

NOTE: This disposition is nonprecedential.

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

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**SHINN FU COMPANY OF AMERICA, INC., SHINN  
FU CORPORATION,**  
*Appellants*

v.

**THE TIRE HANGER CORPORATION,**  
*Appellee*

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

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2016-2250

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Appeal from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in No. IPR2015-  
00208.

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Decided: July 3, 2017

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ALLEN JUSTIN POPLIN, Lathrop & Gage, LLP, Overland Park, KS, argued for appellants. Also represented by TRAVIS W. MCCALLON, Kansas City, MO.

JOHN DAVID VAN LOBEN SELS, Fish & Tsang LLP, Redwood City, CA, argued for appellee. Also represented by JENNIFER SHIH; ROBERT FISH, Irvine, CA.

NATHAN K. KELLEY, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, argued for intervenor. Also represented by SCOTT WEIDENFELLER, FRANCES LYNCH.

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Before PROST, *Chief Judge*, REYNA and TARANTO, *Circuit Judges*.

PROST, *Chief Judge*.

This appeal arises from an inter partes review (“IPR”) of U.S. Patent No. 6,681,897 (“897 patent”) in Inter Partes Review No. IPR2015-00208. In that proceeding, the Patent Trial and Appeal Board (“Board”) granted the patent owner’s motion to amend and held the substitute claims patentable. Because the Board did not properly consider the arguments petitioner set forth in its opposition to the patent owner’s motion to amend, we vacate and remand.

## I

Tire Hanger is the assignee of the ’897 patent, which generally relates to apparatuses and methods for handling and supporting vehicle wheels that have been temporarily removed from a vehicle positioned on a lift or hoist. ’897 patent col. 1 ll. 11–14. In one embodiment, the ’897 patent describes a method for temporary removal of an automotive tire assembly, e.g., a vehicle wheel, that includes the steps of: (1) elevating a vehicle on a hoist; (2) removing the wheel from the vehicle; and (3) placing

the wheel on a support arm installed on the hoist. *Id.* at col. 2 ll. 36–41. Throughout various embodiments, the specification describes humans carrying out these method steps. See, e.g., *id.* at col. 1 ll. 54–59 (describing a principal object and advantage of the invention as providing an improved wheel support apparatus that will not require workers to bend over while temporarily removing and replacing the wheels); *id.* at col. 1 l. 60–col. 2 l. 6 (requiring that a worker remove the wheel, carry it to the support apparatus, and hang it on the support arm without bending over throughout the removal and subsequent reinstallation processes).

Shinn Fu Co. of America, Inc. and Shinn Fu Corp. (collectively, “Shinn Fu”) petitioned for inter partes review of all five claims of the ’897 patent, proposing various anticipatory and obviousness grounds of rejection. The U.S. Patent and Trademark Office (“USPTO”) instituted on claims 1–5 under the following three grounds:

Claims 1 and 4 as anticipated by U.S. Patent No. 5,813,659 (“Heidle”) under 35 U.S.C. § 102;

Claims 3 and 5 as rendered obvious over Heidle, Applicant Admitted Prior Art (“AAPA”), and U.S. DEPT. OF LABOR, *BACK DISORDERS AND INJURIES*, OSHA TECHNICAL MANUAL 5-1 (2d ed., 1991) (“OSHA”) under 35 U.S.C. § 103; and

Claims 1–4 as rendered obvious in view Japanese Patent Pub. No. H4-368261, pub. Dec. 21, 1992 (“Komorita”), AAPA, and OSHA under 35 U.S.C. § 103.

J.A. 126, 131.

In response, Tire Hanger filed a motion to amend, seeking to cancel claims 1–5 and substitute claims 6–10. J.A. 144. Tire Hanger did not challenge the Board’s analysis regarding claims 1–5, thus waiving any arguments in defense of the patentability of those claims. See

J.A. 14 (citing 37 C.F.R. § 42.23(a)). Regarding the newly presented claims, independent claim 6 modified original claim 1, and dependent claims 7–10 modified original claims 2–5, respectively. J.A. 164–66. A redline version comparing original claim 1 to substitute claim 6 is presented below (strikethrough text indicates deletions and underlined text indicates additions):

6. A method for a human to use a support arm to temporarily retaining a vehicle wheel during removal and reinstallation of the wheel with respect to a vehicle, comprising, in the following order, the steps of:

elevating a—the vehicle on an automotive hoist so that a support arm disposed on the hoist is at about the same height as a wheel of the vehicle, and the human can remove the wheel without bending over;

removing the wheel from the vehicle;

carrying the wheel to the support arm, wherein the human carries an entire weight of the wheel;

placing—hanging the wheel on the support arm, wherein the step of hanging the wheel on the support arm consists essentially of guiding a hole in the wheel over the support arm and releasing the wheel;

removing the wheel from the support arm substantially without the human bending over, wherein the step of removing the wheel from the support arm consists essentially of grasping the wheel and pulling the wheel clear of the support arm; and

reinstalling the wheel onto the vehicle.

