

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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RING LLC,  
Petitioner,

v.

SKYBELL TECHNOLOGIES, INC.,  
Patent Owner.

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IPR2019-00445  
Patent 9,179,107 B1

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Before JEFFREY S. SMITH, DANIEL J. GALLIGAN, and  
KAMRAN JIVANI, *Administrative Patent Judges*.

GALLIGAN, *Administrative Patent Judge*.

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

## I. INTRODUCTION

In this *inter partes* review, Ring LLC (“Petitioner”) challenges the patentability of claims 12 and 18 of U.S. Patent No. 9,179,107 B1 (“the ’107 patent,” Ex. 1001), which is assigned to SkyBell Technologies, Inc. (“Patent Owner”).

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision, issued pursuant to 35 U.S.C. § 318(a), addresses issues and arguments raised during the trial in this *inter partes* review. For the reasons discussed below, we determine that Petitioner has proven by a preponderance of the evidence that claims 12 and 18 of the ’107 patent are unpatentable. *See* 35 U.S.C. § 316(e) (“In an *inter partes* review instituted under this chapter, the petitioner shall have the burden of proving a proposition of unpatentability by a preponderance of the evidence.”).

### A. Procedural History

On December 17, 2018, Petitioner requested *inter partes* review of claims 12 and 18 of the ’107 patent on the following grounds:

| Claim Challenged | 35 U.S.C. § <sup>1</sup> | Reference(s)                                 |
|------------------|--------------------------|----------------------------------------------|
| 12               | 103                      | Tylicki, <sup>2</sup> Claiborne <sup>3</sup> |
| 18               | 102(a)(1)                | Tylicki                                      |
| 18               | 102(a)(1)                | Claiborne                                    |

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<sup>1</sup> The Leahy-Smith America Invents Act (“AIA”) included revisions to 35 U.S.C. §§ 102 and 103 that became effective before the filing of the application for the ’107 patent. Therefore, we apply the post-AIA versions of these sections.

<sup>2</sup> US 2007/0008081 A1, published Jan. 11, 2007 (Ex. 1005).

<sup>3</sup> US 2010/0225455 A1, published Sept. 9, 2010 (Ex. 1006).

Paper 1 (“Pet.”). Patent Owner did not file a Preliminary Response. We instituted trial on all grounds of unpatentability. Paper 11 (“Dec. on Inst.”), 20.

During the trial, Patent Owner filed a Response (Paper 21, “PO Resp.”), Petitioner filed a Reply (Paper 23, “Pet. Reply”), and Patent Owner filed a Sur-reply (Paper 25, “PO Sur-reply”).

An oral hearing was held on April 16, 2020, a transcript of which appears in the record. Paper 31 (“Tr.”).

#### *B. Related Matters*

The parties note the following related matter: *SkyBell Techs., Inc. v. Ring Inc.*, 8:18-cv-00014 (C.D. Cal. 2018). Pet. 2; Paper 4, 2.

#### *C. Real Parties in Interest*

Petitioner identifies the following real parties in interest: Ring LLC, Ring of Security Limited, Ring of Security B.V., Ring of Security Pty. Ltd., Ring of Security Asia Co., Ltd., Ring Protect Inc., Wireless Environment, LLC, Wireless Environment Asia, LLC, Wireless Environment Lighting Co., Ltd., Wireless Environment UK Ltd., Wireless Lighting Technologies, LLC, Amazon.com Services, Inc., and Amazon.com, Inc. Pet. 2.

Patent Owner identifies itself as the real party in interest. Paper 4, 1.

#### *D. The ’107 Patent and Challenged Claims*

The ’107 patent relates to doorbells that emit a sound represented by information in a data file. Ex. 1001, code (57). Challenged independent claims 12 and 18 are reproduced below.

12. A method of using a doorbell system to emit a sound from a chime, the method comprising:  
selecting the sound by a communication device comprising one of a phone and tablet device;

sending a data file comprising information to the chime that is communicatively coupled to the communication device, wherein the chime is located within an inside portion of a building, and wherein the information represents the sound;

detecting an indication of a presence of a visitor with a doorbell that is communicatively coupled to the chime, wherein the doorbell is located along an outside portion of the building, and wherein the doorbell comprises a button configurable to detect a button press to indicate the presence of the visitor; and

emitting the sound from a speaker of the chime in response to detecting the indication of the presence of the visitor.

18. A doorbell system, comprising:

a doorbell comprising a button configurable to detect a button press to indicate a presence of a visitor;

a chime communicatively coupled to the doorbell;

a communication device communicatively coupled to at least one of the doorbell and the chime, wherein the communication device comprises one of a phone and tablet device; and

a sound emitted by a speaker of the chime in response to the doorbell detecting an indication of a presence of a visitor, wherein the chime comprises a data file having information that represents the sound.

## II. ANALYSIS

### *A. Level of Ordinary Skill in the Art*

Petitioner's declarant, Dr. Vijay Madiseti, testifies that a person of ordinary skill in the art of the '107 Patent would have had

a bachelor's degree in Electrical Engineering, Computer Engineering, or Computer Science, or equivalent training, as well as at least one year of technical experience in the field of embedded computing systems (including sensors and automation) and wireless networking. Lack of work experience

can be remedied by additional education or training, and vice versa.

Ex. 1003 ¶ 28, *cited in* Pet. 12–13. In the Decision on Institution, we agreed with this assessment, with the exception of the language “at least,” which introduces ambiguity. Dec. on Inst. 8. Patent Owner agrees with Petitioner’s proposed level of ordinary skill in the art. PO Resp. 8 (“For the purposes of this IPR proceeding, Patent Owner adopts Petitioner’s definition of level of ordinary skill.”).

Based on the full trial record and in view of the parties’ agreement, we determine, consistent with the Decision on Institution, that a person of ordinary skill in the art would have had a bachelor’s degree in Electrical Engineering, Computer Engineering, or Computer Science, or equivalent training, as well as one year of technical experience in the field of embedded computing systems (including sensors and automation) and wireless networking. *See* Dec. on Inst. 8; Pet. 12–13; PO Resp. 8; Ex. 1003 ¶ 28; Ex. 2001 ¶¶ 33–34.

### *B. Claim Interpretation*

The Petition was accorded a filing date of December 17, 2018. Paper 5, 1. In an *inter partes* review for a petition filed on or after November 13, 2018, a claim “shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b).” 37 C.F.R. § 42.100(b) (2018); *see* Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (amending 37 C.F.R. § 42.100(b) effective November 13, 2018) (now codified at 37 C.F.R. § 42.100(b) (2019)). In applying this claim construction standard, we are guided by the principle that the words of

a claim “are generally given their ordinary and customary meaning,” as understood by a person of ordinary skill in the art in question at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc) (citation omitted). “In determining the meaning of the disputed claim limitation, we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17). There is a “heavy presumption,” however, that a claim term carries its ordinary and customary meaning. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) (citation omitted).

