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# UNITED STATES PATENT AND TRADEMARK OFFICE

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#### BEFORE THE PATENT TRIAL AND APPEAL BOARD

AXONICS MODULATION TECHNOLOGIES, INC., Petitioner,

v.

MEDTRONIC, INC., Patent Owner.

IPR2020-00678 Patent 7,774,069 B2

Before WILLIAM V. SAINDON, JAMES A. TARTAL, and ALYSSA A. FINAMORE, *Administrative Patent Judges*.

SAINDON, Administrative Patent Judge.

DECISION Granting Institution of *Inter Partes* Review 35 U.S.C. § 314

#### I. INTRODUCTION

Axonics Modulation Technologies, Inc. ("Petitioner") filed a petition requesting *inter partes* review of claims 5–9 of U.S. Patent No. 7,774,069 B2 (Ex. 1001, "the '069 patent"). Paper 1 ("Pet."). Medtronic, Inc. ("Patent Owner") filed a Preliminary Response. Paper 6 ("Prelim. Resp.").

We have authority under 35 U.S.C. § 314, which provides that an *inter partes* review may not be instituted unless the information presented in the Petition and the Preliminary Response shows that "there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314(a); *see also* 37 C.F.R. § 42.4(a) ("The Board institutes the trial on behalf of the Director."). Taking into account the information presented in the Petition and Preliminary Response, we conclude that Petitioner has established a reasonable likelihood that it would prevail with respect to at least one challenged claim. Accordingly, we institute an *inter partes* review.

#### A. Related Matters

Petitioner also challenges U.S. Patent Nos. 8,457,758 B2 and 8,738,148 B2, which are child applications of the '069 patent, in IPR2020-00680 and IPR2020-00712. Paper 4, 2 (Patent Owner's Mandatory Notices).

According to the parties, the '069 patent is involved in *Medtronic, Inc. v. Axonics Modulation Technologies, Inc.*, Case No. 8:19-cv-02115-DOC-JDE (C.D. Cal.). Pet. 56; Paper 4, 2.

#### B. Real Parties In Interest

Petitioner asserts that it is the sole real party in interest. Pet. 56. Patent Owner asserts that it is the real party in interest, that "Medtronic plc is the ultimate parent of Medtronic, Inc.," and that "Medtronic, Inc. has granted certain rights with respect to the patent-at-issue to Medtronic Puerto Rico Operations Co., which in-turn has granted certain rights to Medtronic Logistics, LLC, which in-turn has granted certain rights to Medtronic USA, Inc." Paper 4, 1 n.1.

#### C. The '069 Patent

The '069 patent is directed to charging an implantable medical device having a battery, such as a cardiac pacemaker. Ex. 1001, Abstract, 1:12–20. Rather than remove and re-implant the devices whenever the battery is about to run out, these devices provide for transcutaneous ("through-skin") energy transfer using inductive coupling to charge a rechargeable battery. *Id.* at 1:45–50. To recharge the battery, an external power source is temporarily positioned on the surface of the skin. *Id.* at 1:52–56. An induction coil in the external power source transfers energy to an induction coil in the implant. *Id.* at 2:8–19. The efficiency of the energy transfer is dictated by how well the two coils are aligned with one another. *Id.* at 2:58–3:24. The '069 patent indicates that it improves such existing systems by providing an indication of the alignment between the coils, as well as varying the power output of the external device in order to generate the predetermined level of current in the implant. *Id.* at 3:44–55.

# D. Challenged Claims

Claims 5–9 are challenged. Claim 5 is independent and reproduced below:

- 5. A system for transcutaneous energy transfer, comprising:
- an implantable medical device having componentry for providing a therapeutic output, said implantable medical device having an internal power source and a secondary coil operatively coupled to said internal power source, said implantable medical device adapted to be implanted in a patient;
- an external power source having a primary coil, said external power source providing energy to said implantable medical device when said primary coil of said external power source is placed in proximity of said secondary coil of said implantable medical device and thereby generating a current through said internal power source;
- an alignment indicator, operatively coupled to said internal power source, measuring said current and reporting an alignment between said primary coil and said secondary coil based on said current; and
- wherein said external power source automatically varies its power output in order to generate a predetermined current in said internal power source.

