

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LIVANOVA, INC. and LIVANOVA USA, INC.,

Petitioner,

v.

NEURO AND CARDIAC TECHNOLOGIES, LLC,
Patent Owner.

Case IPR2018-01709
U.S. Patent No. 7,076,307 B2

Before SHERIDAN K. SNEDDEN, JENNIFER MEYER CHAGNON, and
ELIZABETH M. ROESEL, *Administrative Patent Judges*.

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

I. INTRODUCTION

LivaNova, Inc. and LivaNova USA, Inc. (collectively, “Petitioner”), filed a Petition requesting an *inter partes* review of claims 1–8, 10–12, 18–23, and 25–28 of Patent No. 7,076,307 B2 (Ex. 1001, “the ’307 patent”). Paper 2 (“Pet.”). Neuro and Cardiac Technologies, LLC (“Patent Owner”) filed a Preliminary Response. Paper 7 (“POPR”).

For the reasons explained below, we exercise our discretion under 35 U.S.C. § 325(d), and decline to institute *inter partes* review of the challenged claims.

A. *Related Matters*

The parties identify the following litigation between the parties involving the ’307 patent: *Neuro and Cardiac Technologies, LLC v. LivaNova, Inc. and LivaNova USA, Inc.*, Case No. 2:18-cv-01517, Southern District of Texas. Pet. 6; Paper 6, 2.

Petitioner additionally challenges claims 1–12 and 18–28 of the ’307 patent in its petition filed in IPR2019-00264, currently co-pending.

B. *The ’307 patent*

The ’307 patent discloses a method and system for neuromodulating vagus nerve(s) to provide therapy for neurological and neuropsychiatric disorders, which comprises implantable and external components. Ex. 1001, Abstract. The claimed subject matter relates to a programmable implantable pulse generator. *Id.* at 32:63–36:34.

Figure 34 of the '307 patent is reproduced below.