### *1. Chime*

Patent Owner argues that the term “chime” means “a sound emitting device remotely located from the doorbell which contains separate electrical and/or mechanical components from the doorbell.” PO Resp. 9, 15. As Patent Owner points out and Petitioner agrees, the claims require the chime to be a sound emitting device. *See* PO Resp. 9 (quoting claims 12 (“emitting the sound from a speaker of the chime”) and 18 (“sound emitted by a speaker of the chime”)); *see also* Pet. Reply 8 (Peticioner agrees that the claims require the chime to be a sound emitting device). Therefore, the parties agree that the claimed chime must be a sound emitting device. The parties dispute the remaining two requirements of Patent Owner’s proposed construction.

Patent Owner argues that “[t]he ’107 Patent further makes clear that the chime must be remotely located with respect to the doorbell.” PO Resp. 9. In support, Patent Owner cites various disclosures in the ’107

patent specification that the chime is remotely located from the doorbell. PO Resp. 9–12 (citing Ex. 1001, code (57), 3:27–30, 35:52–55, 36:64–37:1, Figs. 32–34, 38). Patent Owner also cites a statement from the Examiner’s Notice of Allowability that “[c]laims 1, 12, 18, and 23 each require . . . [a] chime that is communicatively coupled to the doorbell and remotely located with respect to the doorbell.” Ex. 1002, 30, *quoted in* PO Resp. 12.<sup>4</sup> Thus, Patent Owner argues that the prosecution history supports its interpretation. PO Resp. 12 (citing Ex. 1001, 28–31).

We agree with Patent Owner’s general proposition that one of ordinary skill in the art would assume a chime could be remote from a doorbell, given the basic functions of those devices as described in the specification. With that understanding, however, our inquiry on claim construction focuses on the language of the claims themselves in light of the specification, taking into account intrinsic and extrinsic evidence of record. Thus, we begin our inquiry with the specific claim language at issue.

We agree with Petitioner that independent claim 1’s affirmative recitation that “the chime that is . . . remotely located with respect to the doorbell” is conspicuously absent from independent claims 12, 18, and 23 and that its inclusion in claim 1 tends to show that “remotely located” is not an intrinsic feature of the claimed chime, as disclosed in the ’107 patent. *See* Pet. Reply 2. Otherwise, there would be no need to affirmatively recite this limitation in claim 1.

Turning next to the specification, we do not view the cited disclosures as mandating the construction Patent Owner proposes. *See* Ex. 1001, 3:23–

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<sup>4</sup> Patent Owner cites page 20, but the quoted language appears at page 30 of the Exhibit.

30 (“Methods can comprise . . . sending the data file, by the doorbell, to the chime that is communicatively coupled to the doorbell and remotely located with respect to the doorbell.”), 36:64–67 (referring to Figure 38, disclosing: “As well, methods can include the doorbell 202 sending the data file 211, 213 to the chime 302 that is communicatively coupled to the doorbell 202 and remotely located with respect to the doorbell 202 (at step 1304).”). Thus, the specification of the ’107 patent uses permissive language (“can”) rather than language that mandates that being remotely located from a doorbell is a characteristic of the chime itself.

Patent Owner also argues that “[t]he patent specification further teaches that the doorbell and chime units have separate electrical and mechanical components.” PO Resp. 12 (citing Ex. 2001 ¶ 52); *see* PO Resp. 12–13 (citing Ex. 1001, 34:65–35:38, Figs. 1, 31). One of the portions of the specification quoted by Patent Owner states that “[c]himes 302 (shown in FIGS. 3 and 31-37) can include all of the features, assemblies, parts, systems, and components of any doorbell 202 described herein or incorporated by reference.” Ex. 1001, 34:66–35:2. According to this disclosure, a chime may include a doorbell and, therefore, not be separate from the doorbell. Patent Owner notes that the specification discloses that “the chime 302 may utilize none, some, or all the same components as utilized by the doorbell 202” and also that the chime “may include additional components.” Ex. 1001, 35:36–38, 35:23–28, *quoted in* PO Resp. 13. These disclosures show that a chime may or may not have components in addition to the components of a doorbell, and, therefore, the specification does not support requiring separate components as a feature of a “chime.” Patent Owner’s construction of “chime” excludes embodiments disclosed in

the specification that include the doorbell, and constructions that exclude embodiments are “rarely, if ever, correct and would require highly persuasive evidentiary support.” *Adams Respiratory Therapeutics, Inc. v. Perrigo Co.*, 616 F.3d 1283, 1290 (Fed. Cir. 2010) (citations omitted).

With respect to Patent Owner’s reliance on the statement in the Notice of Allowability that “[c]laims 1, 12, 18, and 23 each require . . . [a] chime that is communicatively coupled to the doorbell and remotely located with respect to the doorbell” (PO Resp. 12), we disagree with Patent Owner’s argument because the “remotely located” language appears in claim 1 but not in claims 12, 18, and 23. *See* Ex. 1002, 315–21 (August 21, 2015 listing of claims during prosecution). In addition, this statement was made by the Examiner, not the Applicant. Ex. 1002, 31. The Applicant commented on the Examiner’s statement of reasons for allowance by stating that “Applicant does not take any position regarding the Examiner’s reasons for allowance.” Ex. 1002, 22. “[A]n applicant’s silence regarding statements made by the examiner during prosecution, without more, cannot amount to a clear and unmistakable disavowal of claim scope.” *Salazar v. Proctor & Gamble Co.*, 414 F.3d 1342, 1345 (Fed. Cir. 2005) (internal quotation omitted). Therefore, this statement in the Notice of Allowability cannot overcome the plain language of the claims themselves.

With respect to the extrinsic evidence of record, Patent Owner alleges that a person of ordinary skill in the art would have understood “that a chime is remotely located from the doorbell and contains separate electrical and/or mechanical components and functionality.” PO Resp. 14 (citing Ex. 2001

¶ 53; Ex. 1009<sup>5</sup> ¶¶ 15, 16, Fig. 2; Ex. 1013,<sup>6</sup> 1, 9). For example, Patent Owner argues that Lee (US 2015/0109111 A1), a reference introduced by Petitioner, shows a doorbell outside by a door and a chime inside a house. PO Resp. 14 (citing Ex. 1009 ¶¶ 15, 16, Fig. 2). We agree that this evidence shows a normal configuration in which a doorbell is outside by a door so that a visitor can press it and a chime is inside so that an occupant of the home can hear when the doorbell is pressed. We do not agree, however, that this is a characteristic of the claimed “chime” itself, especially in light of the ’107 patent’s description that the chime and the doorbell can be in one unit. Ex. 1001, 34:66–35:2. Therefore, in light of the intrinsic record discussed above, we do not find this evidence to be particularly useful in defining “chime” as that term is used in the challenged claims of the ’107 patent. *See Phillips*, 415 F.3d at 1318 (authorizing the consideration of extrinsic evidence in determining the meaning of claims but noting that it is “in general . . . less reliable than the patent and its prosecution history in determining how to read claim terms”).

