for transcription). In conclusion, we find that Mukherji's teachings of on-demand voice-to-text are not constrained only to when call quality drops, and we determine that Patent Owner's argument is unpersuasive.

We do not find persuasive evidence suggesting the combination is unpredictable or anything other than routine skill. Mr. Ludwick's testimony is unpersuasive on this point because he bases it on his unsupported assertion that to use Mukherji's teaching of on-demand voice-to-text, one must use "specialized equipment and software" that is "complicated and not the type of equipment the average end-user of a computer . . . would have been able to set-up easily or operate without training." Ex. 2001 ¶¶ 90–91. The equipment in Mukherji, however, may be "a general purpose computing device such as a laptop or desktop

computer." Ex. 1009, 2:58–60. Mr. Ludwick does not provide any cogent factual or logical basis for his assertion, and it appears contradictory to Mukherji's disclosure. Accordingly, we accord his testimony little weight in this matter. On the other hand, we have the disclosure of Mukherji itself, which does not point to specialized equipment but rather a general-purpose computer. In addition, Petitioner has supported its ground with the testimony of Mr. Occhiogrosso, who explains that adding the on-demand feature is an extension of the existing on/off switch in Engelke '405 and simply makes manual a process that was previously automatic. Ex. 1010 ¶¶ 51–55; Ex. 1026 ¶¶ 44–45, 48.

In view of the above, Patent Owner's arguments that Petitioner has not shown that a person of ordinary skill in the art would have looked to Mukherji, or that the combination was unpredictable or beyond the level of ordinary skill in the art, are unpersuasive.

f. Reasoning for Combining the Teachings of Liebermann, Engelke '405, and Mukherji

Patent Owner presents several arguments as to why it believes Petitioner failed to set forth sufficient reasoning to combine these references. PO Resp. 44– 47. We address those arguments not addressed above.

In its Petition, Petitioner offers many reasons why it would have been obvious to combine the teachings of the references. *See* Pet. 22–31. In one portion of its discussion, Petitioner offers some scenarios in which adding Mukherji's ondemand voice-to-text service to the proposed combination would provide a benefit (namely, when conversing with a speaker of a foreign language or when in a business meeting). *See* Pet. 26–27. We agree with Patent Owner that the mere fact that adding Mukherji's on-demand feature may provide a benefit in these scenarios does not require us to conclude it would have been obvious to include that feature. *See* PO Resp. 44–46. Although the on-demand feature may be useful in such

scenarios, there is nothing about the scenario, in and of itself, that calls for the ondemand feature. As Patent Owner points out, those scenarios could just as easily be satisfied by having voice-to-text activated all of the time, without an on-demand feature. *Id*.

This is not fatal to Petitioner's ground, however, because Petitioner provides other reasons why it would have been obvious to combine the teachings of the references. As we discussed in the previous section, we are persuaded that Petitioner has shown sufficiently that this is a case of "a technique . . . 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." *KSR*, 550 U.S. at 417.

Patent Owner lastly argues that the "cost of the relay service and the additional number of call assistants needed would have <u>deterred</u> a person of ordinary skill in the art from combining the references." PO Resp. 46–47. Patent Owner continues that Mukherji "would lead the POSA away from text transcription at a relay." *Id.* Patent Owner's argument is essentially that technology advances teach away from prior technology; it is not compelling. Patent Owner points to no discussion in Mukherji that teaches away from relay services and we find that Mukherji does not teach away. *See In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004) (prior art does not teach away from claimed subject matter merely by disclosing a different solution to a similar problem unless the prior art also criticizes, discredits, or otherwise discourages the solution claimed).

As to Patent Owner's "cost" theory, Engelke '405 teaches a relay service, as does Liebermann, and Mukherji does not teach away from relay services. Further, although Liebermann states that traditional devices for the deaf, using humanstaffed relays, are "relatively slow," Liebermann does not teach away from these

services but rather provides an alternative and different service. It is not surprising that an inventor would tout his invention over the prior art; such statements, without more, do not teach away. See In re Gurley, 27 F.3d 551, 553 (Fed. Cir. 1994) ("A known or obvious [thing] does not become patentable simply because it has been described as somewhat inferior to some other product for the same use."); Baxter Int'l, Inc. v. McGaw, Inc., 149 F.3d 1321, 1328 (Fed. Cir. 1998) (finding no teaching away where nothing in the prior art device suggested that the claimed invention was unlikely to work). We find that Liebermann does not teach away from human-staffed relays because Liebermann merely asserts that such solutions are inferior to his own solution and does not suggest such solutions are unlikely to work. Likewise, the costs of running a relay service versus running a softwarebased voice-to-text service may be a consideration of one of ordinary skill in the art, but we have insufficient evidence here to conclude that one of ordinary skill in the art, looking at problems in telephone communications and assisted telephone communications, would not consider relay services because of costs. See Medichem, S.A. v. Rolabo, S.L., 437 F.3d 1157, 1165 (Fed. Cir. 2006) ("a given course of action often has simultaneous advantages and disadvantages, and this does not necessarily obviate motivation to combine."); Winner Int'l Royalty Corp. v. Wang, 202 F.3d 1340, 1349 n.8 (Fed. Cir. 2000) ("The fact that the motivating benefit comes at the expense of another benefit, however, should not nullify its use as a basis to modify the disclosure of one reference with the teachings of another. Instead, the benefits, both lost and gained, should be weighed against one another."). For example, one mitigating factor is that the government reimburses at least some portion of the costs for relay services; we have no evidence that a software-only based service would qualify for such funds. See Ex. 2007 (noting

these show reimbursements for relay services). Accordingly, we do not find the prior art to teach away from Petitioner's proposed combination.

g. Conclusion Regarding Reasons for Combination

Reviewing the arguments in the briefs and the evidence cited therein, we determine that Petitioner has shown, by a preponderance of the evidence, reasons explaining why a person of ordinary skill in the art would have considered it obvious to combine the references in a manner that meets each limitation of the claims. Before making our ultimate determination on the obviousness question, we must first turn to the evidence of secondary considerations.