# E. Prior Art and Asserted Grounds

 Claims Challenged
 35 U.S.C. §
 References

 5, 8
 102
 Schulman<sup>1</sup>

 5, 8
 102
 Fischell<sup>2</sup>

 6, 7, 9
 103
 Schulman, Baumann<sup>3</sup>

Petitioner asserts the following grounds:

<sup>&</sup>lt;sup>1</sup> U.S. Patent No. 3,942,535, iss. Mar. 9, 1976 (Ex. 1005).

<sup>&</sup>lt;sup>2</sup> Fischell et al., *A Long-Lived Reliable, Rechargeable Cardiac Pacemaker, in Engineering in Medicine* 357 (Schaldach et al. eds., 1975) (Ex. 1006).

<sup>&</sup>lt;sup>3</sup> U.S. Patent No. 6,227,204 B1, iss. May 8, 2001 (Ex. 1007).

Claims Challenged	35 U.S.C. §	References
6, 7, 9	103	Fischell, Baumann

Petitioner relies on testimony from Dorian Panescu, Ph.D, who has a doctorate in Electrical and Computer Engineering and 25 years of experience in the medical device industry. Ex. 1003 ¶ 4.

#### II. PATENTABILITY ANALYSIS

#### A. Claim Construction

"[W]e need only construe terms 'that are in controversy, and only to the extent necessary to resolve the controversy." Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co., 868 F.3d 1013, 1017 (Fed. Cir. 2017) (quoting Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc., 200 F.3d 795, 803 (Fed. Cir. 1999)). No term requires explicit construction in this Decision. Although Petitioner proposes a construction for the term "measuring said current" (Pet. 10–13), based on the current record the term does not require an express construction for purposes of this Decision. Specifically, Petitioner provides a narrow construction of the term based on alleged prosecution history disclaimer, which Patent Owner disputes. See id. at 12-13 ("Based on these instances of claim amendments and the accompanying arguments made by the Applicant during prosecution, the phrase 'measuring' said current' must be construed to mean 'measuring the actual current through the internal power supply' and not a current associated with or proportional to the actual current."); Prelim. Resp. 4–5 ("Construction of this term is improper and unnecessary."). On the present record and with the issues before us now, we resolve the issues presented using the plain and ordinary meaning of "measuring said current," i.e., measuring the current,

because, under the purportedly broader ordinary meaning advocated by Patent Owner, Petitioner has shown a reasonable likelihood of prevailing for the reasons provided below. *Accord* Prelim. Resp. 4 ("'measuring said current' means what the claim says it means")

# B. Level of Ordinary Skill in the Art

Petitioner asserts that a person of ordinary skill in the art would have had "a bachelor's degree in electrical engineering or an equivalent as well as at least five years of experience in the industry working with implantable medical devices." Pet. 13–14. Patent Owner does not offer a competing definition at this time.

For purposes of this Decision, we apply Petitioner's proposed definition of the level of ordinary skill, which appears reasonable given the relative level of sophistication required to read and understand the '069 patent and the prior art disclosures.

# C. Analysis of the Schulman Anticipation Ground (Claims 5 and 8)

Petitioner asserts that claims 5 and 8 are anticipated by Schulman. Pet. 17–29. In general, claim 5 is directed to transcutaneous energy transfer from a primary coil in an external power source to an implantable medical device's internal power source, by way of a secondary coil in the implant. One limitation in dispute requires an alignment indicator that measures current through the internal power source and uses that measurement to report an alignment between the coils (hereinafter, the "alignment" limitation). A second limitation in dispute requires that the external power source automatically varies its power output in order to generate

predetermined current in the internal power source (hereinafter, the "varying" limitation).

