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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* MARK FISHER, JAMES GARRETT, ARMANDO MARTINEZ,  
and AN NGUYEN

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Appeal 2019-000109  
Application 15/366,810  
Technology Center 2600

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BEFORE DEBRA K. STEPHENS, CARL W. WHITEHEAD JR., and  
PHILLIP A. BENNETT, *Administrative Patent Judges*.

STEPHENS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant,<sup>1</sup> Harman International Industries, Inc., appeals from the Examiner's decision to reject claims 1, 2, 5–10 and 13–18 (Final Act. 1). We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> We use the word “Appellant” to refer to “Applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Harman International Industries, Inc (Appeal Br. 1).

### CLAIMED SUBJECT MATTER

According to Appellant, the claims are directed to a wireless speaker system. Claim 1, reproduced below, is illustrative of the claimed subject matter:

- 1 An apparatus for a wireless speaker system, comprising:
  - a primary speaker, including:
    - a first transceiver configured to receive a first wireless signal from a mobile device via a first interface over a first frequency band, the first wireless signal including audio data;
    - a second transceiver configured to receive enrollment data from at least one secondary speaker and to transmit a second wireless signal including the audio data via a second interface over a second frequency band in response to receiving enrollment data from the at least one secondary speaker; and
    - wherein the primary speaker is configured to playback an audio signal based on the received audio data.

### REFERENCE

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Seydoux	US 8,054,987 B2	Nov. 8, 2011
Mayman	US 2013/0343568 A1	Dec. 26, 2013

### REJECTIONS

Claims 1, 2, 5, 6, 9, 10, and 13–16 are rejected under 35 U.S.C. § 102(a)(2) as being anticipated by Mayman (Final Act. 2); and

Claims 7, 8, 17, and 18 are rejected under 35 U.S.C. § 103 as being unpatentable over Mayman and Seydoux (*id.* at 5).

We have only considered those arguments that Appellant actually raised in the Briefs. Arguments Appellant could have made but chose not to make in the Briefs have not been considered and are deemed to be waived (*see* 37 C.F.R. § 41.37(c)(1)(iv)).

## OPINION

### *Anticipation: Claims 1, 2, 5, 6, 9, 10, and 13–16*

Appellant contends their invention as recited in claims 1, 2, 5, 6, 9, 10, and 13–16, is not anticipated by Mayman (App. Br. 3–6).<sup>2</sup> In particular, Appellant argues the Examiner erred in finding Mayman discloses “a second transceiver configured to receive enrollment data from at least one secondary speaker and to transmit a second wireless signal including the audio data via a second interface over a second frequency band in response to receiving enrollment data from the at least one secondary speaker,” as recited in independent claim 1 (*id.*).

## ANALYSIS

The Examiner finds Mayman discloses “second transceiver 200 [is] configured to receive enrollment data 113 (e.g., ‘handshaking’ . . . procedure which is executed by transmitting signals from a transceiver 300 of the secondary speaker 112 to the transceiver 200 of the primary speaker 104)” (Final Act. 2 (citing Mayman ¶¶ 23–24, 41)). The Examiner further finds Mayman describes “to transmit a second wireless signal 114 including the

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<sup>2</sup> Rather than repeat the arguments here, we refer to the Appeal Brief and Reply Brief for the positions of Appellant and the Final Office Action and Answer for the positions of the Examiner. Only those arguments actually made by Appellant have been considered in this decision. Arguments that Appellant did not make in the Briefs have not been considered and are deemed to be waived (*see* 37 C.F.R. § 41.37(c)(1)(iv) (2012)).

audio data via a second interface over a second frequency band in response to receiving enrollment data 113 from the at least one secondary speaker 112” (*id.* (citing Mayman ¶¶ 50, 52)).

Appellant asserts “the Examiner appears to equate the claimed first transceiver with the detachable transceiver 510, and the second transceiver with the transceiver 200[; however,] . . . these elements are part of separate embodiments” (App. Br. 4–5). Additionally, Appellant contends Mayman’s docking station 104 does not include first and second transceivers and even if it did, Mayman’s handshaking fails to disclose the recited enrollment data (*id.* at 5).

