United States Court of Appeals for the Federal Circuit

NEVRO CORP.,
Plaintiff-Appellant

v.

BOSTON SCIENTIFIC CORPORATION, BOSTON SCIENTIFIC NEUROMODULATION CORPORATION,
Defendants-Cross-Appellants

2018-2220, 2018-2349

Appeals from the United States District Court for the Northern District of California in No. 3:16-cv-06830-VC, Judge Vince Chhabria.

Decided: April 9, 2020

DEANNE MAYNARD, Morrison & Foerster LLP, Washington, DC, argued for plaintiff-appellant. Also represented by SETH W. LLOYD, BRIAN ROBERT MATSUI; BITA RAHEBI, Los Angeles, CA; KENNETH ALEXANDER KUWAYTI, ERIC C. PAI, Palo Alto, CA; MICHAEL ALLEN JACOBS, San Francisco, CA; BRADFORD J. BADKE, CHING-LEE FUKUDA, Sidley Austin LLP, New York, NY; RYAN C. MORRIS, CARTER GLASGOW PHILLIPS, Washington, DC.

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Washington, DC, argued for defendants-cross-appellants. Also represented by MARC A. COHN, EDWARD HAN; THOMAS T. CARMACK, KRISTA MARIE CARTER, Palo Alto, CA.

Before MOORE, TARANTO, and CHEN, *Circuit Judges.*

MOORE, *Circuit Judge.*

Nevro Corporation sued Boston Scientific Corporation and Boston Scientific Neuromodulation Corporation (collectively, Boston Scientific) in the Northern District of California, alleging infringement of eighteen claims across seven patents: U.S. Patent Nos. 8,359,102; 8,712,533; 8,768,472; 8,792,988; 9,327,125; 9,333,357; and 9,480,842.[1] The asserted patents are directed to high-frequency spinal cord stimulation therapy for inhibiting an individual's pain.[2] According to the specification, conventional spinal cord stimulation systems deliver electrical pulses to the spinal cord to generate sensations, such as tingling or paresthesia, that mask or otherwise alter the patient's pain. '533 patent at 1:31–49. The claimed invention purportedly improves conventional spinal cord stimulation therapy by using waveforms with high frequency elements or

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[1] Nevro alleged infringement of claims 11, 21 and 23 of the '102 patent; claims 7, 12, 35, 37 and 58 of the '533 patent; claims 1 and 5 of the '472 patent; claim 18 of the '988 patent; claims 18, 34 and 55 of the '125 patent; claims 5 and 34 of the '357 patent; and claims 1 and 22 of the '842 patent.

[2] The '102, '533, '988, '125, '357 and '842 (collectively, the Alataris patents) belong to the same patent family and share a specification. The '472 patent shares common inventors with the Alataris patents and is likewise directed to high-frequency, paresthesia-free spinal cord stimulation therapy.

components, which are intended to reduce or eliminate side effects. *Id.* at 2:49–56.

In July 2018, the district court issued a joint claim construction and summary judgment order. The district court held invalid as indefinite claims 7, 12, 35, 37 and 58 of the '533 patent, claims 18, 34 and 55 of the '125 patent, claims 5 and 34 of the '357 patent and claims 1 and 22 of the '842 patent. J.A. 5–11. As to the remaining six asserted claims, which the district court held were not indefinite, the district court granted Boston Scientific summary judgment of noninfringement. J.A. 12–13. Nevro appeals the district court's judgment of invalidity. Boston Scientific cross-appeals the district court's determination that the remaining six asserted claims are not indefinite. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

DISCUSSION

We review a district court's grant of summary judgment according to the law of the regional circuit, here the Ninth Circuit. *Kaneka Corp. v. Xiamen Kingdomway Grp. Co.*, 790 F.3d 1298, 1303 (Fed. Cir. 2015). In the Ninth Circuit, summary judgment is reviewed *de novo*. *Brunozzi v. Cable Commc'ns, Inc.*, 851 F.3d 990, 995 (9th Cir. 2017). We review indefiniteness determinations *de novo*, except for necessary subsidiary fact findings, which we review for clear error. *Cox Commc'ns v. Sprint Commc'n Co.*, 838 F.3d 1224, 1228 (Fed. Cir. 2016).

