NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

RESPIRONICS, INC.,
Appellant

v.

ZOLL MEDICAL CORPORATION,
Appellee

2015-1485

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2013-00322.

Decided: July 29, 2016

DENISE WHELTON DEFRANCO, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, Boston, MA, argued for appellant. Also represented by CLARA N. JIMENEZ, JASON LEE ROMRELL, Washington, DC.

RICHARD BIRNHOLZ, Irell & Manella LLP, Los Angeles, CA, argued for appellee. Also represented by DAVID GINDLER; KEVIN JON DEJONG, Fish & Richardson, P.C., Boston, MA; JOHN A. DRAGSETH, Minneapolis, MN; JOHN C. PHILLIPS, San Diego, CA.

Before REYNA, MAYER, and CHEN, *Circuit Judges*.

CHEN, *Circuit Judge*.

This case arises from an inter partes review that Respironics, Inc. filed against U.S. Patent No. 6,681,003, owned by Zoll Medical Corporation. Respironics alleges that International Patent Publication No. WO 98/39061 to Owen et al. anticipates claims 1, 2, 4, 5, 8, 9, 16, 19, and 20 under pre-AIA 35 U.S.C. § 102(b) (2006). The Patent Trial and Appeal Board found claim 1 unpatentable as anticipated and claims 2, 4, 5, 8, 9, 16, 19, and 20 not anticipated and therefore patentable. *Respironics, Inc. v. Zoll Medical Corp.*, IPR2013-00322, 2014 WL 4715644, at *15 (PTAB Sept. 17, 2014) (Board Opinion). Respironics appeals on all claims that the Board found patentable. We agree with Respironics that the Board erred, *vacate*, and *remand* for further consideration.

BACKGROUND

The '003 patent addresses wearable medical devices that can record and remotely communicate a patient's medical information. Such a device might take the form, for example, of a wearable heart monitor, defibrillator, or insulin pump and might communicate measurements about the patient's medical status and use of the device to his doctor. Claim 2 is exemplary and addresses a method including providing a patient with a wearable medical device that monitors his medical information, transmitting it over a communications system to a database, and then providing access to it:

> 2. A method of monitoring patient medical information for the treatment of a patient, the method comprising the steps of:

> providing a wearable medical device for treating the patient and monitoring patient medical information;
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> operatively connecting the medical device to the patient such that the medical device is worn by the patient;
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> recording the patient medical information, device performance data and patient compliance data in a storage means of the medical device;
>
> operatively connecting the medical device to a communications system;
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> transmitting the patient medical information, device performance data and patient compliance data to a health care provider by means of said communications system and recording the patient medical information, device performance data and patient compliance data in an information database, wherein said transmitting step is performed while the medical device is operatively connected to the patient for providing treatment to the patient; and
>
> providing access to the patient medical information, device performance data and patient compliance data to individuals.

Independent claims 4 and 19 are similar but include means-plus-function limitations. Notably for our purposes, claims 2, 4, and 19 all contain requirements for the types of medical information that is transmitted: claim 2 requires this information to include (1) "patient medical information," (2) "device performance data," and (3) "patient compliance data"; claim 4 requires it to include (1) "operations information of the medical device" and (2) "patient compliance and use data"; and claim 19 requires

it to include (1) "patient medical parameters," (2) "device performance data," and (3) "patient compliance data." In order to anticipate all claims, a prior-art reference must disclose, among other things, that the medical information it transmits satisfies all of these categories. The parties' dispute in this appeal centers on whether the Owen reference discloses "patient compliance data." Because each claim contains the limitation "patient compliance data" (or "patient compliance and use data," which the parties agree we need not consider separately), any prior-art reference that anticipates all claims must disclose transmitting medical information that qualifies as "patient compliance data." Dependent claims 5, 8, 9, and 16 depend on claim 4 and thus incorporate its "patient compliance data" limitation. Claim 20 depends on claim 19 and incorporates its similar limitation. Claim 1 does not include any particular requirements for the type of medical information transmitted and therefore requires no disclosure of "patient compliance data."

Owen discloses a wearable medical device that combines a heart monitor and a defibrillator. This device measures a patient's heart rhythms and determines whether he is conscious. When the information it monitors indicates the patient requires defibrillation, it administers a shock. The Board found Owen to disclose that this device stores medical information and transmits it over a network to a central computer, where a doctor can review it. Board Opinion at *7. Owen discloses various types of medical information that its device stores and transmits. One type of information relates to a button that the patient can push to cancel a shock. Owen at 33:2–8. If the device detects an abnormal cardiac rhythm requiring defibrillation, it plays an audio message requesting that the patient press the button. *Id.* at 48:33–49:25. If the patient is unconscious, he cannot press the button, and the defibrillator will administer a shock. *Id.* If he is conscious, he will press the button and cancel the

shock. *Id.* The device logs and transmits information about the patient's presses of this response button. Board Opinion at *6. Another type of information involves the length of time the doctor recommends the patient wear the device. When a patient wears the device for longer than recommended, the device shows a message noting that the patient has exceeded the recommended wear time, logs this condition, and transmits this log information. Owen at 31:42–32, 35:10–17.

