

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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MEDTRONIC XOMED, INC.,  
Petitioner,

v.

NEUROVISION MEDICAL PRODUCTS, INC.,  
Patent Owner.

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Case IPR2017-00456  
Patent 8,634,894 B2

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Before MEREDITH C. PETRAVICK, MITCHELL G. WEATHERLY, and  
MICHAEL L. WOODS, *Administrative Patent Judges*.

WOODS, *Administrative Patent Judge*.

DECISION

Denying Institution of *Inter Partes* Review

*37 C.F.R. § 42.108*

Dismissing Motion for Joinder

*37 C.F.R. § 42.122*

## I. INTRODUCTION

### *A. Background*

Medtronic Xomed, Inc. (“Petitioner”) filed a Petition requesting *inter partes* review of claims 4, 6, 7, and 9 of U.S. Patent No. 8,634,894 B2 (Ex. 1001, “the ’894 patent”) pursuant to 35 U.S.C. §§ 311–319. Paper 1 (“Pet.”). Petitioner also filed a Motion for Joinder (Paper 3, “Mot.”), requesting that this proceeding be joined with either IPR2016-01405 or IPR2016-01406. Mot. 1. Neurovision Medical Products, Inc. (“Patent Owner”) filed a Preliminary Response to the Petition (Paper 6, “Prelim. Resp.”) and an Opposition to Petitioner’s Motion for Joinder (Paper 9, “Opp.”). We have jurisdiction under 35 U.S.C. § 314.

For the reasons provided below, we exercise our discretion and deny the Petition under 35 U.S.C. § 325(d). Because we do not institute an *inter partes* review, we dismiss as moot the Motion for Joinder under 35 U.S.C. § 315(c).

### *B. Related Proceedings*

Petitioner notifies us that it is a named defendant in a patent infringement litigation involving the ’894 patent. Pet. 1 (referencing case No. 2:16-CV-00127, pending in the U.S. District Court for the Eastern District of Texas). Petitioner also notifies us that it has filed concurrently with this Petition two other *inter partes* review petitions of the ’894 patent, which we identify as IPR2016-01405 and IPR2016-01406, and further notifies us of the existence of a fourth *inter partes* review of the ’894 patent,

now terminated, filed by another petitioner. *Id.* (referencing IPR2015-00502).<sup>1</sup>

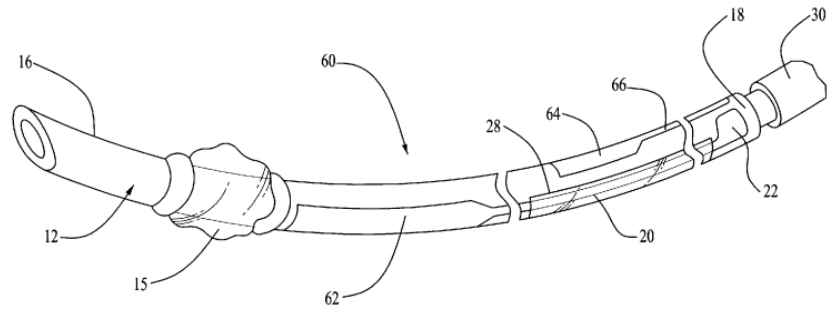
*C. The '894 patent (Ex. 1001)*

The '894 patent is titled “Electrode for Prolonged Monitoring of Laryngeal Electromyography” and issued on January 21, 2014. Ex. 1001, 1. The '894 patent discloses a laryngeal electromyography tube having electrodes, electrical traces, and conductive pads directly imprinted on the surface of, and thus substantially flush with, the surface of the tube, which permits the tube to be used for prolonged monitoring, such as in excess of eight hours. *See id.* at 1:45–2:2; 6:30–58. The electrodes, electrical traces, and conductive pads are imprinted on the surface of the tube by “painting, screen printing, transfer printing, gravure, flexographic or offset printing, as well as inkjet or electrostatic printing methods.” *Id.* at 6:5–7. The electrodes, electrical traces, and conductive pads are formed with conductive ink or paint that comprises a mixture of conductive materials dissolved or suspended in a liquid carrier. *See id.* at 4:49–5:16.

The '894 patent discloses various embodiments, in which the number and placement of the electrodes vary. *See, e.g., id.* at Figs. 1, 2, 4, 7. Figure 7 depicts an embodiment in which two electrodes are placed on the tube such that one electrode is in contact with the vocal cords and another is in contact with the tongue when the tube is in use. Ex. 1001, 4:43–46. Figure 7 is reproduced below.