I. "paresthesia-free"

Several of the asserted claims are directed to embodiments of the claimed invention in which "therapy-induced paresthesia is not a prerequisite to achieving pain reduction." '533 patent at 3:16–19. Specifically, claims 18, 34 and 55 of the '125 patent, claims 5 and 34 of the '357 patent and claims 7, 12, 35, 37, and 58 of the '533 patent recite systems or devices comprising a means for generating

therapy signals that are "paresthesia-free."[3] Claims 11, 21 and 23 of the '102 patent, claims 1 and 5 of the '472 patent and claim 18 of the '988 patent are method claims reciting similar limitations. Claim 18 of the '125 patent is illustrative of the asserted system and device claims and recites:

> 18. A spinal cord modulation system for reducing or eliminating pain in a patient, the system comprising:
>
> means for generating a *paresthesia-free* therapy signal with a signal frequency in a range from 1.5 kHz to 100 kHz; and
>
> means for delivering the therapy signal to the patient's spinal cord at a vertebral level of from T9 to T12, wherein the means for delivering the therapy signal is at least partially implantable.

(emphasis added). Claim 1 of the '472 patent is illustrative of the asserted method claims and recites:

> 1. A method for alleviating patient pain or discomfort, *without relying on paresthesia or tingling to mask the patient's sensation of the pain*, comprising:
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> implanting a percutaneous lead in the patient's epidural space, wherein the percutaneous lead includes at least one electrode, and wherein implanting the percutaneous lead includes positioning the at least one electrode proximate to a target location in the patient's spinal cord region and outside the sacral region;

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[3] As used in this opinion the term "paresthesia-free" refers to "paresthesia-free," "non-paresthesia-producing" and similar phrases used to express the idea that a claimed therapy or therapy signal does not produce paresthesia.

> implanting a signal generator in the patient;
>
> electrically coupling the percutaneous lead to the signal generator; and
>
> programming the signal generator to generate and deliver an electrical therapy signal to the spinal cord region, via the at least one electrode, wherein at least a portion of the electrical therapy signal is at a frequency in a frequency range of from about 2,500 Hz to about 100,000 Hz.

(emphasis added).

The district court determined that "paresthesia-free" has a "clear meaning," namely that the therapy or therapy signal "does not produce a sensation usually described as tingling, pins and needles, or numbness." J.A. 9. It found, based on extrinsic evidence, that "[a]lthough the parameters that would result in a signal that does not create paresthesia may vary between patients, a skilled artisan would be able to quickly determine whether a signal creates paresthesia for any given patient." J.A. 11. The district court therefore held that the term "paresthesia-free" does not render the asserted method claims indefinite. *Id.* The district court held indefinite, however, the asserted "paresthesia-free" system and device claims. It held that infringement of these claims depended upon the effect of the system on a patient, and not a parameter of the system or device itself and therefore, "a skilled artisan cannot identify the bounds of these claims with reasonable certainty." J.A. 10. Nevro appeals, arguing that the district court erred in holding indefinite the asserted "paresthesia-free" system and device claims. Boston Scientific cross-appeals, arguing that the district court erred in holding that the "paresthesia-free" method claims are not indefinite.

While the district court made several underlying factual findings, the parties dispute only the district court's legal conclusion of indefiniteness. Accordingly, we review

the district court's indefiniteness holdings regarding the "paresthesia-free" claims *de novo*. *BASF Corp. v. Johnson Matthey, Inc.*, 875 F.3d 1360, 1365 (Fed. Cir. 2017). Under 35 U.S.C. § 112, patent claims must "particularly point[ ] out and distinctly claim[ ] the subject matter" regarded as the invention. Claims, viewed in light of the specification and prosecution history, must "inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014); *see Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014). This standard "mandates clarity, while recognizing that absolute precision is unattainable." *Nautilus*, 572 U.S. at 910. We conclude that the district court correctly determined that the "paresthesia-free" method claims are not indefinite, but that it erred in holding indefinite the "paresthesia-free" system and device claims.

