

NOTE: This disposition is nonprecedential.

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

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**SPHERIX INCORPORATED,**  
*Appellant*

v.

**JOSEPH MATAL, PERFORMING THE FUNCTIONS  
& DUTIES OF THE UNDER SECRETARY OF  
COMMERCE FOR INTELLECTUAL PROPERTY  
AND DIRECTOR, U.S. PATENT AND TRADEMARK  
OFFICE,**  
*Intervenor*

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2016-1790

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Appeal from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in No. IPR2014-  
01431.

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Decided: July 25, 2017

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Gregory J. Gonsalves, The Gonsalves Law Firm, Falls  
Church, VA, argued for appellant. Also represented by  
Donald Puckett, Nelson Bumgardner PC, Fort Worth, TX.

Nathan K. Kelley, Office of the Solicitor, United  
States Patent and Trademark Office, Alexandria, VA, for

intervenor. Also represented by Thomas W. Krause, Lore A. Unt, Amy J. Nelson.

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Before MOORE, O'MALLEY, and HUGHES, *Circuit Judges*.

O'MALLEY, *Circuit Judge*

Appellant Spherix Incorporated (“Spherix”) appeals from the final written decision of the Patent Trial and Appeal Board (“the Board”), which concluded that claims 1-7 and 18 of U.S. Patent No. 5,581,599 (“the ’599 patent”) are obvious and therefore unpatentable under 35 U.S.C. § 103. *VTech Commc’ns, Inc. v. Spherix Inc.*, No. IPR2014-1431, 2016 Pat. App. LEXIS 1099 (P.T.A.B. Feb. 3, 2016) (“*Final Decision*”). For the reasons explained below, we *affirm*.

Spherix owns the ’599 patent, which relates to a telephone system having an interactive cordless telephone handset and an associated base station. The patent explains that “[c]ordless telephones have proven to be popular in domestic, business and industrial environments due to their unrestricted freedom of movement.” ’599 Patent, col. 1 ll. 12-14. It also acknowledges that displaying and storing names and telephone numbers at the base station was known in the art. *Id.* at col. 1 ll. 26-33. According to the ’599 patent, however, cordless telephone handsets did not have a full-functioning alphanumeric display, which meant that the handset had limited functional capabilities. *Id.* at col. 1 ll. 37-42. The ’599 patent therefore sought to provide a digital data display in the cordless handset. *Id.* at col. 1 ll. 50-53.

The claims of the ’599 patent describe a method for displaying data on the alphanumeric display of a cordless handset in “user-interactive radio communication with an associated base station of a cordless telephone terminal” which is in communication with a telephone exchange. *Id.* at col. 12, ll. 57-62. Representative claim 1 recites a

number of steps in the method, including, in relevant part: (1) “enabling first processor means at the handset for displaying keyed alphanumeric data on the screen and concurrently transmitting the alphanumeric data and commands to the base station”; and (2) “enabling second processor means at the base station for receiving the alphanumeric data and commands, retrievably storing the data in the first submemory of the base station and operably responding to the commands.” *Id.* at col. 13, ll. 1-10.

VTech Communications, Inc. and Uniden America Corporation (collectively, “Uniden”) filed a petition for inter partes review (“IPR”) of the ’599 patent asserting that claims 1-7 and 18, among others, were invalid as obvious. At that time, the parties had already submitted their respective claim construction arguments in a related district court proceeding in the United States District Court for the Northern District of Texas. In its petition for IPR, Uniden adopted the claim constructions Spherix submitted to the district court. Specifically, Uniden agreed with Spherix that the terms “first processor means,” “second processor means,” and “concurrently transmitting the alphanumeric data and commands,” should be construed according to their plain and ordinary meaning. *VTech Commc’ns, Inc. v. Spherix Inc.*, No. IPR2014-1431, 2015 WL 981677, at \*4 (P.T.A.B. Mar. 3, 2015) (“In its Petition, VTech adopts the claim constructions submitted previously by Spherix in the related district court proceeding for several claim elements, and agrees with Spherix to give the claim terms their ordinary and customary meanings.”). At that time, both parties agreed that the processor means elements should not be construed as means-plus-function limitations. *Id.*

The Board instituted review. In its institution decision, the Board employed the petitioner’s proposed claim construction and found a reasonable likelihood that Uniden would prevail in challenging claims 1-7 and 18 of the ’599 patent as obvious in light of two prior art refer-

ences: (1) U.S. Patent No. 4,924,496 (“Figa”); and (2) U.S. Patent No. 6,349,212 (“Martensson”).

After institution, the district court issued its claim construction order in the related proceedings. In that order, the district court construed the first and second processor means as means-plus-function limitations and identified the corresponding structure from the specification. *Spherix, Inc. v. VTech Telecomms.*, No. 3:13-cv-3494, 2015 WL 9311489, at \*18, \*22 (N.D. Tex. Mar. 19, 2015). In its patent owner response following institution, Spherix urged the Board to adopt the district court’s constructions. Spherix argued that: (1) the petition was deficient for failing to identify the specific portions of the specification that describe the corresponding structure; and (2) when the processor means are compared to Figa and Martensson, it is clear that the structural limitations are missing from the combination of the prior art references. Uniden timely responded, and the Board held an oral hearing where Spherix maintained that the district court’s means-plus-function analysis should control.