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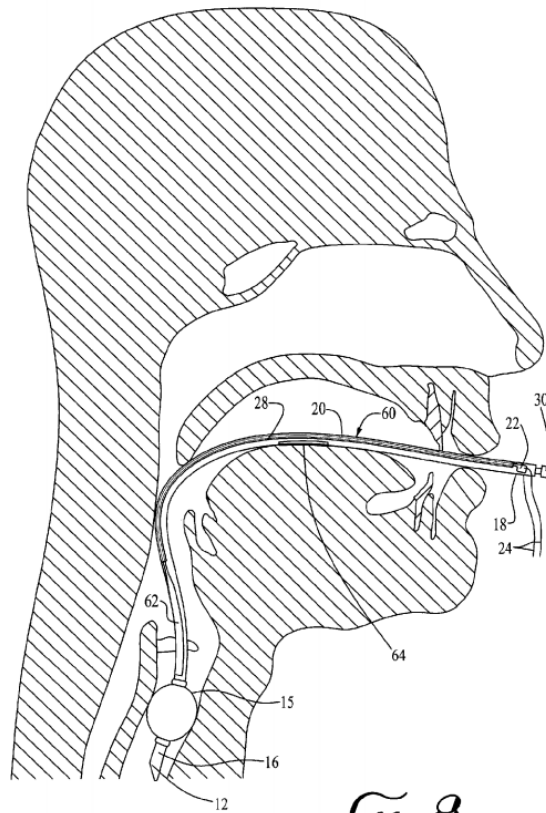
<sup>1</sup> On July 16, 2015, the Board instituted an *inter partes* review of claims 4, 6–11, and 14–19, as unpatentable over Goldstone, Cook, and Hon, but denied institution of claims 1–3, 5, 12, and 13 of the '894 patent, in IPR2015-00502. Ex. 2015, 30.



*FIG. 7*

Figure 7 depicts laryngeal electromyography tube 60 having endotracheal tube 12 imprinted with two electrodes 62 and 64. *Id.* at 4:43–46.

Figure 8 depicts the embodiment of Figure 7 in use and is reproduced below. *Id.* at 4:43.



*FIG. 8*

As shown above in Figure 8, electrode 62 contacts the vocal cords while second electrode 64 “rests against the tongue.” Ex. 1001, 4:43–46.

As shown in the embodiment of Figures 7 and 8, conductive trace 20 connects electrode 62 to conductive pad 22, which attaches to lead wires 24 of an external device. *See id.* at 4:2–13, 46–48. Tube 60 also has an endotracheal tube balloon 15 for retaining, presumably, tube 60 in a desired position when in use. *See id.* at 4:2–3.

#### *D. Claims*

Of the challenged claims, claim 4 is independent, with claims 6, 7, and 9 depending therefrom. Ex. 1001, 7:43–8:11. Claim 4 is illustrative of the subject matter at issue and is reproduced below:

4. A method of forming an electrode bearing endotracheal tube for laryngeal electromyography comprising:  
providing an endotracheal tube having a retaining balloon at a distal end thereof,  
forming first and second electrodes on an exterior surface of the endotracheal tube, a first of one or more electrically conductive traces attached to the first electrodes and a second of one or more electrically conductive traces attached to the second electrodes, first and second connection points at a proximal end of the first and second traces, the first and second electrodes located proximal of the retaining balloon, the connection points located at the proximal end of the traces,  
the electrodes, traces and connection points formed by applying a conductive ink or paint to the exterior surface of the endotracheal tube, and  
forming an electrically insulating barrier over the traces, the barrier extending from a point of connection of the traces to the electrodes to the connection points on the proximal end of the traces.

