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**UNITED STATES INTERNATIONAL TRADE COMMISSION  
WASHINGTON, D.C.**

**In the Matter of**

**CERTAIN SILICON MICROPHONE  
PACKAGES AND PRODUCTS  
CONTAINING THE SAME**

**Investigation No. 337-TA-629**

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U.S. INTERNATIONAL TRADE COMMISSION

### **COMMISSION OPINION**

On June 11, 2009, the Commission issued notice of its final determination of violation of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337) (“section 337”), entry of a limited exclusion order, and termination of this investigation. This opinion sets forth the reasons for the Commission’s determination on the issues it previously determined to review, and on the issues of remedy, the public interest, and bonding.

#### **I. BACKGROUND AND PROCEDURAL HISTORY**

On January 14, 2008, the Commission instituted an investigation under section 337 of the Tariff Act of 1930, 19 U.S.C. §1337, based on a complaint filed by Knowles Electronics, LLC of Itasca, Illinois (“Knowles”), alleging a violation of section 337 in the importation, sale for importation, and sale within the United States after importation of certain silicon microphone packages or products containing same by reason of infringement of one or more of claims 1 and 2 of U.S. Patent No. 6,781,231 (“the ‘231 patent”), and claims 1, 2, 9, 10, 15, 17, 20, 28, and 29 of U.S. Patent No. 7,242,089 (“the ‘089 patent”). 73 *Fed. Reg.* 2277 (Jan. 14, 2008). The

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**PUBLIC VERSION**

complainant named MEMS Technology Berhad of Malaysia (“MemsTech”) as the only respondent. *Id.* The complaint sought, *inter alia*, a limited exclusion order covering infringing silicon microphone packages and products containing the same.

The technology at issue in this investigation generally relates to packaging for MEMS devices.<sup>1</sup> To be protected from the outside environment, including light and electromagnetic interference, MEMS devices must be encapsulated, *i.e.*, in a package. ‘231 patent, 1:15-26. A package also allows a MEMS device to be connected to a printed circuit board (or printed wiring board), which carries all the electrical components for a given system. CX-392C, Gilleo Witness Statement, page 4; RX-035, MEMS231961.

Both patents involved in the subject investigation cover silicon microphone packages. More specifically, the ‘231 patent claims a packaging for a MEMS microphone that “provides a shield for a MEMS microphone from an interference signal and/or environmental condition.” ‘231 patent, 1:38-40. The package includes a cover, substrate, and microphone. The package is formed by connecting the cover to the substrate, and the microphone is found in the housing created by the connection of the cover to the substrate. ‘231 patent, 1:44-47.

The invention of the ‘089 patent is directed to a silicon condenser microphone package

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<sup>1</sup>“MEMS” stands for a microelectromechanical system. MEMS devices are small devices that “move or cause motion in a controlled manner using an electrical signal and/or electrical energy.” CX-392C, Gilleo Witness Statement, page 3. MEMS devices can be made of a number of materials, including silicon. RX-363, Mallon Witness Statement, page 14. The most common type of MEMS devices are sensors, such as accelerometers, pressure sensors, and transducers. The MEMS devices that are at issue in the present investigation are MEMS transducers, specifically, microphones.

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**PUBLIC VERSION**

that allows acoustic energy to contact a transducer which provides the necessary pressure reference while at the same time protects the transducer from light, electromagnetic interference, and physical damage. '089 patent, 1:44-49. The package is formed by connecting the cover to the substrate, and the microphone is located in the chamber created by the connection of the cover to the substrate. '089 patent, 1:54-56.

On January 12, 2009, the presiding administrative law judge ("ALJ") issued his "Initial Determination on Violation of Section 337 and Recommended Determination on Remedy and Bond." The ALJ found a violation of section 337 and recommended that the Commission issue a limited exclusion order directed to Memstech, and require no bond during the period of Presidential review.