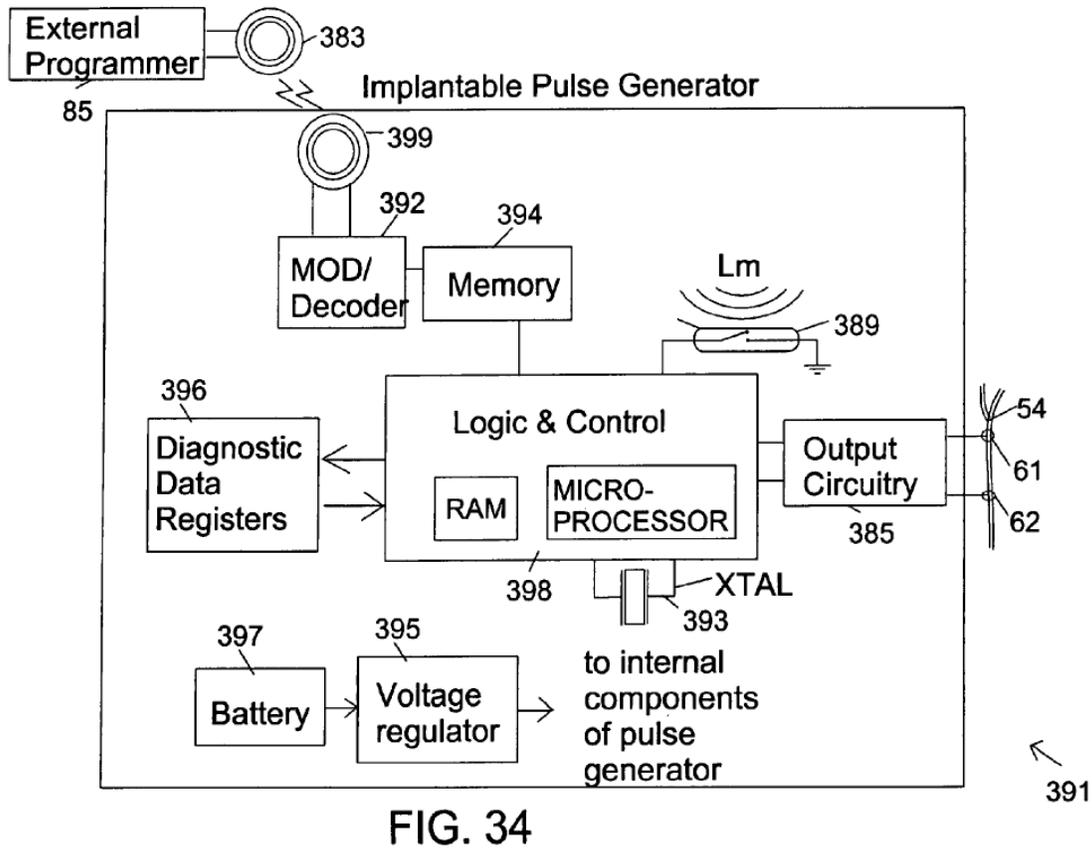


Figure 34 depicts a “simplified block diagram of the implantable pulse generator.” *Id.* at 9:44–45. The '307 patent discloses that the pulse generator “is preferably a microprocessor based device, where the entire circuitry is encased in a hermetically sealed titanium can.” *Id.* at 20:46–48. The system provides “electrical pulses that are delivered to electrodes 61, 62 via a lead 40.” *Id.* at 20:51–52. The external programmer 385 communicates with the implanted device via bi-directional inductive telemetry to provide activation, programming, and selection of predetermined/pre-packaged programs. *Id.* at 20:52–57, 25:60–28:23, Figures 45–52. The memory contained within the implanted pulse generator stores “predetermined/pre-packaged” programs for vagus nerve therapy, which “comprise unique

combinations of pulse amplitude, pulse width, pulse frequency, ON-time and OFF-time.” *Id.* at 20:58–64; 21:1–12 (Table 4).

C. Illustrative Claims

Independent claims 1 and 18, reproduced below, are illustrative of the challenged claims:

1. A method of providing electrical pulses to a vagus nerve(s) of a patient for treating or alleviating the symptoms of at least one of neurological, neuropsychiatric, and obesity disorders, comprising the steps of:

providing a microprocessor based implanted pulse generator, wherein said pulse generator comprises microprocessor, circuitry, memory, and power source;

providing at least two predetermined/pre-packaged programs of neuromodulation therapy stored in memory of said implantable pulse generator, wherein said predetermined/pre-packaged programs define neuromodulation parameters of pulse amplitude, pulse-width, pulse frequency, on-time and off-time;

providing an implanted lead in electrical contact with said implanted pulse generator; wherein said implanted lead comprising at least one electrode adapted to be in contact with said vagus nerve(s);

providing programmer means for activating and/or programming said implanted pulse generator, wherein bi-directional inductive telemetry is used to exchange data with said implanted pulse generator; and

selectively choosing between at least two predetermined/pre-packaged program and activating said selected program.

18. A system for providing electrical pulses to a vagus nerve(s) of a patient for treating or alleviating the symptoms of at least one of neurological, neuropsychiatric, and obesity disorders, comprising:

an implantable pulse generator comprising microprocessor, circuitry, memory, and power source;

at least two predetermined/pre-packaged programs of stimulation therapy stored in said memory to control said electrical pulses emitted by said implantable pulse generator, wherein said predetermined/pre-packaged programs define neuromodulation parameters of pulse amplitude, pulse-width, pulse frequency, on-time and off-time;

an implantable lead in electrical contact with said implantable pulse generator wherein said lead comprising at least one electrode adapted to be in contact with said vagus nerve(s); and

means for activating and/or programming said implantable pulse generator, wherein bi-directional inductive telemetry is used to exchange data with said implantable pulse generator.

D. Evidence Relied Upon

Petitioner relies upon the following prior art references:

Ex. 1008, Birinder R. Boveja et al., U.S. Patent No. 6,366,814 B1, issued Apr. 2, 2002 (“Boveja-814”).

Ex. 1011, John G. Webster, Design of Cardiac Pacemakers, IEEE Press (1995) (selected pages) (“Webster”).

Ex. 1012, Ross G. Baker. Jr. et al., U.S. Patent No. 5,304,206, issued Apr. 19, 1994 (“Baker”).