6. Secondary Considerations

Patent Owner offers arguments directed to evidence of secondary considerations. PO Resp. 47–60. Evidence of secondary considerations "may often establish that an invention appearing to have been obvious in light of the prior art was not." Mintz v. Dietz & Watson, Inc., 679 F.3d 1372, 1378 (Fed. Cir. 2012). Evidence of nonobviousness must be commensurate in scope with the claimed invention, however. *In re Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011) (citing In re Tiffin, 448 F.2d 791, 792 (CCPA 1971)); In re Hiniker Co., 150 F.3d 1362, 1369 (Fed. Cir. 1998). In particular, to be accorded substantial weight, there must be a *nexus* between the merits of the claimed invention and the evidence of secondary considerations. In re GPAC Inc., 57 F.3d 1573, 1580 (Fed. Cir. 1995). "Nexus" is a legally and factually sufficient connection between the objective evidence and the claimed invention, such that the objective evidence should be considered in determining nonobviousness. Demaco Corp. v. F. Von Langsdorff Licensing Ltd., 851 F.2d 1387, 1392 (Fed. Cir. 1988). The burden of showing that there is a nexus lies with the Patent Owner. Id.; see In re Paulsen, 30 F.3d 1475, 1482 (Fed. Cir. 1994).

Although proving nexus is critical to Patent Owner's case, Patent Owner does not discuss nexus in its analysis. Patent Owner makes some nexus-like arguments, but these arguments fail to provide sufficient indication of a nexus. We will discuss first each argument and then discuss the evidence of secondary considerations as a whole.

a. Simultaneous Voice and Text

Patent Owner argues that simultaneous voice and text was a "critical breakthrough in telecommunication for the HOH," allegedly providing commercial success and fulfilling a long-felt need in the art. PO Resp. 49–52. This line of reasoning fails to be persuasive because no claim element requires simultaneous voice and text (even assuming that "simultaneous" has some definite meaning in this context). Ormco Corp. v. Align Tech., Inc., 463 F.3d 1299, 1312-13 (Fed. Cir. 2006) (finding uncompelling secondary evidence directed to unclaimed features). Further, even if it were claimed, Patent Owner fails to address the fact that all three prior art references disclose this feature. See, e.g., Ex. 1008, 7:5-9 (line simultaneously transmitting voice and data, i.e., text), Ex. 1005, Fig. 4 (a line connecting assisted user to relay using "TEXT AND VOICE SIMULTANEOUSLY"), Ex. 1009, Fig. 6 (showing output of both text 164 and speech 170 nearly simultaneously). Our reviewing court has held that "if the feature that creates the commercial success was known in the prior art, the success is not pertinent." Ormco, 463 F.3d at 1312. If Patent Owner's argument is that its product is somehow "more simultaneous" that what is disclosed in these references, we are not apprised of any factual basis for such a conclusion. Instead, much of Patent Owner's analysis and the evidence cited therein consists of comparing its commercial product to what allegedly was available on the market at some point in time. See PO Resp. 49–52. This analysis fails to establish any

difference in being "more simultaneous" than the prior art. In conclusion, we determine that the notion of simultaneous voice and text is not claimed, was disclosed previously in the prior art, and is not persuasive to show evidence of secondary considerations.

b. Two-Line Captioning

Patent Owner argues that "selectable two-line captioned telephone service, however, was a pivotal innovation in telecommunications for the HOH, for the first time allowing the HOH to receive incoming calls that were not dialed through a relay and to have absolute control over when captioning was initiated." PO Resp. 52–55. Patent Owner characterizes this feature as addressing "many long-felt needs, resulting in praise in the industry and overwhelming success of the products and services embodying the invention." *Id.* at 53.

The ability to have direct incoming calls and the ability to have "absolute control" over when a voice-to-text service was initiated were, individually, known in the art. *See Ormco*, 463 F.3d at 1312. Liebermann's two-line configuration allowed an assisted user to receive incoming calls that were not dialed through a relay. Ex. 1008, 6:64–65 ("The normally hearing person who calls a deaf person dials the deaf person's phone number"). ¹⁸ Mukherji's on-demand voice-to-text feature allowed users to have control over when captioning was initiated. Ex. 1009, 6:65–7:11 ("if a condition requiring a text enhanced session has been detected," such as "upon a request from [either party]," voice-to-text transmission begins).

¹⁸ See also Ex. 1021, 30:37–39 (U.S. Patent No. 6,181,736 B1 to McLaughlin) ("An object of the invention is to allow a hearing/speaking person to call the phone number of a deaf and/or speech impaired person directly.") (also cited in a prior art challenge in IPR2013-00542, -543, -544, and -550).

We recognize that Petitioner has shown that the two-line configuration and the on-demand voice-to-text features¹⁹ were known in the art but not in a single device (rather, Petitioner has set forth factually supported reasons for why it would have been obvious for these features to be together in the proposed combination). We will take this into consideration when weighing all of the evidence of obviousness against the evidence of nonobviousness.

c. Allegations of Commercial Success

We have reviewed Patent Owner's arguments regarding alleged commercial success and the evidence cited therein. PO Resp. 55–59. Patent Owner characterizes its technology as "near simultaneous voice and revoiced text and selectable two-line captioned telephone service." *Id.* at 55. As we discussed above, Patent Owner has not claimed near simultaneous voice or revoiced text; commercial success on these bases would do little to show the nonobviousness of the claimed invention. *Ormco*, 463 F.3d at 1312–13. Accordingly, Patent Owner's arguments and evidence directed to these features are unpersuasive.