On March 13, 2009, the Commission determined to review the final ID in part, and issued a notice ("the Commission Notice") in which the Commission specified the issues under review and the questions pertaining to such issues. *74 Fed. Reg.* 11748 (March 19, 2009). In particular, the Commission determined to review:

(1) With respect to the '231 patent:

- (a) the ALJ's determination that Memstech's accused products infringe the '231 patent;
- (b) the ALJ's determination that U.S. Patent No. 4,533,795 to Baumhauer, Jr. et al. ("Baumhauer") does not anticipate claims 1 and 2 of the '231 patent;
- (c) the ALJ's determination that claims 1 and 2 of the '231 patent are not rendered obvious in view of U.S. Patent No. 5,459,368 to Onishi et al. ("Onishi");
- (d) the ALJ's determination that U.S. Patent No. 6,522,762 to Mullenborn et al. ("Mullenborn") taken in combination with Baumhauer does not render claim 1

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**PUBLIC VERSION**

obvious;

(e) the ALJ's determination that the master's thesis by David Patrick Arnold entitled "A MEMS-Based Directional Acoustic Array for Aeroacoustic Measurements" ("Arnold") taken in combination with Baumhauer does not render claims 1 and 2 obvious.

(2) With respect to the '089 patent:

(a) the ALJ's construction of the limitation "electrically coupled" in the asserted claims of the '089 patent;

(b) the ALJ's construction of the limitation "volume" in the asserted claims of the '089 patent;

(c) the ALJ's determination that the Memstech's accused products infringe the '089 patent;

(d) the ALJ's determination that Knowles SiSonic products practice claim 1 of the '089 patent;

(e) the ALJ's determination that Mullenborn does not anticipate claims 1, 2, 9, 15, 17, 20, 28, and 29 of the '089 patent;

(f) the ALJ's determination that claims 1, 2, 9, 15, 17, 20, 28, and 29 of the '089 patent are not invalid as obvious in view of: (i) Baumhauer alone; (ii) Baumhauer in combination with an article by Kress et al. entitled "Integrated Silicon Pressure Sensor for Automotive Applications with Electronic Trimming," SAE Document 950533 (1995) ("Kress"); (iii) Baumhauer in combination with U.S. Patent No. 4,277,814 to Giachino et al. ("Giachino"); and (iv) Onishi;

(g) the ALJ's determination that evidence shows that the commercial success of the SiSonic products is attributable to the '089 patent.

The Commission determined not to review the remainder of the final ID. *Id.* at 11749.

On review, the Commission requested briefing on the issues under review based on the evidentiary record, and responses by the parties to certain questions pertaining to the issues under

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**PUBLIC VERSION**

review. *See id.* at 11750. The Commission also requested briefing on the issues of remedy, the public interest, and bonding from the parties as well as from interested non-parties.

In accordance with the Commission notice, all parties to this investigation, including the Commission investigative attorney (IA), filed timely written submissions regarding the issues under review, and filed timely reply submissions. No submissions were received from interested non-parties.

**II. SUMMARY OF COMMISSION DETERMINATIONS**

The Commission has determined as follows with respect to the issues under Commission review and the issues of remedy, the public interest, and bonding.

**A. Issues Under Review**

(1) With respect to the '231 patent:

(a) The Commission affirms the ALJ's determination that Memstech's accused products infringe the '231 patent with certain modifications as detailed below.

(b) The Commission affirms the ALJ's determination that Baumhauer does not anticipate claims 1 and 2 of the '231 patent with certain modifications as detailed below.

(c) The Commission affirms the ALJ's determination that claims 1 and 2 of the '231 patent are not rendered obvious in view of Onishi.

(d) The Commission affirms the ALJ's determination that Mullenborn, taken in combination with Baumhauer, does not render claim 1 obvious with certain modifications as detailed below.

(e) The Commission affirms the ALJ's determination that Arnold, taken in combination with Baumhauer, does not render claims 1 and 2 obvious with certain modifications as detailed below.