The Board issued a final written decision finding claims 1-7 and 18 of the ’599 patent unpatentable as obvious over the combination of Figa and Martensson. *Final Decision*, 2016 Pat. App. LEXIS 1099, at \*66. First, the Board declined Spherix’s request to hold the petition defective for failure to treat the processor means limitations as means-plus-function limitations. *Id.* at \*23-24. The Board explained that it was reasonable for Uniden to treat the processor means elements as non-means-plus-function limitations when it filed the petition because Spherix—the patent owner—had done so in the district court proceeding. *Id.* at \*24. The Board indicated, however, that its patentability determination with respect to

the processor means elements was the same, regardless of which claim construction applied. *Id.* at \*24-25.<sup>1</sup>

Although Uniden did not identify the specific corresponding structures in its petition, Spherix's expert testified in the district court proceeding that "an ordinarily skilled artisan nevertheless would have been able to derive the corresponding structures from the claim language itself, including the structural components recited in the preamble." *Id.* at \*51. The Board determined that "the corresponding structures for performing the recited functions of the 'processor means' claim elements, as construed by the District Court, are no more than combining known elements according to their established functions, yielding predictable results." *Id.* at \*53. Accordingly, the Board stated that, even if it were "to adopt the District Court's claim constructions for the 'processor means' elements in the instant inter partes review, it would have been obvious to one with ordinary skill in the art to utilize such processor means in a cordless telephone system, in view of Figa and Martensson." *Id.* at \*54.

Turning to the "concurrently transmitting" limitation, the Board expressly adopted the district court's plain and ordinary meaning construction. *Id.* at \*21. Applying that construction, and viewing Martensson as a whole, the Board held that the "concurrently transmitting" element was obvious. Specifically, the Board found that "the local microprocessor and other features of the cordless handset [of Martensson] are enabled to display the keyed alphanumeric data on the display screen and to transmit concurrently the keyed alphanumeric data and commands to

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<sup>1</sup> The Board also noted that it "discern[ed] no inconsistency between [its] determination of the patentability issues in dispute here and the District Court's claim constructions." *Id.* at \*10.

the base station, as required by the claims at issue.” *Id.* at \*47. Finally, the Board found that the combination of Figa and Martensson disclosed every limitation of the claimed telephone system, and that there was ample motivation to combine the two references. *Id.* at \*56-58.

Spherix timely appealed, arguing that it did not receive proper notice of the Board’s means-plus-function claim construction and analysis. Spherix also argued that the Board: (1) did not demonstrate that the processor means elements are obvious because it failed to address many components of the corresponding structure; (2) failed in its construction of “concurrently transmitting”; and (3) failed to explain why one of ordinary skill in the art would have been motivated to combine Figa and Martensson to achieve the claimed invention. After the parties fully briefed the appeal, Uniden filed an unopposed motion to withdraw as appellee pursuant to a settlement agreement. We granted that motion, and notified the PTO of Uniden’s withdrawal. Spherix continued to pursue its appeal, and we held oral argument in March 2017.

After oral argument, we asked the PTO to intervene to submit supplemental briefing addressing specific questions relating to whether the Board construed the processor means limitations as means-plus-function limitations and, if so, whether the Board satisfied its obligations in doing so. The PTO intervened, arguing that the Board construed the processor means limitations as means-plus-function limitations in the alternative. The PTO conceded that, where the Board construes a limitation as means plus function, the final written decision must explain what aspects of the prior art teach or suggest the corresponding structure and its path must be reasonably discernable. The PTO explained that here, however, the Board did not reach a conclusion as to whether the processor means limitations should be construed as means-plus-function limitations or as non-

means-plus-function limitations because it found that the claims would have been obvious under either construction. According to the PTO, the Board's explanation and citations to the record reveal that the structures corresponding to the processor means limitations would have been obvious in light of Figa and Martensson, the level of skill in the art, and the admissions of Spherix's expert.

Spherix sought and obtained leave to file a reply to the PTO's brief. Therein, Spherix maintained that the Board improperly changed its claim construction and that its obviousness decision failed to address many of the components that comprise the structure corresponding to the processor means.

After careful consideration and with the benefit of both oral argument and the parties' supplemental briefing, we conclude that substantial evidence supports the Board's obviousness determinations. At the outset, we find that Spherix had adequate notice of the Board's alternative means-plus-function construction and analysis because Spherix itself introduced that construction following institution and argued that it should apply. The Board was therefore within its discretion to conduct a means-plus-function analysis of the processor means claim elements. In doing so, the Board pointed to expert testimony that one of skill in the art would have been able to derive from the claims alone the structures for performing the corresponding functions. *Final Decision*, 2016 Pat. App. LEXIS 1099, at \*51. And Spherix's expert testified that a person of skill in the art would have known that those structures could be used to perform the functions identified. Admittedly, the Board's decision could have been more detailed, and it would have been preferable if the Board had chosen only one construction to employ in its reasoning. We conclude, however, that the Board sufficiently pointed to those aspects of the prior art and expert testimony that suggest the structures corresponding to the claimed functions. In doing so, the

Board adequately explained its findings under its alternative means-plus-function construction, which we find to be the correct construction in this case. Substantial evidence therefore supports the Board's determination that the "processor means" elements would have been obvious.

Substantial evidence also supports the Board's conclusion that Figa and Martensson render the "concurrently transmitting" element obvious. In reaching this conclusion, we find no error in the Board's plain and ordinary construction of the term "concurrently transmitting alphanumeric data and commands." And we conclude that substantial evidence, including unrebutted expert testimony, supports the Board's determination that there was a sufficient motivation to combine Figa and Martensson.

We have considered Spherix's remaining arguments and conclude that they are without merit. For the foregoing reasons, we *affirm* the Board's decision.

**AFFIRMED**