Regarding selectable service and two-line service, we have already discussed how these technologies were individually known the prior art before Patent Owner's invention. We thus review Patent Owner's evidence to weigh Patent Owner's evidence of nonobviousness of this combination against Petitioner's evidence of obviousness of this combination. Patent Owner's evidence for secondary considerations is based on the alleged success of a service it offers called CapTel, which it alleges had commercial success between 2008 and 2013. PO Resp. 55 (discussing the "tremendous commercial success of Patent Owner's CapTel® service"); *id.* at 57 (showing a graph of minutes used between 2008 and

¹⁹ These features map to the timing element of the control limitation.

2013). Thus, we first review the CapTel service to determine its relationship to the claimed invention.

(1) CapTel

Patent Owner relies on the testimony of its declarant, Mr. Ludwick, for "establishing that the CapTel® service and/or phones embody the limitations of claims 6 and 8." PO Resp. 59–60. We have reviewed Mr. Ludwick's testimony and find it unpersuasive.

First, Mr. Ludwick's testimony is lacking because his conclusions are based on personal observations, without sufficient supporting facts or data. *See In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1368 (Fed. Cir. 2004) ("[T]he Board is entitled to weigh the declaration and conclude that the lack of factual corroboration warrants discounting the opinions expressed in the declarations."); *see also* Fed. R. Evid. 702 (providing one may testify in the form of an opinion if the testimony is based on sufficient facts or data); 37 C.F.R. § 42.65 ("testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight"). For example, the CapTel phones were operated by what appears to be a significant number of users and operators, but no user or operator manuals, or any other documentation, have been provided or discussed by Mr. Ludwick. Accordingly, we afford Mr. Ludwick's testimony little probative value. Notwithstanding, Mr. Ludwick's testimony is deficient on its own merits.

Mr. Ludwick acknowledges that some features of the phones have changed over time but argues that "the claimed features . . . have not been changed over the more than ten years that captioned telephone service has been available." Ex. 2004 ¶¶ 52–53. Mr. Ludwick's rote dismissal of these modifications fails to assure us that the alleged success of the CapTel service is not related to these features, which appear to affect usability and thus desirability. *See, e.g., id.* ¶ 52 (discussing, e.g.,

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features such as a large screen allowing more text to be displayed). This also shows that Mr. Ludwick was in possession of some amount of evidence showing which features various phone models had, and when, but that this information was not provided.

In addition, Mr. Ludwick's testimony is based on an observation of a facility at what appears to be a relatively recent point in time. See id. ¶ 54 (Mr. Ludwick testifies he visited a facility but does not discuss when). Yet Mr. Ludwick alleges that the features of the CapTel service "always involved performance" of the claimed steps, an observation impossible unless he had knowledge of the entire timeframe (or at least a representative sample). Id. ¶ 55. Although Mr. Ludwick appears to have been familiar with some CapTel-branded device during "the early 2000s," id. ¶ 44, it is not clear which features this device had, and Mr. Ludwick acknowledges that not all CapTel devices have features alleged to correspond to claim elements, *id.* ¶ 54 (excluding the "CapTel model 100" from his analysis). Mr. Ludwick does not testify as to the features of the CapTel models as of 2008, which is the first year of the graph Mr. Ludwick provides to show the usage of CapTel (or services like it), or at any other point(s) in time. See id. ¶ 48. In conjunction with the lack of evidence as to which phone models and features were utilized at which times, this also leads us to give little weight to his observation that "the claimed features . . . have not been changed" or that CapTel phones "always involved performance of this claimed method."

Mr. Ludwick's discussion of how the CapTel service "always involved performance" (*id.* \P 55) of the claimed method are likewise lacking in substance. Perhaps most illustrative is Mr. Ludwick's testimony on the on-demand aspect of the captioning service (i.e., the timing element of the control limitation). With respect to the control limitation, Mr. Ludwick testifies:

I personally observed that the CapTel Service meets this element to the extent the CapTel Phones are operated in two- line mode, and the assisted user actuates the "captioning" button present on the CapTel Phones. I further confirmed this from my personal knowledge of the CapTel Service and my observations of the CapTel Phones. The CapTel Service has always involved performance of the claimed method to the extent the commercially-sold CapTel Phones are operated in two-line mode.

Ex. 2004 ¶ 55.

Upon careful review of his testimony, we observe that Mr. Ludwick's testimony does not actually address the timing element. He simply states that "the assisted user actuates the 'captioning' button present on the CapTel Phones." No discussion is made of *when* the button is pressed. Mr. Ludwick also couches his testimony as "to the extent the commercially-sold CapTel Phones are operated in two-line mode." *Id.* This testimony addresses the context element but not the timing element of the control limitation. Petitioner has shown that the two-line mode was known in the art, via Liebermann.²⁰ This leads us to find that Patent Owner has set forth insufficient evidence that the CapTel service includes, during any particular timeframe, the timing element of the control limitation of both challenged claims, i.e., the feature that allows the voice-to-text service to be on-demand.

