

NOTE: This disposition is nonprecedential.

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

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**PHILIP MORRIS PRODUCTS S.A.,**  
*Appellant*

**v.**

**RAI STRATEGIC HOLDINGS, INC.,**  
*Appellee*

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2022-1846

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Appeal from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in No. IPR2020-  
01602.

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Decided: September 14, 2023

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GABRIEL K. BELL, Latham & Watkins LLP, Washington, DC, argued for appellant. Also represented by MAXIMILIAN A. GRANT, JONATHAN M. STRANG, DAVID ZUCKER; TAKASHI OKUDA, New York, NY; GREGORY SOBOLSKI, San Francisco, CA.

GREGORY A. CASTANIAS, Jones Day, Washington, DC, argued for appellee. Also represented by AMELIA A. DEGORY; ROBERT BREETZ, DAVID B. COCHRAN, KENNETH

LUCHESI, DAVID MICHAEL MAIORANA, Cleveland, OH;  
JOSHUA R. NIGHTINGALE, Pittsburgh, PA.

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Before CHEN, STOLL, and CUNNINGHAM, *Circuit Judges*.

CHEN, *Circuit Judge*.

Philip Morris Products, S.A. (Philip Morris) appeals an *inter partes* review (IPR) final written decision of the Patent Trial and Appeal Board determining Philip Morris did not meet its burden of proving certain claims of U.S. Patent No. 9,901,123 ('123 patent) unpatentable under 35 U.S.C. § 103. *See Philip Morris Prods., S.A. v. RAI Strategic Holdings, Inc.*, No. IPR2020-01602, 2022 WL 1022576 (P.T.A.B. Mar. 30, 2022) (*Board Decision*). Contrary to Philip Morris's arguments, the Board's decision in this case did not contradict its findings in a prior Board decision, nor did the Board legally err in its motivation to combine analysis. Because substantial evidence otherwise supports the Board's findings, we *affirm*.

#### BACKGROUND

The '123 patent, assigned to RAI Strategic Holdings, Inc. (Reynolds), generally relates to tobacco smoking devices, including electronic cigarettes. '123 patent col 4 ll. 42–45, col. 5 ll. 7–10. In 2016, before the present IPR proceeding for the '123 patent was initiated, R.J. Reynolds Vapor Company (Reynolds VC), a sister corporation of Reynolds, filed an IPR petition against another company's electronic cigarette patent, U.S. Patent No. 8,365,742 ('742 patent), challenging several claims over a combination of Hon<sup>1</sup> and Whittemore.<sup>2</sup> Specifically, Reynolds VC argued that a skilled artisan would have replaced Hon's heating element with Whittemore's wick and heating wire. The

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<sup>1</sup> Chinese Patent No. CN 2719043.

<sup>2</sup> U.S. Patent No. 2,057,353.

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Board disagreed and upheld the claims, concluding that Reynolds VC had failed to show Hon's heating efficiency needed improvement. The Board also found that a comparatively more plausible substitution would have been to replace Hon's entire atomizer, as opposed to Reynolds VC's proposal to replace only Hon's heating element.

In the present case, Philip Morris filed an IPR petition against several claims of Reynolds's '123 patent. While Philip Morris's petition, like Reynolds VC's above-described IPR, argued that a skilled artisan would have been motivated to combine Hon and Whittemore, Philip Morris proposed a different combination of these references, by replacing Hon's entire atomizer with Whittemore's wick and heating wire. The Board, however, found unpersuasive Philip Morris's argument that a skilled artisan would have been motivated to simplify Hon in the manner Phillip Morris proposed.

