UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SDI TECHNOLOGIES, INC.,

Petitioner

v.

BOSE CORPORATION,

Patent Owner

Patent No. 8,364,295

No. IPR2014-00346

REPLY OF PETITIONER SDI TECHNOLOGIES, INC.

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I. INTRODUCTION

As an initial matter, SDI brings to the Board's attention the Final Written Decision in IPR2013-00465, in which the Board found claims 1-21, 24, 27, 29-47, 50, 63, 64, 68-70, 73, 74, 77, and 78 of the '295 patent unpatentable in view of the same prior art that forms the basis for this proceeding. (*See Bose v. SDI*, Final Written Decision ("465 Final Written Decision"), IPR No. 2013-00465, Paper No. 40.) This Petition addresses claims that include just one additional feature, which is clearly taught in these references, as discussed below.

In its Introduction, Bose notes that it raised evidentiary objections to the subject references in the 465 IPR. Those objections were overruled in the 465 Final Written Decision, with the exception of Bose's objection to page 7 of Ex. 1011, which the Board also found was not necessary to invalidate all of the claims in the earlier IPR. Page 7 is also not necessary to invalidate the claims addressed in this IPR.

II. CLAIM CONSTRUCTION

A. "Configured To Respond To Signals Received From The Computer"

In its Preliminary Response, Bose argued that "configured to respond to signals received from the computer" should be construed to be mean "configured to answer or reply to the computer, *i.e.*, send a responsive communication back to the computer." (Paper 12, at 14.) Bose argued that this should be the construction

because, according to Bose, the word "respond" is used in the patent in a way that requires an answer or a reply. (*Id.* at 15-18.)

In the Institution Decision, the Board considered Bose's argument, but nevertheless found that the ordinary and customary meaning of "respond" also included "to show some reaction to a force or stimulus." (Paper 13, at 9 (citing Bose's Exhibit 2103, a dictionary definition of "respond").) This of course is part of the conventional meaning of this word, as, for example, one can "respond" to a poor grade on an exam simply by studying harder for the next one.

The Board determined that the portions of the specification cited by Bose did "not describe the structure of the claim language," did not define or describe restrictively what it means to "respond," and were simply examples that were not described as limiting. (*Id.* at 9-10.)

In its full Response, Bose argues that (a) "the doctrine of claim differentiation supports Bose's Proposed Construction," (b) "the specification uses the word 'respond' to refer to an answer or reply," and (c) "the claims' separate use of 'respond' and 'in response to' also supports Bose's proposed construction."

None of these arguments (the second which has already been considered) is sufficient to require Bose's narrow construction.

1. The "Claim Differentiation" Argument Fails

For "claim differentiation," Bose argues that, under the construction adopted

by the Board in the Institution Decision, dependent claims 25 and 51 would not be narrower than their respective independent claims 1 and 27. That is not true.

Bose argues that claims 1 and 25 already describe a system in which the speaker plays music from the computer because the claims include "one or more speakers" and "an amplifier . . . powering the one or more speakers." (Paper 16, at 9.) Bose then argues that, because claims 25 and 51 provide that the speaker is "configured to respond," the Board's construction must be wrong because what is claimed in claims 1 and 25 is already configured to play music from the computer.

Bose's argument fails for being unsupported by the claim language because, while the independent claims recite a speaker and amplifier, ***they do not require that the speakers play music from the computer***. (This presumably is not an accident. Bose wrote these claims to not require the computer because SDI does not sell a computer (Bose would say that iPods/iPhones used with SDI's products are the claimed "computer") and Bose was trying to make SDI a direct infringer, having lost an earlier case on the parent when its indirect infringement case failed.)

The independent claims are directed to an "audio system" that includes a housing, a speaker, control circuitry, an amplifier, a connector "configured to provide a physical and electrical connection," and a remote control. The control circuitry is "configured to receive" control signals. But there is nothing in the claims that requires that the speaker play music from the computer.

In particular, while the claims recite "one or more speakers" and an "amplifier . . . for powering the one or more speakers," ***nothing in the claim requires that the speakers play music that comes from the computer***. The independent claims would cover, for example, a system in which the speaker was present but did not play music, or only played music from the amplifier that was supplied to the amplifier from a source other than the computer.

