

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD, SAMSUNG ELECTRONICS
AMERICA, INC., and HARMAN INTERNATIONAL INDUSTRIES, INC.
Petitioner,

v.

STATON TECHIYA, LLC,
Patent Owner.

IPR2024-00559
Patent 11,610,587 B2

Before KEVIN F. TURNER, NATHAN A. ENGELS, and
RUSSELL E. CASS, *Administrative Patent Judges*.

ENGELS, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background

Samsung Electronics Co., Ltd, Samsung Electronics America, Inc., and Harman International Industries, Inc. (collectively, “Petitioner”) filed a Petition requesting an *inter partes* review of claims 1–12 (the “challenged claims”) of U.S. Patent No. 11,610,587 B2 (Ex. 1001, “the ’587 patent”). Paper 4, 1. Patent Owner did not file a preliminary response.

An *inter partes* review may not be instituted unless it is determined that “the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314 (2018). For the reasons provided below and based on the record currently before us, we determine that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing the unpatentability of at least one of the challenged claims. Accordingly, we institute an *inter partes* review on all grounds set forth in the Petition.

B. Real Parties in Interest

Petitioner states that the real parties in interest are Samsung Electronics Co., Ltd, Samsung Electronics America, Inc., and Harman International Industries, Inc. Pet. 1, 73. Patent Owner states that Staton Techiya, LLC is the real party in interest. Paper 7, 1.

C. Related Proceedings

The parties identify the following as related matters: *Staton Techiya, LLC v. Samsung Electronics Co., Ltd.*, No. 2:23-cv-00319 (E.D. Tex.); *Staton Techiya, LLC v. Harmon International Industries, Inc.*, No. 1:23-cv-

00801 (D. Del.); and *Staton Techiya, LLC v. Harman-Kardon, Inc.*, 1:23-cv-00802 (D. Del.). Pet. 73; Paper 7, 1.

D. The '587 Patent (Ex. 1001)

Titled “Personalized Sound Management and Method,” the ’587 patent describes audio devices and audio management applications for recording sound from a user’s environment, processing and storing recordings in a buffer or memory, and replaying recordings to the user. Ex. 1001, 4:36–7:19–39, code (54). Some of the audio management applications described in the ’587 patent are capable of “intelligent hearing” that “detects and outputs a response based on the identification of a recognized sound. This concept of recognizing sounds is described as Sonic Signature Detection.” Ex. 1001, 4:64–67. “Sonic signatures [can be] related to emergency vehicles such as fire trucks, ambulances, and police cars” and, upon detection of a fire truck siren, for example, outside of a user’s car, the application “can initiate playing the identified signal through the car stereo system for the car driver to hear and respond to.” Ex. 1001, 5:21–30.

E. Illustrative Claims

Claim 1 is the only independent claim and is reproduced below with labels added to reflect those in the Petition.

- [1.pre] A system comprising:
 - [1.1] a user interface; and
 - [1.2] an audio device comprising:
 - [1.3] a microphone configured to measure ambient sound and generate a microphone signal;
 - [1.4] a speaker configured to emit an audio signal;
 - [1.5] a memory configured to store instructions;

- [1.6] an audio buffer configured to store at least a portion of the microphone signal;
- [1.7] a data buffer;
- [1.8] a processor operatively coupled to the memory, the processor operatively coupled to the audio buffer, the processor operatively coupled to the data buffer, wherein the processor is configured to execute the instructions to perform operations comprising:
 - [1.9] receiving the microphone signal;
 - [1.10] sending a portion of the microphone signal to the audio buffer;
 - [1.11] analyzing the audio buffer for detecting a sonic signature;
 - [1.12] notifying a user when the sonic signature is detected;
 - [1.13] sending a modified microphone signal to the data buffer replacing or adding to previous data stored in the data buffer; and
 - [1.14] sending a portion of the data stored in the data buffer, spanning a time period, to the speaker in response to a user request, wherein the user request is one of the sonic signature that is a voice command or a manual input from the user interface.

F. Asserted Grounds of Unpatentability

Petitioner challenges the patentability of claims 1–12 of the '587 patent based on the following grounds:

Claim(s) Challenged	35 U.S.C. §	References/Basis
1, 3, 4, 12	103(a) ¹	Fiedler, ² Broussard ³
5–9	103(a)	Fiedler, Broussard, Victorian ⁴
8	103(a)	Fiedler, Broussard, Victorian, Andreasson ⁵
10, 11	103(a)	Fiedler, Broussard, Couper ⁶
1, 2	103(a)	Fiedler, Broussard, Bulthuis ⁷

II. DISCUSSION

A. Level of Ordinary Skill in the Art

Petitioner contends that a person of ordinary skill in the art at the time of the alleged invention would have had a “Bachelor’s of Science degree (or equivalent) in electrical engineering, computer science, or a similar field and two years of experience in the design of digital audio systems and associated

¹ Based on the '587 patent’s filing date, the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”) applies to this proceeding, and we apply the AIA version of 35 U.S.C. § 103 for the purposes of this Decision. Our analysis would not change if the pre-AIA version of § 103 applied.