*E. References*

Petitioner relies on the following references:

Name	Reference	Ex. No.
Goldstone	U.S. Pat. No. 5,024,228, iss. June 18, 1991	1003
Cook	U.S. Pat. No. 4,890,623, iss. Jan. 2, 1990	1004
Lowery	U.S. Pub. No. 2009/0227885 A1, pub. Sept. 10, 2009	1002
MicroPen	MicroPen website, <a href="http://www.micropen.com">http://www.micropen.com</a> (Sept. 5, 2008)	1035
Tekra	Tekra website, <a href="http://www.tekra.com">http://www.tekra.com</a> (Nov. 19, 2006)	1036

*F. Grounds Asserted*

Petitioner contends that claims 4, 6, 7, and 9 of the '894 patent are unpatentable under the following six grounds:

Ground	Basis	Prior Art	Claims
I	§ 103	Goldstone and Cook	4, 6, 7
II	§ 103	Lowery and Goldstone	4, 6, 7
III	§ 103	Goldstone, Cook, and MicroPen	4, 6, 7
IV	§ 103	Lowery, Goldstone, and MicroPen	4, 6, 7
V	§ 103	Goldstone, Cook, and Tekra	6, 7, 9
VI	§ 103	Goldstone, Cook, MicroPen, and Tekra	6, 7, 9

Pet. 2–3.

Petitioner also relies on the declaration testimony of Dr. Andrew C. Goldstone (Ex. 1009) and Mr. Guy Lowery (Ex. 1012) as support for the various contentions. *Id.* at iii.

II. ANALYSIS

Patent Owner requests that the Board exercise discretion to deny the Petition under 35 U.S.C. § 325(d). Prelim. Resp. 11–25. Section 325(d) provides in pertinent part:

In determining whether to institute or order a proceeding under this chapter . . . the Director may take into account whether, and reject the petition or request because, *the same or substantially the same prior art or arguments previously were presented to the Office.*

35 U.S.C. § 325(d) (emphasis added).

To decide whether to exercise discretion to deny the Petition, we first determine whether the Petition asserts the same or substantially the same art or arguments previously before the Office, including those already presented by Petitioner in IPR2016-01405 and IPR2016-01406.

In IPR2016-01405, Petitioner challenged claims 1–19 as obvious over Lowery, Goldstone, and Hon.<sup>2</sup> Ex. 2026, 1, 6. On December 29, 2016, the Board instituted review of claims 1–19 based on these references. *Id.* at 35.

In IPR2016-01406, Petitioner challenged claims 1–19 as obvious over Goldstone, Cook, and Hon. Ex. 2027, 1, 7. On December 29, 2016, the Board instituted review of claims 4, 6–11, and 14–19 based on these references. *Id.* at 35.

In the instant Petition, Petitioner challenges claims 4, 6, 7, and 9 under six different grounds based solely or primarily on the same references relied upon in its two prior petitions, namely, Goldstone, Cook, and Lowery. Pet. 2–3. Unlike in IPR2016-01405 and IPR2016-01406, however, in the instant Petition, Petitioner omits Hon as a reference. *Id.* at 5. Furthermore, in Grounds III–VI, Petitioner relies on two references, MicroPen and Tekra, on which Petitioner did not rely in the prior two *inter partes* reviews. *Id.* at 2–3.

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<sup>2</sup> “Hon” refers to K.K. B. Hon, L. Li, and I.M. Hutchings, *Direct Writing Technology — Advances and Developments*, 57 CIRP Annuals — Manufacturing Technology 601–620 (2008). Ex. 2026, n. 4; Ex. 1005.

MicroPen and Tekra are printouts of archived versions of the MicroPen and Tekra websites. *See* Exs. 1035, 1036. Petitioner describes MicroPen as providing a “more explicit description of ink printing (and ink compositions) on medical tubes than” Goldstone, Cook, and Lowery (*id.* at 45) and Tekra provides “a more explicit description of ink compositions” than Goldstone, Cook, Lowery, and MicroPen (*id.* at 48).

Petitioner admits that “the basis for the combinations and applications of the references is not substantively different than that already raised in the prior petitions.” *Id.* at 4–5. In relying on MicroPen and Tekra in Grounds III–VI, Petitioner explains that it was not aware of these publications until Patent Owner filed its preliminary responses in IPR2016-01405 and IPR2016-01406. *See id.* at 7, 9. Petitioner also asserts that MicroPen and Tekra are not susceptible to being sworn behind, as Hon is. *Id.* at 9. Accordingly, Petitioner argues that based on the Board’s prior *Nvidia* decision, we should not preclude institution under Section 325(d). *See id.* at 7 (citing *Nvidia Corp. v. Samsung Elec. Co., Ltd.*, Case IPR2016-00134, slip op. at 6, 12 (PTAB May 4, 2016) (Paper 9)).

