NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

LEICA MICROSYSTEMS, INC.,
Appellant

v.

REGENTS OF THE UNIVERSITY OF MICHIGAN,
Appellee

2022-1445

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2020-01165.

Decided: April 24, 2023

ANDREW RYAN SOMMER, Greenberg Traurig LLP, McLean, VA, argued for appellant. Also represented by VIVIAN KUO, Washington, DC.

RUSSELL TONKOVICH, Kramer Alberti Lim & Tonkovich LLP, Burlingame, CA, argued for appellee. Also represented by AIDAN BREWSTER, ROBERT KRAMER.

Before LOURIE, DYK, and STARK, *Circuit Judges*.

LOURIE, *Circuit Judge*.

Leica Microsystems, Inc. ("Leica") appeals from a final written decision of the United States Patent and Trademark Office Patent Trial and Appeal Board ("the Board") holding that Leica failed to show that claims 1–26 of U.S. Patent 7,277,169 (the "'169 patent") were unpatentable as obvious. *See Leica Microsys. Inc. v. Regents of the Univ. of Mich.*, No. IPR2020-01165, Paper No. 26 (P.T.A.B. Jan. 7, 2022), J.A. 1–27 ("*Decision*"). For the reasons provided below, we *affirm*.

BACKGROUND

Regents of the University of Michigan ("Regents") own the '169 patent, which describes a fluorescence detection system that detects light that is emitted from a sample after it is struck with an excitation light. The system uses ultrafast white light optical pulses to excite fluorophores and a detector to detect the emitted light. Claims 1, 10, and 19 are the three independent claims, each reciting a fluorescence detection system for testing a sample, comprising a single-source white light generation system and a time-resolving detector for receiving fluorescence. Representative claim 1 is presented below:

> 1. A fluorescence detection system for testing a sample, said sample having a plurality of fluorophores, said fluorescence detection system comprising:
>
> a single-source white light generation system outputting a supercontinuum white light pulse comprising an entire spectrum of white light, said supercontinuum white light pulse exciting the plurality of fluorophores of the sample to emit fluorescence; and
>
> a time-resolving detector receiving said fluorescence and at least a portion of said supercontinuum white light pulse, said time-

> resolving detector separating said fluorescence from said portion of said supercontinuum white light pulse.

'169 patent, col. 7 ll. 43–55.

Relevant to this appeal, Leica petitioned for *inter partes* review ("IPR") of claims 1–26, asserting that the claims would have been obvious over PCT application WO 01/022063 ("Folestad") in view of various secondary references, including Wittmershaus.[1] Folestad discloses a method of analyzing a turbid pharmaceutical sample (*e.g.*, a tablet) using white light from a laser excitation source. Wittmershaus describes a method for analyzing fluorophores in chlorophyll from spinach leaves using a fluorescence detection system.

The Board concluded that Leica had not shown an adequate rationale for combining Folestad with other secondary references, including Wittmershaus. The Board rejected Leica's expert testimony as conclusory and lacking evidentiary support, also holding that there was no evidence that Folestad would have provided any improvement or benefit over Wittmershaus. The Board also rejected Leica's showing that substituting one sample for another in the same system was routine. Finally, the Board held that the record lacked evidence regarding whether a skilled artisan would have configured the system in Folestad to measure fluorescence as required by the claims in the '169 patent.

Leica appealed the Board's decision. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

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[1] Bruce Wittmershaus et al., *Picosecond studies at 77 K of energy transfer in chloroplasts at low and high excitation intensities*, 806 BIOCHIMICA ET BIOPHYSICA ACTA 93 (1985).

DISCUSSION

We review the Board's legal determinations *de novo*, *In re Elsner*, 381 F.3d 1125, 1127 (Fed. Cir. 2004), and the Board's factual findings for substantial evidence, *In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000). A finding is supported by substantial evidence if a reasonable mind might accept the evidence as adequate to support the finding. *Consol. Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938).

Leica argues that the Board applied too rigid an obviousness analysis, focusing too heavily on the references themselves and not considering the background knowledge of a skilled artisan, in violation of *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007). Leica also contends that the Board's finding that sample substitution was not simple was unsupported by substantial evidence. Leica asserts that the Board improperly focused on unclaimed sample preparation techniques, which, even if relevant, fell within the routine abilities of the skilled artisan. Leica further argues that the claimed invention is nothing more than a new use of Folestad's old system, and that a new use of an old system would not be patentable.

Regents respond that the Board's finding that there was no motivation to combine Folestad and Wittmershaus was supported by substantial evidence, that the Board did not misapply the law of obviousness, and that the Board did not err in finding that Wittmershaus disclosed highly specialized sample preparation for use in highly specialized fluorescence detection systems. Regents also assert that the Board did not err in crediting Regents' expert and rejecting Leica's expert's testimony as conclusory. Regents further contend that the claimed invention and the Folestad reference describe different systems for different purposes, and so the claimed invention is not merely a new use of Folestad's old system.

We agree with Regents that the Board's finding that there was no motivation to combine Folestad with

Wittmershaus was supported by substantial evidence. In arriving at its conclusion, the Board found that Leica's proposed combination of Folestad with Wittmershaus required replacing Folestad's teachings of detection of transmitted or reflected radiation with Wittmershaus's detection of fluorescence. *Decision* at 16–17, J.A. 16–17. The Board further found that the record lacks evidence regarding whether and how a skilled artisan would have configured Folestad to measure fluorescence. *Decision* at 18, J.A. 18. In other words, one would have needed to modify Folestad to arrive at the claimed invention.

The Board also credited expert testimony from both parties in determining whether a skilled artisan would have been motivated to make the modifications necessary to combine Folestad and Wittmershaus. It is within the discretion of the Board to weigh the evidence of record. *Tiger Lily Ventures Ltd. v. Barclays Cap. Inc.*, 35 F.4th 1352, 1365–66 (Fed. Cir. 2022); *see also Shoes by Firebug LLC v. Stride Rite Child.'s Grp., LLC*, 962 F.3d 1362, 1371 (Fed. Cir. 2020) ("[I]t is not for us to second-guess the Board's assessment of the evidence."). Here, the Board did just that. We therefore hold that the Board's finding that a skilled artisan would not have been motivated to combine Folestad with Wittmershaus was supported by substantial evidence.

CONCLUSION

We have considered Leica's remaining arguments but find them unpersuasive. For the foregoing reasons, we *affirm* the Board's final written decision.

AFFIRMED