Patent Owner does not rely on its declarant Ms. Battat for establishing that this feature was available on CapTel phones, but Ms. Battat does testify that "all versions of the CapTel phone since the Model 200 have included an on-off control allowing an end user to enable and disable the captioning service on-the-fly." Ex. 2003 ¶ 23. Ms. Battat, like Mr. Ludwick, does not provide sufficient evidence in support of this assertion. Similarly, we also are left without explanation as to the

²⁰ See also n.18, noting Ex. 1021 also describes this feature.

usage of this feature, such as when it was available, whether it was used, or how it was facilitated. Ms. Battat provides one quotation of a statement allegedly made by a CapTel user that appears to indicate that that particular user, in 2002, had a CapTel phone that allowed on-demand captioning. *Id.* ¶ 55. This evidence is problematic because it is unclear how representative this one testimonial is of CapTel phones. For example, it is unclear how many CapTel phone models had this feature, how many users had this feature enabled, and the extent of the feature's use. Accordingly, this testimony also fails to persuade us that the CapTel service includes the timing element of the control limitation, or that any potential commercial success could be attributed to this feature.

In view of the above, we find that the proffered evidence relating to the CapTel service and products fail to establish a nexus between the claimed invention and the alleged commercial success. Even if we did find some small relationship between the two, the evidence of commercial success is not convincing, which we turn to next.

(2) Alleged Success of CapTel

Patent Owner argues that "[f]rom the time that CapTel service became available, its minutes of use have steadily climbed, in comparison to and at the expense of other forms of TRS service." PO Resp. 56. Patent Owner offers a graph showing "traditional text-only relay service ('Interstate TRS' and 'All IP') versus caption telephone service ('Interstate CapTel VCO' and 'All IP CTS')," reproduced below:



PO Resp. 56-57.

The figure above shows the annual minutes of usage for interstate²¹ relay and interstate captioned telephone services from 2008 to 2013.²² The figure depicts a trend where the relay minutes decline in contrast to the increase of the captioned telephone minutes, such as to depict a reversal in which service is more used between 2008 and 2013. Patent Owner's declarant, Mr. Ludwick, testifies that these data were gathered from the evidence provided in Exhibit 2007. Ex. $2004 \P 47-48$.

Missing here is a convincing analysis of how the claimed features are tied to this alleged success. Patent Owner and its declarant state that "Interstate CapTel VCO" and "All IP CTS," in this graph and in the underlying data from which this graph appears to have been derived (Ex. 2007), should be credited as directed to the claimed invention, but offer no evidence to support this. Initially, we note that

²¹ Patent Owner's declarant, Mr. Ludwick, testifies that the data provided is of interstate usage but "it is [his] understanding" that the overall trend holds for all use (e.g., intrastate). Ex. 2004 \P 51.

²² The Interstate TRS Fund is set up by the Federal Communications Commission (FCC) to reimburse providers of TRS under the Americans with Disabilities Act. *See generally* 47 U.S.C. § 225 *et seq.* Each carrier is required to provide TRS service, which is to be provided at no additional cost. Carriers are reimbursed by the states (for intrastate calls) or by the TRS fund (for interstate calls, which includes internet (IP) calls).

these data are an amalgamation of data from several providers; we are left to guess what features each provider offers, or what the relative contributions to minutes used each provider makes. *See, e.g., id.* at 1 (noting the "# of Providers Paid During Month" row). Thus, we cannot know which features or which providers may or may not be driving the growth, to the extent the growth is caused by any feature or provider.

Next, Patent Owner seeks to credit VCO technology for its commercial success, but Voice Carry Over (VCO) service is a prior technology, described, for example, in Engelke '405. Ex. 1005, 5:64-6:5; see also PO Resp. 53-54 (arguing that VCO is unsatisfactory compared to its invention). Thus, we are not persuaded that success in VCO is relevant. The VCO minutes represent the bulk of the contribution to total "CTS" minutes (i.e., the height of the "CTS" bars in the prior graph). For example, in the January 2008 "TRS FUND PERFORMANCE STATUS REPORT"²³ provided by Patent Owner, the VCO minutes used were 656,293, versus 97,411 of "All IP CTS." Ex. 2007, 1. In the April 2008 TRS Report, VCO minutes were 561,405 and All IP CTS minutes had fallen to 31,307. Id. at 4. IP CTS did not overtake VCO until August 2010. Id. at 32. Reviewing the data, we see that IP CTS did not appear to have much relative success compared to VCO until 2011, after which time the IP CTS minutes grow rapidly. See id. at 32–47. There seems to be some indication that this growth was not expected, as the TRS Reports were not predicting such growth (see id.), and, in fact, the TRS fund rapidly depleted. See, e.g., id. at 47. The growth however, quickly reversed in April 2013, leading to a one-month fall in minutes of approximately 60%. Id. at 64.

²³ These reports will be hereinafter referred as: "[month] [year] TRS Report."

In view of a long period of limited growth relative to prior technology, followed by a rapid increase and then a rapid decrease, it is not apparent how one could ascribe commercial success to technical merits of IP CTS, let alone to Patent Owner's invention (or particularly to the context element of the control limitation). The issue date of the '835 patent is 2003 (Ex. 1001 at (45) and the data Patent Owner provides begin in 2008 (PO Resp. 57; Ex. 2007). Patent Owner does not explain or acknowledge the approximately eight year gap between the '835 patent's issue and late 2011, when "IP CTS" could be said to have success relative to the existing technology.²⁴ Patent Owner notes that federal funds were allowed for IP CTS in 2007 (PO Resp. 57), but making the service essentially free did not appear to have any effect on usage, at least until late 2011 or 2012. The long delay between patent issue and alleged success, and even between federal subsidy and alleged success, is a factor weighing against Patent Owner's argument. Further, to the extent there was a large rise in usage, there was an even more rapid fall in usage. Ex. 2007, 64. Such a bubble seems more likely explained by marketing practices, not technological features.²⁵ See Pentec, Inc. v. Graphic Controls Corp., 776 F.2d 309, 315–16 (Fed. Cir. 1985) (affirming a district court's finding that the promotional campaign contributed to the commercial success over any technical merit).