(2) With respect to the '089 patent:

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**PUBLIC VERSION**

- (a) The Commission affirms the ALJ’s construction of the term “electrically coupled.”
- (b) The Commission affirms the ALJ’s construction of the term “volume” with certain modifications as detailed below.
- (c) The Commission affirms the ALJ’s determination that Memstech’s accused products infringe the ‘089 patent with certain modifications as detailed below.
- (d) The Commission affirms the ALJ’s determination that Knowles SiSonic products practice the ‘089 patent and, accordingly, that a domestic industry exists for this patent.
- (e) The Commission affirms the ALJ’s determination that Mullenborn does not anticipate claims 1, 2, 9, 15, 17, 20, 28, and 29 of the ‘089 patent.
- (f) The Commission affirms the ALJ’s determination that claims 1, 2, 9, 15, 17, 20, 28, and 29 of the ‘089 patent are not invalid as obvious in view of: (i) Baumhauer alone; (ii) Baumhauer in combination with Kress; (iii) Baumhauer in combination with Giachino; or (iv) Onishi, with certain modifications as detailed below.
- (g) The Commission affirms the ALJ’s determination that the commercial success of Knowles’ SiSonic products is attributable to the ‘089 patent.

**B. Remedy, the Public Interest and Bonding**

The Commission has determined that: (i) the appropriate remedy is a limited exclusion order directed to Memstech’s products that infringe the asserted claims of the ‘231 or ‘089 patent; (ii) the public interest will not be adversely affected by entry of the limited exclusion order; and (iii) there should be no bond during the period of Presidential Review.

**III. STANDARD ON REVIEW**

Commission review of an initial determination is limited to the issues set forth in the notice of review and all subsidiary issues therein. *Certain Bar Clamps, Bar Clamp Pads, and*

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*Related Packaging Display and Other Materials*, Inv. No. 337-TA-429, Comm'n. Op. at 3 (January 1, 2001). Once the Commission determines to review an initial determination, its review is conducted under a *de novo* standard. *Certain Polyethylene Terephthalate Yarn and Products Containing Same*, Inv. No. 337-TA-457, Comm'n. Op. at 9 (June 18, 2002). Upon review the "Commission has 'all the powers which it would have in making the initial determination,' except where the issues are limited on notice or by rule." *Certain Flash Memory Circuits and Products Containing Same*, Inv. No. 337-TA-382, Comm'n. Op. on the Issues Under Review and on Remedy, the Public Interest, and Bonding at 9-10 (June 2, 1997), USITC Pub. 3046 (July 1997) (quoting *Certain Acid-Washed Denim Garments and Accessories*, Inv. No. 337-TA-324, Comm'n. Op. at 5 (Nov. 1992)).

On review, "the Commission may affirm, reverse, modify, set aside or remand for further proceedings, in whole or in part, the initial determination of the administrative law judge. The Commission may also make any findings or conclusions that in its judgment are proper based on the record in the proceeding." 19 C.F.R. § 210.45(c).

## IV. DISCUSSION

### A. The '231 Patent

(1) The ALJ's determination that Memstech's accused products infringe the '231 patent.

We affirm the ALJ's determination that the Memstech's accused products infringe the '231 patent, with certain modifications. Specifically, while we agree with the ALJ's finding that the accused products infringe the '231 patent, we believe it is necessary to modify the ID by

**REVISED**

**PUBLIC VERSION**

striking out the ALJ's references to exhibits that were not properly admitted into evidence, *i.e.*, CX-231C and CX-228, and substituting other record evidence to support his findings.

Knowles and the IA assert that the ALJ's reliance on exhibit CX-231, *see* ID at 197, appears to be a typographical error. They support this assertion by noting that, when citing to CX-231, the ALJ refers to Bates numbers MEMS061075-92, which are included in exhibit CX-49C, which was admitted into evidence. We agree with Knowles and the IA and, accordingly, strike the ALJ's citation to un-admitted exhibit CX-231 and rely instead on exhibit CX-49C to support the ALJ's infringement determination.