Ex. 1013, Michael T. Lee, U.S. Patent No. 6,442,432 B2, issued Aug. 27, 2002 (“Lee”).

Petitioner also relies upon the Declaration of Dr. Richard T. Mihran (Ex. 1003) to support its contentions.

E. Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability (Pet. 35):

Ground	Claim(s)	Basis	References
1	1–5, 7, 8, 10–12, 18–23, 25–28	§ 103(a)	Baker, Boveja-814, and Webster
2	6	§ 103(a)	Baker, Boveja-814, Webster and Lee

II. ANALYSIS

A. Discretionary Denial Under 35 U.S.C. § 325(d)

Institution of an *inter partes* review is discretionary. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (explaining that under 35 U.S.C. § 314(a), “the PTO is permitted, but never compelled, to institute an IPR proceeding”). Our discretionary determination of whether to institute review is guided, in part, by 35 U.S.C. § 325(d), which states, in relevant part:

In determining whether to institute or order a proceeding under this chapter, chapter 30, or chapter 31, 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.

See also 157 CONG. REC. S1376 (daily ed. Mar. 8, 2011) (statement of Sen. Kyl) (“[T]he second sentence of section 325(d) . . . authorizes the Director to reject any . . . petition . . . on the basis that the same or substantially the same prior art or arguments previously were presented to the Office. This will prevent parties from mounting attacks on patents that raise issues that are substantially the same as issues that were already before the Office with respect to the patent. The Patent Office has indicated that it currently is

forced to accept many requests . . . that are cumulative to or substantially overlap with issues previously considered by the Office with respect to the patent.”).

In evaluating whether the same or substantially the same prior art or arguments were previously presented to the Office under § 325(d), the Board has considered a number of non-exclusive factors, including, for example:

- (a) the similarities and material differences between the asserted art and the prior art involved during examination;
- (b) the cumulative nature of the asserted art and the prior art evaluated during examination;
- (c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;
- (d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguished the prior art;
- (e) whether Petitioner has pointed out sufficiently how the Examiner erred in its consideration of the asserted prior art; and
- (f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of the asserted prior art or arguments.

Becton, Dickinson and Co. v. B. Braun Melsungen AG, IPR2017-01586, slip op. at 17–18 (PTAB Dec. 15, 2017) (Paper 8) (informative) (“the *Becton Dickinson* factors”).

Petitioner asserts several challenges to claims 1–8, 10–12, 18–23, and 25–28, as set forth above. Patent Owner disagrees that the asserted references render the challenged claims obvious (POPR 34–60).

Additionally, Patent Owner requests that we deny institution of *inter partes* review under 35 U.S.C. § 325(d) because i) Baker was already considered and applied against the challenged claims; ii) Boveja-814 is substantially the same as art previously considered and applied against the challenged claims (namely, Boveja-359¹); and iii) Webster is cumulative of art previously applied against the challenged claims during prosecution. POPR 19–33.

For the reasons that follow, we agree with Patent Owner regarding denial under 35 U.S.C. § 325(d), and exercise our discretion to deny institution.

1. Art and Arguments Presented in Prosecution

We provide a brief overview of the prosecution history to supply context for the dispute between the parties. The '307 patent issued from U.S. Patent Application Serial No. 10/841,995 (the "'995 application") filed on May 8, 2004, as a continuation-in-part of application Ser. No. 10/196,533 filed July 16, 2002, which is a continuation-in-part of Ser. No. 10/142,298 filed on May 9, 2002. Ex. 1001, 1.

The '995 application was filed with 33 claims, of which claims 1, 15, 19 and 21 were independent. Ex. 1002, 57–62. Claims 2–14 depended from claim 1, either directly or indirectly; claims 16–18 depended from claim 15, either directly or indirectly; claim 20 depended directly from claim 19; claims 22–33 depended from claim 21, either directly or indirectly. *Id.* Pending claims 1–7, 10–19, 21–25, and 28–33 of the '995 application issued as claims 1–28 of the '307 patent. *Id.* at 304–305.

¹ Ex. 2002, Birinder B. Boveja, et al., U.S. Patent No. 6,205,359 B1, issued Mar. 20, 2001 ("Boveja-359").

