NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

IN RE: DAVID TSAI,
Appellant

2020-1347

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. 90/013,961, 90/014,080.

Decided: November 30, 2020

JOSEPH A. BRUCE, Bruce Stone LLP, Indianapolis, IN, for appellant. Also represented by JEFFREY JOHNSON, Schmeiser Olsen & Watts LLP, Mesa, AZ.

DANIEL KAZHDAN, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, for appellee Andrei Iancu. Also represented by THOMAS W. KRAUSE, MONICA BARNES LATEEF, FARHEENA YASMEEN RASHEED.

Before LOURIE, CLEVENGER, and CHEN, *Circuit Judges*.

CHEN, *Circuit Judge*.

David Tsai (Tsai) appeals two reexamination decisions of the United States Patent Trial and Appeal Board

(Board). The first decision found claims 1, 2, 4–7, 14–17, and 20 of U.S. Patent No. 7,240,816 (the '816 patent) unpatentable under 35 U.S.C. § 103, and the second decision found claims 1–20 of the '816 patent also unpatentable under § 103. We affirm the second reexamination decision and thus need not reach the merits of the first reexamination decision.

BACKGROUND

The '816 patent is directed to a bicycle rack for a vehicle. '816 patent col. 1 ll. 5–6. The bicycle rack comprises a base, two beams pivotally connected with the base, at least one supporting device attached to each of the beams in order to support one wheel of the bicycle, a post pivotally connected with the base, and a hooking device attached to the post in order to hook a portion of the bicycle. *Id.* at col. 1 ll. 47–55. Claim 1 is representative:

> 1. A rack for holding at least one bicycle in position, the rack comprising:
>
> a base, wherein the base comprises a bottom and two spaced, parallel walls extending from the bottom, wherein each of the two walls comprises a plurality of apertures;
>
> two beams independently pivotally connected with the base, wherein an internal end of each of the two beams is located between the two walls and is pivotally mounted by a screw extending through corresponding apertures of the two walls and driven into the internal end;
>
> at least one supporting device attached to each of the two beams in order to support one wheel of the bicycle;
>
> a post pivotally connected with the base, wherein a lower end of the post is located between the two walls and is pivotally mounted by a screw

> extending through corresponding apertures of the two walls and driven into the lower end of the post, with the screw of the post being spaced from and parallel to the screws of the two beams,
>
> a hooking device attached to the post in order to hook the bicycle;
>
> first and second pins received in corresponding apertures of the two walls and extending through the two beams spaced from and parallel to the screws pivotally mounting the two beams; and
>
> a third pin received in corresponding apertures of the two walls and extending through the post and spaced from and parallel to the screw pivotally mounting the post, with the plurality of apertures receiving the first, second and third pins keeping the two beams and the post in position.

Id. at claim 1.

On May 24, 2017, a first request for ex parte reexamination was filed by an anonymous third-party requester. The examiner rejected claims 1, 2, 4–7, 14–17, and 20 as obvious, using James[1] as the primary reference. On February 22, 2018, a second request for ex parte reexamination was filed by King Roof Industrial Co., Ltd. For this second reexamination, the examiner rejected claims 1–20 as obvious over various combinations of SportRack in view of James, Graber, Fullhart, Mehls, Pedrini '163, McLemore,

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[1] James refers to French Patent No. 8110176.

Krieger, Reeves, and Pedrini '347.[2] On appeal, the Board affirmed the rejections in both reexaminations.[3]

Tsai timely appealed to our court on January 10, 2020. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

We review the Board's legal determinations de novo, *In re Elsner*, 381 F.3d 1125, 1127 (Fed. Cir. 2004), but we review the Board's factual findings underlying those determinations 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 Vo. v. NLRB*, 305 U.S. 197, 229 (1938). The scope and content of the prior art is a question of fact. *See In re Mouttet*, 686 F.3d 1322, 1330 (Fed. Cir. 2012). The presence or absence of a motivation to combine references is also a question of fact. *See Novartis Pharms. Corp. v. West-Ward Pharms. Int'l Ltd.*, 923 F.3d 1051, 1059 (Fed. Cir. 2019).

I

Tsai argues that the Board implicitly and erroneously construed the claims of the '816 patent as not requiring the

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[2] SportRack 2EZ (https://web.archive.org/web/20030416222420/http://www.barrecrafters.com: 80/prod/hitch2.html) (SportRack); U.S. Patent No. 4,394,948 (Graber); U.S. Patent No. 5,190,195 (Fullhart); U.S. Patent No. 6,089,430 (Mehls); U.S. Patent No. 6,929,163 (Pedrini '163); U.S. Patent No. 6,857,545 (McLemore); U.S. Patent No. 4,823,997 (Krieger); U.S. Patent No. 6,439,397 (Reeves); U.S. Patent No. 7,044,347 (Pedrini '347).

[3] Because we affirm the second reexamination decision, which finds unpatentable all the claims of the '816 patent, we need not address the first reexamination decision.

post and beams to be pivotally mounted between the base's two walls that are connected to the bottom. Appellant's Br. at 11. We disagree. A review of the Board's decision makes clear that the Board correctly understood the claim language, carefully walking through the relevant claim limitations and explaining how the cited prior art references corresponded to those limitations. *See* J.A. 16–20. For example, the Board relied on SportRack in view of James for the pivoting post and mounting the post with a screw that extends through apertures of the base's two walls. J.A. 11–12, 15–16, 17–18. James teaches "a screw configuration mounted between and through the side walls." J.A. 484. The Board relied on Pedrini '163 for a bicycle rack having a base with two parallel walls extending from a bottom, J.A. 16. Substantial evidence supports these findings and we also conclude that the Board did not misconstrue the claim limitations.