Petitioner asserts that Schulman discloses each limitation of claim 5. Pet. 20–29. In general, Schulman discloses transcutaneous energy transfer from a primary coil in an external device (Ex. 1005, Fig. 4, item 19) to an internal power source of an implantable medical device (*id.* at Fig. 3, item 15), by way of a secondary coil in the implant (id. at Fig. 2, item 17). Pet. 20-29; see also Ex. 1005 at Fig. 1 (showing a functional diagram of the internal and external devices). As to the alignment limitation, Petitioner asserts that Schulman measures the current through the battery using resistor R9, which is connected in series to the positive end of battery 15. Pet. 26– 27 (citing Ex. 1005, 6:28-41, 9:67-10:4; Ex. 1003 ¶ 96); see also Ex. 1005, Figs. 2, 3 (depicting circuit diagrams including resistor R9 and battery 15). Petitioner also asserts that Schulman will report alignment by way of lights or a buzzer. Pet. 25–26 (citing Ex. 1005, 6:28–41, 9:44–57; Ex. 1003 ¶ 96). As to the varying limitation, Petitioner asserts that Schulman will reduce the charging current if it exceeds a maximum level, by reducing the intensity of the magnetic field. Pet. 27–28 (citing Ex. 1005, 6:19–43, 7:20–33, 9:57–65; Ex. 1003 ¶¶ 85–95).

Patent Owner argues that Petitioner does not explain sufficiently how Schulman discloses the alignment limitation. Prelim. Resp. 8–15 (addressing the limitation as "5.3(b)"). This limitation requires measuring the current and then reporting an alignment between the coils based on the current. As to measuring the current, Schulman discloses using resistor R9 to measure the current into the battery. *See, e.g.*, Ex. 1005, 4:11–12 ("[c]harging current passes through the current sampling resistor R9"); 4:66–

5:2 ("[T]he initial current through resistor R9 is the charging current to the battery 15."); 5:35–38 ("As long as the current through resistor R9 remains at 40 milliamperes or above, charging of the battery 15 is considered to be proper."). We find on the current record Patent Owner's argument that Schulman does not measure the actual current through the battery (Prelim. Resp. 9–11) unpersuasive because Schulman appears to have no problem relying on resistor R9 to measure the current through the battery, and Patent Owner has not persuasively shown that any current loss (e.g., through transistor Q6 (*see* Ex. 1005, Fig. 2)) has an appreciable effect on measuring current through the battery as required by the claim.

After measuring the current, the alignment limitation further requires reporting the alignment between the coils based on the current. According to Petitioner, Schulman discloses this is done by the telemetry circuit reporting the current to the external component. Pet. 25-26; see also id. at 4:57–66 ("Magnetic field strength between the induction coils of the power source and charging circuit is illustrated with respect to time in FIG. 9."); 6:28-31 ("As the induction coils of the power source are moved closer to a proper charging relationship with respect to the induction coil of the implanted the charging circuit, the period t in FIG. 9 will decrease."). If the coils are not in alignment, the current would be low. Id. at 6:17-21 ("[a]]] current up to a maximum level will flow through . . . to charge the battery 15, any current less than this maximum passing through resistor R9 is indicative of inadequate charging of the battery 15"). If that happens, then Schulman discloses that the user can be made aware of the improper alignment by lights or a buzzer. Id. at 9:66–10:4 ("[if] current flowing through resistor R9 drops below its operating level[,] [t]his will be sensed by

the [external component] which will deactivate the green light emitting diode 26 and activate the intermittent operation of the buzzer 28 and yellow light emitting diode 27"). Thus, on this record, we are persuaded that Schulman sufficiently describes measuring the current through the internal power source and reporting an alignment between the coils based on the current.<sup>4</sup>