Based on the foregoing, we agree with Patent Owner that the claimed chime is “a sound emitting device,” but we do not agree that it must be “remotely located from the doorbell which contains separate electrical and/or mechanical components from the doorbell.” As discussed below, we also find that the asserted prior art describes a chime even under Patent Owner’s proposed construction.

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<sup>5</sup> US 2015/0109111 A1, published Apr. 23, 2015.

<sup>6</sup> NuTone LA600WH Wired / Wireless Door Chime Installation and Operating Instructions.

2. *Order of “selecting” and “sending” steps (claim 12)*

As noted above, claim 12 recites “selecting the sound by a communication device comprising one of a phone and tablet device” and “sending a data file comprising information to the chime that is communicatively coupled to the communication device . . . wherein the information represents the sound.” Petitioner argues that, although the “selecting” step appears before the “sending” step in claim 12, the claim does not require these steps to be performed in any particular order. Pet. 9 (citing *Interactive Gift Exp., Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1343 (Fed. Cir. 2001), *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369–70 (Fed. Cir. 2003), *Mformation Techs., Inc. v. Research In Motion Ltd.*, 764 F.3d 1392, 1398–99 (Fed. Cir. 2014)).

In the Decision on Institution, the panel “agree[d] with Petitioner that the ‘selecting’ step does not need to be performed before the ‘sending’ step in claim 12.” Dec. on Inst. 7. During the trial, Patent Owner did not dispute this interpretation of claim 12. *See generally* PO Resp.; *see also* Tr. 20:1–8 (Patent Owner’s counsel confirming that claim 12 does not require the sending and selecting steps to be performed in any particular order). Based on the full trial record, we are persuaded by Petitioner’s contention as to the order of performance and determine that the “selecting” step does not need to be performed before the “sending” step in claim 12. We incorporate by reference the analysis from the Decision on Institution supporting this determination. *See* Dec. on Inst. 5–7.

C. *Principles of Law*

To establish anticipation under 35 U.S.C. § 102, each and every element in a claim, arranged as recited in the claim, must be found in a

single prior art reference. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008). Although the elements must be arranged or combined in the same way as in the claim, “the reference need not satisfy an *ipsissimis verbis* test,” i.e., identity of terminology is not required. *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009).

A patent claim is unpatentable under 35 U.S.C. § 103 if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which 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 ordinary skill in the art; and (4) any secondary considerations, if in evidence.<sup>7</sup> *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

*D. Anticipation by Claiborne  
(Claim 18)*

Petitioner asserts that Claiborne anticipated claim 18. Pet. 13, 47–56.

*1. Claiborne*

Claiborne discloses a door chime system that allows a user to download sound files and select particular sound files to be played when the door chime is activated. Ex. 1006 ¶ 15. Claiborne discloses door chime

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<sup>7</sup> Patent Owner does not present any objective evidence of nonobviousness (i.e., secondary considerations) as to the ground of obviousness challenging claim 12.

system 10 having microcontroller 100, which has “a plurality of inputs for receiving a plurality of door bell pushbutton 130 outputs 132.” Ex. 1006

¶ 25. “In operation, when front doorbell pushbutton 130 is depressed, pushbutton output 132 provides an electrical signal to input PA0 of microcontroller 100 to initiate door chime playback.” Ex. 1006 ¶ 38.

Claiborne discloses the following:

The microcontroller 100 also comprises a communications port 104, for example a MIDI port and associated connector, thereby permitting communications with a plurality of peripheral devices for downloading polyphonic MIDI sound files or other digital sound files incorporating alternative digital formats for eventual playback. Port 104 is shown in FIG. 3 as connected to a connector 108 to which a user can connect an audio data source to download sound representations [from] a device such as a personal computer, PDA, or cellular telephone. Optionally port 104 may be connected to a wireless communication device 106 which is shown in FIG. 3 in a dashed line box. This wireless communication can be Wifi (802.11), IrDA, Zigbee, Bluetooth, WiMax or any other open or proprietary system to allow the transfer from the audio data source to the communication port. When a new sound file is to be received from a user it is connected from 106 or 108 to the port 104. Microcontroller 100 then receives the sound file at port 104, and properly loads the file into memory 110 and optionally records the new file directory for later selection.

Ex. 1006 ¶ 27.

## *2. Independent claim 18*

We address first Petitioner’s contentions regarding anticipation of claim 18 by applying our construction of the claimed “chime.” Under our construction, Petitioner’s contentions are undisputed because Patent Owner’s arguments as to anticipation of claim 18 by Claiborne are based entirely on its proposed construction of “chime,” which we do not adopt.

See PO Resp. 24–27; PO Sur-reply 13–14. We address Patent Owner’s arguments regarding anticipation under its proposed construction in the next section.

*a) Petitioner’s undisputed contentions and our findings*

Independent claim 18 is directed to “[a] doorbell system, comprising: a doorbell comprising a button configurable to detect a button press to indicate a presence of a visitor.” Petitioner contends that Claiborne’s door chime system having a doorbell pushbutton describes this subject matter. Pet. 47–49 (citing Ex. 1006 ¶¶ 11, 15, 23, 25, 38, Fig. 1; Ex. 1003, 77–80). We are persuaded, and we find, that Claiborne describes this subject matter. In particular, Claiborne discloses “a doorbell system having a housing or enclosure in which is contained a circuit for providing polyphonic audio responsive to the actuation of a doorbell pushbutton.” Ex. 1006 ¶ 11.

Claim 18 recites “a chime communicatively coupled to the doorbell.” Petitioner contends that Claiborne discloses doorbell pushbuttons that are coupled to a chime. Pet. 49–51 (citing Ex. 1006 ¶¶ 38–40, Figs. 1, 2; Ex. 1003, 81–83). Claiborne discloses “pushbuttons wired to the door chime” and notes that “the pushbuttons can also be operably coupled to the door chime through wireless methods.” Ex. 1006 ¶ 38. Claiborne also discloses that, “[i]n operation, when front doorbell pushbutton 130 is depressed, pushbutton output 132 provides an electrical signal to input PA0 of microcontroller 100 to initiate door chime playback.” Ex. 1006 ¶ 38. Based on this evidence, we find Claiborne describes a chime that is a sound emitting device and that is communicatively coupled to the doorbell.