*Nvidia* is not precedential and not binding on us. Nevertheless, we consider *Nvidia* to be instructive, and we apply the factors used by the panel in that decision. *Nvidia* sets forth several factors to consider in deciding whether to exercise discretion not to institute review, including:

- (1) the resources of the Board;
- (2) the requirement under 35 U.S.C. § 316(a)(11) to issue a final determination not later than 1 year after the date on which the Director notices institution of review;
- (3) whether the same petitioner already previously filed a petition directed to the same claims of the same patent;



(4) whether at the time of filing of the first petition the petitioner knew of the prior art asserted in the second petition or should have known about it;

(5) whether at the time of filing of the second petition the petitioner already received patent owner's preliminary response to the first petition or received the Board's decision on whether to institute review in the first petition;

(6) the length of time that elapsed between the time petitioner learned of the prior art asserted in the second petition and filing of the second petition; and

(7) whether petitioner provides adequate explanation for the time elapsed between the filings of multiple petitions directed to the same claims of the same patent.

*Nvidia*, Case IPR2016-00134, slip op. at 6–7 (Paper 9).

With respect to factors (3) and (5), we are concerned with the potential inequity based on Petitioner's filing of *three* Petitions against the same claims of the same patent, while adjusting its litigation position in the third Petition in response to Patent Owner's preliminary responses from the first two cases. As pointed out correctly by Patent Owner, we previously instituted trial of claims 4, 6, 7, and 9 under Petitioner's same main references—Goldstone, Cook, and Lowery. Prelim. Resp. 12 (citations omitted). Although the instant Petition does not rely on Hon and instead relies on MicroPen and Tekra, we find that the Petition still presents “substantially the same . . . arguments [that] previously were presented to the Office” in IPR2016-01405 and IPR2016-01406. We also note that the Petitioner filed the instant Petition to adjust its arguments after Patent Owner filed its preliminary responses in the first two petitions. *See* Pet. 5. These facts weigh against granting the third, instant Petition.

In response to Petitioner's argument that MicroPen and Tekra are “not susceptible to any attempt to swear behind (unlike Hon)” (Pet. 9), we find

that this fact only slightly weighs in Petitioner's favor. Although it appears that Tekra may not be susceptible to being sworn behind, MicroPen—just like Hon—is susceptible to being sworn behind. In fact, Patent Owner attempts to swear behind MicroPen in arguing that MicroPen is not prior art, because the claimed invention was conceived prior to MicroPen's publication date. *See* Prelim. Resp. 25–26.

Concerning factors (4), (6) and (7), Petitioner points out that it was not aware of the cited art until after it received Patent Owner's preliminary responses in the first two cases, and because of this fact, we should not exercise our discretion to deny the instant Petition. *See* Pet. 6–8. In presenting this argument, Petitioner explains that its delay in filing the instant Petition was a result of Patent Owner's failure to disclose Tekra during prosecution of the '894 patent (*id.* at 8) and misrepresentation of MicroPen's publication date during prosecution (*id.* at 6–8 (explaining that Patent Owner misidentified MicroPen's publication date as being 2010, rather than 2008)). We find this argument unavailing, and the underlying facts only slightly weigh in Petitioner's favor. Petitioner knew of the cited art in Grounds I and II as the art (Goldstone, Cook, and Lowery) is *identical* to that presented in the first two petitions. Furthermore, under factor (4), the issue is not simply whether Petitioner actually knew of MicroPen and Tekra at the time of filing of the first and second petitions, but also whether Petitioner “should have known about it.” With respect to MicroPen (relied on in Grounds III, IV, and VI), Petitioner “should have known” that MicroPen was prior art, as Hon (which Petitioner relied on in its first two petitions), itself, cites to MicroPen's 2008 website date. *See* Ex. 1005, n.121.

Furthermore, instituting an *inter partes* review here would require Patent Owner to defend itself yet again against substantially the same arguments that were raised several months prior against the same claims in IPR2016-01405 and IPR2016-01406, delaying completion of proceedings before the Board.

Considered in the aggregate, the above facts warrant our exercise of discretion under § 325(d) to deny the instant Petition.

### III. CONCLUSION

For the foregoing reasons, we do not institute *inter partes* review on any of claims 4, 6, 7, and 9 of the '894 patent on any ground. Petitioner's Motion for Joinder is *dismissed* as moot

### IV. ORDER

It is

ORDERED that Petitioner's request for an *inter partes* review of claims 4, 6, 7 and 9 of the '894 patent is *denied*; and

FURTHER ORDERED that Petitioner's Motion for Joinder is *dismissed*.

IPR2017-00456  
Patent 8,634,894 B2

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