In an Office Action dated November 1, 2005, pending claims 1–7, 15–25, 27–28, and 33 were rejected under 35 U.S.C. 102(b) as being anticipated by Baker. *Id.* at 166–168. The Examiner made the following findings regarding Baker relative to the limitations of the pending claims:

Baker disclose[s] a method of providing electrical pulses to a vagus nerve 27 comprising providing a neurostimulator that includes a microprocessor based programmable pulse generator 10 implanted in the body of a patient 30, and a lead 22 in electrical contact with the implantable pulse generator 10 and further comprising stimulating electrodes 25 adapted to be in contact with the vagus nerve 27 upon activation of a predetermined program.

Id. at 166.

In that same Office Action, pending claims 1–8, 12–15, 17, 21–26, and 30–33 were rejected under 35 U.S.C. 102(b) as being anticipated by Boveja-359. *Id.* at 168–170. The Examiner relied on Boveja-359 for its disclosure of an external pulse generator that emits electrical pulses to stimulate a cranial nerve such as the left vagus nerve according to a pre-determined program. *Id.* at 168. Specifically, the Examiner found:

Boveja '359 provides means for programming the pulse generator via programming station 77 and means for activating the at least one predetermined program to emit the predetermined pulses to the vagus nerve(s) via selector 69 or the on/off switches shown in Fig. 13 or the buttons for selecting one out of seven available predetermined programs also shown in Fig. 13.

Id. at 168–169 (citing Ex. 2002, Abstract, Figs. 13–14, 12:24–37, 13:10–28).

Additionally, the Examiner rejected dependent claims 11 and 29 under 35 U.S.C. 103(a) as unpatentable over the combination of Baker and Boveja-359. *Id.* at 171–172.

In a paper filed December 9, 2005, Applicant amended the abstract and the pending claims and provided remarks to the Examiner's rejection in view of the claim amendments. Ex. 1002, 182–202. Notably, Applicant amended claim 1 to recite an “*implanted pulse generator*” and a “*programmer means for activating and/or programming said implanted pulse generator, wherein bi-directional inductive telemetry is used to exchange data with said implanted pulse generator.*” *Id.* at 184 (italicized text added by amendment). The claims were also amended to recite “at least two predetermined/pre-packaged programs of neuromodulation therapy stored in memory of the implantable pulse generator.” *Id.* Similar amendments were made to the other independent claims². *Id.* at 184–191.

In response to the Examiner's rejection over Baker, Applicant argued that Baker discloses apparatus and techniques for activating an implantable neurostimulator that is patient activated, a “completely different invention.” *Id.* at 194–195. Specifically, Applicant argued:

[Baker] discloses that its object was to provide improvements in the activation and deactivation of the implanted stimulator by implanted sensors. For example, [Baker] discloses adjusting the stimulation signal pattern in response to coded sequences of finger taps on the skin adjacent to the implanted device. That patent also discloses a motion sensor responsive to the patient's movements. In the [Baker] disclosure[,] a piezoelectric sensor which is bonded to the internal surface of the housing is configured to respond to finger tapping among other things. Furthermore[, Baker discloses that] a coded sequence of finger tapping may also be used. Again, the finger tapping or the

² Claim 15 retained the “at least one . . . program” (as opposed to “at least two . . .”) but included the addition of the “pre-packaged” limitation that was added to claim 1. Ex. 1002, 186–187.

“bracelet” would be using only for patient activated situations such as epilepsy where either an “aura” occurs or there is vigorous repetitive motion such as during a seizure.

In contrast, Applicant’s invention is based on providing therapy for depression, and other neuropsychiatric and neurologic disorders with predetermined/pre-packaged programs. These predetermined/pre-packaged programs comprise unique combinations of pulse amplitude, pulse width, pulses per second, on-time and off-time. These are judiciously selected and packaged into a convenient number of complete programs of therapy, which are then stored in the memory of the implanted pulse generator.

Id. at 195–196.