Claim 18 further recites “a communication device communicatively coupled to at least one of the doorbell and the chime, wherein the

communication device comprises one of a phone and tablet device.”

Petitioner argues Claiborne’s disclosure of a port in the door chime system for connecting to peripheral devices, including a cellular phone, describes this subject matter. Pet. 51–52 (citing Ex. 1006 ¶ 27, Fig. 3; Ex. 1003, 83–85). As noted above, Claiborne discloses the following:

The microcontroller 100 also comprises a communications port 104, for example a MIDI port and associated connector, thereby permitting communications with a plurality of peripheral devices for downloading polyphonic MIDI sound files or other digital sound files incorporating alternative digital formats for eventual playback. Port 104 is shown in FIG. 3 as connected to a connector 108 to which a user can connect an audio data source to download sound representations [from] a device such as a personal computer, PDA, or cellular telephone. Optionally port 104 may be connected to a wireless communication device 106 which is shown in FIG. 3 in a dashed line box.

Ex. 1006 ¶ 27. Thus, Claiborne discloses that its chime has a port for communicating with a device such as a cellular phone. Based on this evidence, we are persuaded, and we find, that Claiborne describes “a communication device communicatively coupled to at least one of the doorbell and the chime, wherein the communication device comprises one of a phone and tablet device.”

Claim 18 further recites “a sound emitted by a speaker of the chime in response to the doorbell detecting an indication of a presence of a visitor.” Petitioner contends Claiborne discloses a “sound emitted by the speaker of the door chime system in response to a visitor pressing the doorbell pushbutton/actuator,” thereby describing this subject matter. Pet. 53–54 (citing Ex. 1006 ¶ 38, Fig. 1; Ex. 1003, 85–87). As noted above, Claiborne discloses that, “when front doorbell pushbutton 130 is depressed, pushbutton output 132 provides an electrical signal to input PA0 of microcontroller 100

to initiate door chime playback.” Ex. 1006 ¶ 38; *see also* Ex. 1006 ¶ 39 (“When the front doorbell pushbutton input PA0 is detected, microcontroller U4 selects the audio file indicated by switch SW1 . . . and produces a polyphonic analog audio output on pin RCH which is amplified through amplifier IC U3, then reproduced via speaker SP1 and/or SP2.”). Based on this evidence, we are persuaded, and we find, that Claiborne describes “a sound emitted by a speaker of the chime in response to the doorbell detecting an indication of a presence of a visitor.”

Claim 18 lastly recites “wherein the chime comprises a data file having information that represents the sound.” Petitioner argues Claiborne’s disclosure of storing digital sound files for playback by the chime system describes this subject matter. Pet. 54–56 (citing Ex. 1006, [57], ¶¶ 3, 27, Fig. 3; Ex. 1003, 87–89). As noted above, Claiborne discloses “downloading polyphonic MIDI sound files or other digital sound files incorporating alternative digital formats for eventual playback.” Ex. 1006 ¶ 27; *see also* Ex. 1006, code (57) (“A door chime system includes a microcontroller having a polyphonic MIDI music processor and a data memory for storing MIDI format sound files. The microcontroller includes an input for accepting signals from door chime actuators or pushbuttons and an output representative of distinct MIDI sound files.”). Based on this evidence, we are persuaded, and we find, that Claiborne describes that “the chime comprises a data file having information that represents the sound.”

*b) Patent Owner’s arguments and our additional findings*

Patent Owner argues that Claiborne does not disclose that its chime is remotely located from the doorbell and contains separate electrical and/or mechanical components from the doorbell, as Patent Owner proposes to

construe “chime.” PO Resp. 24–27. As discussed above, we do not agree that these are requirements of the claimed “chime,” but we find Claiborne describes this subject matter in any event.

As Petitioner correctly argues, Claiborne discloses that the doorbells and chime can communicate wirelessly. *See* Pet. 49 (citing Ex. 1006 ¶ 38). Claiborne discloses the following:

While this embodiment shows the pushbuttons wired to the door chime for clarity the pushbuttons can also be operably coupled to the door chime through wireless methods. The pushbuttons can have a different wireless signal to identify which of the multiple pushbuttons have been activated. These methods are well understood in the industry.

Ex. 1006 ¶ 38. When asked “[i]f a doorbell communicates with a chime wirelessly, are they remotely located from each other,” Patent Owner’s declarant, Dr. Baker, testified “Yes.” Ex. 1020, 45:6–9; *see also* Tr. 17:1–4 (Patent Owner’s counsel agreeing that Claiborne’s wireless doorbell teaches “remotely located”). Thus, based on Claiborne’s disclosure of wireless communication between the doorbell pushbuttons and the chime, we find that Claiborne discloses that its chime is remotely located from the doorbell.<sup>8</sup>

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<sup>8</sup> Patent Owner argues that Petitioner’s reliance in its Reply on Claiborne’s wireless communication to teach “remotely located” is improper because “[n]either the Petition nor the declaration of Dr. Madisetti identified anything in Claiborne showing that the chime is remotely located with respect to the doorbell.” PO Sur-reply 13. The Petition did not rely on wireless communication to show that the doorbell and the chime are “remotely located” from each other because this is not a requirement of claim 18. Petitioner, however, did rely on this disclosure to contend that Claiborne describes “a chime communicatively coupled to the doorbell.” Pet. 49 (citing Ex. 1006 ¶ 38). Thus, the Petition preemptively and effectively addressed Patent Owner’s argument that a chime must be

Second, we find that Claiborne discloses that its chime “contains separate electrical and/or mechanical components from the doorbell,” as required by Patent Owner’s proposed construction. *See* PO Resp. 9. As an initial matter, Patent Owner argues that Claiborne does not satisfy Patent Owner’s proposed construction because Claiborne discloses that “the doorbell and the chime share common circuitry” and “Claiborne teaches the use of multiple shared electronic components between the doorbell and the chime.” PO Resp. 25–26. These arguments, however, are not commensurate with Patent Owner’s proposed construction, which simply requires that the chime have some “electrical and/or mechanical components” that are separate from the doorbell. Claiborne’s disclosure that the chime and doorbell pushbuttons communicate wirelessly indicates that the chime is physically separate from the pushbutton. *See* Pet. Reply 22. This was confirmed by Dr. Baker in his deposition:

[Q.] If a chime communicates with a doorbell wirelessly, does it have separate electrical or mechanical components from the doorbell?

A. Yes, as the terms “doorbell” and “chime” are used in the ’107 patent.

Ex. 1020, 45:12–16. Furthermore, Figure 2 of Claiborne depicts many electrical components that are separate from doorbell pushbuttons 130. Based on this evidence, we find that Claiborne discloses a chime that has electrical or mechanical components that are separate from the doorbell.