²⁴ In addition, we note we found previously that Patent Owner has not shown how all features of the claims map to "IP CTS" or "CapTel."

²⁵ Indeed, an FCC inquiry into this sudden rise in IP CTS minutes found the cause to have been "provider [marketing and sales] practices that appeared to be directly causing the sharp increase in IP CTS usage." FCC-13-118 ¶ 8 (Aug. 26, 2013) (Ex. 3001); *see also id.* ¶¶ 6, 8, 93 (indicating that IP CTS phones at the time automatically connected to the relay); Ex. 2008, 1 (citing this document). Although highly relevant and material to this proceeding, our Decision herein makes note of this document but does not rely on it.

In view of the above, the evidence Patent Owner offers is insufficient to establish commercial success, let alone a nexus between the merits of the claimed invention and any alleged commercial success.

d. Allegations of Long-Felt But Unmet Need

The secondary consideration of long-felt need is addressed by evidence that tends to show that the prior art had a recognized need for a solution to the problem and that others had tried, and failed, to find a solution to that problem. *Al-Site Corp. v. VSI Int'1, Inc.*, 174 F.3d 1308, 1325 (Fed. Cir. 1999); *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1540 (Fed. Cir. 1983). Patent Owner argues a long-felt need for simultaneous voice and text, PO Resp. 49–52, but that problem already had solutions, as we discussed above in Section II.E.6.a. *See Ormco*, 463 F.3d at 1312. Further, Patent Owner's analysis is with respect to its commercial product in comparison to other commercial products in general, not between its claimed invention and the prior art. Also, as we found above in Section II.E.6.c.(1), Patent Owner has failed to show sufficiently that the commercial product practiced the claimed invention. Thus, Patent Owner's evidence of non-obviousness for long-felt need for simultaneous voice and text is very weak.

Patent Owner also alleges its claimed invention meets long-felt needs with respect to the on-demand and two-line features in combination. PO Resp. 52–55. Again, as we found above, Patent Owner fails to establish that the commercial product had these features. In addition, Patent Owner does not cite to evidence that others had recognized and tried but failed to find a solution to providing on-demand and two lines at the same time. The only evidence Patent Owner provides is the declarations of Mr. Ludwick and Ms. Battat in support of its position, but their testimony is conclusory and backed by insufficient evidence. *Id.* at 52–53

(citing Ex. 2004 ¶¶ 34–43, Ex. 2003 ¶¶ 20–21, 40–48, 51–57). We address the testimony of each in turn.

(1)Ludwick

Mr. Ludwick offers as support for his testimony a letter from "counsel for Petitioners" that "asked that the FCC compel Patent Owner to license claims directed to the selectable captioning feature to Patent Owner's competitors" and that purportedly expressed "Petitioner's own belief that use of the control limitation of the claims . . . is advantageous feature for users, and . . . necessary for competitors to use in order to succeed in this market." Ex. 2004 ¶ 42 (citing Ex. 2008).

We have reviewed the letter of Mr. Nakahata and find that it does not support Mr. Ludwick's assertions of long-felt need (or any other aspect of secondary considerations). The letter was written as a consequence of a FCC investigation into a "Misuse of . . . Captioned Telephone Service" by providers, including Petitioner and Patent Owner. Ex. 2008 1, n.1; see also supra n.25 (providing a citation to one document generated during the FCC's rulemaking in response to captioned telephone misuse). The letter discusses certain rules that were promulgated by the FCC in an attempt to curb that misuse, including a requirement that captioned telephones must be set such that captions are off by default. Id. Mr. Nakahata states that his firm spoke to an individual at the FCC about a feature allowing captions to be turned "on and off during a call," after the FCC's prior default-off rule was vacated in court. Id. Contrary to Mr. Ludwick's testimony, Mr. Nakahata did not ask "that the FCC compel Patent Owner to license claims." Ex. 2004 ¶ 42. Instead, Mr. Nakahata noted that Patent Owner had "invalid" patents covering such a feature and that Patent Owner was "exclud[ing] other providers from providing" such a function. Id. at 2. In addition, we do not

place much weight on Mr. Nakahata's words lobbying to the FCC the merits of turning captions on and off. These words fail to establish that this feature meets a long-felt but unmet need.

We find that Mr. Ludwick's testimony and supporting evidence are insufficient to establish a long-felt need, or any other notion of secondary considerations.

(2)Battat

Ms. Battat's testimony is directed largely to alleged long-felt needs of twoline service. Ex. 2003 ¶¶ 40–48. This testimony discusses the advantages of not having a relay intervening on the line and allowing users to call the assisted user directly. *See id.* These features do not solve a long-felt *but unmet* need as these features were known in the art, as we explained above.

Ms. Battat also testifies regarding alleged long-felt needs of the on-demand aspect of the claims, but provides as evidence only a single statement from an individual who allegedly stated that "I can engage captioning only when I need it, merely by pushing the Caption button on the phone." *Id.* ¶ 55. Interestingly, this person does not use the service because she is hard-of-hearing but rather for assistance with "people who provide customer service support [who] have accents." *Id.* This statement by one individual does not offer sufficient evidence of a long-felt but unmet need solved by captioned telephone.