In response to the Examiner’s rejection over Boveja-359, Applicant argued that Boveja-359 did not disclose “a microprocessor, memory, and power source in the implantable components as is found in the currently amended claims of the applicant’s disclosure.” *Id.* at 193. Additionally, Applicant argued as follows:

The implantable circuitry of [Boveja-359] comprises only passive components. . . . In [Boveja-359], the implantable lead receiver circuitry is shown in FIG. 8, and described in columns 10–11 lines 59 (col. 10) to line 16 (col. 11). There is simply no disclosure or even a suggestion in [Boveja-359] to have a microprocessor, memory, and power source in the implantable components as is found in the currently amended claims of the applicant’s disclosure. . . .

[Pending] claims 1 and 21, as amended, include programmer means “wherein bi-directional inductive telemetry is used to exchange data with said implanted pulse generator”. As mentioned above, [Boveja-359] clearly and specifically teaches passive circuitry in the implanted components, whereby it would not be possible to have bi-directional telemetry, and by

having passive components in the implanted portion of the system, the prior art teaches away from the amended claims.

Id. at 193.

In a Final Office Action dated January 23, 2006, the Examiner did not maintain any of the rejections relying on Baker and/or Boveja-359 and, instead, entered new grounds of rejection that relied on references not cited in any ground now before us in the Petition. *Id.* at 231–241.

2. *Becton Dickinson factors (a)–(d)*

Becton Dickinson factors (a)–(d) relate to whether—and to what extent—the Examiner considered and relied upon the prior art and arguments asserted in the Petition. Each of Petitioner’s Grounds relies heavily on the disclosures of Baker and Boveja-814. Pet. 41–44, 48–77. Petitioner relies on Baker and/or Boveja-814 to teach most of the limitations of the challenged claims. *Id.* at 48–77 (claim-by-claim analysis relying on Baker and Boveja-814 to teach all limitations of the challenged claims, except claim elements 1.4 and 18.4 and claim 21).

With regard to Baker, the Examiner rejected certain pending claims as anticipated by Baker, as summarized above. Ex. 1002, 166–168. The Examiner also rejected certain dependent claims as unpatentable over the combination of Baker and Boveja-359. *Id.* at 171–172. Then, in response to Applicant’s amendment and remarks (*id.* at 182–202), the Examiner’s Final Office Action entered new grounds of rejection, effectively withdrawing the earlier rejections citing Baker as prior art (*id.* at 231–241).

The Examiner relied on Baker for disclosing a method of providing electrical pulses to the vagus nerve using an implantable pulse generator with stimulating electrodes adapted to be in contact with the vagus nerve

upon activation of a predetermined coded sequences of finger taps. *Id.* at 166; Ex. 1012, 4:39–43. Here, Petitioner relies similarly on Baker for teaching an implantable pulse generator programmed to respond to coded sequences of finger taps. Pet. 37–38; *id.* at 41 (“*Baker* teaches that parameters are programmed into the memory of an implantable pulse generator, and teaches the utility of providing the patient with a limited number of different stimulation outputs from which the patient can select using coded sequences of taps.”). In view of the above and as argued by Patent Owner (POPR 22–24), we find that Petitioner relies on Baker for substantially the same teachings as relied on by the Examiner during prosecution.

Both grounds of unpatentability asserted in the Petition are based principally on the combination of Baker and Boveja-814. Petitioner relies on Boveja-814 primarily for its disclosure of the recited element “at least two predetermined/pre-packaged programs.” Pet. 50–56. The Examiner did not rely on Boveja-814 during the prosecution of the ’307 patent, but did rely on Boveja-359, as summarized above. Boveja-814 is related to Boveja-359 as a continuation-in-part. Ex. 1008, 1. Like Boveja-359, Boveja-814 discloses external pulse generators, not implantable pulse generators. *See id.*, Abstract (“An external stimulator adapted to be inductively coupled with an implanted lead-receiver is designed to deliver neuromodulation therapy for disorders”); *see also id.* at 10:14–52 (listing advantages of using the external pulse generator “of the present inductively coupled system”). Furthermore, like Boveja-359, Boveja-814 discloses that the external stimulator may contain nine pre-determined programs. Ex. 1008, 8:44–46, 14:34–67; Ex. 2002, 12:24–37. As noted by

Patent Owner, the disclosures of Boveja-814 relied on by the Petitioner for the claim element “at least two predetermined/pre-packaged programs” is nearly identical to the parallel sections of Boveja-359 cited by the Examiner during prosecution. POPR 25–28 (citing, among other passages, Ex. 1008,³ 8:38–46, 14:39–67; Ex. 2002, 12:24–37). We are persuaded by Patent Owner’s analysis, which we adopt as our own, and find that Boveja-814 is cumulative to Boveja-359.