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“remotely located” from the doorbell. Although we need not rely on Petitioner’s Reply in this regard, we see no impropriety in it.

*c) Determination of unpatentability for claim 18 based on Claiborne*

For the reasons explained above, we find that Claiborne describes the subject matter of claim 18 both under our interpretation of “chime” and under Patent Owner’s interpretation of “chime.” Having considered the full record developed during trial, we are persuaded by Petitioner’s contentions and evidence, and we determine that Petitioner has proven by a preponderance of the evidence that claim 18 of the ’107 patent is unpatentable under 35 U.S.C. § 102(a)(1) as anticipated by Claiborne.

*E. Obviousness over the Combination of Tylicki and Claiborne (Claim 12)*

Petitioner asserts claim 12 of the ’107 patent is unpatentable under 35 U.S.C. § 103 as obvious over the combined teachings of Tylicki and Claiborne. Pet. 13, 16–39.

*1. Tylicki*

Tylicki discloses a door chime system that allows a user to download sound files to the door chime and select particular sound files to be played when particular switches on the door chime are pressed. Ex. 1005 ¶¶ 8–9. Figure 1 of Tylicki is reproduced below.

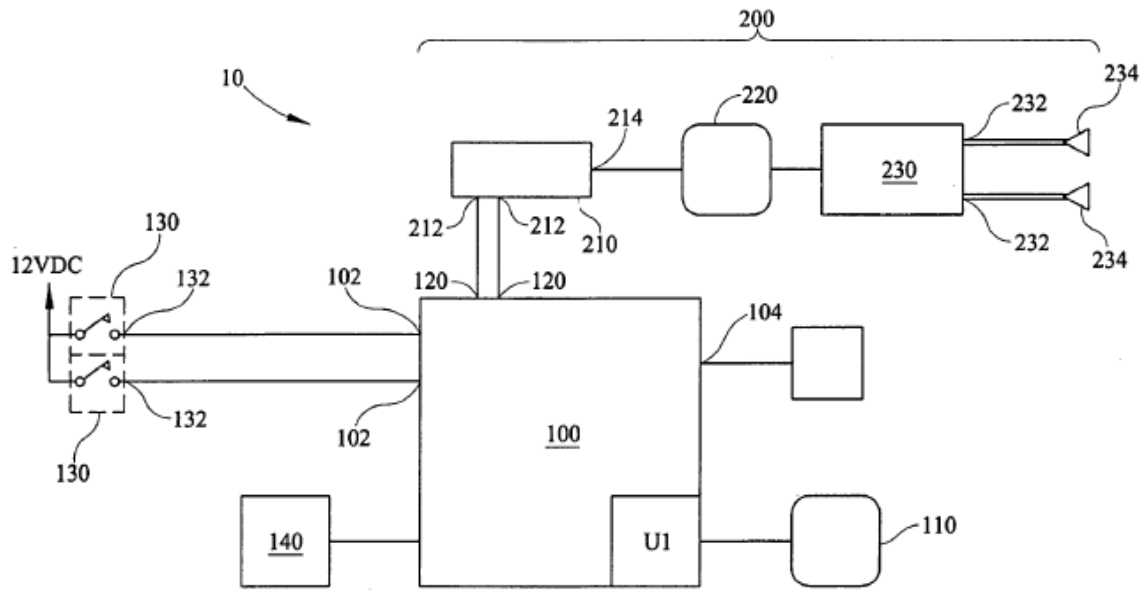


FIG. 1

Figure 1 of Tylicki is a block diagram of door chime system 10 having microcontroller 100, which has “a plurality of inputs 102 for receiving a plurality of door bell pushbutton 130 outputs 132.” Ex. 1005 ¶¶ 11, 15. Tylicki explains that microcontroller 100’s outputs 120 are electrically connected to amplifier stage 200, in which “[p]ower amplifier 230 includes plurality of analog speaker outputs 232 that are electrically connected to a plurality of conventional speakers 234 for playback.” Ex. 1005 ¶ 24. Tylicki also explains that “user interface 140 is operably connected to the microcontroller 100 to permit various features of the system 10 to be configured,” and Tylicki lists “cellular telephones” as exemplary “user interface 140 devices.” Ex. 1005 ¶ 18.

## 2. Independent claim 12

Patent Owner disputes only Petitioner’s contentions as to whether the combination of Tylicki and Claiborne teaches a chime that is remotely

located from the doorbell and contains separate electrical and/or mechanical components from the doorbell, as Patent Owner proposes to construe the term “chime.” *See* PO Resp. 20–22. As discussed above, we do not agree with this construction. We address obviousness of claim 12 first applying our construction of “chime,” under which Petitioner’s contentions are undisputed. We address obviousness under Patent Owner’s proposed construction in the next section.

*a) Petitioner’s undisputed contentions and our findings*

Claim 12 is directed to “[a] method of using a doorbell system to emit a sound from a chime.” Petitioner contends Tylicki teaches such a method. Pet. 22–23 (citing Ex. 1005 ¶¶ 2, 8, 15, 25, 26, Fig. 1; Ex. 1003, 39). We are persuaded Tylicki teaches this subject matter because it teaches broadcasting a sound when the chime is activated by the doorbell. Ex. 1005 ¶ 8.

Claim 12 recites “selecting the sound by a communication device comprising one of a phone and tablet device” and “sending a data file comprising information to the chime that is communicatively coupled to the communication device, . . . wherein the information represents the sound.” As discussed above in our claim construction discussion, we are persuaded by Petitioner’s contention that claim 12 does not require the “selecting” and “sending” steps to be performed in any particular order. Petitioner contends that Tylicki’s disclosure of using a cellular phone to select which sound to play when the doorbell is pressed teaches the “selecting” limitation. Pet. 24–25 (citing Ex. 1005 ¶¶ 18, 19, 25; Ex. 1003, 39–42). Tylicki discloses that “[a] user interface 140 is operably connected to the microcontroller 100 to permit various features of the system 10 to be configured” and that “[a] wide variety of user interface 140 devices may be employed with the system

of the present invention, including . . . cellular telephones.” Ex. 1005 ¶ 18. Tylicki further discloses that “user interface 140 enables a user to select from a plurality of chime tunes stored in data memory 110 to be played responsive to a doorbell pushbutton 130.” Ex. 1005 ¶ 19. Based on this evidence, we are persuaded, and we find, that Tylicki teaches “selecting the sound by a communication device comprising one of a phone and tablet device.”

