

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CAPTIONCALL, L.L.C.,
Petitioner,

v.

ULTRATEC, INC.,
Patent Owner.

Case IPR2015-01358
Patent 7,006,604 B2

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

SAINDON, *Administrative Patent Judge*.

DECISION
Final Written Decision
37 C.F.R. § 42.73

I. INTRODUCTION

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

With respect to the grounds 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 not shown, by a preponderance of the evidence, that sole claim 1 of U.S. Patent No. 7,006,604 B2 (Ex. 1001, “the ’604 patent”) is unpatentable.

A. Procedural History

Petitioner filed a Petition (Paper 1, “Pet.”) requesting *inter partes* review of claim 1 of the ’604 patent. Patent Owner filed a Preliminary Response to the Petition. Paper 6 (“Prelim. Resp.”). Upon consideration of those papers, we instituted an *inter partes* review. Paper 7 (“Dec. on Inst.”). Patent Owner then filed a Response (Paper 43, “PO Resp.”), to which Petitioner filed a Reply (Paper 55, “Pet. Reply”). No oral argument was held, per request of the parties. Paper 74.

B. Related Matters

The Petition was filed concurrently with three other petitions challenging patents owned by Patent Owner: IPR2015-01355 (U.S. Patent 5,974,116), IPR2015-01357 (U.S. Patent 6,934,366), and IPR2015-01359 (U.S. Patent 6,493,426). Pet. 4. We instituted an *inter partes* review for each. The patents involved are related to a number of Patent Owner’s patents upon which Petitioner also has filed petitions, including IPR2013-00540–545, –549, and –550, IPR2014-00780, and IPR2015-00636 and –

637. *Id.*; Paper 5. We have issued Final Written Decisions in those proceedings.

The parties are involved in several lawsuits involving patents covering related subject matter: *Ultratec, Inc. v. Sorenson Communications, Inc.*, No. 13-CV-00346 (W.D. Wis.), *Ultratec, Inc. v. Sorenson Communications, Inc.*, No. 14-CV-00066 (W.D. Wis.), *Ultratec, Inc. v. Sorenson Communications, Inc.*, No. 14-CV-00847 (W.D. Wis.). Pet. 4; Paper 4.

C. The '604 Patent

The '604 patent is directed to a telephone relay system used as a personal interpreter. Ex. 1001, (54), 1:20–24. The system is best described by way of an example. A deaf person could take his or her personal interpreter (the size of a book) to a store to interact with hearing persons. *Id.* at 4:4–6, 4:44–50. When desiring to interact with a hearing person, the deaf person would activate the device, which would dial into a relay via a cellular telephone connection. *Id.* at 4:65–5:2. The deaf user would type into a small keyboard on the interpreter, and that text would be read out loud by a call assistant at the relay and transmitted to the hearing user via a speaker on the interpreter. *Id.* at 5:31–37.¹ The hearing user's voice would be captured by the interpreter and sent to the call assistant at the relay, who would then re-voice those words into a voice-to-text computer program trained to the call assistant's voice. *Id.* at 5:15–22; *see also id.* at 6:10–49 (describing how re-voicing works). The resulting text would be transmitted to the interpreter to be read by the deaf user. *Id.* at 5:25–28.

¹ Alternatively, if the deaf person can speak, they would speak and skip this step. *Id.* at 5:28–29.

The sole claim of the '604 patent essentially claims this process, but with a distinction. Claim 1 further requires that the voice of the hearing user that is sent to the relay for voice-to-text conversion is also subsequently transmitted back to the interpreter and reproduced by the interpreter. *Id.* at 10:29–37. In claim 1, the user is not a deaf user but rather an “assisted user,” opening the possibility that the user is hard-of-hearing or otherwise requires assistance. *Id.* at 10:14 (claiming “assisted user”); 3:49–53 (defining “assisted user”).