It is undisputed that "paresthesia," as used in the asserted patents, means "a sensation usually described as tingling, pins and needles, and numbness." *See* J.A. 6 (citing e.g., '472 patent at 1:62–66). It is also undisputed that "a skilled artisan would be able to quickly determine whether a signal creates paresthesia for any given patient." J.A. 11. In nonetheless holding indefinite the asserted "paresthesia-free" system and device claims, the district court applied the wrong legal standard. The test for indefiniteness is not whether infringement of the claim must be determined on a case-by-case basis. Instead, it is simply whether a claim "inform[s] those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus*, 572 U.S. at 910. We conclude that both the "paresthesia-free" method claims and the "paresthesia-free" system and device claims satisfy this standard.

"Paresthesia-free" is a functional term, defined by what it does rather than what it is. But that does not inherently render it indefinite. *See Halliburton Energy Servs., Inc. v.*

M-I LLC, 514 F.3d 1244, 1255 (Fed. Cir. 2008). In fact, we have held that functional language can "promote[] definiteness because it helps bound the scope of the claims by specifying the operations that the [claimed invention] must undertake." *Cox Commc'ns*, 838 F.3d at 1232. When a claim limitation is defined in "purely functional terms," a determination of whether the limitation is sufficiently definite is "highly dependent on context (e.g., the disclosure in the specification and the knowledge of a person of ordinary skill in the relevant art area)." *Halliburton*, 514 F.3d at 1255. We have held that the ambiguity inherent in functional terms may be resolved where the patent "provides a general guideline and examples sufficient to enable a person of ordinary skill in the art to determine the scope of the claims." *Enzo Biochem. Inc. v. Applera Corp.*, 599 F.3d 1325, 1335 (Fed. Cir. 2010).

Here, the asserted claims recite parameters for a system or device configured to generate a "paresthesia-free" signal. *See, e.g.*, '125 patent at Claim 34; '102 patent at Claim 7. The specification teaches how to generate and deliver the claimed signals using the recited parameters. For example, the specifications of the Alataris patents describe a study comparing the effects of conventional signals and the effects of the claimed therapy signals. To achieve paresthesia-free therapy signals, the specifications teach using "therapeutic signals at a frequency of from about 3 kHz to about 10 kHz" and amplitudes ranging "from about 1 mA to about 4 mA (normally about 2.5 mA)." '533 patent at 6:51–7:5. Accordingly, a person of ordinary skill would know whether a spinal cord stimulation system, device or method is within the claim scope. Thus, the patents provide reasonable certainty about the claimed inventions' scope by giving detailed guidance and examples of systems and devices that generate and deliver paresthesia-free signals with high frequency, low amplitude, and other parameters. *Enzo Biochem.*, 599 F.3d at 1335. That

a given signal will eliminate paresthesia in some patients, but not others, does not render the claims indefinite. *See id.* at 1336 ("[T]he claims are not indefinite simply because the binding strength of a DNA strand will vary based on the strand's length and sequence . . . .").

Boston Scientific contends that the asserted "paresthesia-free" claims are indefinite because infringement can only be determined after using the device or performing the method. Appellees' Br. 44–46, 55–56 (citing *Halliburton,* 514 F.3d at 1254–55; *Geneva Pharm., Inc. v. GlaxoSmithKline PLC*, 349 F.3d 1373, 1384 (Fed. Cir. 2003)). We do not agree. Definiteness does not require that a potential infringer be able to determine *ex ante* if a particular act infringes the claims. *See*, *e.g.*, *Star Sci., Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1372–73 (Fed. Cir. 2008); *Invitrogen Corp. v. Biocrest Mfg., L.P.,* 424 F.3d 1374, 1384 (Fed. Cir. 2005). Our decisions in *Halliburton* and *Geneva* do not hold otherwise. In *Halliburton*, we held claims reciting the term "fragile gel" indefinite not because infringement could only be determined after use, but because infringement could not be determined at any time. 514 F.3d at 1254–56. That is not the case here, as "a skilled artisan would be able to quickly determine whether a signal creates paresthesia for any given patient." J.A. 11. And in *Geneva*, we held that "[t]he fact that the same dosage amount does not yield synergy under other circumstances is irrelevant" and does not alone render the term "synergistically effective amount" indefinite. 349 F.3d at 1384.

Accordingly, we hold the district court erred in holding invalid as indefinite the "paresthesia-free" system and device terms, and we construe "paresthesia-free" in accordance with the plain language of the claims and specification to mean that the therapy or therapy signal "does not produce a sensation usually described as

tingling, pins and needles, or numbness." *See, e.g.*, '472 patent at 1:62–66.

