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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* AKIRA INOUE

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Appeal 2018-003932  
Application 13/416,114  
Technology Center 3600

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Before EDWARD A. BROWN, JILL D. HILL, and  
JEREMY M. PLENZLER, *Administrative Patent Judges*.

BROWN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant<sup>1</sup> seeks review under 35 U.S.C. § 134(a) of the Examiner's decision rejecting claims 1–15. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM IN PART.

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<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Shimano, Inc. Appeal Br. (filed Aug. 4, 2017) 3.

CLAIMED SUBJECT MATTER

Claims 1 and 15 are independent claims. Claim 1 illustrates the claimed subject matter.

1. A bicycle pedal comprising:
  - a pedal axle;
  - a main pedal body rotatably supported on the pedal axle;
  - a coupling mechanism including a first cleat securing member configured to be coupled to a front portion of a cleat and a second cleat securing member that is rotatably attached to the main pedal body about a pivot axis and is configured to be coupled to a rear portion of the cleat, the second cleat securing member including a cleat contacting surface;
    - a force exerting member operatively disposed between the main pedal body and the second cleat securing member, the force exerting member being configured to bias the second cleat securing member in a cleat securing direction to contact the rear portion of the cleat; and
    - a cleat movement restricting member disposed underneath an end of the second cleat securing member as viewed from an axial direction that is parallel to the pivot axis, the end including the cleat contacting surface that is configured to contact the cleat while the cleat is engaged with the second cleat securing member, the cleat movement restricting member being configured to restrict movement of the cleat in a rearward direction, the cleat movement restricting member being further configured and arranged relative to the coupling mechanism such that the cleat movement restricting member guides the cleat in an upward direction such that the cleat detaches from the coupling mechanism during a cleat disengagement operation in which the cleat detaches from the coupling mechanism,
      - the cleat movement restricting member having a first slanted surface that is configured to guide the cleat upward such that the cleat detaches from the coupling mechanism.

Appeal Br. 20 (Claims App.).

## REJECTIONS

Claim 15 is rejected under 35 U.S.C. § 112, second paragraph, as indefinite.

Claims 1–15 are rejected under 35 U.S.C. § 102(b) as anticipated by Peyre (US 5,423,233, issued June 13, 1995).

Claims 1–15 are rejected under 35 U.S.C. § 102(b) as anticipated by Bryne (US 8,857,292 B2, issued Oct. 14, 2014).

## ANALYSIS

### *Claim 15 as Indefinite*

Appellant does not contest the rejection of claim 15 under 35 U.S.C. § 112, second paragraph. Appeal Br. 19. Accordingly, we sustain the rejection.

### *Claims 1–15 as Anticipated by Peyre*

As for claim 1, the Examiner finds that Peyre discloses a bicycle pedal comprising, *inter alia*, a cleat movement restricting member (rear abutment 22) “having a first slanted face (figs 1 and 4) that is {configured to guide the cleat upward such that the cleat detaches from the coupling mechanism}.” Final Act. 4. The Examiner states that the use of brackets “{ }” indicates that “Peyre discloses a device that is identical, or substantially structurally identical, to the device claimed, and thus anticipates the claim. Therefore, Peyre is *inherently capable* of the claimed functions in the same way that the claimed device is *inherently capable* of the claimed functions.” *Id.* at 6–7 (citing MPEP §§ 2112, 2114) (emphasis added). The Examiner makes closely similar findings for claim 15, including that Peyre discloses, *inter*

*alia*, a cleat movement restricting member 22 “{configured to restrict movement of the cleat in a rearward direction} [and] . . . having a first slanted surface (figs 1 and 4) that is {configured to guide the cleat in an upward direction such that the rear portion of the cleat pushes against the second cleat securing member to detach the cleat from the coupling mechanism}.” *Id.* at 6.