² US 6,804,638 B2; issued Oct. 12, 2004. Ex. 1005.

³ US 2006/0195322 A1; published Aug. 31, 2006. Ex. 1008.

⁴ EP 1,519,625 A2; published Mar. 30, 2025. Ex. 1009.

⁵ US 2007/0281744 A1; published Dec. 6, 2007. Ex. 1010.

⁶ US 2008/0162133 A1; published July 3, 2008. Ex. 1011.

⁷ US 2003/0032447 A1; published Feb. 13, 2003. Ex. 1012.

signal processing such as voice or speech processing and/or acoustic pattern recognition.” Pet. 10 (citing Ex. 1002 ¶ 17). Petitioner also states that a greater amount of education could compensate for fewer years of work experience, and vice versa. Pet. 10–11 (citing Ex. 1002 ¶ 17).

For purposes of this Decision, we adopt Petitioner’s assessment of the level of ordinary skill, which is uncontested at this stage.

B. Claim Construction

We construe claims using the principles set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–17 (Fed. Cir. 2005) (en banc) and related cases. 37 C.F.R. § 42.100(b) (2021). Under that precedent, the words of a claim are generally given their “ordinary and customary meaning,” which is the meaning the term would have to a person of ordinary skill at the time of the invention, in the context of the entire patent including the specification. *Phillips*, 415 F.3d at 1312–13.

Petitioner states that no constructions are necessary and that the claim should be given their plain and ordinary meaning. Pet. 11. Based on the current record, we determine that it is not necessary to provide an express interpretation of any claim terms at this stage of the proceeding. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

C. Principles of Law

A claim is unpatentable under 35 U.S.C. § 103 if “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) where in evidence, objective evidence of non-obviousness.⁸ *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17–18 (1966). When evaluating a combination of teachings, we must also “determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). Whether a combination of prior art elements would have produced a predictable result weighs in the ultimate determination of obviousness. *Id.* at 416–417.

In an *inter partes* review, the petitioner must show with particularity why each challenged claim is unpatentable. *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016); 37 C.F.R. § 42.104(b). The burden of persuasion never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

D. Petitioner’s Assertions

We address Petitioner’s showings for claim 1 as illustrative. Petitioner provides a limitation-by-limitation comparison of claim 1 to the combined teachings of Fiedler and Broussard. Pet. 11–42. Among other things, Petitioner cites Fiedler for its teachings relating to a device to capture and playback audio, having a user interface, a microphone, and a speaker.

⁸ At this stage of the proceeding, Patent Owner has not presented objective evidence of non-obviousness.

Pet. 11–14 (citing, e.g., Ex. 1007, 3:11–19, 3:66–4:3, 7:53–57, 8:21–23, 8:45–47, Fig. 3).

Petitioner also contends Fiedler discloses multiple buffers for selective preservation and recall of audio data. Pet. 15 (citing, e.g., Ex. 1007, 3:66–6:67). In particular, Petitioner cites Fiedler’s teachings relating to an input buffer, an original acquisition buffer, and a second acquisition buffer, as well as a permanent recording medium, explaining that detection of a triggering event can affect how audio data is stored in one or more of the buffers. Pet. 15–21 (citing, e.g., Ex. 1007, 11:33–47).

Petitioner contends Fiedler suggests use of a processor, and Petitioner additionally cites Broussard as providing details of how to implement a recording device similar to Fiedler’s with a general-purpose computer, including a data processor, among other things. Pet. 22–26 (citing, e.g., Ex. 1002 ¶¶ 143–152; Ex. 1008 ¶¶ 2, 12, 15, 21, 24, Fig. 2). Petitioner contends a person of ordinary skill would have looked to Broussard’s teachings of signal processing to implement Fiedler’s teachings regarding event-activated recording and that combining the references’ teachings would have amounted to use of known techniques to improve a similar device. Pet. 28–32.

On the current record, Petitioner’s arguments and evidence sufficiently show that the teachings of Fiedler and Broussard satisfy each limitation of claim 1 and that a person of ordinary skill would have had reasons to combine the references’ teachings. At this stage, Petitioner’s arguments and evidence are un rebutted, and we preliminarily determine Petitioner has shown a reasonable likelihood that it will prevail in its challenge to claim 1.

Petitioner additionally provides comparisons of claims 2–12 to the combinations of references listed above. Pet. 42–67. Petitioner’s arguments and evidence relating to these claims are also unrebutted on the current record. Accordingly, we institute *inter partes* review on all challenged claims and all grounds raised in the Petition. 37 C.F.R. § 42.108(a).

III. CONCLUSION

After considering the evidence and arguments presented in the current record, we determine that Petitioner has demonstrated a reasonable likelihood of success in proving that at least one of the challenged claims of the ’587 patent is unpatentable. We therefore institute trial on all challenged claims and grounds raised in the Petition. 37 C.F.R. § 42.108(a).

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–12 of the ’587 patent is instituted with respect to all grounds set forth in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of the ’244 patent shall commence on the entry date of this Order, and notice is hereby given of the institution of a trial.

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