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EXAMINER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CIRRUS LOGIC, INC. and CIRRUS LOGIC INT'L (UK) LTD.
Third Party Requesters and Respondents
and
BSE Co., Ltd.
Third Party Requester and Respondent

v.

KNOWLES ELECTRONICS LLC
Patent Owner and Appellant

Appeal 2015-004342
Merged *Inter Partes* Reexamination Control Nos. 95/000,509,
95/001,251, and 95/001,363
Patent US 6,781,231 B2
Technology Center 3900

Before JAMES T. MOORE, BRADLEY W. BAUMEISTER, and
ANDREW J. DILLON, *Administrative Patent Judges*.

BAUMEISTER, *Administrative Patent Judge*.

DECISION ON REQUEST FOR REHEARING

Appeal 2015-004342
Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363
US Patent No. 6,781,231 B2

SUMMARY

In our Decision on Appeal mailed September 9, 2015 (“Decision”), this Panel of the Board affirmed the Examiner’s decision rejecting reexamined claims 1–4 and 23–27 of US Patent 6,781,231 B2 (“the ’231 Patent”). Dec. 23. More specifically, the Board affirmed the Examiner’s anticipation rejection of claims 1–4 under 35 U.S.C. § 102(b) over Halteren (US 6,324,907 B1; issued Dec. 4, 2001). Dec. 15–23; *e.g.*, RAN 37–39. The Board also affirmed the Examiner’s rejection of claims 23–27 under 35 U.S.C. § 112, ¶ 1, for lacking adequate written description. Dec. 10–15; RAN 16–17.

Pursuant to 37 C.F.R. § 41.79, Patent Owner (“Owner”) subsequently requested rehearing of our Decision, setting forth three specific issues. *See generally* Reh’g Req. filed October 10, 2015. In response, Third Party Requester (“Requester”) responded with a paper styled, “Comments Under 35 U.S.C. § 41.79(c) In Opposition To Request For Rehearing,” filed October 27, 2015 (“Opposition To Request”).

Subsequent to receiving the Parties’ respective briefs on rehearing, the Panel became aware—without the requisite notification from either party or from the Examiner¹—of the existence of a related PTAB appeal.

¹ *See* rules 37 C.F.R. §§ 41.67(c)(1), 41.68(b)(1) (requiring parties filing appeal briefs and respondent briefs, respectively, in an *inter partes* reexamination to identify “all other prior and pending appeals . . . or judicial

Appeal 2015-004342

Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363

US Patent No. 6,781,231 B2

Specifically, Owner brought Appeal 2015-004989 before the PTAB (“the ’4989 Appeal”) in relation to an *inter partes* reexamination of US 8,018,049 B2, issued September 13, 2011 and titled “SILICON CONDENSER MICROPHONE AND MANUFACTURING METHOD” (“the ’049 Patent”). The ’049 Patent indicates that that patent is also issued to the present inventor, Anthony D. Minervini, and is also assigned to the present assignee, Knowles Electronics LLC.

Requester for reexamination of the ’049 Patent, Analog Devices, Inc., filed a Corrected Request for Reexamination of the ’049 Patent. *See* Request for Inter Partes reexamination of U.S. Patent No. 8,018,049 (filed Dec. 23, 2011 in reexamination application 95/001,850) (“the ’850 Request” and “the ’850 Reexamination”). The ’850 Request was subsequently granted (*see* Order Granting Request for *Inter Partes* Reexamination, mailed Mar. 7, 2012), and various claims of the ’049 Patent were rejected in the associated reexamination (*see* ’850 Reexam., RAN 1).

proceedings . . . [that] may be related to, directly affect or be directly affected by or have a bearing on the Board’s decision in the pending appeal.” *See also* 37 C.F.R. § 41.69(a) (requiring an Examiner’s Answer in an *inter partes* reexamination to make of record determinations that an appeal brief or respondent brief does not comply with Rules 41.67 and 41.68); 37 C.F.R. § 41.8(a)(2) (requiring a party filing an appeal brief to identify “within 20 days of any change during a proceeding . . . , [e]ach judicial or administrative proceeding that could affect, or be affected by, the Board proceeding”).