For the “sending” limitation, Petitioner cites Tylicki’s disclosure of allowing a user to download sound files to the door chime system. Pet. 29 (citing Ex. 1005 ¶¶ 9, 16, 17). Tylicki discloses that “[t]he present invention permits a user to download a plurality of digital sound files, for example files saved utilizing the commonplace MP3 format, into an integral data memory and select a specified file to be broadcast when the door chime is actuated.” Ex. 1005 ¶ 9. Tylicki also discloses that microcontroller 100 includes a communication port that “permit[s] communications with a plurality of peripheral devices for downloading MP3 files or other digital sound files incorporating alternative digital formats for eventual playback.” Ex. 1005 ¶ 17. Based on this evidence, we are persuaded, and we find, that this Tylicki teaches “sending a data file comprising information to the chime . . . wherein the information represents the sound,” as recited in claim 12. We also are persuaded, and we find, that Tylicki’s disclosure of user interface 140, such as a cellular phone, connected to the chime system teaches that the chime “is communicatively coupled to the communication device,” as recited in claim 12. *See* Ex. 1005 ¶¶ 18–19.

Petitioner also asserts that it would have been obvious to download the sound files from the cellular phone of Tylicki. Pet. 30–32. Claim 12

recites “sending a data file comprising information to the chime that is communicatively coupled to the communication device.” Unlike the limitation reciting “selecting the sound by a communication device,” the “sending” limitation does not require the recited “communication device” to send the data file comprising information to the chime. Nonetheless, we have reviewed Petitioner’s contentions, and we are persuaded it would have been obvious to download (i.e., send) the sound files from the cellular phone of Tylicki in view of Claiborne’s teachings of downloading audio files from a device such as a cellular phone to the chime. *See* Pet. 30–32; Ex. 1003, 49–51; Ex. 1006 ¶¶ 27, 41, Fig. 3. As Petitioner points out, “Tylicki does not specify which particular peripheral devices may be used to accomplish the task of downloading,” but Claiborne provides “an identified and predictable solution,” namely using a cellular phone to download files to the chime. Pet. 20 (citing Ex. 1003 ¶ 59). Tylicki identifies “cellular telephones” as examples of user interface devices that can connect to and configure various features of the chime system, including selecting which file to play. Ex. 1005 ¶¶ 18–19. Tylicki also discloses downloading sound files from peripheral devices to the chime system. Ex. 1005 ¶ 16. Tylicki does not state expressly that the peripheral devices that can be used for downloading files include cellular telephones. In view of Tylicki’s other disclosures of using cellular telephones as user interface devices to configure the system, we are persuaded by Petitioner’s contention that a person of ordinary skill in the art would have been motivated to use a cellular phone to send sound files to the chime, as disclosed in Claiborne. *See* Ex. 1003 ¶ 59 (Dr. Madisetti testifying that “an artisan looking to implement Tylicki’s door chime would have found a predictable solution in Claiborne. Claiborne

teaches that a cellular phone was one such peripheral device known in the art to enable the downloading of sound files to a chime. . . . Claiborne’s teaching is just one example of the common practice of transferring files from a cellular phone to another device.”) (citing Ex. 1006 ¶ 27).

Claim 12 also recites “detecting an indication of a presence of a visitor with a doorbell that is communicatively coupled to the chime, . . . wherein the doorbell comprises a button configurable to detect a button press to indicate the presence of the visitor” and “emitting the sound from a speaker of the chime in response to detecting the indication of the presence of the visitor.” Petitioner contends Tylicki teaches this subject matter. Pet. 34–35, 37–39 (citing Ex. 1005 ¶¶ 8, 9, 15, 24, 25, 26, Fig. 1; Ex. 1003, 54–56, 60–64). We are persuaded, and we find, that Tylicki teaches this subject matter. In particular, referring to Figure 1, Tylicki discloses “door chime system 10 comprises a microcontroller 100 having a plurality of inputs 102 for receiving a plurality of door bell pushbutton 130 outputs 132.” Ex. 1005 ¶ 15. Tylicki discloses that, “when pushbutton 130 is depressed, output 132 provides an electrical signal to input 102 of microcontroller 100 to [initiate]<sup>9</sup> door chime playback.” Ex. 1005 ¶ 25. As shown in Tylicki’s Figure 1, the door chime system has “conventional speakers 234 for playback.” Ex. 1005 ¶ 24. Based on this evidence, we are persuaded, and we find, that Tylicki teaches “detecting an indication of a presence of a visitor with a doorbell that is communicatively coupled to the

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<sup>9</sup> Tylicki uses the word “imitate” here, which appears to be a typo. *See, e.g.*, Ex. 1005 ¶ 15 (“[T]he term ‘pushbutton’ will be used throughout this specification to denote a device capable of initiating door chime actuation . . .”).

chime, . . . wherein the doorbell comprises a button configurable to detect a button press to indicate the presence of the visitor” and “emitting the sound from a speaker of the chime in response to detecting the indication of the presence of the visitor.”

Claim 12 also recites “wherein the chime is located within an inside portion of a building” and “wherein the doorbell is located along an outside portion of the building.” Petitioner argues that a person of ordinary skill in the art would have found it obvious to place a chime inside a building and a doorbell outside a building because “the well-known purpose of a chime is to alert occupants of a building to the presence of a visitor at the door” and “the well-known purpose of a doorbell is to provide visitors a way to alert occupants to their presence outside.” Pet. 32–33, 35–37. We are persuaded by Petitioner’s contentions.

We agree with Petitioner that “the well-known purpose of a doorbell is to provide visitors a way to alert occupants to their presence outside.” Pet. 36 (citing Ex. 1003, 58). Thus, we find a person of ordinary skill in the art would have understood that a doorbell is mounted outside, by a door for example. We also agree with Petitioner that “the well-known purpose of a chime is to alert occupants of a building to the presence of a visitor at the door.” Pet. 32–33 (citing Ex. 1005 ¶ 4). In view of this, Petitioner argues that “it would have been obvious to a person of ordinary skill in the art that Tylicki’s chime speaker may be mounted inside the business or large residential dwelling so as to alert various dwelling occupants to the presence of a visitor outside.” Pet. 33 (citing Ex. 1003, 52–53; Ex. 1006, claim 1). We are persuaded by this argument because it is generally known that a doorbell chime rings inside a building to provide notice to those inside of

someone outside. *See* Ex. 1003, 52–53 (Dr. Madisetti testifying that a chime is placed inside to alert occupants).

Patent Owner does not explicitly dispute Petitioner’s contentions as to the locations of the doorbell and the chime. *See* PO Resp. 20–22. Rather, Patent Owner asserts that “the Petition and Dr. Madisetti fail to point to any teaching of Tylicki showing that the chime is remotely located with respect to the doorbell as required by the claims under the proper construction of ‘chime.’” PO Resp. 22. If a doorbell is located outside a building and a chime is located inside a building, then the chime would be “remotely located” from the doorbell, satisfying part of Patent Owner’s proposed construction. *See* Tr. 13:15–17 (Patent Owner’s counsel stating that “Claim 12 does have the inside and outside [recitations], which we do agree is a form of remotely location”). For the reasons explained above, we are persuaded by Petitioner’s contentions that it would have been obvious for a doorbell to be located on the outside of a building and for a chime to be located inside the building, and, therefore, we also find that it would have been obvious to have the chime be “remotely located” from the doorbell.