Patent Owner also argues that Petitioner does not explain sufficiently how Schulman discloses the varying limitation. Prelim. Resp. 15–19 (addressing limitation "5.4"). This limitation requires the external power source to automatically vary power output in order to generate a predetermined current. As discussed above with respect to the alignment limitation, Petitioner contends that Schulman discloses measuring the current to the battery and reporting it back to the external device. Pet. 25. In order to protect against excessive current levels, Petitioner directs our attention to disclosures in Schulman that describe several ways to reduce the current to the battery, such as use of a shunt and zener diode, as well as reducing the intensity of the magnetic field, the latter of which is most relevant to this limitation. Ex. 1005, 9:56–65 ("[W]hen a current larger than the operating current exists through the resistor R9, proper charging will continue to occur because the shunt current regulator [Q7, R8] and the zener diode VR1 will prevent excessive current or voltage from being applied to

<sup>&</sup>lt;sup>4</sup> Patent Owner also argues that Petitioner's analysis in its Petition is in conflict with its expert's position regarding measuring the current. Prelim. Resp. 12–13. This argument is not persuasive on the current record because it appears to take isolated statements out of context. We understand Petitioner to rely on resistor R9 to measure the current in the battery. *See, e.g.*, Pet. 14–28.

the battery 15. In this event, a current control signal . . . will act to reduce the intensity of the magnetic field.") (emphasis added); see also id. at 5:31– 49, 7:20–33 (similar). Accordingly, Petitioner shows sufficiently how Schulman discloses measuring the current and signaling back to the external device if the current is too high, to cause the external device to lower the intensity of the magnetic field (i.e., its power output). On this record, we are persuaded that Schulman sufficiently describes measuring current and automatically varying the power output in order to generate a predetermined current.

Having reviewed the Petition and the Preliminary Response, we determine that Petitioner has established a reasonable likelihood of success of showing claim 5 to be anticipated by Schulman.

Claim 8 depends from claim 5 and states that the predetermined current is a maximum current. Petitioner asserts that Schulman's device utilizes a maximum operating current. Pet. 29 (citing, e.g., Ex. 1005, 7:25– 29 ( "when the current passing through resistor R9 in the charging circuit exceeds a maximum operating level, the signal from the circuit 59 will lower the output current")). Patent Owner does not address this limitation at this time. Reviewing Schulman and the specific citations provided in the Petition, we determine that Petitioner has established a reasonable likelihood of success of showing that claim 8 is anticipated by Schulman.

# D. Analysis of the Fischell Anticipation Ground (Claims 5 and 8)

Petitioner asserts that claim 5 is anticipated by Fischell. Pet. 29–40. Fischell describes a rechargeable cardiac pacemaker. Ex. 1006, 357. In general, Fischell describes an external device with a charger head that

transfers energy to a pickup coil in the implant in order to recharge the battery. Id. at 372 ("the external charger applies an alternating magnetic field which is picked up through the intact skin by the pulse generator's pickup coil"), Fig. 8. A telemetry transmitter in Fischell communicates back to the external device the charge current in the battery. Id. at 372-373 ("a telemetry system is powered whose output frequency from the pacer is proportional to the charge current in the battery"), Fig. 8 (noting a box for telemetry sensing of charge current), Table 3 (noting a "Battery charge current telemetry" item). If the battery is not charging properly due to misalignment (i.e., the current level is too low), the user is made aware by beeping and lights on the external device. *Id.* at 377–378. If the battery is receiving too much current, a feedback control system maintains charge at the appropriate level. Id. at 367 ("The charging circuit for the rechargeable pacer limits the charge (and overcharge) current into the battery to 40 mA."), 372 ("telemetry ... to measure and control charge current into the battery"), 373 ("[t]he external charg[ing] detects [the telemetry] and closed-loop controls the battery charge current to a value of 40 mA"), 378 ("[A] feedback control system in the charger maintains the battery charge current at the proper 40 mA level.") (emphasis omitted)).

Patent Owner argues that the Petition does not sufficiently explain how Fischell describes the varying limitation. Prelim. Resp. 19–21 (identifying the limitation as "5.4"). The argument does not point to any specific deficiencies in what Petitioner does identify, but rather focuses on whether the explanation is sufficiently clear. *See, e.g., id.* at 19 ("Petitioner provides little to no explanation in the Petition as to how Fischell discloses [the varying limitation]"). We find the Petition sufficiently detailed for

purposes of ascertaining whether a reasonable likelihood has been established.