We note that the ALJ also relies in part on un-admitted exhibit CX-228 for his finding that "[t]he accused products contain a substrate including a surface at least partially covered by a first layer of a conductive material." ID at 184. We also agree with the IA and Knowles that Dr. Gilleo's testimony at CX-392C at 17-18, to which the ALJ also cited, provides adequate support for this finding. *See* IResponse at 3. *See also* KResponse at 5. Therefore, we strike the reference to exhibit CX-228 on page 184 of the ID.

(2) The ALJ's determination that Baumhauer does not anticipate claims 1 and 2 of the '231 patent.

We affirm the ALJ's determination that Baumhauer does not anticipate claims 1 and 2 of the '231 patent with certain modifications. We agree with the ALJ that Baumhauer fails to anticipate claims 1 and 2 of the '231 patent because it does not disclose a "microelectromechanical package." ID at 65. The ALJ's finding is based *inter alia*, on the testimony of Dr. Gilleo that Baumhauer does not disclose a "package" because it does not

**REVISED**

**PUBLIC VERSION**

disclose the ability to connect the microphone to another circuit. (Gilleo Tr., p. 727, lines 4-8; p. 729, lines 16-22).<sup>2</sup>

However, we do not rely on the ALJ's finding that "[t]he substrate in Baumhauer is not exclusive to the transducer, and it extends beyond [the] cover." ID at 65. That finding cannot now be used to support his conclusion that "Baumhauer does not disclose a 'microelectromechanical system package.'" Claims 1 and 2 of the '231 patent do not require that the substrate be exclusive to the transducer or not extend beyond the cover. In this regard, we observe that the ALJ did not require Knowles to prove that Memstech's products have a substrate that is exclusive to the transducer or that the substrate did not extend beyond the cover to find that the microelectromechanical system package claim limitation was met and claims 1 and 2 were infringed.<sup>3</sup> We therefore strike the corresponding portion of the ALJ's discussion on page 65 of his ID.

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<sup>2</sup> Dr. Gilleo specifically testified as follows with respect to Baumhauer:

Baumhauer Figure 6 is an example of attaching the microphone device to an end-user board and then attaching a protective cover onto that portion of the PC board where the microphone resides. Therefore, Baumhauer discloses a device, not a package.

CX 411C at Q. 19.

<sup>3</sup> The ALJ found that the term "microelectromechanical system package" in the preambles of claims 1 and 2 of the '231 patent is a claim limitation. ID at 13, 15. The ALJ stated that "[b]ecause there is no dispute as to the meaning of this term, I find it unnecessary to construe it." ID at 16. The Commission did not review the ALJ's finding.

**REVISED**

**PUBLIC VERSION**

(3) The ALJ's determination that Mullenborn, taken in combination with Baumhauer, does not render claim 1 obvious.

We affirm the ALJ's determination that Mullenborn, taken in combination with Baumhauer, does not render claim 1 obvious, with certain modifications. We agree with the ALJ that the record evidence does not clearly and convincingly show that it would have been obvious to one of ordinary skill in the art to modify Mullenborn in view of Baumhauer to arrive at the invention recited in claim 1 of the '231 patent. Mullenborn and Baumhauer fail to teach or suggest a number of limitations recited in claims 1 and 2, and the record evidence has not shown how or why one skilled in the art would have modified these references to include these missing limitations. For example, the ALJ correctly found that Mullenborn fails to disclose the "housing formed by connecting the peripheral edge portion of the cover to the substrate." ID at 102. Memstech's arguments with respect to the Mullenborn/Baumhauer combination are based on the assumption that Mullenborn teaches every single limitation recited in claim 1 with the exception of a cover comprising multiple layers, when in fact the ALJ also found that Mullenborn failed to teach a "housing" limitation. Memstech did not address this missing limitation. Moreover, there is no record evidence to explain why one skilled in the art would have modified Mullenborn in view of Baumhauer to meet claims 1 and 2 of the '231 patent and modify the final ID to incorporate this finding. *See* ID at 102.

(4) The ALJ's determination that Arnold, taken in combination with Baumhauer, does not render claims 1 and 2 of the '231 patent obvious.