II. "configured to"

Claims 1 and 22 of the '842 patent and claims 7, 12, 35 and 37 of the '533 patent recite "a signal generator configured to generate" a therapy signal with set parameters and functions. Claim 1 of the '842 patent is illustrative and recites:

> 1. A spinal cord modulation system comprising:
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> *a signal generator configured to generate* a therapy signal having a frequency of 10 kHz, an amplitude up to 6 mA, and pluses having a pulse width between 30 microseconds and 35 microseconds; and
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> an implantable signal delivery device electrically coupleable to the signal generator and configured to be implanted within a patient's epidural space to deliver the therapy signal from the signal generator the patient's spinal cord.

(emphasis added).

Nevro argued before the district court that the term "configured to" means "designed to." Boston Scientific disagreed, arguing that if a construction is necessary, "configured to" should be construed as "requir[ing] no further configuration to." At the *Markman* hearing, the district court *sua sponte* suggested that "'configure[d] to' maybe is indefinite." J.A. 12506. After the parties filed supplemental briefing on the district court's newly raised indefiniteness theory, the district court concluded that "configured to" could be "reasonably construed . . . to mean one of two things: (1) the signal generator, as a matter of hardware and firmware, has the capacity to generate the described electrical signals (either without further programing or after further programming by the clinical programming software); or (2) the signal generator has been

programmed by the clinical programmer to generate the described electrical signals." J.A. 6. Because the district court determined that "configured to" is susceptible to differing constructions, it held the term renders indefinite claims 1 and 22 of the '842 patent and claims 7, 12, 35 and 37 of the '533 patent.

Nevro argues that that the district court applied the wrong legal standard in holding the claims indefinite. We agree. The test for indefiniteness is whether the claims, viewed in light of the specification and prosecution history, "inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus,* 572 U.S. at 910. The test is not merely whether a claim is susceptible to differing interpretations. Such a test would render nearly every claim term indefinite so long as a party could manufacture a plausible construction. In fact, the Supreme Court declined to adopt such a rule in *Nautilus*. *Id.* at 909 (declining to adopt a test rendering a patent invalid "when a claim is 'ambiguous, such that readers could reasonably interpret the claim's scope differently'"). Under the proper standard, we hold that the claim term "configured to" does not render the asserted claims indefinite.

A person of ordinary skill would be reasonably certain that "a signal generator configured to generate" means "a signal generator programmed to generate." The asserted claims contemplate that "configured to" requires programming the signal generator (i.e., setting parameters) to generate the claimed signals. For example, claim 37 of the '533 patent recites a "signal generator configured to generate . . . wherein at least a portion of the therapy signal is at a frequency of 10 kHz, and at a current amplitude in a current amplitude range from 0.1 mA to 20 mA." '533 patent at Claim 37; *see also* '125 patent at Claim 1 (reciting "a step for configuring the signal generator, including programming"). The specifications of the asserted patents confirm that "configured to" requires setting parameters.

Indeed, the focus of the specifications is on setting the signal generator's parameters; they are silent as to any other steps the inventors took to configure the signal generator. *See, e.g.*, '533 patent at 6:34–7:5 (distinguishing the claimed spinal cord stimulation systems from conventional systems based on the parameters used to generate the therapy signals). Moreover, in prosecuting a related patent application, U.S. Pat. App. 14/522,405, Nevro agreed with the examiner that "configured" means "programmed" as opposed to "programmable." J.A. 12929. This is consistent with the prosecution history of the asserted '842 patent, during which Nevro consistently distinguished the claimed invention from the prior art on the basis that the prior art did not disclose specific parameters for a signal generator. J.A. 12938–39 (distinguishing a prior art reference on the basis that it does not teach "the specific combination of therapy signal parameters in the claimed ranges"); *see also* J.A. 12947.