Appeal 2015-004342

Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363

US Patent No. 6,781,231 B2

One rejection includes an anticipation rejection over Halteren (*see* '850 Reexam., RAN 5–10)—the same prior art reference at issue in the present appeal and rehearing. Owner appealed that rejection, among others (*see generally*, '4989 Brief of appellant Knowles electronics LLC (filed June 17, 2014)), and therein argued, as in the present appeal, that the claim term “package” should be interpreted narrowly and that Halteren does not disclose a package (*id.* at 5–19). The Panel of the '4989 Appeal rejected Owner's claim construction of the term “package” ('4989 Decision on Appeal (mailed Aug. 31, 2015) at 6–9), affirmed the Examiner's anticipation rejection over Halteren (*id.* at 9–11), and denied Owner's Request for Rehearing (*see generally* '4989 Decision on Request for Rehearing (mailed Feb. 18, 2016)). Owner subsequently appealed this Decision to the United States Court of Appeals for the Federal Circuit. *See* Patent Owner Knowles Electronics, LLC's Notice of Appeal (filed in the '1850 Reexamination Mar. 21, 2016).

Because neither Party brought this related appeal to the present Panel's attention, much less presented any arguments in relation to this related appeal, any arguments that may have been based on that Panel's Decisions are deemed waived. *See Hyatt v. Dudas*, 551, F.3d 1307, 1313–14 (Fed. Cir. 2008) (the Board may treat arguments appellant failed to make for a given ground of rejection as waived). We instead review the appealed rejections for error based upon the issues identified by the parties, and in

Appeal 2015-004342

Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363

US Patent No. 6,781,231 B2

light of the arguments and evidence produced thereon. *Ex parte Frye*,
94 USPQ2d 1072, 1075 (BPAI 2010) (precedential) (citing *In re Oetiker*,
977 F.2d 1443, 1445 (Fed. Cir. 1992)).

For the reasons set forth below, Owner's Request for Rehearing is
DENIED.

THE INVENTION AND CLAIMS

The '231 Patent describes the invention as follows:

A microelectromechanical system package has a microelectromechanical system microphone, a substrate, and a cover. The substrate has a surface for supporting the microelectromechanical microphone. The cover includes a conductive layer having a center portion bounded by a peripheral edge portion. A housing is formed by connecting the peripheral edge portion of the cover to the substrate. The center portion of the cover is spaced from the surface of the substrate to accommodate the microelectromechanical system microphone. The housing includes an acoustic port for allowing an acoustic signal to reach the microelectromechanical system microphone.

Abstract.

Independent claim 1, reproduced below with added emphasis, is
illustrative of the appealed claims:

Appeal 2015-004342

Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363

US Patent No. 6,781,231 B2

1. A microelectromechanical system *package* comprising:
 - a microelectromechanical system microphone;
 - a substrate comprising a surface for supporting the microelectromechanical microphone;
 - a cover comprising a conductive layer having a center portion bounded by a peripheral edge portion; and
 - a housing formed by connecting the peripheral edge portion of the cover to the substrate, the center portion of the cover spaced from the surface of the substrate to accommodate the microelectromechanical system microphone, the housing including an acoustic port for allowing an acoustic signal to reach the micro electromechanical system microphone wherein the housing provides protection from an interference signal.

PRINCIPLES OF LAW

Rule 37 C.F.R. § 41.79(b)(1) states,

(1) [A] request for rehearing must state with particularity the points believed to have been misapprehended or overlooked in rendering the Board's opinion reflecting its decision. Arguments not raised in the briefs before the Board and evidence not previously relied upon in the briefs are not permitted in the request for rehearing except as permitted by paragraphs (b)(2) and (b)(3) of this section.

Appeal 2015-004342

Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363

US Patent No. 6,781,231 B2

CONTENTIONS AND ANALYSIS

I.