We affirm, with one modification, the ALJ's determination that Arnold, taken in

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**PUBLIC VERSION**

combination with Baumhauer, does not render claims 1 and 2 obvious. The ALJ did not make a finding as to whether there is any evidence in the record to suggest to one of ordinary skill in the art that Baumhauer and Arnold could be combined to make the '231 invention. We find that there is no such evidence on the record, and modify the final ID to incorporate this finding.

**B. The '089 Patent**

(1) The ALJ's construction of the limitation "volume" in the asserted claims of the '089 patent.

We affirm the ALJ's construction of the claim term "volume" with the following modifications. We determine not to rely on the ALJ's statement on page 55 of the ID: "Another embodiment recites, '[t]he back volume 18 is formed by a combination of the back hole of the transducer 58 (mounted down) and the bottom portion 50.' (CX-2 at 7:5-7.)" We find that this sentence is not needed to support the ALJ's construction and strike it from the ID.

MemsTech and the IA proposed an alternative construction of "volume" that required a recess in the substrate. We note, however, that the doctrine of claim differentiation provides additional support for the Commission's construction of the term "volume." Claim 3 of the '089 patent, which depends from claim 1, expressly added a limitation to claim 1 that a volume "includes a recess in the substrate." *See* '089 patent, 11:49-50. There is, therefore, a presumption that claim 1 should not require the same limitation. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (*en banc*) ("[T]he presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in

**REVISED**

**PUBLIC VERSION**

the independent claim.”). Memstech and the IA did not overcome this presumption in the present case. *See Finisar Corp. v. DIRECTV Group, Inc.*, 523 F.3d 1323, 1331 (Fed. Cir. 2008) (“In this instance, the doctrine of claim differentiation also bolsters this court’s interpretation.”)

(2) The ALJ’s determination that Memstech’s accused products infringe the ‘089 patent.

We affirm the ALJ’s determination that the Memstech’s accused products infringe the ‘089 patent, with certain modifications. While we agree with the ALJ’s finding that the accused products infringe the ‘089 patent, we believe it is necessary to modify the ID by striking out the ALJ’s reference to an exhibit that was not properly admitted into evidence, *i.e.*, CX-466C, and substituting other record evidence to support his finding.

We note that in reaching his infringement determination, the ALJ relied, *inter alia*, on exhibit CX-466C, which was not admitted into evidence. *See* MResponse at 36-38. Specifically, the ALJ improperly relied on CX-466C for his finding that the volume is acoustically coupled to the transducer. ID at 201 *citing* CX-466C. We agree with the IA and Knowles, however, that Dr. Gilleo’s witness statement provides alternative support for this proposition. CX-392C. *See* IReply at 2-3; KResponse at 8-9. Accordingly, we strike the reference to CX-466C on page 201 of the final ID, and substitute a reference to CX-392C for the above stricken reference.

(3) The ALJ’s determination that claims 1, 2, 9, 15, 17, 20, 28, and 29 of the ‘089 patent are not invalid as obvious in view of: (i) Baumhauer alone; (ii) Baumhauer in combination with Kress; (iii) Baumhauer in combination with Giachino; and (iv) Onishi.

We affirm the ALJ’s determination that claims 1, 2, 9, 15, 17, 20, 28, and 29 of the ‘089

**REVISED**

**PUBLIC VERSION**

patent are not invalid as obvious in view of: (i) Baumhauer alone; (ii) Baumhauer in combination with Kress; (iii) Baumhauer in combination with Giachino; and (iv) Onishi, with certain modifications.

Baumhauer

We affirm the ALJ's finding that Baumhauer does not render the '089 patent obvious, but we do not adopt the ALJ's statement that "Baumhauer fails to teach or suggest a package because it does not disclose first or second level connections and it fails to disclose a package substrate. (CX-411C at Q. 39.)" ID at 132. We find that the ALJ used one claim construction for "surface mountable package," when he did his infringement analysis, and another when he did his invalidity analysis. In performing the infringement analysis, the ALJ concluded that the term "surface mountable package" needed no construction, and found that Memstech's products were surface mountable packages. ID at 132. However, the ALJ concluded in his invalidity analysis that Baumhauer does not disclose a "surface mountable package" since it "does not disclose first or second level connections and it fails to disclose a package substrate." *Id.* Thus, it appears that the ALJ applied additional requirements to assess validity.

