

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

**BOSTON SCIENTIFIC NEUROMODULATION
CORP.,**
Appellant

v.

NEVRO CORP.,
Appellee

2021-1777

Appeal from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in No. IPR2019-
01340.

Decided: March 18, 2022

PRATIK A. SHAH, Akin Gump Strauss Hauer & Feld
LLP, Washington, DC, argued for appellant. Also repre-
sented by Z.W. JULIUS CHEN; MICHAEL P. KAHN, New York,
NY; DAVID A. CAINE, Arnold & Porter Kaye Scholer LLP,
Palo Alto, CA; MATTHEW WOLF, Washington, DC.

RICHARD CRUDO, Sterne Kessler Goldstein & Fox,
Washington, DC, argued for appellee. Also represented by

NAVEED HASAN, JON WRIGHT; CHING-LEE FUKUDA, Sidley Austin LLP, New York, NY.

Before MOORE, *Chief Judge*, CHEN and HUGHES, *Circuit Judges*.

HUGHES, *Circuit Judge*.

Boston Scientific Neuromodulation Corp. appeals a decision of the Patent Trial and Appeal Board invalidating all claims of U.S. Patent No. 6,381,496 as obvious. Because substantial evidence supports the Board's factual findings, we affirm.

I

U.S. Patent No. 6,381,496 relates to implant devices that allow users to modify therapy parameters. For example, a spinal cord stimulation device uses parameters like amplitude, width, and frequency to create electric pulses that the device sends to a patient's spinal cord. The '496 patent discloses a device that can switch from one set of values for these operational parameters to another. Claim 1 is representative:

1. An implant device comprising:

an implantable case;

electronic circuitry housed within said implantable case for performing a prescribed function, the electronic circuitry including

a control register wherein a control set of operational parameters is stored,

a controller that controls the operation of the implant device as a function of the control set of operational parameters stored in the control register, and

a plurality of sets of operational parameters; and

selection means for selecting one of the plurality of sets of operational parameters as the control set of operational parameters that is stored in the control register;

whereby the operation of the implant device may be changed through selection of a different set of operational parameters.

'496 patent at 19:47–64.

Nevro Corp. petitioned for inter partes review of all claims of the '496 patent, asserting seven obviousness grounds. The Board instituted review, agreed with all asserted grounds, and concluded that the '496 patent is unpatentable as obvious. Boston Scientific appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

II

We review the ultimate conclusion of obviousness de novo and subsidiary fact findings for substantial evidence. *In re Ethicon, Inc.*, 844 F.3d 1344, 1349 (Fed. Cir. 2017).

Boston Scientific argues that the Board misconstrued the term “set of operational parameters” by allowing a set to contain only one parameter even though the patent uses the plural term “parameters.” Boston Scientific asserts that this error is material because the prior art reference Shelton (U.S. Patent No. 5,387,228) teaches modifying only a single parameter. Boston Scientific further argues that Shelton does not teach the '496 patent's “selecting one of the plurality of sets of operational parameters as the control set” limitation.

While Nevro disagrees with Boston Scientific's arguments about Shelton, it tells us we should instead focus on the prior art reference Nappholz (U.S. Patent No. 5,720,770). According to Nevro, Nappholz discloses modifying multiple parameters—rendering any claim

construction error harmless—and teaches the disputed limitation.

We agree with Nevro. Substantial evidence supports the Board’s factual finding that Nappholz teaches “selecting one of the plurality of sets of operational parameters as the control set.” Nappholz’s claims 10 and 27 teach a system that switches between “first and second therapies” in response to a change in conditions. Nappholz at 16:1–12, 17:13–22. And Nappholz’s figure 7 depicts a flowchart in which the device detects a change in the user’s activity level, asks the user what activity she is performing (e.g., sleeping, waking up, exercising), and then adjusts the operational parameters accordingly. *See id.* at 9:19–29. These disclosures constitute substantial evidence supporting the Board’s finding that Nappholz teaches “a plurality of sets of operational parameters” and means for selecting one set as the control set.

We also do not need to determine whether a “set of operational parameters” must contain more than one parameter because Nappholz teaches sets containing more than one parameter. *See id.* at 15:14–25 (claiming means for exchanging information with an implantable cardiac device, “said information including . . . commands for modifying [a plurality of] programmable parameters”). We affirm the Board’s decision.

AFFIRMED