Patent Owner more specifically asserts that it is not clear what the "power output" would be in Fischell. Id. at 19–20. Claim 5 requires that the "external power source automatically varies its power output in order to generate a predetermined current," and Petitioner maps this limitation onto disclosures in Fischell regarding the closed-loop control of battery charging levels. Pet. 39. The external charger charges the battery using a magnetic field to induce a current in the implant, which is the "power output" of the charger. See Ex. 1006, 372 ("[w]hen the external charger applies an alternating magnetic field . . . "), 378 ("the charger maintains the battery charge current"). To the extent Patent Owner is arguing that an *ipsis verbis* usage of the phrase "power output" in Fischell is required, we disagree. The disclosure of Fischell is to be read by a person of ordinary skill in the art (who is familiar with electrical engineering and implantable medical devices), and the Petition sufficiently shows that Fischell discloses a feedback telemetry system that adjusts the power to maintain a specified current charge level.

Patent Owner next argues that the Petition does not sufficiently explain how Fischell describes measuring the current or reporting an alignment based on the current. Prelim. Resp. 21–25 (identifying the limitation as "5.3(b)"). Patent Owner's arguments again are more directed to the level of detail of Fischell's disclosure, rather than asserting any particular error in the Petition. Petitioner identifies where Fischell describes sensing the charge current (Pet. 36–38) and reporting alignment (*id.* at 36– 38). Fischell is concerned with maintaining the battery charge at a certain

current level, and is concerned with accurately measuring battery voltage and current. *See, e.g.*, Ex. 1006, 367 (discussing overcharge), 378 (discussing "proper 40 mA [battery charge] level"); 380 ("A telemetry system is provided by means of which battery voltage and charge current can be accurately determined."). Fischell also has a telemetry system to know whether the charge levels indicate improper alignment. *Id.* at 370, 371–373, 378. Given that the appropriate lens is through the eyes of a person of ordinary skill in the art, we are persuaded on this record that Petitioner has shown that this disclosure is sufficient to satisfy the claim requirement of measuring the current through the battery and reporting an alignment based on that current. *See* Pet. 37–38.

Having reviewed the Petition and the Preliminary Response, we determine that Petitioner has established a reasonable likelihood of success of showing claim 5 to be anticipated by Fischell.

Claim 8 depends from claim 5 states that the predetermined current is a maximum current. Petitioner asserts that Fischell's device utilizes a maximum operating current. Pet. 39–40 (citing Ex. 1006, 367 ("The charging circuit for the rechargeable pacer limits the charge (and overcharge) current into the battery to 40 mA."), 378 ("[A] feedback control system in the charger maintains the battery charge current at the proper 40 mA level.")). Patent Owner does not address this limitation at this time. Reviewing Fischell and the specific citations provided in the Petition, we determine that Petitioner has established a reasonable likelihood of success of showing claim 8 is anticipated by Fischell.

# E. The Schulman—Baumann Obviousness Ground (Claims 6, 7, and 9)

Petitioner asserts that claims 6, 7, and 9 are unpatentable over Schulman and Baumann. Pet. 40–49. Claims 6, 7, and 9 depend directly or indirectly from claim 5, and recite further limitations of the clause in claim 5 that states the "external power source automatically varies its power output in order to generate the *predetermined current*" into the battery (emphasis added). Claim 6 states that the predetermined current varies "as a function of voltage of [the battery]," claim 7 states that the predetermined current "declines as said voltage of [the battery] increases," and claim 9 states that the predetermined current "declines over time as an internal impedance of [the battery] increases." Petitioner asserts that Baumann teaches these limitations. *Id.* at 43.