D. Exemplary Claim

Petitioner challenges the sole claims of the '604 patent, which is reproduced below:

1. A method of operating a relay system using a call assistant to facilitate communication between a hearing user and an assisted user using a single telephone connection connecting to a personal interpreter located in the presence of both the hearing and assisted users, the hearing user speaking words in voice, the method comprising the steps of
transmitting the voice of the hearing user when speaking over the single telephone connection to the ear of the call assistant;
the call assistant speaking in voice the same words that the call assistant hears spoken by the hearing user into a microphone connected to a digital computer;
the digital computer using voice recognition computer software trained to the voice of the call assistant to translate the words spoken by the call assistant into a digital text message stream containing the words spoken by the call assistant;

transmitting both the digital text message stream and the voice of the hearing user over the single telephone connection back to the personal interpreter of the assisted user;
displaying the digital text message stream by the personal interpreter within sight of the assisted person; and
transmitting the voice of the hearing user to the personal interpreter which reproduces that voice for the assisted user.

E. Prior Art & Asserted Grounds

Petitioner asserts that claim 1 of the '604 patent would have been obvious under 35 U.S.C. § 103 in view of Engelke '482² and Engelke '405.³ Petitioner also relies on the testimony of Mr. Benedict J. Occhiogrosso. Exs. 1012, 1043.

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 Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (holding that 37 C.F.R. § 42.100(b) “represents a reasonable exercise of the rulemaking authority that Congress delegated to the Patent Office”). Under the broadest reasonable interpretation standard, claim terms are presumed to have their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire

² U.S. Patent No. 5,909,482, issued June 1, 1999 (Ex. 1002).

³ U.S. Patent No. 5,724,405, issued Mar. 3, 1998 (Ex. 1003).

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).

Petitioner proposes that the term “assisted user” in claim 1 means “a user who may be deaf or hard of hearing, but who also may be a normally hearing person who simply wants text assistance for some reason.” Pet. 14. Petitioner asserts that the ’604 patent explicitly defines this term as such. *Id.* (citing Ex. 1001, 3:45–57). Patent Owner does not discuss this proposed construction. We adopt Petitioner’s proposed construction, which is consistent with our construction of the term in other related proceedings involving these parties and this technology. *See, e.g., CaptionCall, L.L.C. v. Ultratec, Inc.*, Case IPR2013-00549, Paper 7 at 8–9 (Decision on Institution) (PTAB 2014); *id.*, Paper 71 at 7 (Final Written Decision) (PTAB 2015).

B. The Prior Art

1. Engelke ’482

As Petitioner points out, the disclosure of the ’604 patent is substantially similar to that of Engelke ’482. Pet. 15–16; *see also* Ex. 1006 (redline comparison between the ’604 patent and Engelke ’482). The same example we used to describe the features of the ’604 patent, above, is found in Engelke ’482 (less the identified “distinction”). *Compare* Ex. 1001, 4:44–5:52, *with* Ex. 1002, 3:66–5:7. Thus, Engelke ’482 describes a personal interpreter for a *deaf* person.

2. *Engelke '405*

Engelke '405 describes how it is advantageous to take devices intended for use by deaf persons and to modify them so that they are useable by hard-of-hearing persons. Ex. 1003, 2:9–27. Engelke '405 proposes to modify a prior art relay system, which only provided text to deaf users, to include simultaneous voice and text for use by hard-of-hearing users. *Id.* at 2:30–45; *see also id.* at Fig. 4.

C. Petitioner's Asserted Ground

Petitioner's asserted ground explains how most of the features in claim 1 of the '604 patent are found verbatim in Engelke '482. Pet. 21–32. Petitioner acknowledges that Engelke '482, being directed to use by a deaf person, does not re-broadcast the voice of the hearing user. *Id.* at 27–29, 30–32. Petitioner proposes to modify the personal interpreter for a deaf person in Engelke '482 to include simultaneous voice and text as taught in Engelke '405. *Id.*; *id.* at 33–58. Petitioner offers many rationales for combination, including “[a]pplying a known technique to improve similar devices . . . in the same way” (*id.* at 33–38), “[o]bvious to try” (*id.* at 38–42), “[c]ombining prior art elements according to known methods to yield predictable results” (*id.* at 42–44), the references “share a common inventor, and address common subject matter” (*id.* at 44–45), and “[t]he prior art teaches and suggests the proposed combination” (*id.* at 45–49).