*b) Patent Owner’s arguments and our additional findings*

Patent Owner argues that Tylicki does not teach that its chime is remotely located from the doorbell and contains separate electrical and/or mechanical components from the doorbell, as Patent Owner proposes to construe “chime.” PO Resp. 20–22; PO Sur-reply 9–13. As discussed above, we do not agree that these are requirements of the claimed “chime,” but we find Tylicki teaches this subject matter in any event.

First, we find Tylicki teaches that its chime is remotely located from the doorbell because the doorbell is located on the outside of a building and

the chime is located inside the building, as discussed above. *See* Pet. Reply 14 (“As explained in the Petition, Tylicki renders obvious that its chime would be located inside a building, Pet. at 32–33, while the doorbell would be located outside a building, Pet. at 35–37.”). Patent Owner argues the following:

In its reply, Petitioner attempts to piggyback off its arguments regarding the limitations in claim 12 requiring that the “chime is located within an inside portion of a building” and the “doorbell is located along an outside portion of the building.” These arguments are improper as they differ from those made in the Petition.

PO Sur-reply 9. We disagree that these arguments are improper. Petitioner’s reply arguments merely point out that the requirements of claim 12 that the doorbell be outside and the chime be inside mean that the chime is remotely located from the doorbell, a point with which we agree. Thus, we find Tylicki teaches that its chime is remotely located from the doorbell.

Second, we find Tylicki teaches that its chime “contains separate electrical and/or mechanical components from the doorbell,” as required by Patent Owner’s proposed construction. *See* PO Resp. 9. Similar to its arguments against Claiborne, Patent Owner argues that Tylicki does not satisfy Patent Owner’s proposed construction because Tylicki “teaches a doorbell that shares a controller 100, and other components, with the chime speakers” and “teaches multiple shared components, including a shared microprocessor, which receives the doorbell output signals and then triggers the sound to play.” PO Resp. 21–22. These arguments, however, are not commensurate with Patent Owner’s proposed construction, which simply requires that the chime have some “electrical and/or mechanical

components” that are separate from the doorbell. Figure 1 of Tylicki is reproduced below.

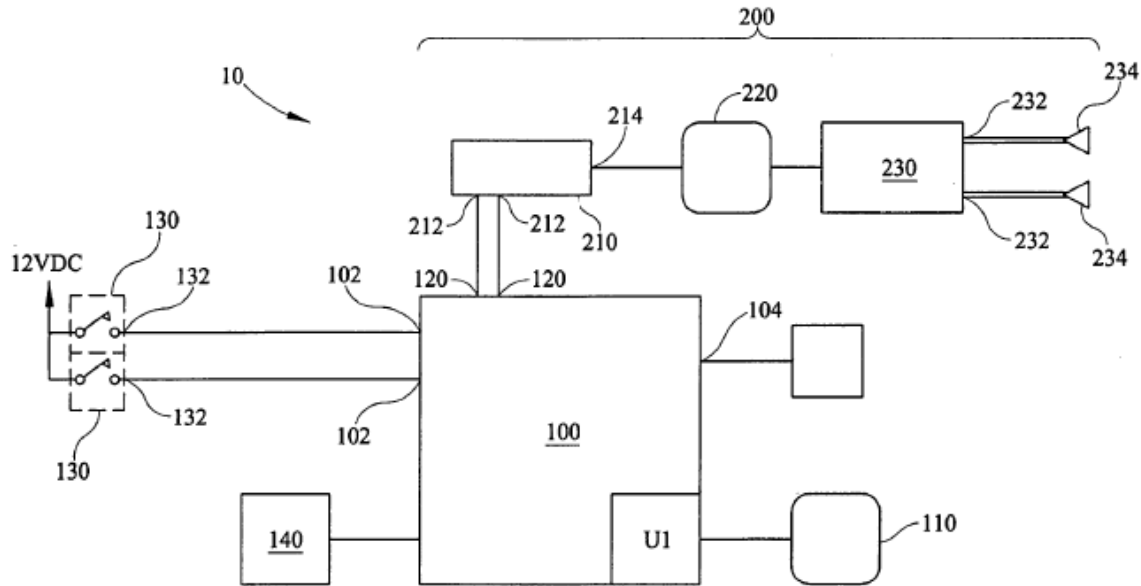


FIG. 1

Figure 1 of Tylicki is a block diagram of door chime system 10 having microcontroller 100, which has “a plurality of inputs 102 for receiving a plurality of door bell pushbutton 130 outputs 132.” Ex. 1005 ¶¶ 11, 15. Figure 1 depicts speakers 234 that are used for playing sound, and these are depicted as separate from doorbell pushbuttons 130. Speakers 234, therefore, are examples of components within Tylicki’s chime that are separate from the doorbell.

Thus, we find that, even under Patent Owner’s proposed construction, Tylicki teaches that its chime is remotely located from the doorbell and contains separate electrical and/or mechanical components from the doorbell.

*c) Determination of unpatentability for claim 12*

For the reasons explained above, we find the combination of Tylicki and Claiborne teaches the subject matter of claim 12 both under our interpretation of “chime” and under Patent Owner’s interpretation of “chime.” We also find that a person of ordinary skill in the art would have been motivated to combine the teachings of Tylicki and Claiborne, as discussed above. Having considered the full record developed during trial, we are persuaded by Petitioner’s contentions and evidence, and we determine that Petitioner has proven by a preponderance of the evidence that claim 12 of the ’107 patent is unpatentable under 35 U.S.C. § 103 as obvious over the combined teachings of Tylicki and Claiborne.

*F. Anticipation by Tylicki  
(Claim 18)*

Petitioner asserts that Tylicki anticipated claim 18. Pet. 13, 39–47. Similar to its arguments as to the other grounds, Patent Owner’s arguments as to anticipation of claim 18 by Tylicki are based entirely on its proposed construction of “chime,” which we do not adopt. See PO Resp. 22–24; PO Sur-reply 9–13. As explained below, we find Tylicki anticipated claim 18 under our construction of “chime” and under Patent Owner’s proposed construction.