There is, however, record evidence that sufficiently supports the ALJ's finding that Baumhauer does not render the '089 patent obvious, even if the Commission does not require that Baumhauer disclose first or second level connections and a package substrate to support an invalidity conclusion. Specifically, the ALJ found, *inter alia*, that "[t]he entire fabric of Baumhauer is directed to the design of the microphone to be mounted on a substrate, *not to a package for mounting.*" ID at 132 (emphasis in the original). According to Dr. Gilleo,

**REVISED**

**PUBLIC VERSION**

Baumhauer discloses a device that is mounted on an end-user's board, and Figure 6 of Baumhauer depicts the Baumhauer device mounted to a circuit board that is subsequently provided to an end-user. CX-411 at 39. Memstech fails to rebut this evidence. We adopt the ALJ's finding that the term "package" makes clear that all of the components listed in the claim body must come together and form a "package," *i.e.*, the elements cannot simply be found on printed circuit board, but must be provided as a single, self-contained unit. *See* ID at 15. Therefore, we find that Baumhauer does not disclose a package because it does not teach or suggest a package composed of the elements in the manner recited in the claims.

Baumhauer in combination with Kress

The ALJ correctly determined that Baumhauer in combination with Kress does not render the '089 patent obvious. The ALJ specifically found:

As discussed, *supra*, Baumhauer does not teach or suggest 'a surface-mountable package.' The further proposal to modify Baumhauer with Kress does not cure this deficiency. I see no rational basis to combine the teachings of Baumhauer with the teachings of Kress.

ID at 133. The ALJ found that even though Kress mentions packaging for a transducer, it does so in the context of automotive silicon pressure sensors, as opposed to surface mountable packages for microphones. Moreover, the ALJ found that Kress lacks the detail necessary to cause one of ordinary skill in the art to adapt it to an acoustic MEMS package. ID at 133 *citing* RX-45 at MEMS 155376. The ALJ concluded that Memstech failed to provide clear and convincing evidence of a reason why a person having ordinary skill in the art would be moved to use Baumhauer in combination with Kress to create the MEMS package for a microphone taught

**REVISED**  
**PUBLIC VERSION**

by the '089 patent. ID at 134.

We affirm the ALJ's finding that Baumhauer in combination with Kress does not render claim 1 of the '089 patent obvious. We note, however, that in reaching his finding of non-obviousness, the ALJ stated that "Baumhauer fails to teach or suggest a package because it does not disclose first or second level connections and it fails to disclose a package substrate." ID at 133. For the same reason that we modified his finding of non-obviousness based on Baumhauer alone, we modify the final ID to clarify that the Commission does not rely on the ALJ's such finding.

Baumhauer in combination with Giachino

We affirm the ALJ's determination that Baumhauer in combination with Giachino does not render the '089 patent obvious, but similarly modify it to clarify that the Commission does not rely on the ALJ's finding that "Baumhauer fails to teach or suggest a package because it does not disclose first or second level connections and it fails to disclose a package substrate." ID at 132 (citations omitted).

Onishi

While the ALJ correctly determined that Onishi does not render claim 1 of the '089 patent obvious, he did not make findings with respect to dependent claims 2, 9, 15, 17, 20, 28, and 29, even though Memstech argued that those claims are also obvious in view of Onishi. A determination regarding obviousness with respect to dependent claims depends on the obviousness finding with respect to the independent claim. *See, e.g., Hartness Int'l, Inc. v. Simplimatic Engineering Co.*, 819 F.2d 1100, 1108 (Fed. Cir. 1987) ("For the reasons stated

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below, the district court was correct in holding that independent claim 1 was nonobvious. *A fortiori*, dependent claim 3 was nonobvious (and novel) because it contained all the limitations of claim 1 plus a further limitation.”) Therefore, determining that Onishi does not render claim 1 of the ‘089 patent obvious leads to the determination that dependent claims 2, 9, 15, 17, 20, 28, and 29 are also not invalid as obvious in view of Onishi. Accordingly, we supplement the ALJ’s finding regarding claim 1 with further findings that Onishi does not render claims 2, 9, 15, 17, 20, 28, and 29 of the ‘089 patent obvious for the same reasons that it does not render claim 1 obvious.