D. Patent Owner's Response

Patent Owner argues that the prior art does not disclose presenting the hearing user's voice twice. PO Resp. 11–19. Patent Owner also sets forth arguments regarding Petitioner's articulated reasons to combine. *Id.* at 19–

27. First, Patent Owner contests that adding the simultaneous voice and text of Engelke '405 to the interpreter of Engelke '482 would be a “known technique” type of improvement to the prior art. *Id.* at 19–23. Patent Owner argues that the modification would result in the assisted user hearing the hearing user’s voice twice—once in real time and once when the simultaneous voice and text of Engelke '405 are provided. *Id.* at 20. Patent Owner argues that the teachings of Engelke '405 do not encompass or suggest *repetition* of voice. *Id.* Patent Owner’s declarant, Mr. Ivan Zatkovich, points out that the close-in-time repetition would be disruptive, akin to a phone call with an echo. Ex. 2098 ¶ 58.

Second, Patent Owner contests that Petitioner’s proposed combination would be obvious to try. PO Resp. 23–27. The Supreme Court has stated that, “[w]hen there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp.” *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 421 (2007). Patent Owner argues that “Petitioner has failed to identify *any* design need or market pressure that would have led a POSA to create the claimed invention.” PO Resp. 25.

E. Analysis

Petitioner has shown where the prior art, if combined, discloses each element of claim 1 as claimed. Pet. 21–32. We find persuasive and adopt Petitioner’s analysis here as our own. Patent Owner’s only argument regarding whether the prior art teaches each limitation is that the prior art allegedly does not disclose presenting the hearing user’s voice twice. PO

Resp. 11–19. This argument is unpersuasive in view of Petitioner’s showings.

Patent Owner’s argument is not based on a specific claim limitation, but rather an implication of the steps of “transmitting the voice of the hearing user when speaking” and then “transmitting the voice of the hearing user.” The assisted user would hear directly the hearing user speaking in the first step, then he or she would hear the voice again from the personal interpreter in the latter step. Petitioner’s ground relies on a combination of references, i.e., their teachings in conjunction, to teach the claimed invention. The first step is taught in Engelke ’482, with the second taught in Engelke ’405. Pet. 23–24, 30–32. Patent Owner’s argument appears to presume that these two steps must be disclosed in the same prior art reference. But that argument does not address the combination presented (which relies on both references) because it instead focuses on the references in isolation. Accordingly, Patent Owner’s argument is unpersuasive.

Patent Owner’s next arguments focus on whether Petitioner has explained sufficiently why it would have been obvious to a person of ordinary skill in the art at the time of invention to have combined the interpreter of Engelke ’482 with the simultaneous voice and text of Engelke ’405. We determine Patent Owner’s arguments on this topic are persuasive for the following reasons.

1. Known Technique Rationale

Petitioner asserts that the simultaneous voice and text feature of Engelke ’405 is intended to convert devices originally for deaf users to be useable by hard of hearing users, by providing simultaneous voice and text. Pet. 35–36. Patent Owner’s response points out that the result of the

proposed combination would be a method where the simultaneous voice and text would be provided shortly after the original voice was heard by the assisted user. PO Resp. 20; Ex. 2098 ¶ 58.

We understand Patent Owner’s argument to be that a person of ordinary skill in the art would not have considered it obvious to follow the teachings of Engelke ’405 in this particular situation, because one of the main benefits taught by Engelke ’405 is to provide voice in addition to text so that non-deaf users can benefit more from voice-to-text services. Here, however, an assisted user does not need the hearing user’s voice to be provided because the assisted user already can hear the hearing user, as they are in close physical proximity (in order to use the personal interpreter). Thus, although a person of ordinary skill in the art might consider Engelke ’405 because it teaches to improve devices for the deaf such as Engelke ’482, we are not persuaded that a person of ordinary skill in the art would have considered it obvious to *apply* it in this situation. The reason is that the hearing user’s voice would already be present, such that providing that voice again, i.e., when applying the teaching of Engelke ’405, appears to be unnecessary and, as Patent Owner’s declarant suggests, potentially disruptive. Ex. 2098 ¶ 58. Engelke ’405 would not provide the solution to the problem it was intended to solve—the voice is there already. Petitioner offers insufficient reason or evidence explaining why a person of ordinary skill in the art would have considered it obvious to proceed to combine the references nonetheless, in view of this situation.