The Board first found that Owen anticipates claim 1, rendering it unpatentable. Next, it turned to the remaining claims, each of which contains the requirement that the data stored and transmitted include "patient compliance data." It construed this term to mean "data indicating whether a patient has followed instructions for use." Board Opinion at *4. It found Owen not to disclose this type of data. It reasoned that Owen's disclosure of data related to the patient's presses of the response button did not qualify because Respironics had not pointed to any evidence that the Owen device also stored information showing that the patient had been prompted to press the button. *Id.* at *9. If the data did not indicate the patient had been prompted, the Board reasoned, it could not indicate that he was following instructions when he pressed the button. *Id.* And, similarly, it found that because Owen did not disclose informing the patient what the recommended wear time is, the log the device creates when the patient exceeds this recommendation cannot qualify. *Id.* Again, the Board reasoned that without indicating that the patient had been told to take the device off after a specific amount of time, the data could not show that the patient had failed to comply with wear-time instructions. *Id.* The Board found Owen not to disclose "patient compliance data" and therefore not to anticipate independent claims 4 and 19. Because it found claims 4 and 19 not anticipated, it also found the various

claims depending on them—claims 5, 8, 9, 16, and 20—not anticipated.

Zoll does not appeal from the Board's finding that its claim 1 is unpatentable. Respironics appeals from the Board's findings that claims 2, 4, 5, 8, 9, 16, 19, and 20 are patentable over the Owen reference. We agree with Respironics that the Board erred in finding Owen not to disclose "patient compliance data." We *vacate* the Board's finding of no anticipation, and we *remand* so that the Board may consider in the first instance whether Owen discloses all remaining elements of the claims.

ANALYSIS

We have jurisdiction over this appeal under 35 U.S.C. § 141(c) and 28 U.S.C. § 1295(a)(4)(A).

The issue at the heart of this appeal is one of claim construction: whether the Board impermissibly modified its construction of "patient compliance data" when it applied that construction to Owen's disclosures. We review the Board's ultimate claim constructions and findings about the intrinsic record de novo, and its findings based on the extrinsic record for substantial evidence. *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1297 (Fed. Cir. 2015) (citing *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 833 (2015)). The parties agree that we need not consider any extrinsic evidence to decide the appealed claim-construction issues. The Board applies a broadest-reasonable-interpretation standard when construing claims in an inter partes review. *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2146 (2016).

In its institution decision, the Board found the broadest reasonable interpretation of the term "patient compliance data" to be "data indicating whether a patient has followed instructions for use." *Respironics, Inc. v. Zoll Medical Corp.*, IPR2013-00322, 2013 WL 8563952, at *4 (Dec. 2, 2013). The Board noted in its final decision that

it would maintain this construction. Board Opinion at *4. Respironics had initially proposed a different construction but, after the Board first construed the term in its institution decision, Respironics has not challenged that construction, either before the Board or before us. What Respironics challenges is the Board's application of its own construction. In Respironics' view, although the Board's construction was proper, the Board added improper limitations when it applied that construction. We have recognized such a challenge to an application of a construction. *See In re Abbot Diabetes Care Inc.*, 696 F.3d 1142, 1150–51 (Fed. Cir. 2012); *Intervet Inc. v. Merial Ltd.*, 617 F.3d 1282, 1289–90 (Fed. Cir. 2010). Our analysis of this issue includes two components: first, we determine whether the Board added a limitation when it applied the construction; second, we determine whether that limitation is appropriate under claim-construction law. *Id.*

First, we find that the Board added a limitation when it applied its construction. Its initial construction—that "patient compliance data" is "data indicating whether a patient has followed instructions for use"—incorporates no specific requirement relating to the instructions for use. The Board did not take issue with Respironics' showings that Owen disclosed playing an audio message requesting that the patient press a button and storing information about button presses. Instead, it required more: evidence that the reference disclosed a system for "assur[ing] that every, or indeed any, recorded button push was performed in response to an instruction." Board Opinion at *9 (emphasis removed). Specifically, it examined whether the reference disclosed "record[ing] the time at which the [instruction] is given to the patient." *Id.* In doing so, it added a limitation not present in its construction: that the device store information not just about patient compliance but also about instructions it gave the patient. This additional limitation represents a modifica-

tion to its construction. The Board repeated this error when it considered Respironics' alternative argument that Owen's disclosure of storing an indication that the patient had worn the device for longer than recommended additionally satisfied the "patient compliance data" limitation. It rejected this argument not because Owen failed to disclose recording when a patient has exceeded the recommended wear time, but because it did not disclose instructing the patient what the recommended wear time is. *Id.* Without a disclosure of giving the patient a wear-time instruction, the Board reasoned, a record that the patient had exceeded a particular wear time could not qualify as data indicating that the patient had or had not complied with any particular instruction. *Id.* Here, again, the Board modified its construction to impose a requirement that the device store data about the instructions it gave to the patient