Owner frames the first allegation of Board error as follows:

Issue 1: The Board misapprehended and overlooked established tenets of claim construction and the weight of the evidence in interpreting the term “package” in a manner that is unreasonably broader than any corroborated example of the term “package” in the record, further failing to properly apply or distinguish the Federal Circuit’s prior holdings interpreting this claim element.

Reh’g Req. 2.

More specifically, Owner first contends that “[t]he Board erred in failing to credit [Owner’s] extensive evidence that a person skilled in the art would have understood the term “package” to be mountable either by surface mounting or by through-hole mounting. Reh’g Req. 5 (citing PO App. Br. 9–13).

This argument is not persuasive because the Panel did not overlook Owner’s evidence submitted to show that a package must be mountable by surface mounting or through-hole mounting. Owner’s evidence was noted (Dec. 15–18), and the Panel explained why the broadest reasonable interpretation of “package” *included, but was not limited to*, packages produced from these two mounting methods (Dec. 18–22).

Owner also contends that “the Board overlooked that the record is devoid of a *single corroborated example* of the term “package” being used to describe a technology with any electro-mechanical connection means

Appeal 2015-004342

Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363

US Patent No. 6,781,231 B2

other than surface mounting or by through-hole mounting.” Reh’g Req. 5
(citing PO App. Br. 9–13) (or more simply, “other types of packages”).

This argument is not persuasive. It is not dispositive whether the record includes any prior art references that refer to other types of packages *ipsissimis verbis* as “packages.” Rather, the dispositive issue is whether the record contains sufficient evidence to conclude that the broadest reasonable interpretation of “package” must be limited to the narrow definition proffered by Owner. The Decision addressed this question and set forth evidence for the Panel’s conclusion that the broadest reasonable interpretation of “package” was *not* limited to Owner’s narrow interpretation, but instead included other types of packages. Dec. 18–22.

Owner next contends that “[t]he Board further failed to properly address pertinent Federal Circuit precedent about the meaning of the term ‘package’” in the ’231 Patent. Reh’g Req. 5. Towards this end, Owner argues that the Federal Circuit affirmed the International Trade Commission’s narrower interpretation of the ’231 Patent’s “package” (Reh’g Req. 5–6), and Owner asserts that it was legal error for the Board to reject “those aspects of the Federal circuit’s construction of ‘package’ on the sole ground that the Federal Circuit was not applying the broadest reasonable interpretation standard” (Reh’g Req. 6). Owner then cites legal precedent for the propositions that “an agency has an obligation to ‘acknowledge’ a ‘previous judicial interpretation of a disputed claim term’

Appeal 2015-004342

Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363

US Patent No. 6,781,231 B2

and ‘to assess whether it is consistent with the broadest reasonable construction of the term.’” Reh’g Req. 6 (citing *Power Integrations, Inc. v. Lee*, 797 F.3d 1318, 1326 (Fed. Cir. 2015)).

This argument is unpersuasive. The Panel did consider and “acknowledge” the district court’s interpretation of “package.” Dec. 21. However, *considering and acknowledging* the court’s interpretation does not mean that the Board then necessarily must *adopt* the court’s interpretation. Even Owner acknowledges (1) that the circuit court applied a narrower interpretation standard than the currently applicable broadest-reasonable-interpretation standard, and (2) that the USPTO is not bound in reexamination proceedings by claim constructions produced by a court. Transcript for Oral Hearing held July 22, 2015 (entered into the record Aug. 20, 2015) at 8. Furthermore, the Decision also explained the additional evidence the Board weighed and relied upon in concluding that the term “package,” as used in the ’231 Patent, should be interpreted more broadly under the applicable, broadest-reasonable-interpretation standard. Dec. 15–21.

Appeal 2015-004342

Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363

US Patent No. 6,781,231 B2

II.

Owner frames the second allegation of Board error as follows:

Issue 2: The Board misapprehended and overlooked the fact that Halteren fails to disclose the claimed “package,” even under the definitions of “package” that the Board relied on in rejecting Knowles’s construction.

Reh’g Req. 6.