Nevro contends that "configured to" should instead be construed as "designed to." It argues that this construction is consistent with the specifications, which use the terms "configured" and "programmed" separately in the same sentence. *See* '533 patent at 24:18. It also argues that its construction is consistent with our precedent, which it contends equates "adapted to" with "configured to," "designed to" and "made to." Appellant's Br. 37 (citing, *e.g.*, *Aspex Eyewear, Inc., v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1348–49 (Fed. Cir. 2012)). Nevro's contentions are unavailing. The sentence from the specifications that Nevro relies upon merely states that "the patient will typically not feel a paresthesia, unless the system is configured and programmed to deliberately produce paresthesia in addition to the therapy signal." '533 patent at 24:15–20. The referenced programming and configuring relates only to the system; the sentence is silent regarding configuring the signal generator. And our construction of different claims in

different patents is insufficient to overcome the plain language of the claims and the specification here. *See Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1318 (Fed. Cir. 2005) (holding that a particular term, even the same term, "need not have the same meaning when used in an entirely separate patent, particularly one involving different technology"). Accordingly, we conclude the district court erred in holding indefinite the claims reciting the term "configured to" and we construe "configured to" to mean "programmed to."

III. "means for generating"

Asserted claims 18, 34 and 55 of the '125 patent recite "a means for generating" a paresthesia-free or non-paresthesia-producing therapy signal. Claim 18 of the '125 patent is illustrative and recites:

> 18. A spinal cord modulation system for reducing or eliminating pain in a patient, the system comprising:
>
> *means for generating a paresthesia-free therapy signal* with a signal frequency in a range from 1.5 kHz to 100 kHz; and
>
> means for delivering the therapy signal to the patient's spinal cord at a vertebral level of from T9 to T12, wherein the means for delivering the therapy signal is at least partially implantable.

(emphasis added). The parties agreed before the district court that these claim terms are means-plus-function terms under 35 U.S.C. § 112 ¶ 6, having a function of "generating" the claimed paresthesia-free therapy signal. Nevro identified the corresponding structure as a pulse generator and Boston Scientific identified the structure as "a signal generator configured to generate." The district court nonetheless determined that there was "not an adequate disclosure of a corresponding structure in the patent

specification" and *sua sponte* held indefinite claims 18, 34, and 55 of the '125 patent J.A. 11. It held that the patents' disclosures of a "generic signal generator" as the corresponding structure" was "not sufficient" because signal generators were "already known in the prior art." *Id.*

Because the district court relied only on the intrinsic record, we review the district court's indefiniteness determination *de novo*. *BASF*, 875 F.3d at 1365. Pre-AIA section 112 ¶ 6 allows a patentee to express an element of a claim as a means for performing a specified function. 35 U.S.C. § 112 ¶ 6 (2006). In exchange for using this form of claiming, the patent specification must disclose with sufficient particularity the corresponding structure for performing the claimed function and clearly link that structure to the function. *See Ibormeith IP, LLC v. Mercedes–Benz USA, LLC,* 732 F.3d 1376, 1379 (Fed. Cir. 2013). If the function is performed by a general-purpose computer or microprocessor, then the specification must also disclose the algorithm that the computer performs to accomplish that function. *Aristocrat Techs. Australia Pty. Ltd. v. Int'l Game Tech.,* 521 F.3d 1328, 1333 (Fed. Cir. 2008).

Nevro argues that the asserted patent specifications' disclosure of a signal generator as the structure for this limitation should end the inquiry. We agree. The only case the district court cites in holding to the contrary, *Aristocrat Techs.*, 521 F.3d at 1333, addresses only whether a general-purpose computer or processor, without a corresponding algorithm, can provide structure for computer-implemented inventions. It does not require a specific algorithm when the identified structure is not a general-purpose computer or processor. Here, the specification clearly recites a signal or pulse generator, not a general-purpose computer or processor, as the structure for the claimed "generating" function. *See, e.g.*, '125 patent at 3:54–5:45. The specification teaches further how to configure the signal generators to

generate and deliver the claimed signals using the recited parameters, clearly linking the structure to the recited function. *See, e.g.*, '125 patent at 6:56–7:10.

Boston Scientific does not dispute that the corresponding structure is a signal/pulse generator configured to generate. Instead, it argues that this term renders the claims indefinite for the same reasons it contends "configured to" render the asserted claims indefinite. Appellees' Br. 38–39. For the reasons discussed above, this contention is unavailing. We hold that the district court erred in holding indefinite claims 18, 34 and 55 of the '125 patent. We construe the claim term "means for generating" as a means-plus-function term, having a function of "generating" and a structure of "a signal/pulse generator configured to generate" the claimed signals.