Appellant disagrees with the Examiner’s finding that Peyre discloses “the cleat movement restricting member having a first slanted surface that is configured to guide the cleat upward such that the cleat detaches from the coupling mechanism,” as recited in claim 1, or “a cleat movement restricting member . . . having a first slanted surface that is configured to guide the cleat in an upward direction such that the rear portion of the cleat pushes against the second cleat securing member to detach the cleat from the coupling mechanism,” as recited in claim 15<sup>2</sup>. Appeal Br. 15. Appellant contends that Peyre is silent about any structure that provides an upward movement component to a cleat during a disengagement operation that releases the cleat from a pedal body. *Id.* at 7.

Appellant specifically disagrees that Peyre’s rear abutment 22 corresponds to the claimed cleat movement restricting member. Appeal Br. 11. Appellant contends that Peyre only describes that rear abutment 22 prevents cleat plate 23 from moving in the longitudinal direction relative to pedal body 1 (Reply Br. 6 (citing Peyre, col. 5, l. 30–col. 6, l. 1)), but is silent about rear abutment 22 guiding or imparting any kind of upward movement component to cleat plate 23 during its detachment from pedal

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<sup>2</sup> Herein, we also refer to these limitations in claims 1 and 15 as “the slanted surface limitation.”

body 1 (Appeal Br. 11). To the contrary, Appellant contends, rear abutment 22 is incapable of guiding plate 23 upward during detachment from pedal body 1. Appeal Br. 11. According to Appellant, “the only ‘slanted portion’ of the rear abutment 22 is disposed far *too spaced and too low* to be able to guide the plate 23 in an upward direction during a disengagement operation, as claimed.” *Id.* at 12 (boldface omitted). Appellant provides an annotated Figure 5 of Peyre as further explanation. *Id.* Appellant states, “during a disengagement operation, any part of the rear abutment 22 *that would be able to provide any type of upward guidance*, as claimed, is disposed too low and *would not be able to contact the cleat 23.*” *Id.* (emphasis added).

In the Reply Brief, Appellant clarifies this position, stating “Appellant meant to state that whatever portion of the rear abutment 22 *that is potentially capable of contacting the cleat plate 23*, that portion of the rear abutment 22 would not be capable of guiding the cleat upward as claimed in claim 1.” Reply Br. 5 (emphasis added). Appellant provides a revised annotated Figure 5 of Peyre with the revised annotation “Rear abutment 22 — the alleged ‘slanted face’ is not capable of guiding the cleat plate 23 upward.” *Id.* Appellant states that the revised annotation has been clarified “to reinstate the point that the rear abutment 22 is disposed too low to contact the cleat 23. Therefore, based on Appellant’s understanding of Peyre, the rear abutment 22 does *not* contact the cleat plate 23 when the device of Peyre is used as intended.” *Id.* (boldface omitted).

Appellant additionally contends that Peyre’s rear abutment 22 is curved rearwardly and cleat plate 23 is curved forwardly to avoid interference with cleat plate 23 during a disengagement operation. Appeal Br. 12 (showing annotated Fig. 4 of Peyre). Appellant contends that, during

a disengagement operation, cleat plate 23 pivots about a vertical axis and rear abutment 22 is disposed rearward of the movement path of cleat plate 23 such that rear abutment 22 can only prevent rearward movement of cleat plate 23. *Id.* at 13. Appellant further asserts that because the portion of rear abutment 22 that contacts rear support surface 56 of plate 23, and also rear support surface 56 itself, are perpendicular to the pivot direction of plate 23, no upward movement can be imparted to plate 23 by the rear abutment 22. *Id.* at 11–12.

The Examiner responds that claims 1 and 15 recite no specific physical characteristics of the cleat movement restricting member that differentiate it *structurally* from Peyre. Ans. 5. According to the Examiner, claims 1 and 15 define the cleat movement restricting member entirely functionally, but the functional limitation “guide” does not further describe what the cleat movement restricting member is. *Id.* at 5–6. The Examiner submits that “the claim does not recite specifically how the bicycle cleat of the instant application is detached from the bicycle pedal in relation to any specific *unique structure*.” *Id.* at 6.