Ms. Battat lastly alleges that Mr. Engelke and Mr. Colwell, inventors of the '835 patent, received awards from Telecommunications for the Deaf, Inc. and Hearing Loss Association of America, but offers no evidence of such awards, the conditions on which they were awarded, or any other context to evaluate what probative value they may have.²⁶ Further, Ms. Battat seems to imply that the

²⁶ Ms. Battat embeds a hyperlink in her declaration allegedly to link to the first

award was provided for the two-line feature, a feature which we have found was already in the prior art.

e. Conclusion for Secondary Considerations and Obviousness

Reviewing the above, we have determined that Patent Owner has not sufficiently shown nexus between the claimed invention and the evidence of secondary considerations. We have also determined that Patent Owner has not shown commercial success or long-felt need. In our analysis, we have considered many factors, none of which are necessarily dispositive, necessary, or sufficient; it is the totality of the evidence that is considered.

Reviewing this evidence before us, as a whole, compared to the evidence of obviousness provided by Petitioner, we conclude that the evidence of obviousness outweighs the evidence of nonobviousness. The evidence of obviousness shows an obvious solution in the field (on-demand voice-to-text), whereas the evidence of nonobviousness fails to reasonably establish any link between sales and the technical merits of the claimed invention. The evidence also fails to reasonably establish any link between the claimed invention and a long-felt but unmet need. The only evidence of relative success of "IP CTS," to the extent it could even be mapped to claimed features, only comes many years after the technology was available, and even that success was suddenly and rapidly reversed, hinting of market causes, not technological ones. The evidence of record, both of obviousness and nonobviousness, points to obviousness.

award, but even if such an incorporation by reference were permissible, the link is broken.

7. Conclusion

We determine that Petitioner has established, by a preponderance of the evidence, that the subject matter of claims 6 and 8 would have been obvious to a person of ordinary skill at the time of invention.

III.ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 6 and 8 of the '835 patent are unpatentable as obvious;

FURTHER ORDERED that this is a Final Written Decision under 35 U.S.C. § 318(a) and that parties to the proceeding seeking judicial review of the decision under 35 U.S.C. § 319 must comply with the notice and service requirements of 37 C.F.R. § 90.2.

Petitioner:

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Case: 19-2003

Document: 46-1 Page: 183 Filed: 04/08/2020

Trials@uspto.gov Tel: 571-272-7822 Paper 40 Entered: May 19, 2016

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CAPTIONCALL, L.L.C., Petitioner,

v.

ULTRATEC, INC., Patent Owner.

Case IPR2014-00780 Patent 6,603,835 B2

Before WILLIAM V. SAINDON, BARBARA A. BENOIT, and LYNNE E. PETTIGREW, *Administrative Patent Judges*.

SAINDON, Administrative Patent Judge.

DECISION Denying Patent Owner's Request for Rehearing 37 C.F.R. § 42.71

I. INTRODUCTION

In our Final Written Decision, we determined that Petitioner had shown, by a preponderance of the evidence, that claims 6 and 8 of U.S. Patent No. 6,603,835 B2 (Ex. 1001, "the '835 patent") were unpatentable in view of Liebermann,¹ Engelke '405,² and Mukherji.³ Paper 35 ("Final Dec." or "Final Decision"). Patent Owner requests a rehearing of the Final Decision. Paper 36 ("Req." or "Request"). Having considered Patent Owner's Request, we decline to modify our conclusion that Petitioner has shown claims 6 and 8 to be unpatentable.

A. Applicable Standard of Review

In an *inter partes* review, the petitioner has the burden of showing unpatentability by a preponderance of the evidence. 35 U.S.C. § 316(e). The standard of review for rehearing requests is set forth in 37 C.F.R. § 42.71(d), which states:

> The burden of showing a decision should be modified lies with the party challenging the decision. The request must specifically identify all matters the party believes the Board misapprehended or overlooked, and the place where each matter was previously addressed in a motion, an opposition, or a reply.

Based on the language of our Rule, it is clear that a request for rehearing is not intended as a vehicle simply to disagree with our outcome or to provide new arguments. Consistent with 37 C.F.R. § 42.71(d), a request

¹ U.S. Patent No. 5,982,853, issued Nov. 9, 1999 (Ex. 1008).

² U.S. Patent No. 5,724,405, issued Mar. 3, 1998 (Ex. 1005).

³ U.S. Patent No. 7,117,152 B1, filed June 30, 2000, issued Oct. 3, 2006 (Ex. 1009).

for rehearing must *cite* where the argument or evidence allegedly overlooked or misapprehended was *previously discussed* in one of the *parties' papers*.

B. Analysis

Patent Owner alleges that we: disregarded evidence concerning a person of ordinary skill in the art's view of Liebermann (Req. Reh'g 1–6); did not provide a rationale for modifying the references (*id.* at 6–9); and misapplied the law of obviousness by finding prior art elements individually in the prior art (*id.* at 9–11). With regard to evidence of secondary considerations, Patent Owner alleges we: misinterpreted certain data pertaining to "VCO" (*id.* at 11–13); misinterpreted certain data by attributing it to others (*id.* at 13–14); and disregarded the testimony of its declarant (*id.* at 14–15). We address these allegations in turn.

1. Arguments Regarding Evidence of Obviousness

In our Final Decision, we addressed Patent Owner's argument in its brief "that a person of ordinary skill in the art 'would never have looked to the Liebermann reference when attempting to design a system like that disclosed in the '835 Patent." Final Dec. 29 (addressing Patent Owner's arguments at pages 32–35). We discussed why Patent Owner's argument was unpersuasive, including because it merely disparaged Mr. Liebermann's work and failed to explain why the reference did not teach what Petitioner asserted it taught, and because it did not explain how the Liebermann reference was non-enabled. Final Dec. 29–31. We analyzed Liebermann's disclosure for what it taught to a person of ordinary skill in the art, based on the record before us, and made our decision on that basis. *Id*.