IV. "therapy signal"

All but four of Nevro's asserted claims recite a "therapy signal,"[4] which the district court construed as an "electrical impulse" or "electrical signal." J.A. 5. In reaching its construction, the district court relied on a passage from the '472 patent specification, which it contends "defined" the term "therapy signal." On appeal, Nevro challenges the court's construction. It argues that "therapy signal" should instead be construed as "a spinal cord stimulation or modulation signal to treat pain." Appellant's Br. 63–64. Boston Scientific contends that the district court erred in holding that "therapy signal" does not render the asserted claims indefinite.

We review a district court's claim construction *de novo* except for underlying fact findings related to extrinsic evidence, which we review for clear error. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 835 (2015). "The words

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[4] Claims 11, 21 and 23 of the '102 patent and claim 58 of the '533 patent do not recite a "therapy signal."

of a claim are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history." *Thorner v. Sony Comput. Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). While the district court correctly determined that the claims reciting a "therapy signal" are not indefinite, we hold that the district court erred in its construction of the term.

The plain language of the claims makes clear that the claimed "therapy signal" is for pain-relief spinal cord stimulation therapy. For example, claim 37 of the '533 patent recites a "spinal cord stimulation system for reducing or eliminating pain in a patient, the system comprising: an implantable signal generator configured to generate a non-paresthesia-producing therapy signal." Likewise, claim 1 of the '472 patent recites "a method for alleviating patient pain or discomfort" comprising "programming the signal generator to generate and deliver an electrical therapy signal to the spinal cord region." The pain-relief therapy component of the claimed "therapy signal" is confirmed by the specifications of the asserted patents, as they consistently identify treating pain as the purpose of the claimed invention. *See, e.g.*, '533 patent at 3:11–13 (describing embodiments of the claimed invention as "directed to producing a therapeutic effect that includes pain reduction in patients"); *id.* at 3:39–45, 50–56, 5:35–38. In fact, during prosecution of the '842 patent, Nevro distinguished the claimed "therapy signals" from prior art electrical signals on the basis that the prior art signals were merely "diagnostic signals." J.A.8837, 8814.

The portion of the '472 patent that the district court contends "defined" the term "therapy signal" merely states that "[t]he pulse generator 101 or other controller transmits instructions and power to the electric array 103 via the lead body 102 to apply therapy signals (e.g., electrical impulses) to the nerve fibers . . . ." '472 patent at 5:44–49. This does not meet the exacting standard for redefining

"therapy signal." *See Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371–73 (Fed Cir. 2014); *see also Interval Licensing*, 766 F.3d at 1373 ("declin[ing] to cull out a single 'e.g.' phrase from a lengthy written description to serve as the exclusive definition" of a claim term). And the other passages cited by the district court merely indicate that electrical signals that stimulate or modulate a spinal cord to treat pain are examples of "therapy signals." '533 patent at 3:45–53, 4:43–50.

Boston Scientific does not dispute that the claimed "therapy signal" is used to provide pain relief. Instead, it contends that the asserted claims reciting a "therapy signal" are indefinite because "the patents do not disclose the structure or steps which necessarily achieve the claimed therapeutic signal." Appellees' Br. 58. It argues that the specification fails to inform a person of ordinary skill in the art how to achieve the claimed therapeutic result with reasonable certainty because "two signals with the same set of characteristics (e.g., frequency, amplitude, and pulse width) may result in therapy in one patient and no therapy in another." *Id.* But, as discussed above, the fact that a signal does not provide pain relief in all circumstances does not render the claims indefinite. *Geneva*, 349 F.3d at 1384.

Accordingly, we hold that the district court correctly determined that the term "therapy signal" does not render the asserted claims indefinite. We also hold that the district court erred in its construction of the term. A "therapy signal" is "a spinal cord stimulation or modulation signal to treat pain."

CONCLUSION

We have considered the parties remaining arguments and find them unpersuasive. For the foregoing reasons, we vacate and remand the district court's judgment of invalidity as to claims 7, 12, 35, 37 and 58 of the '533 patent,

claims 18, 34 and 55 of the '125 patent, claims 5 and 34 of the '357 patent and claims 1 and 22 of the '842 patent.

VACATED AND REMANDED

COSTS

Costs to Appellant.