J.A. 145.

In broad terms, aside from specifying the order in which to perform the recited steps, these amendments added human involvement to steps that an apparatus or other structure could have otherwise performed. Tire Hanger accompanied these amendments with arguments in favor of patentability for the newly presented claims. Specifically, it presented its arguments in view of the prior art upon which the USPTO based its institution decision and recently discovered prior art references not of record. J.A. 152–63. Shinn Fu opposed and presented arguments of unpatentability with regard to the references Tire Hanger identified in its motion and two additional references: U.S. Patent No. 4,976,336 (“Curran”) and U.S. Patent No. 4,650,144 (“Conrad”). J.A. 170–94. After the parties presented oral argument, the Board concluded that the amended claims were patentable in light of the prior art of record and granted Tire Hanger’s motion to amend. J.A. 27. It reached this conclusion after characterizing the focus of the parties’ arguments as being limited only to the Komorita, Heidle, and Conrad references. J.A. 20. Shinn Fu timely appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A) (2012).

## II

The principal issue on appeal is whether the Board erred by not adequately addressing Shinn Fu’s arguments in opposition to Tire Hanger’s motion to amend. We review the Board’s IPR decisions to ensure that they are not “arbitrary, capricious, an abuse of discretion, . . . otherwise not in accordance with law . . . [or] unsupported by substantial evidence. . . .” 5 U.S.C. § 706(2)(A), (E).

On appeal, Shinn Fu argues that the Board failed to consider its position of unpatentability based on “the prior art combination of Curran and Conrad as taught by Komorita or Heidle.” Appellants’ Opening Br. 21. Shinn Fu faults the Board for neither referencing this combination in its Final Written Decision nor providing a substan-

tive analysis of the merits of its arguments. *Id.* Specifically, Shinn Fu contends that the Board did not address its proposed combination that included the addition of Conrad's tire hanger to a simple lift described in the prior art. *Id.* at 25–26.

For its part, Tire Hanger faults Shinn Fu for not addressing on appeal the analysis the Board set forth in its Final Written Decision and focusing instead on other combinations of prior art that the Board *could have* considered. Appellee's Br. 25. It contends that Shinn Fu failed to develop its arguments before the Board, particularly with regard to the combinations involving the Conrad and Curran references. *See id.* at 34 (arguing that the combination that involved these references was not a “primary combination” that Shinn Fu argued before the Board) (citation omitted); *see also id.* at 25–26 (identifying the Komorita, Heidle, and Conrad references as one of the “primary combinations” that the Board considered). Tire Hanger describes the Curran and Conrad combination as one of many “ancillary issues” that Shinn Fu “only tangentially mention[ed]” in the first instance when opposing Tire Hanger's motion to amend. *Id.* at 38; *see also* Intervenor's Br. 21 (stating that Shinn Fu mentions Curran as merely a “fungible alternative” to other references primarily relied upon throughout the IPR proceeding).

We conclude that the Board erred by ignoring the manner in which Shinn Fu proposed its obviousness combinations in opposition to Tire Hanger's motion to amend. J.A. 180–86. Under our standard of review, the Board's failure here was arbitrary and capacious. *See In re Lee*, 277 F.3d 1338, 1344 (Fed. Cir. 2002); *see also Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (“[A]n agency rule would be arbitrary and capricious if the agency . . . entirely failed to consider an important aspect of the problem . . .”).

