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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte LESTER F. LUDWIG

Appeal 2010-008330
Application 10/676,249
Technology Center 2800

Before JOHN A. JEFFERY, BARBARA A. BENOIT, and TRENTON A. WARD, *Administrative Patent Judges*.

JEFFERY, *Administrative Patent Judge*.

ON REQUEST FOR REHEARING

Appellant requests that we reconsider our decision of October 18, 2012 ("Op.") where we affirmed the Examiner's anticipation rejection of claims 1-102. We have reconsidered our decision in light of Appellant's arguments in the Request for Rehearing, but we decline to change the decision for the following reasons.

Claims 1, 3-23, 25-57, 60-74, 77-79, 81-91, and 93-102

Appellant first emphasizes that claim 1 recites plural processors, where each processor (1) receives a selected one of plural incoming audio

signals, and (2) processes a received incoming electrical signal to produce an audio output signal, the processing performed by variably changing the incoming signal's pitch as claimed. Req. 2-3.[1] In light of this limitation, Appellant contends that even if Hasebe's elements 12-15 and control section 16 could be construed as a single signal processor as allegedly "implied" in our decision, this "processor" is provided with two incoming audio signals not a selected one incoming audio signal as claimed. Req. 5. Appellant adds that Hasebe's signal processing section 19, which Appellant equates to the second processor under this "implied" construction, does not variably change pitch as claimed. *Id.*

We find these arguments unavailing. First, Appellant's argument regarding Hasebe's elements 12-16 as constituting a single signal processor that does not receive a *selected one* incoming audio signal was not previously raised in the briefs and is therefore waived as untimely. *See* 37 C.F.R. § 41.52(a)(1) ("Arguments not raised in the briefs before the Board and evidence not previously relied upon in the brief and any reply brief(s) are not permitted in the request for rehearing except as permitted by paragraphs (a)(2) and (a)(3) of this section."). Although Appellant's Appeal Brief quotes the relevant language of claim 1 reciting plural processors and each processor's functionality (App. Br. 18-19), Appellant's corresponding arguments mainly emphasized Hasebe's (1) failure to process an incoming audio signal by variably changing its pitch, and (2) derived control signals are not audio signals. *See* App. Br. 18-21; Reply Br. 2-9. In short, Appellant did not emphasize the particular mapping that Appellant currently

[1] Although the Request is not paginated, we nonetheless refer to the pages in the order in which they appear in the record for clarity.

proffers in connection with Hasebe and the recited processors, let alone that one of those processors is provided with two signals as Appellant now asserts in the Request. *Compare* Req. 5 *with* App. Br. 18-21; Reply Br. 2-9.

But even if we were to consider Appellant's belated arguments based on an "implied" mapping of Hasebe, they are not commensurate with the scope of the claim, and, in any event, not germane to our decision. To be sure, claim 1 requires plural processors, and that each processor (1) receives a selected one of plural incoming audio signals, and (2) processes a received incoming electrical signal by variably changing its pitch. But as we indicated in the decision, we found no error in the Examiner's position based on Hasebe's processing functionality in Figure 3, which we found satisfies both these requirements. *See* Op. 5-9. Notably, the Examiner not only finds that elements 12-15 and 19 have processing capabilities, but also that control section 16 likewise processes input signals. Ans. 8-9.

Given the various processing functions in Hasebe's Figure 3, nothing in claim 1 precludes one such "processor" from including (1) first pitch detection section 13; (2) control section 16; and (3) signal processing section 19. Nor does the claim preclude another such "processor" from including (1) second pitch detection section 15; (2) control section 16; and (3) signal processing section 19. While these "processors" include common elements, namely the control and signal processing sections, they are nonetheless distinct in light of their different pitch detection sections that each receive a different "incoming audio signal" from ADCs 10 and 11, respectively. *See* Op. 8 (noting that these signals are direct digital representations of analog audio signals and therefore constitute "incoming audio electrical signals"). Appellant's arguments based on the "implied" mapping of Hasebe to various

elements (i.e., elements 12-16 or 12-13 as corresponding to a first "processor" and elements 19 or 14-15 as corresponding to a second "processor") (Req. 5) are simply not commensurate with the scope of the term "processor" which is hardly limited to Appellant's presumed mapping—a mapping which is raised for the first time on appeal in any event.

And as we indicated in our decision, we found no error in the Examiner's position that Hasebe processes a received incoming audio signal by variably changing its pitch—a processing function that is fully met by the pickups' detected pitch that is used to determine corresponding data sets that is ultimately used to generate tones with the correct pitch. *See* Op. 7-8. Although only one of the two pitch data sets are used in this process, namely the one that is deemed correct, Hasebe still effectively changes the pitch of the received audio signal that is deemed incorrect as we noted in the decision. *See* Op. 8 (noting that the second pickup's pitch data in an example is effectively "corrected" by Hasebe's processing functionality). Appellant's contention that omitting signal processor output deemed to be the error component of a "non-agreeable outcome" is not a pitch change (Req. 5) is unavailing and not commensurate with the scope of the claim. We also find Appellant's arguments regarding Hasebe's envelope detection sections 12 and 14 and MIDI Converter section 18 as not changing pitch are irrelevant to our decision which does not rely on those elements, but rather the processing elements noted above. *See* Op. 5-9.

Lastly, Appellant's arguments regarding the distinction between an audio signal and a control signal in view of their respective content and intended purposes (Req. 6-8) are unavailing given the scope and breadth of

the terms. As we noted in our decision, nothing in the claim precludes an "incoming audio electrical signal" from constituting, among other things, a digital signal that is derived from analog audio signals. Op. 8-9.

We therefore maintain our decision affirming the Examiner's rejection of claims 1, 3-23, 25-57, 60-74, 77-79, 81-91, and 93-102 for the reasons indicated above and in the decision.

Claims 2, 24, 58, 59, 75, 76, 80, and 92

We are also unpersuaded by Appellant's arguments regarding claim 2 that recites that at least one processor is controlled by an *incoming* signal processing control signal. Req. 8-9. As we noted in our decision, nothing in the claim precludes the internal control signals that control Hasebe's signal processing section 19 which has multiple inputs to that section. Op. 9 (noting this fact). These inputted signals are incoming, at least with respect to the signal processing section.

We therefore maintain our decision affirming the Examiner's rejection of claims 2, 24, 58, 59, 75, 76, 80, and 92 for the reasons indicated above and in the decision.

CONCLUSION

For the foregoing reasons, we have granted Appellant's request to the extent that we have reconsidered our decision, but we deny the request with respect to making any changes therein.

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

REHEARING DENIED

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