Independent claim 18 is directed to “[a] doorbell system, comprising: a doorbell comprising a button configurable to detect a button press to indicate a presence of a visitor.” Petitioner contends that Tylicki’s door chime system having a doorbell pushbutton describes this subject matter. Pet. 40–41 (citing Ex. 1005 ¶¶ 2, 8, 9, 15, 25, 26, Fig. 1; Ex. 1003, 65–68). We are persuaded, and we find, that Tylicki describes this subject matter. In

particular, referring to Figure 1, Tylicki discloses “door chime system 10 comprises a microcontroller 100 having a plurality of inputs 102 for receiving a plurality of door bell pushbutton 130 outputs 132.” Ex. 1005 ¶ 15.

Claim 18 recites “a chime communicatively coupled to the doorbell.” Petitioner contends that Tylicki discloses an electronic door chime whose components “are communicatively coupled to the doorbell pushbuttons via a microcontroller,” thereby describing this subject matter. Pet. 41–42 (citing Ex. 1005, code (57), ¶¶ 8, 24, 25, Fig. 1; Ex. 1003, 68–70). Tylicki discloses that, “when pushbutton 130 is depressed, output 132 provides an electrical signal to input 102 of microcontroller 100 to [initiate] door chime playback.” Ex. 1005 ¶ 25. Based on this evidence, we find that Tylicki describes a chime that is a sound emitting device and that is communicatively coupled to the doorbell.

We also find that Tylicki describes a “chime” under Patent Owner’s construction. Tylicki discloses “allowing a user to select a plurality of different tunes to be broadcast upon actuation of a plurality of different door chime pushbuttons or switches,” which “is particularly useful where the system is installed at a site having multiple locations for ingress and egress.” Ex. 1005 ¶ 9. Thus, like Claiborne, Tylicki discloses a system with doorbells at different entrances. Even if the chime is in the unusual configuration of being co-located with one of the doorbells, the chime would be remotely located from the other doorbell, thereby meeting the “remotely located” prong of Patent Owner’s proposed construction. As noted above, Tylicki discloses speakers 234 that are used for playing sound and that are separate from doorbell pushbuttons 130. Ex. 1005, Fig. 1. Speakers 234,

therefore, are examples of components within Tylicki's chime that are separate from the doorbell.

Claim 18 further recites "a communication device communicatively coupled to at least one of the doorbell and the chime, wherein the communication device comprises one of a phone and tablet device."

Petitioner argues Tylicki's disclosure of a user interface device such as a cellular phone coupled to the door chime system describes this subject matter. Pet. 43–44 (citing Ex. 1005 ¶¶ 18–19, Fig. 1; Ex. 1003, 70–72). Tylicki discloses that "[a] user interface 140 is operably connected to the microcontroller 100 to permit various features of the system 10 to be configured" and that "[a] wide variety of user interface 140 devices may be employed with the system of the present invention, including . . . cellular telephones." Ex. 1005 ¶ 18. Tylicki further discloses that "user interface 140 enables a user to select from a plurality of chime tunes stored in data memory 110 to be played responsive to a doorbell pushbutton 130." Ex. 1005 ¶ 19. Based on this evidence, we are persuaded, and we find, that Tylicki describes "a communication device communicatively coupled to at least one of the doorbell and the chime, wherein the communication device comprises one of a phone and tablet device."

Claim 18 further recites "a sound emitted by a speaker of the chime in response to the doorbell detecting an indication of a presence of a visitor." Petitioner contends Tylicki discloses "broadcasting sounds from a speaker in response to a visitor pressing the doorbell pushbutton," thereby describing this subject matter. Pet. 44–45 (citing Ex. 1005 ¶¶ 8, 24–26, Fig. 1; Ex. 1003, 72–74). As noted above, Tylicki discloses that, "when pushbutton 130 is depressed, output 132 provides an electrical signal to

input 102 of microcontroller 100 to [initiate] door chime playback.”

Ex. 1005 ¶ 25. As shown in Tylicki’s Figure 1, the door chime system has “conventional speakers 234 for playback.” Ex. 1005 ¶ 24. Based on this evidence, we are persuaded, and we find, that Tylicki describes “a sound emitted by a speaker of the chime in response to the doorbell detecting an indication of a presence of a visitor.”

Claim 18 lastly recites “wherein the chime comprises a data file having information that represents the sound.” Petitioner argues Tylicki’s disclosure of storing digital sound files for playback by the chime system describes this subject matter. Pet. 45–47 (citing Ex. 1005 ¶¶ 2, 9, 16, Fig. 1; Ex. 1003, 74–76). Tylicki discloses that “[t]he present invention permits a user to download a plurality of digital sound files, for example files saved utilizing the commonplace MP3 format, into an integral data memory and select a specified file to be broadcast when the door chime is actuated.” Ex. 1005 ¶ 9; *see also* Ex. 1005 ¶ 16 (“The microcontroller 100 further includes an associated data memory 110 and digital output 120 (or a plurality thereof) for supplying digital sound files to a sound reproduction system . . .”). Based on this evidence, we are persuaded, and we find, that Tylicki describes that “the chime comprises a data file having information that represents the sound.”

For the reasons explained above, we find Tylicki describes the subject matter of claim 18. Having considered the full record developed during trial, we are persuaded by Petitioner’s contentions and evidence, and we determine that Petitioner has proven by a preponderance of the evidence that claim 18 of the ’107 patent is unpatentable under 35 U.S.C. § 102(a)(1) as anticipated by Tylicki.

### III. CONCLUSION<sup>10</sup>

For the reasons discussed above, we determine Petitioner has proven, by a preponderance of the evidence, that the challenged claims are unpatentable, as summarized in the following table:

| <b>Claim</b>               | <b>35 U.S.C. §</b> | <b>Reference(s)/<br/>Basis</b> | <b>Claims<br/>Shown<br/>Unpatentable</b> | <b>Claims<br/>Not Shown<br/>Unpatentable</b> |
|----------------------------|--------------------|--------------------------------|------------------------------------------|----------------------------------------------|
| 12                         | 103                | Tylicki,<br>Claiborne          | 12                                       |                                              |
| 18                         | 102(a)(1)          | Tylicki                        | 18                                       |                                              |
| 18                         | 102(a)(1)          | Claiborne                      | 18                                       |                                              |
| <b>Overall<br/>Outcome</b> |                    |                                | 12, 18                                   |                                              |

### IV. ORDER

Accordingly, it is:

ORDERED that claims 12 and 18 of the '107 patent have been shown to be unpatentable; and

FURTHERED ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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<sup>10</sup> Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

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PETITIONER:

Scott T. Jarratt  
Andrew S. Ehmke  
HAYNES AND BOONE, LLP  
scott.jarratt.ipr@haynesboone.com  
andy.ehmke.ipr@haynesboone.com

PATENT OWNER:

Neil Rubin  
Kent Shum  
RUSS AUGUST & KABAT  
nrubin@raklaw.com  
kshum@raklaw.com