Patent Owner first argues that our citation to In re Kuhle, 536 F.2d 553 (CCPA 1975), "does not support disregarding Patent Owner's evidence" that Lieberman would be "unworkable." Req. 2–3. Patent Owner's argument was, essentially, that a feature of Liebermann not relied on by Petitioner in its asserted ground would not work as described in Liebermann's patent and therefore we must not consider any other features that Liebermann teaches. As we pointed out in our Final Decision, we considered Patent Owner's argument and evidence and found it lacking. See Final Dec. 29–30 (discussing Patent Owner's arguments from pages 32–35) of its Response). We considered, for example, the testimony of Mr. Ludwick cited by Patent Owner at pages 32–35. Final Dec. 29 (citing to pages 32–35, and discussing that we considered that Patent Owner's "argument is not compelling" and that it "failed to offer sufficient evidence to establish that an issued patent is non-enabled"). The evidence we referenced in our Final Decision is the testimony of Mr. Ludwick that "Liebermann's invention was universally perceived to be non-workable" and "was not taken seriously by anyone in the industry." Ex. 2001 ¶ 75 (cited in PO Resp. 32–35, in turn cited in Final Dec. 29). As we stated in our Final Decision, Patent Owner is simply disparaging Mr. Liebermann's work and "failed to offer sufficient evidence to establish that an issued patent is nonenabled." Final Dec. 29. Accordingly, we did not overlook Patent Owner's evidence.

In addition, we pointed out that the sign-recognition feature that Patent Owner was alleging was unworkable is not a component of Petitioner's proposed combination. *Id.* at 30. As we explained in our Final Decision, Patent Owner's argument presumed bodily incorporation and

failed to address persuasively the relevant teachings of the references. Id. at 30. For that reason, we cited Patent Owner to *Kuhle* and *In re Nievelt*, 482 F.2d 965, 968 (CCPA 1973). *Nievelt* stands for the premise that prior art should be considered for what it teaches, and Liebermann teaches a two-line configuration. Nievelt, 482 F.2d at 968 ("Combining the teachings of references does not involve an ability to combine their specific structures."). Although Liebermann also teaches a sign recognition feature, that feature is not relevant for the asserted ground; its absence or presence is of no matter because it is a separate idea from the two-line configuration, which is why we cited Kuhle. Kuhle, 526 F.2d 553 (CCPA 1975) (omission of an unnecessary feature may be obvious if the only result is the removal of that feature). Patent Owner argues that Petitioner should have the burden of establishing that the sign-recognition feature is separable, but Patent Owner never raised this issue in the trial and there is no presumption of bodily incorporation. Instead, as we explained in our Final Decision, Petitioner set forth sufficient evidence and reasoning why those features it proposes to combine would have been obvious to combine. See Final Dec. 25-40.

Patent Owner next makes similar arguments regarding our citation to *Nievelt*. Req. 3–4. These arguments are unpersuasive for the reasons expressed above; we considered Patent Owner's argument and evidence regarding the alleged unworkability of Liebermann and found them unpersuasive. *See* Final Dec. 29–31.

Patent Owner then argues that we did not consider the "totality of the prior art" and that we "considered only one isolated aspect of *Liebermann*." Req. 4–5. Patent Owner argues, along those lines, that the proposed combination "change[d] the principle of operation of Liebermann." *Id.* at 5–

6. Patent Owner does not cite to where it raised this principle of operation argument; it is new and was waived. Patent Owner does not cite to any evidence in the record that we did not consider that would support its argument, even if it had raised the issue timely. We note that Patent Owner did argue a different principle of operation theory, which we addressed. Final Dec. 32–33 (rejecting Patent Owner's argument that Liebermann's system was incompatible with revoicing technology). The remaining argument (Req. 4–5) is a reiteration of the arguments discussed above.

Patent Owner next argues that the claims require a "direct" connection and that the prior art "teaches captioning services intervening," i.e., does not teach a direct connection. Req. 6–9. Patent Owner's argument here is just a reiteration of its prior argument that the prior art teaches a party call rather than a direct connection, which we addressed at length in our Final Decision and found unpersuasive. *See* Final Dec. 17–20.

Patent Owner then argues that we found "the three constituent elements of the control limitation . . . individually," "but not their interrelationship." Req. 9–11. Patent Owner also re-argues that Liebermann does not disclose two lines. *Id.* at 10. Patent Owner then speculates that other proposed combinations of the art would have been obvious. *Id.* at 11. Patent Owner's arguments that the prior art does not teach the control limitation, or a reason why it would have been obvious to combine the teachings of the prior art to have a device that includes the control limitation, were addressed in our Final Decision at length. *See, e.g.*, Final Dec. 20–25 (discussing prior art's disclosure of the control limitation), 31–32 and 37–40 (discussing reasons to combine). Patent Owner's arguments regarding the two-line feature are addressed above. Patent Owner's speculation that there

are other obvious combinations of the prior art is irrelevant. What is at issue is whether Petitioner has demonstrated that it would have been obvious to combine the cited references *in the manner Petitioner proposed*; Patent Owner's arguments regarding other potentially obvious combinations of the prior art are beside the issue.