Because the independent claims do not actually require that the speakers play music ***from the computer***, Bose's claim differentiation argument does not work. In independent claims 1 and 27, the speaker does not need to respond to signals from the computer (music or otherwise), while the "configured to" dependent claims (25 and 51) narrow the scope of the independent claims by requiring that the speakers be configured to respond to the computer.

Because the claims have different scopes under the Board's construction, "claim differentiation" does not require a narrower interpretation of "respond."

2. The Arguments Based in the Specification Fail

Bose next repeats the arguments it made in the Preliminary Response about the specification. They have not improved with age.

Basically, Bose's argument is that "respond" should be limited to its "answer or reply" construction because that is "consistent" with the specification. Bose's the fundamental problem, however, is that the Board's construction is ***also***

"consistent with" specification.

The Board is obligated to apply the ***broadest reasonable*** construction that is consistent with the specification. *See, e.g.*, *SAP America Inc. v. Versata Dev. Group Inc.*, CBM2012-00001, Paper 70 at 7-19 (PTAB 2013) (discussing the rationale for applying broadest reasonable interpretation); *Vibrant Media Corp. v. General Electric Co.*, IPR2013-00170, Paper 56 at 4-5 (PTAB 2014) (rejecting the patent owner's argument that broadest reasonable interpretation standard should not apply because patent owner decided not to amend its claims).

Bose cannot show, and does not even try to show, that the Board's construction—which comes from Bose's own dictionary definition of this common word—is unreasonable.

As the Board observed in the Institution Decision, Bose's arguments about the specification are based on an aspect of the system different than what is being claimed and are not described as limiting.

In particular, the first passage Bose cites are about the computer system responding to the speaker, while the claims concern the opposite arrangement, in which the speaker is responding to the computer. (*See* '295 Patent, Claim 51 ("wherein the sound reproduction system is configured to respond to signals received from the computer").) Contrary to Bose's assertions, the distinction ***is*** significant, because Bose's argument is based on the specific context in which the

term is used in the specification. Bose says that "respond" must have a certain meaning for specific technical reasons that are inapplicable to how the word is used in the claims. Because "respond" is never used in the specification in the context in which it is used in the claims, the specification cannot limit that term in the claims.

The second passage Bose cites relates to the automatic selection of preset radio stations in which, according to Bose, the "sound reproduction device replies back [to the computer] identifying the strongest signals." (Paper 16, at 12.) In fact, however, the specification is silent about how the computer determines the strongest signals for available stations. (*See* Ex. 1001, at 9:32-7 ("At step 104, the computer program directs AM/FM tuner 12 to scan the applicable broadcast frequency band for strong signals. At step 106, the strongest signals are compared to available stations based on the locator and information about available radio stations, as discussed above in the discussion of audio system mode operation."); Fig. 7.) The specification does not say that the speaker responds to the computer and, even if it did, it certainly does not amount to a clear disclaimer.

Finally, Bose asserts that it is not seeking to limit the claims to particular embodiments, but instead "is relying on the description of this embodiment as illustrative of an answer or reply the sound reproduction device may send to the computer, which is consistent with and supports Bose's proposed construction."

(Paper 16, at 14.) To the extent that is understandable, it is incorrect. Bose most certainly is seeking to use the specification to narrow the meaning of "respond." Without a clear disclaimer, that would not be appropriate. *See In re Am. Acad. Of Sci. Tech Ctr.*, 367 F.3d 1359, 1369 (Fed. Cir. 2004) ("We have cautioned against reading limitations into a claim from the preferred embodiment described in the specification, even if it is the only embodiment described, absent clear disclaimer in the specification.").

3. Bose's "In Response To" Argument Also Fails

Finally, Bose argues that "the separate use of the terms "respond" and "in response to" in the claims (and in the claims of related patents, as well as the prosecution history) also supports Bose's proposed construction." (Paper 16, at 14.) The argument is that "respond" must be limited to an answer or response because the claims also use a ***different*** phrase—"in response to"—to mean a situation in which there is no answer or reply.

This argument fails, as a matter of logic, because it does not follow that because one thing means X another does not mean X. In other words, there is no reason why "respond" and "in response to" cannot have the same meaning. Bose offers no reason why both terms cannot encompass "a responsive action."