Second, we find that claim-construction law does not support the additional limitation that the Board added to its construction to require particular disclosures about the instructions given to the patient. As we have previously made clear, the fact that an unclaimed element may be necessary for a device to function as claimed does not, standing alone, allow courts to treat the unclaimed element as a claim limitation. *See SiRF Tech., Inc. v. Int'l Trade Com'n.*, 601 F.3d 1319, 1330 (2010). In *SiRF*, we addressed a method claim[1] including steps of "transmitting" data to a remote receiver and processing it in a particular way at the remote receiver. *Id.* In this system, in order to transmit data to a remote receiver and then process it there, one must send the data to an intermedi-

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[1] We addressed an additional, similar claim in *SiRF* and reached the same conclusion on that claim. *SiRF Tech.*, 601 F.3d at 1330. We leave it out of our analysis to streamline our discussion.

ary server, which then forwards the data to the remote receiver for it to be downloaded there. The defendant asked us to construe the claim to require these additional steps of "forwarding" and "downloading" the data. *Id.* We rejected this argument, holding that although these steps were necessary to carry out the claimed "transmitting" step, they were not claimed and thus did not act as limitations. *Id.* This precedent applies here as well. The claimed concept of storing patient compliance data may be possible only if the patient is provided instructions with which he can comply. But this fact alone does not elevate the instructions or any information about them to the level of a claim limitation. The Board's additional requirement that the device give the patient particular instructions or store particular information about the instructions given to the patient therefore finds no place in the "patient compliance data" claim term. Neither the Board nor Zoll cites anything else in the claims or the record to support this additional limitation. We therefore reject the modification that the Board made in applying its construction to require the device to store information related to instructions given to the patient.

The Board's opinion makes clear that Owen anticipates the "patient compliance data" limitation under its original construction. The Board found Owen to disclose that the device plays an audio message instructing the patient to press a button. Board Opinion at *5. It further found Owen to disclose storing records of patient interaction with the defibrillator, including information about button presses. *Id.* at *5–6. These two factual findings show that the Owen device stores "patient compliance data" under the Board's original, correct construction. We therefore reverse the Board's determination that Owen does not meet the "patient compliance data" claim limitation.

Because we find that the Board erred when it applied its construction of "patient compliance data," we need not

reach Respironics' alternative arguments that Owen discloses "patient compliance data" even under the Board's construction.

The Board based its rejection of Respironics' anticipation arguments for independent claims 2, 4, and 19 and dependent claims 5, 8, 9, 16, and 20 solely on its determination that Owen did not disclose anything qualifying as "patient compliance data." For claim 2, it found Owen not to disclose "patient compliance data" and therefore not to satisfy the claim limitations requiring "recording . . . patient compliance data in a storage means of the medical device," "transmitting the . . . patient compliance data," "recording the . . . patient compliance data in an information database," and "providing access to the . . . patient compliance data." For independent claims 4 and 19, it found Owen not to satisfy the means-plus function elements "means for monitoring and storing . . . patient compliance data" or "means for transmitting the . . . patient compliance data." The Board found that, whether or not Owen disclosed structures satisfying these elements' structural limitations, any structure it disclosed would not monitor, store, or transmit "patient compliance data" and would therefore not satisfy their functional limitations. The Board then found that, because Owen failed to anticipate independent claims 2, 4, and 19, it could not anticipate dependent claims 5, 8, 9, 16, and 20. The Board noted various factual findings about what Owen disclosed. But, because the Board found the "patient compliance data" limitations to dispose of the inquiry before it on all claims but claim 1, it did not need to apply those factual findings to determine whether Owen satisfies the remaining claim limitations of those claims. Based on our holding that Owen satisfies the "patient compliance data" limitations, we remand to the Board so that it may determine whether Owen satisfies those remaining limitations.

CONCLUSION

We hold that the Board erred in finding that the Owen reference does not disclose "patient compliance data." Based on this error, we *vacate* the Board's decision rejecting Respironics' anticipation arguments as to claims 2, 4, 5, 8, 9, 16, 19, and 20. We *remand* this case to the Board so that it may consider whether Owen satisfies these claims' remaining limitations.

VACATED AND REMANDED

COSTS

No costs.