#### **B. Remedy, the Public Interest, and Bonding**

We determine that: (i) the appropriate remedy is a limited exclusion order (“LEO”) directed to Memstech’s products found to infringe the asserted claims of the ‘231 patent; (ii) the public interest will not be adversely affected by entry of this exclusion order; and (iii) no bond should be required during the period of Presidential review.

The ALJ recommended that the Commission issue a limited exclusion order that applies to Memstech and all of its affiliated companies, parents, subsidiaries, or other related business entities, or its successors or assigns and that is limited to those of Memstech’s silicon microphones that have been found to infringe the ‘231 or ‘089 patents. ID/RD at 218. The ALJ stated that it would be inappropriate to limit the exclusion order by listing specific product names or model numbers. He specifically noted that Memstech’s “chamber chip” products were not part of this investigation, and therefore, recommended that any remedy should not apply to those products. ID/RD at 218 n.33.

**REVISED**

**PUBLIC VERSION**

The ALJ recommended no bond during the period of Presidential review because Knowles did not present any evidence regarding bonding. The ALJ based his recommendation on Commission precedent finding that no bond should be required where there is “no evidence in the record to support any bond to offset any competitive advantage resulting from the unfair acts of [respondents] from their importations.” ID/ RD at 220-21 *citing Certain Rubber Antidegradants, Components Thereof, and Products Containing Same*, Inv. No. 337-TA-533, Comm’n Op., 2006 ITC LEXIS 591 (July 21, 2006), at \*59. He found that Knowles provided no legitimate reason for its failure to offer pricing differential or royalty rate evidence, noting that Knowles did not assert that Memstech failed to produce pricing information, or move to compel such information during discovery. ID/ RD at 222. The ALJ observed that the complainant has the burden of supporting any proposition it advances, including the amount of the bond. ID/RD at 221 (citations omitted).

The IA objected only to the ALJ’s recommendation that silicon microphones instead of silicon packages be excluded because “certain silicon microphone packages or products containing same,” rather than silicon microphones, are at issue in this investigation. *73 Fed. Reg.* 2277 (Jan. 14, 2008).<sup>4</sup> In the IA’s view, the entry of the limited exclusion order would not be contrary to the public interest. *See* 19 U.S.C. § 1337(d).

Knowles agrees that the Commission should issue a limited exclusion order if it finds a

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<sup>4</sup> *See also* ID at 223 (“Based on the foregoing, and the record as a whole, it is my Final Initial Determination that there is a violation of 19 U.S.C. § 1337(a)(1) in the importation into the United States, sale for importation, and the sale within the United States after importation of certain *silicon microphone packages* and products containing the same.”) (emphasis added).

**REVISED**

**PUBLIC VERSION**

violation in this investigation but contends, contrary to the ALJ's recommendation, that the Commission's limited exclusion order should cover all accused Memstech products, even those that have a so-called chamber chip. Knowles does not dispute the ALJ's recommendation that no bond be required for imports during the period of Presidential review. Finally, Knowles submits that the entry of relief in the form of a limited exclusion order would not raise any public interest concerns under 19 U.S.C. §1337(d).

Memstech states that the only disputed remedy issue is the scope of any limited exclusion order and, more particularly, whether such exclusion order should cover all Memstech's silicon microphones including those containing its "chamber chip" configuration. Memstech points out that the Commission rejected Knowles' petition on this issue since the Commission's Notice of Review does not identify it as an issue to be reviewed. MReply at 58 citing *Commission Notice* at 3.