We are not persuaded by Appellant’s contentions. Mayman describes a docking station located external to the docking station housing (Mayman ¶ 53; Fig. 5). Mayman further describes that “wireless techniques may also be used to connect” the cradle 502 and docking station 500 using wireless methodologies such as, for example, IR, RF, or laser (*id.* ¶ 54). Thus, the docking station has a first transceiver to communicate with the cradle. Accordingly, we are not persuaded these are two different, exclusive embodiments; rather, the embodiments may work together.

As noted by the Examiner, Mayman discloses a built-in docking station 106 of the primary speaker, a separate docking station 502 connected to the primary speaker by wire 506, or a cradle for the mobile device wirelessly connecting the mobile device to the primary speaker using a separate transceiver 510 of the primary speaker (Final Act. 6 (citing Mayman ¶ 54, Figs. 1, 5)). In particular, Figure 2 describes a docking station and Figure 5 describes a docking station with a detachable transceiver and media device cradle (Mayman ¶¶ 15, 18, 32, 53).

Furthermore, Figure 5 is directed to locating “portions of a docking station . . . external to the docking station housing” (*id.* ¶ 53). Mayman describes wireless communication between portions of the docking station external to the docking station and the docking station (*id.*). Mayman also describes communication between remote speakers and the docking station (*id.* ¶¶ 39, 41).

Appellant next argues “the ‘handshaking’ appears to relate to various audio playback related commands such as skip a track, etc. [but] is silent as to the ‘handshaking’ being received at the second transceiver, within the context of the claims” (App. Br. 5; Reply Br. 2). Appellant further contends “[w]hile Mayman discloses transmitting audio signals to other speakers, it does not do so ‘in response to receiving enrollment data from the at least one secondary speaker’” (App. Br. 5; Reply Br. 2).

We are not persuaded by Appellant’s contentions. Claim 1 recites the second transceiver “receive[s] enrollment data from at least one secondary speaker and to transmit a second wireless signal . . . in response to receiving enrollment data from the at least one secondary speaker.” Initially, we note Appellant has not identified a definition of “enrollment data” in the Specification (*see* App. Br. 2). The Specification does not describe explicitly the term “enrollment data.” The Specification describes “[t]he enrollment data *may* include the predefined frequency, as well as an identifier unique to each speaker” (Spec. ¶ 42 (emphasis added)).

Mayman discloses the docking station transmitting and receiving signals (Mayman ¶ 39). Mayman further describes the remote speaker 112 receives or transmits data to establish a wireless link, such as establishing a link with the transceiver 200 in the docking station. Mayman further

describes handshaking may be “executed by transmitting signals from the transceiver 300 [of the secondary speaker 112]” (Final Act. 7 (citing Mayman ¶ 41)). The Examiner determines:

As well known in the art, a handshaking procedure in information technology, telecommunications, and related fields, is an automated process of negotiation that dynamically sets parameters of a communications channel established between two entities before normal communication over the channel begins. Thus, the secondary speaker 112 transmits handshaking data 113 (“enrollment data”) to the primary speaker 104 before the primary speaker 104 transmits the audio data to the secondary speaker 112 over the communication link 114

(*id.*; see Reply Br. 3). We agree with the Examiner’s finding (*see also* Harry Newton, *Newton’s Telecom Dictionary* 393 (21<sup>st</sup> ed. 2005) “construing ‘handshaking’ as ‘[t]he initial exchange between two data communications systems prior to and during data transmission to ensure proper data transmission’”; *Microsoft Computer Dictionary* 245 (5<sup>th</sup> ed. 2002) “construing ‘handshake’ as ‘a series of signals acknowledging that communication or the transfer of information can take place between computers or other devices’”). Appellant has not proffered sufficient evidence or argument to persuade us *handshaking* should be construed other than as would have been understood by an ordinarily skilled artisan at the time of the invention. Thus, we are not persuaded of Examiner error in the interpretation and therefore find Mayman discloses data sent by the secondary speaker to the transceiver during handshaking.