II

Tsai also contends that the Board improperly ignored the declaration of Kevin Wren (Wren Declaration). Appellant's Br. at 19. The Board, however, correctly determined that the declaration's arguments were non-responsive to the examiner's rejection of the claims. J.A. 20. The Wren Declaration incorrectly stated that the "claims assert a clean and unimpeded access to the vehicle," and also stated that a skilled artisan would want a bicycle rack post that leaned away from the vehicle to permit access to the back of the vehicle. J.A. 211–12. But as the Board found, the claims do not require such an "access" feature, nor does this contention defeat the examiner's reasons for combining the cited references. J.A. 20.

III

Tsai avers that none of the prior art discloses the following claim limitations pertaining to apertures and pins: "a base, wherein the base comprises a bottom and two spaced, parallel walls extending from the bottom, wherein

each of the two walls comprises a plurality of apertures," "first and second pins received in corresponding apertures of the two walls," and "a third pin received in corresponding apertures of the two walls." Appellant's Br. at 27. We find this argument to lack merit. Both the Board and the examiner pointed to Pedrini '163, which teaches a post member that is locked in an upright or tilted position via rotation on a pivot screw and via locking pins. Pedrini '163 col. 3 l. 51–col. 4. l. 10. As the examiner explained, "given the explicit locking pin configuration of Pedrini '163," a skilled artisan would know to modify SportRack to include "locking pins and corresponding apertures in the two walls of the bracket for each beam and the post such that they are all parallel to the mounting screws for the post and the beams." J.A. 139. Graber, Fullhart, and Mehls also establish that skilled artisans were well aware of using locking pins and corresponding apertures for securing posts and beams for bike racks. *See e.g.*, Mehls col. 5 ll. 6–46; Fullhart col. 2 ll. 37–42. The Board and examiner reasonably found that use of pins would "allow for quick repositioning and fixation of the beams and post." J.A. 19. Substantial evidence thus supports the Board's rationale for why a skilled artisan would use pins with the SportRack bicycle rack, as modified by the teachings of Pedrini '163.

We likewise see no reversible error with the Board's finding that the modification of SportRack that a skilled artisan would undertake in view of James, Pedrini '163, and the other prior art references would preserve the rotation of the beams. James teaches a bicycle rack with a post and two beams that are all connected to two parallel walls. J.A. 1665, 1684. James also teaches a screw for the post that is parallel to the screws of the two beams. J.A. 1665–66. The examiner found that it would have been obvious to a skilled artisan to modify SportRack "to pivotally connect the post using a screw oriented parallel to the screws of the two beams" as taught by James, "such as by mounting the

post screw in the parallel walls as the beam screws, in order to fold up the rack with the post parallel to the beams, and thereby achieve an implicitly more compact profile for storage while still allowing for the post to tilt for 'easy rear car access' as explicitly called for in SportRack." J.A. 476–77. In order to teach the limitation of a base having a "bottom," SportRack in view of James is further modified by Pedrini '163. The examiner found "the concept of rotating beams attached to bases with bottoms of hitch-mounted racks was well known in the art at the time of the invention," and a skilled artisan "would have recognized the base bottom as adding structural stability to the base," such that the rotation of the beams "is not affected by the bottom of the base." J.A. 480. Without evidence to the contrary, the examiner reasonably found that it would have been a "mere matter of engineering design choice" for a skilled artisan to mount the rotating beams higher in the base's walls so that the bottom does not interfere with the rotation. J.A. 482. The Board agreed with the examiner's findings regarding SportRack, James, and Pedrini '163. J.A. 21. Thus, substantial evidence supports the Board's determination that the combination of SportRack, James, and Pedrini '163 would still allow the beams of the resulting combination to rotate without interference.

As to dependent claims 2 and 17, Tsai argues that SportRack and James cannot be modified by adding McLemore's collar because the beams of James would not be able to rotate. Appellant's Br. at 29. That argument is not persuasive because, as already explained, the examiner and Board's SportRack, James, and Pedrini '163 combination would not affect the pivotal rotation of the beams. The addition of a collar attached to the bottom of the base—and thus positioned below base—would likewise not affect the rotation of the beams. We thus see no error in the Board's affirmance of claims 2 and 17.

Tsai also challenges the rejection to dependent claims 3 and 18, which recite that the collar has two wings

extending from its sides. The Board reasonably found that Krieger teaches the use of support wings. The examiner found that given the known desire to add such reinforcements to bicycle hitch mounted racks, it would have been obvious to skilled artisans at the time of the invention to have added wings or reinforcements to increase support and stability. J.A. 493–94. Further, "[s]imple physics would have led those in the art to the location of the likely dynamic stress points relative to the hitch mount in such a system, and routine design modifications without undue experimentation would have led to the resultant location of such wing reinforcements." J.A. 494. The Board's decision in this respect is thus supported by substantial evidence.

CONCLUSION

We have considered Tsai's remaining arguments and find them either forfeited, too skeletal and underdeveloped and/or unpersuasive. Substantial evidence supports the Board's factual determinations underlying its obviousness rejection relying on SportRack as the primary reference. Accordingly, the Board's decision maintaining the examiner's rejection of claims 1–20 of the '816 patent is

AFFIRMED

COSTS

No costs.