Petitioner acknowledges that “the assisted user would be presented with the voice of the hearing user [twice].” Pet. Reply 16. Petitioner asserts, however, that it has established that “provision of voice and text

together may substantially improve a user’s comprehension of the hearing user’s words.” *Id.* Engelke ’405 supports this assertion, but it is not directed squarely at the combination proposed because the resulting combination provides voice *twice* and text once. The insight in Engelke ’405 was to *add voice* to a text system, to have text *and voice*. It is not directed to providing voice and text where voice is provided already. *See* Ex. 1003, 2:9–27, 31–45. Petitioner does not offer sufficient reason explaining why a person of ordinary skill in the art would have considered implementing it nonetheless.⁴

Petitioner also asserts that providing the voice of the assisted user again would provide a benefit for “multiple situations in which the assisted user would not have heard the hearing user’s voice [initially]” or if the assisted user was wearing headphones. Pet. Reply 16 (citing Ex. 1043 ¶ 14). Although these may be situations in which it would be beneficial to provide the voice of the assisted user again through the personal interpreter, Petitioner does not provide sufficient evidence that a person of ordinary skill in the art would have been aware of these problems at the time of invention such as to prompt him or her to address them. The assertions of Petitioner’s declarant, Mr. Occhiogrosso, are not supported by sufficient evidence or explanation for us to credit his assertion that these problems would have provided a reason to modify the interpreter of Engelke ’482 to playback simultaneous voice and text to address these scenarios. *See also* Ex. 2105, 39:17–40:7 (showing that Mr. Occhiogrosso is unable to provide evidentiary

⁴ We wish to be clear that we are not requiring a reference only to be used in an obviousness analysis for its primary purpose. The distinction here is that *Petitioner’s asserted rationale* requires the reference to be applied for its primary purpose. *See* Pet. 33–34 (asserting that “Engelke ’405 taught a technique for upgrading devices”).

support for his assertions in Exhibit 1043, paragraph 14); Paper 64, 6 (directing us to Mr. Occhiogrosso’s testimony on this point).

In view of the above, we are not persuaded that Petitioner has established, by a preponderance of the evidence, that it would have been obvious to combine the identified teachings of Engelke ’482 and Engelke ’405 under a theory of “[a]pplying a known technique to improve similar devices . . . in the same way.” In sum, we are not persuaded that the application of the simultaneous voice and text of Engelke ’405 here improves a similar device in the same way, given that Engelke ’482 as applied by Petitioner already provides the voice of the hearing user to the assisted user.

2. *Obvious to Try Rationale*

Petitioner asserts that, with respect to “potential ways to upgrade a device designed for the deaf to include features specifically intended to benefit the hard of hearing,” Engelke ’405 “identified the small number of ways to provide transcription services to the hard of hearing and deaf users.” Pet. 38–39 (citing Ex. 1003, 5:45–6:52). Specifically, according to Petitioner, Engelke ’405 describes “text alone,” “VCO systems” (one-way voice, and text),⁵ and “text enhanced telephony” (two-way voice, and text). *Id.* at 39. Petitioner also sets forth why it believes there would be a reasonable expectation of success—namely, that the device of Engelke ’482 requires little, if any, modification to simply play back the voice it just sent to the relay. *Id.* at 40–42. Lastly, Petitioner explains why it believes the

⁵ “VCO” is “Voice Carry Over.” It is where the assisted user’s voice carries over to the hearing user, but not vice versa. Ex. 1012 ¶ 64.

combination would yield a predictable result (playing the voice). *Id.* at 42–44.

Patent Owner argues that “Petitioner has failed to identify *any* design need or market pressure that would have led a POSA to create the claimed invention.” PO Resp. 25.

We agree with Petitioner that the combination proposed would have a reasonable expectation of success and would yield a predictable result. The combination described by Petitioner is a straightforward application of the simultaneous voice and text features of Engelke ’405 to a system made by the same inventor and using essentially the same components. Pet. 39–43; *see Western Union Co. v. Moneygram Payment Sys., Inc.*, 626 F.3d 1361, 1370 (Fed. Cir. 2010) (stating that “[w]e fail to see how it would have been difficult for a person of ordinary skill in the art to integrate an electronic transaction device that was available from Western Union into [another] well-known money transfer system that was also owned by Western Union at the time of the invention”).