Additionally, although Mayman describes that the wireless signals exchanged between the docking station and remote speaker may include data that may affect the operations of the docking station (including selecting

another song or changing a song play list), Mayman also discloses the wireless signals exchanged include handshaking signals (Mayman ¶ 41). We further note “enrollment data” does not preclude other data affecting the operations of the docking station.

Mayman describes the transceiver in the secondary speaker (remote speaker 112) may transmit or receive wireless signals from transceiver 200 (Mayman ¶¶ 40–41; Fig. 1). The transceiver 300 may then access audio content included in a received wireless signal (*id.*). Thus, we agree with the Examiner that handshaking data is transmitted to achieve the initial connection between the docking station and the remote (secondary) speaker 112, as discussed above, and in response, the secondary speaker 112 receives audio data (Final Act. 2–3, 7; Mayman ¶¶ 39–40, 50–51; *see also* Mayman ¶ 34 (discussing how the transceiver may comply with one or more protocols such as client/server in which the server responds to request from the client)). Mayman therefore discloses the transceiver in the docking station, upon receiving the enrollment data (handshaking data) transmitting a wireless signal including the audio data to the secondary speaker (Mayman ¶¶ 23–24, 32, 39, 40, 50–52; Figs. 1, 2).

Accordingly, we are not persuaded the Examiner erred in finding Mayman discloses the invention as recited in independent claim 1. Independent claims 9 and 14 and dependent claims 2, 5, 6, 10, 13, 15, and 16 were not separately argued, instead relying on the arguments set forth with respect to claim 1 (App. Br. 6). Therefore, we sustain the rejection of claims 1, 2, 5, 6, 9, 10, and 13–16 under 35 U.S.C. § 102(b) for anticipation by Mayman.

*Obviousness: Claims 7, 8, 17, and 18*

Appellants contend their invention as recited in claims 7, 8, 17, and 18, is not obvious over Mayman and Seydoux and particularly, that the combined references do not teach “a mode switch for switching between a primary mode where the first transceiver is configured to receive the audio data from the mobile device and a secondary mode where the second transceiver is configured to receive the audio data from the at least one secondary speaker,” as recited in dependent claim 7 and commensurately recited in dependent claim 17 (App. Br. 7–8).

According to Appellant, however, although Seydoux “discloses an algorithm having various ‘modes of operation,’ . . . *Seydoux* fails to disclose a ‘mode switch,’” within the context of claim 7 (App. Br. 7). Appellant contends although Seydoux’s loudspeaker may be moved or switched off, Seydoux discloses the speakers 10 having “an *internal* mode switch” (*id.*).

Initially, we note the claim does not recite that the mode switch is a physical piece of hardware or that the switch must be performed by a human. The Specification describes “a mode switch 158 for switching between a primary mode . . . and a secondary mode” (Spec. ¶ 23). The Specification further describes that the switch may be “a separate switch,” “any type of switch such as a button, sliding switch, toggle, etc.” or “may, additionally or alternatively, also be included in the display interface 125” (*id.*). The Specification, however, uses “may be” for each example, and Appellant’s Specification describes the mode switch in a non-limiting, exemplary context. Furthermore, looking to the prior art, Seydoux describes “the system is ergonomically simplified because its operation is highly automated and the number of pushbuttons and other controls is reduced to

the strict minimum” (Seydoux, col. 3, ll. 15–17). Therefore, we are not persuaded by Appellant’s argument that because Seydoux’s switch is internal, it does not teach a “mode switch” or moreover, that an ordinarily skilled artisan would not have found a mechanical or manually selected mode switch obvious to implement in light of the teachings of Seydoux.

The Examiner relies on Mayman to teach “by relaying content (e.g., audio content or remote control commands), a wireless network may be established among the remote speakers and the docking station” and thus, Mayman, allows the second transceiver to transmit and receive audio (Final Act. 5 (citing Mayman ¶¶ 39, 42, 47)). Mayman, thus, allows the second transceiver to transmit and receive audio.