Remedy

We note that in a Section 337 proceeding, the Commission has "broad discretion in selecting the form, scope, and extent of the remedy." *Viscofan, S.A. v. United States Int'l Trade Comm'n*, 787 F.2d 544, 548 (Fed. Cir. 1986). We determine that the appropriate remedy in this investigation is a limited exclusion order covering Memstech accused products that infringe the asserted claims of the '231 or '089 patent. With respect to Memstech's "chamber chip" products, pursuant to Commission practice we are not making a finding as to whether particular products not considered by the ALJ are or are not within the scope of the order, but note that the order generally covers products that infringe the relevant patent claims.

## REVISED

### PUBLIC VERSION

We agree with the ALJ's recommendation that any limited exclusion order be directed to "MemsTech and all of its affiliated companies, parents, subsidiaries, or other related business entities, or its successors or assigns," ID/RD at 281, however our limited exclusion order covers silicon microphone packages rather than silicon microphones, as recommended by the ALJ, because silicon microphone packages are at issue in this investigation, *see 73 Fed. Reg. 2277* (Jan. 14, 2008).

#### The Public Interest

Before issuing a remedy for a violation of Section 337, the Commission must consider the effect of the remedy on certain public interest considerations: (1) the public health and welfare, (2) competitive conditions in the U.S. economy, (3) the U.S. production of articles that are like or directly competitive with those which are the subject of the investigation, and (4) U.S. consumers. 19 U.S.C. § 1337(d); *Certain Ink Jet Print Cartridges and Components Thereof* Inv. No. 337-TA-446, Comm'n. Op. at 14 (October 2002).

We find that the issuance of the proposed LEO would not be contrary to the public interest. There is no evidence in the record that the U.S. demand for silicon microphone packages cannot be met by other entities, including Knowles. Moreover, silicon microphone packages are not the sort of product that has been shown to be necessary to safeguard the public interest.

#### Bonding

When the Commission issues an exclusion order, infringing products are entitled to entry under bond during the period of Presidential review. 19 U.S.C. § 1337(j). The Commission must set the amount of the bond at a level that would be sufficient to protect complainant from injury.

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19 C.F.R. § 210.50(a)(3). As noted, the ALJ recommended that no bonding be required based on the record in this investigation and Commission precedent. ID/RD at 220. Because Knowles failed to provide any evidence to support a bond, we adopt the ALJ's recommendation that no bond should be set during the period of Presidential review.

**V. CONCLUSION**

The Commission has determined that there has been a violation of section 337, and has further determined that the appropriate form of relief in this investigation is a limited exclusion order prohibiting the unlicensed entry of silicon microphone packages and products containing same that infringe claims 1 and 2 of the '231 patent and claims 1, 2, 9, 15, 17, 20, 28, and 29 of the '089 patent, and that are manufactured abroad by or on behalf of, or imported by or on behalf of, Memstech. The Commission further has determined that the public interest factors enumerated in section 337(d)(1) (19 U.S.C. § 1337(d)(1)) do not preclude issuance of the limited exclusion order. Finally, the Commission has determined that there should be no bond during the period of Presidential review.

By order of the Commission.



Marilyn R. Abbott  
Secretary to the Commission

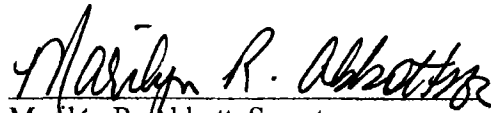
Issued: August 18, 2009

**CERTAIN SILICON MICROPHONE PACKAGES AND  
PRODUCTS CONTAINING THE SAME**

**337-TA-629**

**PUBLIC CERTIFICATE OF SERVICE**

I, Marilyn R. Abbott, hereby certify that the attached **REVISED COMMISSION  
OPINION** has been served by hand upon the Commission Investigative Attorney,  
Mareesa Frederick, Esq., and the following parties as indicated, on  
**AUG 19 2009**.



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