Baumann is directed to a device and process for charging batteries in medical implants. Ex. 1007, code (54), 1:7–19. In particular, Baumann is concerned with charging methods that prevent overheating or damaging the battery. *Id.* at 1:30–54. To avoid those problems, Baumann proposes a two-phase charge, with a high current phase followed by a reduced current phase once the battery reaches a certain voltage. *Id.* at Abstract. Petitioner asserts that, given Schulman's concerns with over-current and over-voltage conditions, a person of ordinary skill in the art would have considered it obvious to incorporate the specific charging patterns disclosed in Baumann, which would have improved the safety and reliability of the device. Pet. 44–45 (citing Ex. 1007, 2:15–22 ("The primary object of the present invention is to devise a device and a process for charging of rechargeable . . . . batteries of

implants . . . to preclude harmful charging conditions and especially limit the temperature [rise].")).

Claim 6 requires varying current as a function of voltage. Petitioner points to Baumann's disclosure that when the voltage reaches a certain level it "sets back," or lowers, the current. Pet. 45–46 (citing Ex. 1007, 5:14–22 ("When monitoring of the cell voltage  $U_Z$ ... indicates that the cell voltage has reached a limiting [value]  $U_G$ , the microcontroller 32 ... sets back the charging current  $I_L$  for a second charging phase T2.")).<sup>5</sup> Figure 3 of Baumann illustrates:

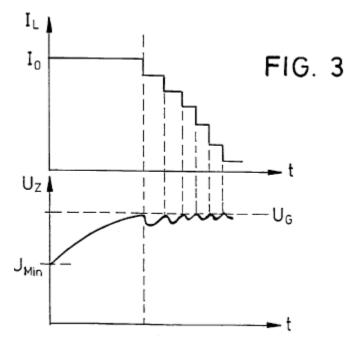


Figure 3 of Baumann depicts two graphs showing the relationship between charge current  $I_L$  over time, and battery voltage  $U_Z$  over time. *See* Ex. 1007, 4:63–5:35. As shown in Figure 3, after the voltage  $U_Z$  hits a

<sup>&</sup>lt;sup>5</sup> On page 46 of the Petition, the pincite to "Ex. 1005, 5:14–22" appears to be a typographical error and should instead read "Ex. 1007, 5:14–22."

threshold value  $U_G$ , current  $I_L$  is varied in a stepwise function over time. Patent Owner does not address claim 6 at this time. Reviewing the Petition and the Preliminary Response, we determine that Petitioner has established a reasonable likelihood of success of showing claim 6 to have been unpatentable in view of Schulman and Baumann.

Claim 7 depends from claim 6 and further requires the current to specifically *decline* as the voltage increases. Petitioner points to Baumann's disclosure of setting back the current when the voltage reaches a certain level (i.e., to the same disclosure as for claim 6). Pet. 47. Patent Owner argues that Baumann does not disclose this limitation and instead, e.g., merely discloses a constant current phase in a constant voltage phase. Prelim. Resp. 25–28. Baumann's Figure 3 does disclose a first phase where battery voltage increases as current stays high (I<sub>0</sub>, to the left of the vertical dashed line, corresponding to phase T1). See Ex. 1007, 4:63–14. Once the battery voltage U<sub>Z</sub> increases to a certain level U<sub>G</sub>, however, the current I<sub>L</sub> begins to decline. *Id.* at 5:15–20. As shown in Figure 3, each time after the current I<sub>L</sub> declines the voltage U<sub>Z</sub> quickly dips then begins to rise for a time until it hits voltage level U<sub>G</sub> again, after which time the current I<sub>L</sub> declines again. Id. at 5:15–47 (noting, e.g., that the voltage deviation is between 10– 30% at each step). Accordingly, we are persuaded on this record that Baumann shows that the current declines as the voltage increases.

Claim 9 depends from claim 8 and states that the predetermined current declines over time as an internal impedance of the battery increases. Petitioner points to Baumann's disclosure that the charging is regulated depending on the internal resistance of the battery. Pet. 48–49. Petitioner quotes the following passage:

In the device and process of the invention, the charging of the battery is regulated depending on the internal resistance of the battery. It is ensured that the cell is charged only with as much energy as the electrochemical state allows, without excess gassing or heating of the cell occurring. Older cells with increasing internal resistance, in this way, acquire less charge than new cells.