However, Owner’s supporting arguments generally are *not* directed to this allegation. *See* Reh’g Req. 6–9. Most of the arguments of this section are, instead, directed to the first allegation of error, discussed above—that the claim term “package” should be afforded a narrower interpretation. *Id.*; *see, e.g., id.* at 6–7 (arguing that in endorsing “the Examiner’s finding that Haltern’s ‘flexible substrate transducer assembly’ is a package[,] . . . the Board overlooked a fundamental difference between Halteren’s ‘flexible’ assembly and the actual ‘packages’ described in Minervini ’231 and the above-cited extrinsic evidence”). To the extent that these arguments of the second allegation of error are, in fact, directed to the noted first allegation of error, these arguments are unpersuasive for the reasons set forth above in *Section I*.

Owner does present one argument in this section of the Rehearing Request that is directed to the stated second allegation: Owner argues that “the Decision overlooked that Halteren’s failure to provide a way to mechanically attach its disclosed device to a circuit board would lead to

Appeal 2015-004342

Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363

US Patent No. 6,781,231 B2

failure to provide protection from mechanical and environmental stresses.”

Reh’g Req. 8; *accord* 8–9.

At the outset, we question whether this argument was timely raised. *See* Opp. To Req. 7 (contending that this argument was not raised in Owner’s original brief). Regardless, though, this argument is unpersuasive. As noted by Requester,

Owner points to no evidence or legal authority that the Board overlooked. Owner’s assertion that Halteren fails to be a package because it does not describe a way to mechanically attach its disclosed device *to a circuit board* is based entirely on unsupported attorney argument. Owner does not explain why Halteren would need to describe a way to mechanically attach its disclosed device to a circuit board for the Halteren device to provide the “mechanical and environmental protection” described by the JEDEC definition of package.

Id. (emphasis added).

In fact, Halteren does disclose that the package provides mechanical and environmental protection. *See, e.g.*, Halteren, col. 2, ll. 57–59 (“the term ‘lid’ designates various forms of covers, casings and housing that are capable of providing the shielding from the external environment”); *see also, id.* col. 6, ll. 29–33 (“an important issue that needs to be addressed is the capability of the flexible substrate transducer assembly to withstand stress forces acting on the flexible member and the attached transducer system covered by the lid”); *accord id.* col. 6, ll. 29–64; col. 6, ll. 57–62 (“potentially damaging forces are minimized by substantially rigidly

Appeal 2015-004342

Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363

US Patent No. 6,781,231 B2

attaching the lid to the upper surface of the flexible elongate member to restrain the supporting area of the flexible elongate member so as to increase a stiffness of the supporting area”). In short, Halteren’s lid does, in fact, provide mechanical and environmental protection, including acoustic protection. Halteren col. 2, ll. 57–67.

III.

Issue 3 relates to the written description rejection of new claims 23–27, issued under 35 U.S.C, § 112, ¶ 1. The rejection results from the new claims’ inclusion of the language “wherein the solder pads are configured to mechanically attach and electrically connect the package to a surface of an external printed circuit board *using a solder reflow process*” (emphasis added).

Owner frames the third allegation of Board error as follows:

Issue 3: The Board misapprehended and overlooked established legal precedent and critical evidence in affirming the Examiner’s decision that claims 23–27 lack written description support for the “solder reflow” limitation.

Reh’g Req. 9.

In support of this general allegation, Owner more specifically argues that there is no dispute that the ‘231 Patent discloses solder pads, that extrinsic evidence of record makes it clear that such solder pads are meant to use Surface Mounting Technology, and “[o]bjective evidence indicates that

Appeal 2015-004342

Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363

US Patent No. 6,781,231 B2

a person skilled in the art would understand that the disclosed solder pads on the bottom of Minervini's package would be used to surface mount a device through reflow soldering." Reh'g Req. 9. This argument is not persuasive.

As explained in the Decision (*see e.g.*, Dec. 11, 14), evidence of what one skilled in the art would have understood to be obvious in light of a disclosure is relevant to the rule's requirement that a claim be enabled—not to the rule's separate requirement that the claim possess adequate written description. The test for whether an applicant's specification contains adequate written description for the claimed subject matter is whether applicant conveyed with reasonable clarity to those skilled in the art that, as of the filing date sought, applicant was in possession of the invention. *Enzo Biochem, Inc. v. Gen Probe Inc.*, 323 F.3d 956, 969 (Fed. Cir. 2002).