Petitioner additionally supports its asserted obviousness grounds with Webster (Ground 1) and the combination of Webster and Lee (Ground 2). Webster discloses programming in the context of bi-directional telemetry of an implantable pulse generator used for stimulating cardiac tissue (i.e. a pacemaker). Ex. 1003 ¶ 313. Lee relates generally to “[a] data communication system . . . which permits collaboration between distributed clinicians regarding distributed or remote implantable medical devices (IMDs).” Ex. 1013, Abstract. Lee discloses that the IMD may communicate with a central collaborative network via modem, LAN, WAN, wireless or infrared. *Id.* at 10:52–53.

In Ground 1, Petitioner cites Webster for the claim elements of “providing programmer means for activating and/or programming said implanted pulse generator, wherein bi-directional inductive telemetry is used to exchange data with said implanted pulse generator” (claim 1) and “means for activating and/or programming said implantable pulse generator, wherein bi-directional inductive telemetry is used to exchange data with said

³ At page 26 of the Preliminary Response, Patent Owner mistakenly cites Boveja-814 as Exhibit 1001 instead of Exhibit 1008.

implantable pulse generator” (claim 18). Pet. 45–47, 57–59, 69–71.

Petitioner adds Webster to the combination of Baker and Boveja-814 because,

[w]hile *Baker* does not present specific implementation details of the computer or programming wand disclosed in the specification and depicted in Figure 2, a POSITA seeking to design or build Baker’s system would be motivated to specify those implementation details, based on known programming systems used with implanted medical devices such as [implantable pulse generators]. Ex. 1003, ¶¶ 306–311.

Id. at 45–46. Thus, according to Petitioner, “*Webster* is an example that presents details on how to implement a programmer for programming an [implantable pulse generator], and thus a person of ordinary skill in the art would readily recognize the applicability to *Baker*.” *Id.* at 46.

In Ground 2, Petitioner relies on Lee in addition or alternatively to Webster for the element of claim 6, which recites that “said implanted pulse generator may further comprise a telemetry means for remote device interrogation and/or programming over a wide area network.” Ex. 1001, 33:37–40. Specifically, Petitioner relies on Lee as one example of how a person of ordinary skill in the art could modify Webster’s programmer with a modem. Pet. 80. That is, “the programmer of *Webster* is modified with the modem of *Webster* (to achieve the benefit of saving a patient ‘time and money’) together with circuitry for communication in the programmer further specified by the interface medical device 116 of *Lee*.” *Id.* at 81; Ex. 1013, 10:52–53.

Having considered the grounds presented in the Petition in connection with the prosecution history, we find that these additional references support the asserted obviousness ground with teachings of what was generally

known in the art the time of the invention and cumulative to art considered during prosecution. For example, in the Final Office Action dated January 23, 2006, the Examiner relied on Kirkpatrick⁴ in an obviousness rejection for the element of claim 6 for substantially the same reason as Petitioner now relies on Webster and Lee. Specifically, the Examiner combined Bojeva-626,⁵ disclosing an “implantable pulse generator having prepackaged/predetermined programs stored in the memory of the pulse generator” (Ex. 1017, Abstract), with Kirkpatrick, making the following findings of fact regarding Kirkpatrick relative to the pending claims:

Kirkpatrick . . . teaches that it is known to couple an implanted medical device 110 to a network 320 via a programmer 312 and communication link 318 to allow any information uploaded from the implanted device 110, as well as any program code or other information to be downloaded to the implantable device 110, to be stored in a database 322 at one or more data repository locations. Kirkpatrick also teaches that this telemetric capability allows a patient (and the patient’s physician) to have access to important data, including past treatment information and software updates, essentially anywhere in the world that there is an external programmer and a network connection (see Kirkpatrick column 10, lines 18–32).