Philip Morris timely appealed the Board's decision to this court, arguing that the decision was arbitrary and capricious because (1) it contradicts the reasoning in the '742 patent IPR decision, (2) there was legal error in the Board's motivation to combine analysis, and (3) the decision was otherwise not supported by substantial evidence. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

#### DISCUSSION

As to Philip Morris's first argument, we see no contradiction between the Board's analysis of Hon and Whittemore and its earlier decision on the '742 patent. In the prior IPR, the issue before the Board was whether a skilled artisan would have replaced Hon's heating element with Whittemore's wick and heating wire. The patent owner's overarching argument there was that a skilled artisan would not have combined Hon and Whittemore at all. *See* J.A. 2801 (patent owner arguing that Hon and Whittemore "have different modes of operation, and in at least some ways, Hon[] is more thermally efficient."). In this context,

we view the Board in that case as agreeing with the patent owner's expert testimony that a more plausible "simple substitution," compared to the petitioner's proposed substitution, would be to replace Hon's entire atomizer (because replacing only Hon's heating element would lead to a redundant design). See J.A. 2806–07. But the Board there did not go so far as to find that replacing Hon's entire atomizer with Whittemore's wick and heating wire would have been an obvious simple substitution under *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007). Moreover, that particular combination theory was not before the Board in the prior IPR, as no party made that argument. *In re Magnum Oil Tools Int'l, Ltd.*, 829 F. 3d 1364, 1381 (Fed. Cir. 2016) (holding that the PTO does not have authority to "raise, address, and decide unpatentability theories never presented by the petitioner").

In contrast, in the presently appealed IPR, the issue before the Board was whether a skilled artisan would have replaced Hon's entire atomizer with Whittemore's wick and heating wire. The Board thus analyzed a different combination theory, with expert testimony<sup>3</sup> specifically directed to this combination. Because the Board did not conclude in the prior IPR that replacing Hon's atomizer would have been obvious, it was not arbitrary and capricious for the Board to conclude that Philip Morris did not meet its burden here.

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<sup>3</sup> We similarly find no abuse of discretion by the Board in relying on Reynolds's expert in the presently appealed IPR. Even considering the statements made by Reynolds VC's expert in the prior IPR, it is evident that each expert was testifying about a distinct modification of Hon (i.e., replacing Hon's *heating element* versus replacing Hon's *entire atomizer*), and thus the respective expert statements must be understood to be referring to the specific combination at issue.

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Philip Morris also argues, separate and apart from the prior IPR decision, the Board's finding of no motivation to combine Hon and Whittemore is based on legal error and the decision otherwise lacks substantial evidence. We disagree. Philip Morris claims the Board allegedly required it to prove that its proposed combination was superior to other prior art combinations. We do not think that is a fair reading of the Board's decision. Philip Morris argued to the Board that a skilled artisan would be motivated to first remove Hon's piezoelectric element, a simplification Hon teaches. But Philip Morris further asserted that once the piezoelectric element was removed, there would be difficulty in forming an aerosol and thus a skilled artisan would further "simplify" Hon by removing Hon's entire atomizer and replacing it with Whittemore's wick and heater. Since the proposed combination was based on a purported simplification of Hon beyond what Hon itself teaches, we interpret the Board's statement that "Petitioner does not show persuasively that replacing Hon's atomizer with Whittemore's wick and heater would have simplified the device as compared with the modifications Hon expressly teaches" as determining Philip Morris had not proven the obviousness theory that it had advanced. *Board Decision*, 2022 WL 1022576, at \*12. We do not view the Board's statement as a rejection of the combination merely because Hon itself teaches other simplifications distinct from the proposed combination.

We also conclude that substantial evidence supports the Board's decision to reject Philip Morris's proposed combination, because the Board reasonably relied on expert testimony and its own analysis of the R.J. Reynolds Tobacco Co. (RJR) teardown report.<sup>4</sup> Specifically, the Board

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<sup>4</sup> The RJR teardown report documents a disassembling of a Ruyan device, which is an implementation of Hon.

relied on expert testimony to find that Hon's heater produces more aerosol at a higher efficiency while using less power than Whittemore's wick and heater design, and found that nothing in the RJR teardown report supports a view that the Ruyan device (an implementation of Hon) failed to produce sufficient aerosol that would warrant replacement of the atomizer. *See Board Decision*, 2022 WL 1022576, at \*12–14. This is substantial evidence. To the extent Philip Morris argues that the Board failed to consider record evidence of the alleged cost and simplicity of Whittemore's wick and heater or testimony regarding reasonable expectation of success, we do not believe the Board erred in dismissing these arguments as conclusory and lacking factual substantiation.

We have considered Philip Morris's remaining arguments and find them unpersuasive. For the foregoing reasons, we *affirm*.

**AFFIRMED**