In further support of its position, Owner newly cites to three cases not previously relied upon in the original appeal. *Cf.* Reh'g Req. 10 (citing to *Falko-Gunter Falkner v. Inglis*, 448 F.3d 1357, 1366 (Fed. Cir. 2006) (for the proposition that "it is unnecessary to spell out every detail of the invention"); *Union Oil Co. v. Atl. Richfield Co.*, 208 F.3d 989, 997 (Fed. Cir. 2000) (for the proposition that "[t]he written description requirement does not require the applicant to describe exactly the subject matter claimed"); and *LizardTech, Inc. v. Earth Resource Mapping, Inc.*, 424 F.3d 1336, 1345 (Fed. Cir. 2005) (for the proposition that "[a] claim will not be invalidated on section 112 grounds simply because the embodiments of the specification

Appeal 2015-004342

Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363

US Patent No. 6,781,231 B2

do not contain examples explicitly covering the full scope of the claim language”) *with* PO App. Br. 49–54 (addressing the written-description issue without citing to these cases).

These cases do not support Owner’s position. The present situation is not one in which Owner failed to spell out *every* detail of the invention or failed to describe the claimed subject matter *exactly*. Rather, the present situation is one in which Owner failed to even mention, much less spell out *any* detail of, the claimed reflow process used for connecting the solder pads. As previously explained in the Decision,

The present situation is not one wherein the specification recites . . . a solder pad that can be connected to a board by use of a reflow process, and then merely fails to provide any details of what compositions and methods can be used to undertake the disclosed reflow solder process. Rather, the present Specification merely discloses a genus—solder pads that are capable of being connected to a board. But the Specification fails completely to disclose the newly claimed species of such pads—pads that are connectable to a board specifically by using a reflow process.

Dec. 13.

Nor is the fact pattern of *LizardTech* on point. We agree with

Requester:

in *LizardTech*, the specification described a [species of a] particular method for creating a seamless [discrete wavelet transform] DWT, while the claims were broad enough to cover [a genus that included] creating a seamless DWT using other

Appeal 2015-004342

Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363

US Patent No. 6,781,231 B2

methods. Thus, the issue in *LizardTech* is the opposite of the situation here where the claims at issue are *narrower* than the disclosure and recite a specific requirement (solder pads configured to connect the package to a printed circuit board using a solder reflow process) that is not disclosed in the specification. *LizardTech* has no bearing on whether claims 23–27 have written description support.

Opp. To Req. 13.

Owner also alleges that “[t]he Board misapprehended this written description issue as arising under the genus-species rubric.” Reh’g Req. 14 (citing Dec. 10). According to Owner, the present situation of where the package depicted in Fig. 3 is allegedly shown to be surface mounted using reflow technology, “is not a situation (*e.g.*, as sometimes arises in biotechnology and *chemical patents*) where a patentee tries to claim a specific tree after disclosing only a forest.” Reh’g Req. 10 (emphasis added and citation omitted).

This argument is not persuasive for at least two reasons. First, Owner presents no support for the proposition that the discussed “genus-species rubric” is limited solely to biotechnology and chemical patents. Secondly, even though the presently claimed package may be used within a larger electronics system, this fact does not negate the ultimate fact that the present dispute is, specifically, one of chemistry. The dispute centers around the chemical composition of the disclosed metal solder pad and whether this pad’s composition is sufficiently

Appeal 2015-004342

Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363

US Patent No. 6,781,231 B2

disclosed as being one capable of being used in a solder reflow
process. The composition of solder and methods of reflowing solder
are quintessentially chemical in nature.

DECISION

Owner's Request for Rehearing is denied.

DENIED

Appeal 2015-004342
Merged *Inter Partes* Reexamination Control Nos. 95/000,509, 95/001,251,
and 95/001,363
US Patent No. 6,781,231 B2

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