Bose's arguments are also circular, as they assume a meaning of something in the claims or file history and then argue that Bose's conclusion must be correct

based on Bose's assumption. For example, Bose cites application claim 18, which stated that the "computer system responds to [the] control signal." (Paper 16, at 16.) Bose then assumes that this means "answer or reply," where nothing in the claim actually says or requires that. Then Bose says that because application claim 18 used "respond" to mean "answer or reply" (according to Bose) the claim language must mean "answer or reply." The argument is faulty because there is nothing in the claim requiring that computer send a signal, or any other answer.

The Board's construction is also fully "consistent with the general presumption in patent law that different terms have different meanings" because, as Bose seems to acknowledge (*see* Paper 16, n.3), these are simply the same term expressed as different parts of speech. The choice of "respond" or "in response to" is simply a matter of how the concept fits with the words around it. The plain meaning is that sending an answer and taking an action are both things that can be done as a response to something else; whether that is "responding" to the trigger or doing something "in response to" the trigger is simply a matter of whether you are expressing the concept as an infinitive or a prepositional phrase. The underlying concept is the same.

* * *

Assuming support in the specification, Bose could have written claims limited to "answering or replying," and Bose could have amended its claims in this

IPR to limit them in that way. Having done neither, Bose can hardly complain about this non-technical language being given its conventional meaning.

III. OBVOUSNESS

Aside from the "respond" claim construction argument, Bose offers only non-obviousness arguments that have already been considered and rejected in the 465 Final Written Decision. (To be fair, the Board had not issued the 465 Final Written Decision when Bose filed its Response.)

A. A Person Of Skill in the Art Would Have Made this Combination

Bose first argues that the instituted ground of rejection is defective because "a person of ordinary skill in the art would not have combined the references as proposed in the Amended Petition." (Paper 16, at 18.) The idea is that a person of skill in the art would have combined the references in a different way proposed by Bose that would avoid the claims.

The Board has already considered this argument in the 465 IPR, determining that "[t]he references do not teach away from Petitioner's proposed combination." (465 Final Written Decision, at 19.) In particular, the Board found that while "Patent Owner's evidence suggests that a skilled artisan may have had reasons to pursue one or the other of its two proposed combinations in certain circumstances . . . the mere disclosure of alternative designs does not teach away." (*Id.* at 23-24 (citing *In re Mouttet*, 686 F.3d 1332, 1334 (Fed. Cir. 2013).)

With respect to Bose's argument about hindsight, the Board explained that Bose failed to "show[] that focusing one's testimony on an allegedly invalidating combination to the exclusion of other, non-invalidating combinations, evidences hindsight bias." (*Id.* at 22.) The Board further found that Dr. Lippman's testimony that "a skilled artisan would have made the proposed combination in order to reduce duplication and clutter, such that one remote would control both the speaker and the computer and using the IR receiver positioned in the speaker" had a rational underpinning. (*Id.* at 23.)

The Board correctly concluded that "Patent Owner's two combinations and Petitioner's combination together constitute three rearrangements of the same elements, where each of those combinations is a predictable use of the elements for their intended purposes" and that "[p]recisely how to arrange these known elements would have been an obvious matter of design choice." (*Id.* at 23.)

The arguments Bose makes on these points in this IPR are identical to the arguments made in the 465 IPR. None of them are based on, or even mention, the "respond" issue that distinguishes this IPR from the earlier one. As the arguments are the same, the result should be the same, and Bose's "teaching away" argument should be rejected.

B. The Combination Does Teach All of the Claim Elements

Bose argues that the combination would not satisfy (a) the "configured to respond" requirement of claims 25-26 and 51-52, (b) the requirement of an amplifier within the same housing as control circuitry, and (c) the requirement of a connector located at least partially within the same housing as the control circuitry. The first argument is based on Bose's improperly narrow construction of "respond," and the other two have already been considered in the 465 IPR.

1. Configured to Respond

In its Response, Bose admits that page 3 of the Altec Lansing Manual "discloses that the user is able to adjust the volume of the speakers, e.g., by having the computer transmit a command via USB to the speaker system, which then adjusts the amplifier settings." (Paper 16, at 33.) Bose further admits that "[w]hen audio is received the speaker turns on automatically" due to "audio sensing circuitry in the speaker." (*Id.* at 34.) These admissions are more than sufficient to show that the system of the combination meets the "the configured to respond" requirement of claims 25-26 and 51-52, as explained in the Petition.[1] Notably, Bose does not argue that the combination does not meet this claim limitation under the Board's construction. Bose's argument on this limitation is based entirely on

[1] It should also be noted that the responses described in the Altec Lansing Manual are more than just playing music provided by the computer—the computer is operating to control specific features, such as volume or power.

its claim construction, which is incorrect, as explained above.