During the course of this trial, however, Petitioner has not identified a design need or market pressure that indicates it would have been obvious to try to modify the personal interpreter of Engelke ’482 to have simultaneous voice and text as shown in Engelke ’405. An obvious to try rationale generally requires some identification of “a design need or market pressure to solve a problem” before looking at the “finite number of identified, predictable solutions.” *See KSR*, 550 U.S. at 421. A key of the obvious to try rationale is that the design need or market pressure is what drives a person of ordinary skill in the art to consider the identified, predictable solutions. In other words, *the need is addressed by the solutions*. Here, the

need identified by Petitioner is to upgrade devices previously intended for the deaf to be used for the hard of hearing. *See* Pet. 38. We agree that this is an identified need in the art.

The solutions identified by Petitioner, however, are text alone, VCO, and text-enhanced telephony. *Id.* at 38–39. Notably, only one of these solutions, text-enhanced telephony, actually addresses the identified need of upgrading devices to include features specifically for hard of hearing users. Text only and VCO are for *deaf* users. Ex. 1003, 1:25–40 (describing text-only devices for the deaf); Ex. 1012 ¶ 64 (Mr. Occhiogrosso testifying that VCO “allowed a deaf but speaking person to . . . respond directly to the hearing user in voice”). The problem with Petitioner’s rationale is that it is based upon the identification of a finite set of identified, predictable solutions to a need where, in fact, two out of the three so-called solutions in the set are not actually solutions at all, because they do not address the need. In this way, Petitioner’s articulated rationale, as a whole, is internally inconsistent and, for that reason, unpersuasive.

3. *Other Rationales*

In its Petition, Petitioner articulated other rationales, one based on *Western Union*, one based on “known methods,” and another set based on an assertion that several prior art references provide a motivation to combine the references. *See* Pet. 42–43, 44, 45–58. In our Decision on Institution, we considered these rationales unpersuasive (Dec. on Inst. 10–11), and we do so again here. Petitioner does not apprise us of further evidence or explanation that persuades us otherwise.

Petitioner’s assertion that, under *Western Union*, “as a matter of law, . . . it is obvious to combine components in patents sharing a common

inventor and addressing the same problem” (Pet. 44) is unpersuasive because it takes the holding of *Western Union* too far. The context of the actual combination made must be considered. Not every device addressing a given problem (or a similar problem) is necessarily combinable—for example, two patents could approach the same problem in mutually exclusive ways. Thus, we are not persuaded that, as a matter of law, two patents by the same inventor relating to the same problem are always obvious to combine.

Petitioner’s assertion that the proposed combination of “prior art elements according to known methods to yield predictable results” (*id.* at 42–43) is essentially the same as the second half of its obvious to try rationale, regarding predictability of the combination. Although we agree the proposed combination would yield predictable results, Petitioner has not provided a sufficient explanation for why a person of ordinary skill in the art would have combined the teachings of the prior art in the manner asserted. Petitioner’s rationale here is essentially that the combination would be easy to do, but that does not explain why it would have been obvious.

Petitioner’s assertions that Hiroi (Ex. 1009), Van Thong (Ex. 1007), and Bannister (Ex. 1008) provide “strong motivations to combine” are unpersuasive. Pet. 45; *id.* at 45–58. In particular, these references are generally related to ensuring that text captions align temporally (synchronize) with corresponding audio. *See, e.g.*, Ex. 1010 ¶ 233 (delaying audio to allow captions to catch up); Ex. 1007, [54] (title—Method for Refining Time Alignments of Closed Captions); Ex. 1008, [54] (title—Synchronous Voice/Data Message System). We do not understand Petitioner’s position as to how they motivate the particular proposed modification to *Engelke* ’482. *Engelke* ’482 does not have voice and text to

synchronize, and thus nothing relevant to modify. Accordingly, this set of rationales is unpersuasive.

4. Conclusion

We have found that Petitioner has shown where each limitation can be found in the prior art, if combined. Petitioner, however, has not established sufficiently a rationale to combine the prior art in the manner proposed. Accordingly, we determine that Petitioner has not shown, by a preponderance of the evidence, that claim 1 of the '604 patent is unpatentable.

III.ORDER

In view of the foregoing, it is hereby:

ORDERED that claim 1 of the '604 patent has not been shown to be unpatentable;

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

Case IPR2015-01358

Patent 7,006,604 B4

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