2. Arguments Regarding Evidence of Nonobviousness

In our Final Decision, we discussed the evidence of secondary considerations provided by Patent Owner. Final Dec. 40–54. Of the many items we considered, one related to data purporting to compare annual minutes of usage for "CTS" (captioned telephone service, allegedly embodying the claims) versus "Relay" (a technology not alleged to embody the claims). Id. at 47–51. We reviewed the evidence and arguments presented but were unconvinced that the "CTS" data presented sufficiently embodied the claims. In particular, Patent Owner failed to provide an explanation as to what constituted "CTS" in the data. Id. at 48-49 ("Missing here is a convincing analysis of how the claimed features are tied to this alleged success."). This alone was sufficient to find against Patent Owner. Nevertheless, we found that the data provided showed that Patent Owner had lumped several different types of technology into its "CTS" designation, including something called "CapTel VCO." Id. We noted, however, that VCO (voice carry over) is an old technology not embodying the invention. *Id.* at 49 (citing to Patent Owner's argument disparaging VCO). Accordingly, we concluded that "the evidence Patent Owner offers is insufficient to establish commercial success, let alone a nexus between the

merits of the claimed invention and any alleged commercial success." *Id.* at $51.^4$

Patent Owner argues that we substituted our own assumptions for the opinion of its declarant, Mr. Ludwick. Req. 12. Mr. Ludwick testified that "Interstate CTS VCO," "IP CTS," "Interstate CapTel VCO," and "All IP CTS" are "captioned telephone service." Ex. 2004 ¶¶ 47–48. We acknowledged this testimony in our Final Decision (Final Dec. 48, citing to these paragraphs), but found it unpersuasive. Notably, as we stated then, Mr. Ludwick provides no evidence to support his statements. When a declarant fails to provide sufficient explanation or evidence, we have discretion to afford such testimony little or no weight. 37 C.F.R. § 42.65(a). Patent Owner argues that we should credit his testimony anyway, because he is an expert (Req. 12), but our Rules specifically permit us to require evidence, even from experts. 37 C.F.R. § 42.65(a) ("*Expert testimony* that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.") (emphasis added).

Patent Owner then argues that evidence supporting its position purportedly exists in the record, but fails to show where arguments regarding such evidence were previously addressed in Patent Owner's papers. Req. 12–13; 37 C.F.R. § 42.71(d). We could not have misapprehended or overlooked arguments not made. Further, even if this information would have been before us, would have stood for the proposition Patent Owner alleges, and would have been persuasive, our discussion of the secondary

⁴ In addition, we note that we found insufficient evidence to find that "CTS" embodied the invention; we did not find affirmatively that "CTS," or any of the underlying items grouped as "CTS," did not embody the invention.

considerations, and of obviousness, is based on a host of facts, none of which are dispositive. Final Dec. 54 ("In our analysis, we have considered many factors, none of which are necessarily dispositive, necessary, or sufficient; it is the totality of the evidence that is considered.").

In our Final Decision, when reviewing the evidence of secondary considerations, we found that certain evidence pertaining to service usage were "an amalgamation of data from several providers" and thus it was not clear how to attribute this information to the claimed invention. Final Dec. 48–49. Patent Owner argues that we incorrectly assumed that the data presented represented multiple services, and that we should have understood that other companies license its technology and that it was "the only major" provider prior to 2011. Req. 13–14. Although Patent Owner points to various evidence in its request for rehearing, Patent Owner fails to identify where it made these arguments previously in its Patent Owner Response, but we do not see this argument in the cited portion, nor does Patent Owner explain in its request for rehearing that we missed such an argument.

We could not have misapprehended or overlooked arguments not made. Our decision was based on the facts before us; there is no reason to believe that, even if these other providers were licensees, that they used the exact same features as claimed. Further, even if this information would have been before us, would have stood for the proposition Patent Owner alleges, and would have been persuasive, our discussion of the secondary considerations, and of obviousness, is based on a host of facts, none of which are dispositive. Final Dec. 54 ("In our analysis, we have considered

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many factors, none of which are necessarily dispositive, necessary, or sufficient; it is the totality of the evidence that is considered.").

In our Final Decision, we considered the testimony of Patent Owner's declarant, Mr. Ludwick, in conjunction with Patent Owner's argument that the CapTel commercial service embodied the limitations of claims 6 and 8. Final Dec. 44–47. We analyzed his testimony in detail and made our findings and conclusions on the basis of many different factors. *See id.* Patent Owner argues that we should have found his testimony persuasive. Req. 14–15. Patent Owner does not cite to an argument it made that we overlooked or misapprehended. Patent Owner does not cite to testimony of Mr. Ludwick that it cited in its brief that we overlooked or misapprehended. Instead, Patent Owner simply disagrees with our Decision. We could not have misapprehended or overlooked arguments not made.

3. Request for Expanded Panel

Patent Owner suggests an expanded panel is warranted to decide the Request. Req. 1. The Board's procedures provide examples of reasons for expanding a panel, none of which apply here. PTAB SOP 1 at 3 (§ III.A). For example, an expanded panel may be appropriate when "serious questions have been raised about the continuing viability of an apparently applicable precedential decision of the Board, or a panel of the Board renders a decision that conflicts with a precedential decision of the Board or an authoritative decision of the Board's reviewing courts." *Id.* Patent Owner's Request does not show a conflict or other reason that weighs in favor of panel expansion. Even so, the panel informed the Chief Judge, who has authority to expand a panel, of Patent Owner's request, and the Chief Judge declined to expand the panel. *See* PTAB SOP 1 at 4 (§ III.C). ("The

Chief Judge will determine when an expanded panel is to be designated."); *see also Apple Inc. v. Rensselaer Polytechnic Inst.*, Case IPR2014-00319, slip op. at 2 n.1 (PTAB Dec. 12, 2014) (Paper 20) (indicating only the Chief Judge, acting on behalf of the Director, may act to expand a panel and panels do not authorize panel expansion).

C. Conclusion

Having reviewed Patent Owner's Request, we are not persuaded we misapprehended or overlooked any argument previously presented. Thus, we decline to modify our Decision.

II. ORDER

It is hereby ORDERED that Patent Owner's Request for Rehearing is *denied*.