2. Location of the Amplifier

Bose next argues that the amplifier in the combination would not be in the same "housing" as the control circuitry. (Paper 16, at 35.) As the Board has already found, however, "the control circuitry taught in Altec Lansing Manual is not limited to the IR receiver positioned on the satellite speaker, but rather includes circuitry in the subwoofer that receives commands from the remote control via the IR receiver (e.g., circuitry that receives a signal from the remote to control the volume of the subwoofer)." (465 Final Written Decision, at 25.) The Board also agreed with SDI that "where to locate the particular circuitry would have been a predictable matter of design choice, with the circuitry performing the same intended function regardless of whether it is located in the subwoofer or a satellite speaker." (*Id.*)

Bose does make one effort to improve this argument from the 465 IPR, asserting that the Petition only identifies the "IR receiver" as the control circuitry. (Paper 16, at 35.) Bose apparently interprets the Petition to refer to only the single component in the IRMan device that actually receives the infrared signals. That is an inappropriately narrow reading of the petition, which further explains that the IRMan product both "receive[d] the signal" and "converts [the] signals to computer commands understood by the software in [the] PC." (*See, e.g.*, Paper 1,

at 17.) In addition, Bose ignores the fact that Dr. Lippman's Declaration, submitted as Exhibit 1017 with the Petition, further explained that the "IR receiver" was "plugged into a computer to control software running on the computer." (Exhibit 1017, at ¶ 40.) The Petition used the term "IR receiver" to refer to the entire IRMan device, including the components/cables that connect the actual IR receiving component to the computer.

Further, as explained by the Board, the decision about where in the system to place the control circuitry would simply have been a matter of design choice. (465 IPR Written Decision, at 25 ("We also are persuaded by Petitioner that where to locate the particular circuitry would have been a predictable matter of design choice, with the circuitry performing the same intended function regardless of whether it is located in the subwoofer or a satellite speaker.").) Bose surely cannot contend that the claims are patentable solely because the control circuitry is in one place rather than another.

That wrinkle aside, Bose's argument on this point is identical to the argument made in the 465 IPR, and Bose does not argue that the "respond" issue affects this one. As the arguments are the same, the result should be the same.

3. Connector Within the Housing

Bose finally argues that the combination would not have a "connector located at least partially within" the same housing as the control circuitry." (Paper

16, at 38.) This is the same issue as discussed immediately above. As the Board has already found that the control circuitry "is not limited to the IR receiver positioned on the satellite speaker, but rather includes circuitry in the subwoofer that receives commands from the remote control via the IR receiver (e.g., circuitry that receives a signal from the remote to control the volume of the subwoofer)," this limitation is met. (465 IPR Written Decision, at 25.) Again, deciding where to place these known components, which are used for their known purpose (*e.g.*, a connector for connecting), is simply a matter of design choice.

IV. CONCLUSION

For these reasons, and those stated in the Petition, SDI respectfully requests that the Board find claims 25, 26, 51-53, 55-62, 75, and 76 unpatentable.

FOLEY & LARDNER LLP

/Matthew B. Lowrie/
Matthew B. Lowrie, Reg. No. 38,228

Date: November 25, 2014
111 Huntington Avenue, Suite 2600
Boston, MA 02199-7610
Tel: (617) 342-4000

CERTIFICATION OF SERVICE

The undersigned hereby certifies that the foregoing Reply was served electronically on counsel for patent owner Bose Corporation, on November 25, 2014, in its entirety:

Dorothy P. Whelan, Reg. No. 33,814
Whelan@fr.com

W. Karl Renner, Reg. No. 41,265
axf@fr.com

Mark J. Hebert, Reg. No. 31,766
Hebert@fr.com

IPR2556-0006IP2@fr.com
IPR25556-0007IP2@fr.com

FOLEY & LARDNER LLP

/Aaron W. Moore/
Aaron W. Moore, Reg. No. 52,043