Throughout its analysis, Shinn Fu described various prior art references and, more importantly here, the particular *manner* in which to combine them. Specifically, the combinations Shinn Fu proposed, including the combination of Conrad and Curran that Shinn Fu emphasizes on appeal to this court, involve modifying the prior art references by *adding* features from particular references together. *See, e.g.*, J.A. 180 (describing why one of ordinary skill would have taken the tire hangers disclosed in the Conrad, Marion, and Wuethrich references and *attached* them to a vehicle lift disclosed in Curran or Heidle); J.A. 183 (coupling Conrad's tire hanger to the Curran lift).<sup>1</sup> Furthermore, Shinn Fu provided the specific motivation to combine by *adding* these features together. *See* J.A. 182 (explaining why one of ordinary skill in the art would have *coupled* the Conrad tire hanger to a lift); *see also* J.A. 181 (discussing OSHA and why one of ordinary skill would be motivated to prevent bending over while holding a tire); J.A. 184 (same).

In contrast, the Board addressed the prior art references by *removing* elements from individual references to achieve the resulting combination and found no motivation to combine the references in this manner.<sup>2</sup> *See, e.g.*, J.A. 24–25 (“Thus, absent evidence to the contrary, we are

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<sup>1</sup> *See also* J.A. 181 (“The Conrad, Marion, and Wuethrich hangers would have respectively been attached to a vehicle lift . . . .”); J.A. 182–83 (attaching Conrad’s hanger to a lift); *id.* (coupling Conrad’s hanger to a lift in a manner taught by Komorita).

<sup>2</sup> During oral argument, Shinn Fu characterized its proposed combination as “additive in nature,” i.e., adding elements of the prior art together. It contrasted this analysis with the Board’s “subtractive approach,” i.e., taking elements away from the primary (Komorita) reference when combining those references.

not persuaded that a skilled artisan would have contemplated *gutting Komorita’s cradle structure in favor of a simpler hanger structure* where doing so would have led to the loss of the very benefits on which Komorita is premised.”) (emphasis added); *id.* at 24 (“The ability of Komorita’s tire holder to retain multiple vehicle parts and to self-collapse flat with the floor would be lost if the cradle-like structure was replaced with a simple tire hanger.”) (emphasis added). This analysis differs substantively from the additive approach Shinn Fu provided in its opposition to Tire Hanger’s motion to amend. Yet the Board largely engaged in this subtractive analysis while ignoring Shinn Fu’s additive combination of the Curran, Conrad, Komorita/Heidle references.<sup>3</sup> See J.A. 20 (declaring in its Final Written Decision that the focus of the parties’ arguments merely “boils down” to the Komorita, Heidle, and Conrad references). And it did so even after describing Shinn Fu’s proposed combination as “the centerpiece of [its] argument.” See J.A. 290 ll. 1–13 (oral argument transcript).

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<sup>3</sup> Although the Board faulted Shinn Fu for relying on additional references in its opposition, it is not surprising that it pursued this course of action in light of Tire Hanger’s amendments. See J.A. 290, ll. 1–13 (arguing that its combinations provided the necessary motivation in light of the amendments). In particular, those amendments added limitations that necessitate human involvement throughout the process. Indeed, the Board recognized this as the fundamental purpose of the amended claims in its Final Written Decision. See J.A. 21 (“Relevant to our analysis, however, is the purpose of the claimed method, which entails the removal and replacement of a wheel on an elevated vehicle *without requiring the person handling the wheel to bend over.*”) (emphasis added).

Because the Board did not provide any analysis with regard to the manner in which Shinn Fun proposed its key obviousness combination, we have no meaningful way to review the Board’s patentability determination in light of Shinn Fu’s arguments. *See Pers. Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017) (concluding that the Board provided an inadequate analysis to provide meaningful appellate review); *In re Nuvasive, Inc.*, 842 F.3d 1376, 1384–85 (Fed. Cir. 2016) (remanding for failure to articulate a motivation to combine).

To be clear, the Board’s error here does not stem from its disregard for the teachings of any particular reference. As Tire Hanger correctly observes, the law does not require that the Board address every conceivable combination of prior art discussed throughout an IPR proceeding, no matter how duplicative the other references are. Appellee’s Br. 29–30. The Board does have an obligation, however, to address the arguments that the parties present to it—here, represented by the manner in which Shinn Fu argued the Curran-Conrad combination in opposition to Tire Hanger’s motion to amend. It simply did not meet its obligation here. Accordingly, we vacate the Board’s Final Written Decision and remand for it to address Shinn Fu’s arguments in the first instance.

#### CONCLUSION

For the foregoing reasons, we vacate the Board’s obviousness determinations of claims 6–10 and its order granting Tire Hanger’s motion to amend and remand for further proceedings.

#### VACATED AND REMANDED

#### COSTS

The parties shall bear their own costs.