Ex. 1007, 2:34–40.

Patent Owner argues that Petitioner does not properly address the term "impedance." Prelim. Resp. 28–29. Again, however, this appears to be an *ipsis verbis* argument, as Petitioner has explained how the prior art regulates charging current based on a battery's internal resistance, and we are persuaded a person of ordinary skill in the art would understand this to be the same as what the claim requires ("impedance"). On the current record we are persuaded that a person of ordinary skill in the art, having a background in electrical engineering, would be able to understanding what information is being conveyed by the terms "impedance" and "resistance," regardless of whether those terms are strictly or loosely used.<sup>6</sup> See, e.g., Ex. 1003 ¶ 116 ("While the two terms "impedance" and "resistance" are sometimes loosely used to refer to the same concept, there is a very welldefined difference between the two. The term "internal impedance" is reserved for referring to a resistance in combination with a reactance provided by the battery during AC current flow."); see also id. (casting aspersion as to whether the '069 patent uses the term "impedance" properly).

Regarding the proposed combination, Patent Owner argues that Petitioner's obviousness analysis is faulty because the charging control in

<sup>&</sup>lt;sup>6</sup> In broad terms, we note that resistance is the opposition to current flow in DC circuits while impedance is the opposition to current flow in AC circuits.

Baumann is in the implant, whereas the control in Schulman is in the external device. Prelim. Resp. 30–32. Patent Owner argues that the difference is meaningful because "Baumann's internal and external charge components are tuned to a specific frequency," whereas "Schulman's similar components are not tuned as such." *Id.* at 32. But these passages are talking about the physical communication protocol, not the information that passes between the devices. Patent Owner also argues about the age of the references (*id.* at 32), but the combination is not to bodily incorporate a device of a certain age with another device of a different age, but rather to take what the person of ordinary skill in the art would know based on all of the prior art at the time of the invention.

In light of the above, we find Petitioner to have addressed sufficiently for purposes of institution all of the limitations of claims 6, 7, and 9. Regarding the proposed combination, we determine that Petitioner has provided sufficient rationale for incorporating the battery-charging regimen of Baumann into the Schulman system. The charging regimen in Baumann is for implants having rechargeable batteries like in Schulman. Ex. 1007, 2:15–22. Reviewing the Petition and the Preliminary Response, we determine that Petitioner has established a reasonable likelihood of success of showing that claims 6, 7, and 9 would have been unpatentable over Schulman and Baumann.

# F. The Fischell—Baumann Obviousness Ground (Claims 6, 7, and 9)

Petitioner asserts that claims 6, 7, and 9 would have been obvious in view of Fischell and Baumann. Pet. 49–55. We have already addressed the Fischell anticipation ground, as well as the Schulman—Baumann ground.

The Fischell—Baumann obviousness ground is similar to the Schulman— Baumann ground, but substitutes in Fischell. Patent Owner relies on arguments it has already made (Prelim. Resp. 34–35). For reasons already expressed, we determine that Petitioner has established a reasonable likelihood of success of showing that claims 6, 7, and 9 would have been unpatentable over Fischell and Baumann.

#### III. ORDER

We determine that Petitioner has demonstrated a reasonable likelihood of success in showing that claims 5–9 of the '069 patent are unpatentable under the grounds asserted in its Petition.

In view of the foregoing, it is hereby

ORDERED that the Petition is *granted* and that we institute an *inter partes* review of the '069 patent to evaluate all claims and grounds asserted in the petition, namely:

whether claims 5 and 8 are anticipated by Schulman;

whether claims 5 and 8 are anticipated by Fischell;

whether the subject matter of claims 6, 7, and 9 would have been obvious in view of Schulman and Baumann;

whether the subject matter of claims 6, 7, and 9 would have been obvious in view of Fischell and Baumann; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and

37 C.F.R. § 42.4(b), *inter partes* review of the '069 patent shall commence on the entry date of this Order, and notice is hereby given of the institution of a trial.

For PETITIONER:

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