The Examiner further relies on Seydoux and in particular, on Seydoux’s mode switching which “allow[s] any speaker within the wireless network to perform the function of either receiving and playing the audio signal directly from the source S or receiving and playing the audio signal relayed by another speaker depending on the speaker[’]s position within the network relative to the source S and other speakers” (Final Act. 5 (citing Seydoux Figs. 1(c)–1(d))<sup>3</sup>).

Seydoux teaches speakers able to switch roles, i.e., the network head loudspeaker R and a dependent loudspeaker L’ swap roles (col. 12, l. 48 – col. 13, l. 14, Fig. 1*d*). In particular, Seydoux describes “the dependent loudspeaker L’ sends to the network head R a ‘role swap request’”. This

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<sup>3</sup> The Examiner cites to paragraphs 136–142 of Seydoux; however, the printed patent of Seydoux does not have a “paragraph” format, but rather, column and line numbers. Based on the findings, it appears these paragraphs are column 13, line 46 to column 14, line 22. Appellant does not indicate confusion; therefore, we determine this is harmless error.

request . . . defines a new routing scheme so as to be able to broadcast audio signal from the loudspeaker L' instead of from the loudspeaker R" (*id.* at col. 12, l. 65– col. 13., l 3; Fig. 1*d*). "[T]he loudspeaker L' becomes the 'host' (i.e.,) server, in the meaning of a client/server relationship), becoming temporarily the network head, the loudspeaker R receiving data (i.e.,) being a client in the meaning of a client/server relationship) coming temporarily from a dependent loudspeaker" (*id.* at col. 13, ll. 9–14, Fig. 1*d*). Thus, Seydoux teaches a primary mode where the head loudspeaker R (and therefore, a transceiver in the loudspeaker R) is configured to receive the audio data from the source S, and a secondary mode where the head loudspeaker R (and therefore, a transceiver in the loudspeaker R) receives audio data from the loudspeaker L' (a secondary speaker). We further agree with the Examiner that an ordinarily skilled artisan would have found it obvious to include an electronic mode switch for switching between the modes (Ans. 4; Final Act. 5–6).

In light of these teachings, we determine the combination of Seydoux and Mayman performs the function of switching between a primary mode where the first transceiver is configured to receive audio data from the mobile device and a secondary mode where the second transceiver is configured to receive the audio data from the secondary speaker.

Appellant presents new arguments regarding motivation in the Reply Brief. Appellant had an opportunity to raise the arguments in the Appeal Brief, and has provided this record with no such showing of good cause for not doing so. In the absence of a showing of good cause by Appellant, the new arguments by Appellant are thus deemed waived (*see* 37 C.F.R. § 41.41(b)(2); *see also* *Optivus Tech., Inc. v. Ion Beam Appl'ns S.A.*, 469

F.3d 978, 989 (Fed. Cir 2006) ("[A]n issue not raised by an appellant in its opening brief . . . is waived.") (Internal citations and quotation marks omitted)).

Accordingly, we are not persuaded the Examiner erred in finding the combination of Mayman and Seydoux teaches, suggests, or otherwise renders obvious the limitations as recited in dependent claim 7 and commensurately recited claim 17, argued on the basis of claim 7. Dependent claims 8 and 18, not separately argued. Therefore, we sustain the rejection of claims 7, 8, 17, and 18 under 35 U.S.C. § 103(a) for obviousness over Mayman and Seydoux.

#### DECISION

The Examiner's rejections are affirmed.

More specifically,

The Examiner's rejection of claims 1, 2, 5, 6, 9, 10, and 13–16 under 35 U.S.C. § 102(a)(2) as being anticipated by Mayman is affirmed; and

The Examiner's rejection of claims 7, 8, 17, and 18 under 35 U.S.C. § 103 as being unpatentable over Mayman and Seydoux is affirmed.

#### DECISION SUMMARY

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1, 2, 5, 6, 9, 10, 13–16	102	Mayman	1, 2, 5, 6, 9, 10, 13–16	
7, 8, 17, 18	103	Mayman, Seydoux	7, 8, 17, 18	

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<b>Overall Outcome</b>			1, 2, 5–10, 13–18	
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FINALITY AND RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a) (*See* 37 C.F.R. § 1.136(a)(1)(iv)).

AFFIRMED