Ex. 1002, 234 (citing Ex. 2005, 10:18–32). Thus, while Kirkpatrick was not combined with either Baker or Boveja-359, the Examiner relied on Kirkpatrick in an obviousness rejection for the substantially the same reasons Petitioner now relies on Webster and Lee. Accordingly, we find

⁴ Ex. 2005, Bruce Kirkpatrick et al., U.S. Patent No. 6,480,743 B1, issued November 12, 2002 (“Kirkpatrick”).

⁵ Ex. 1017, Birinder B. Boveja et al., U.S. Patent No. 6,760,626 B1, issued July 6, 2004 (“Boveja-626”).

Webster and Lee to be cumulative to art relied on by the Examiner during prosecution of the application leading to the '307 patent.

Having considered the parties' positions and evidence of record, summarized above, we find that the Examiner substantively considered and relied upon Baker and a reference cumulative to Boveja-814—the main references Petitioner relies upon in the Petition—during prosecution of the application leading to the '307 patent. And, when viewed in connection with the prosecution history, we find that Petitioner makes substantially the same arguments about Baker and Boveja-814 that the Examiner made about Baker and Boveja-359 during prosecution. Although the Examiner did not consider Webster and Lee, we find that these references are cumulative of other prior art considered and applied by the Examiner and that neither reference substantively changes Petitioner's reliance on Baker and Boveja 814. Thus, we find that Becton Dickinson factors (a)–(d) weigh heavily in favor of exercising our discretion under § 325(d) to deny institution.

3. *Becton Dickinson factors (e)–(f)*

Factors (e) and (f) look to the Petition and whether Petitioner has made a case for reconsidering the asserted prior art. We are not persuaded that Petitioner has done so here. In a single paragraph, Petitioner contends that the unpatentability grounds set forth in the Petition “are not redundant of the prosecution of the '307 patent.” Pet. 37. Petitioner's main contention supporting its position is that,

while *Baker* was applied during prosecution, the other references, *Boveja-814*, *Webster and Lee*, were not part of the file history. Further, the disclosure of *Boveja-814* contradicts the applicant's assertion “[t]here is simply no disclosure or even a

suggestion in the prior art teaching to have predetermined/pre-packaged programs as in the Applicant's disclosure." Ex. 1002 at 196.

Id.

Having considered the prosecution history in its entirety, we find that Petitioner's argument is not sufficient to identify error in the Examiner's consideration of the prior art. In prosecution, Applicant argued that there was no disclosure in the prior art of two or more predetermined/pre-packaged programs as *in Applicant's disclosure*, which relates to an implanted pulse generator. The prior art relied on by the Examiner for the element of predetermined/pre-packaged programs, Boveja-359, relates to external pulse generators. Furthermore, as summarized above, the disclosure from Boveja-814 that Petitioner relies upon in its Petition for the element of two or more predetermined/pre-packaged programs is nearly identical to the disclosure of Boveja-359 that was evaluated by the Examiner during prosecution. Accordingly, we determine that Petitioner has not pointed out sufficiently how the Examiner erred in its consideration of Boveja-359 and are not persuaded that the nearly identical disclosure contained in Boveja-814 presented in the Petition warrants reconsideration.

For these reasons, we find that *Becton Dickinson* factors (e) and (f) weigh in favor of exercising our discretion under § 325(d) to deny institution.

4. *Weighing the Factors*

Taking into account the facts and circumstances of this case, we find that *Becton Dickinson* factors (a)–(f) weigh in favor of exercising our discretion under § 325(d) to deny institution.

III. CONCLUSION

For the reasons set forth above, we exercise our discretion under 35 U.S.C. § 325(d) and do not institute an *inter partes* review on any of the challenged claims of the '307 patent on any ground set forth in the Petition.

IV. ORDER

Accordingly, it is

ORDERED that no trial or *inter partes* review is instituted for any claim of U.S. Patent No. 7,076,307 B2 on any ground in this proceeding.

IPR2018-01709
U.S. Patent No. 7,076,307 B2

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