The Examiner construes the term “guide” as requiring “a feature *to somehow, in some unspecified way*, to direct, cause, or bring about movement of the cleat in an upward direction.” Ans. 7 (underlining omitted).<sup>3</sup> The Examiner submits that “because the instant application relies on the user of the device using his/her foot to rotate the cleat, the claim is

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<sup>3</sup> The term “guide” is used as a verb in claims 1 and 15. Appeal Br. 20, 24. We note a dictionary definition of the verb “guide” is “to act as a guide to: direct in a way or course.” *Merriam-Webster’s Collegiate Dictionary* 555 (11th. ed. 2003).

sufficiently broad to include situations where the user of the device provides the upward force to the cleat and *the cleat movement restricting member passively guides the cleat.*” *Id.* at 8 (emphasis added).

The Examiner finds that Figure 2 of Peyre demonstrates that the cleat movement restricting member 22 has a face directed upwards, and, therefore, “the cleat movement restricting member (22) guides the cleat upwards because the cleat movement restricting member (22) prevents the cleat from moving rearward beyond the cleat movement restricting member.” Ans. 8–9. According to the Examiner, “[t]he cleat movement restricting member (22) limits movement of the cleat to only movement that is directed in the upward direction along the Y-axis.” *Id.* at 9.

Additionally, the Examiner finds that rear abutment 22 in Peyre has a “slanted surface,” as claimed. Ans. 10. Particularly, the Examiner finds that the front curved surface of rear abutment 22 “diverges or is inclined relative to the YZ-plane, which is the vertical plane.” *Id.* (see the Examiner’s annotated Figure 4 of Peyre, which identifies the slanted surface “1SS”). The Examiner submits that surface 1SS guides the cleat upwards along the Y-axis. *Id.*

Appellant replies that the Examiner has not established that Peyre’s device is capable of the claimed guiding function of the cleat movement restricting member. Reply Br. 3. Appellant contends that the Examiner must show that the corresponding components of Peyre “are *made to* perform the guiding function. ‘Configured to’ in claims requires a structure that is more than just capable of performing a function, but is actually made to perform the function.” *Id.* (boldface omitted) (citing *Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335 (Fed. Cir. 2012)). Appellant

contends that Peyre's disclosure shows that rear abutment 22 was made to prevent longitudinal movement, *not* to guide the cleat upward, as required by *Aspex Eyewear. Id.* at 6.

According to the Examiner, Appellant is "suggesting that the *functional limitation* 'guide' is being used *in place of* specific structural limitations that enable those functional limitations." Ans. 6 (boldface omitted). The Examiner states, "the claim merely recites 'the cleat movement restricting member *guides* the cleat in an upward direction' (emphasis added), and thus Applicant's arguments rely entirely on the breadth of the interpretation of 'guides.'" *Id.*

We disagree that Appellant's argument relies entirely on the meaning of "guides." Ans. 6. Claim 1 recites "the cleat movement restricting member having a first *slanted surface that is configured to* guide the cleat upward such that the cleat detaches from the coupling mechanism." Appeal Br. 20 (Claims App.) (emphasis added). Claim 15 similarly recites "the cleat movement restricting member having a first *slanted surface that is configured to* guide the cleat in an upward direction such that the rear portion of the cleat pushes against the second cleat securing member to detach the cleat from the coupling mechanism." *Id.* at 24 (Claims App.) (emphasis added). Accordingly, these claims require that the cleat movement restricting member has a first slanted surface, and that the first slanted surface is *configured to* guide the cleat upward (claim 1) or in an upward direction (claim 15). The "first slanted surface" is a structural limitation. As for the phrase "configured to," *Aspex Eyewear* addressed the meaning of the phrase "adapted to," explaining that the phrases "made to," "designed to," and "configured to" are narrower meanings than "capable of."

*Aspex Eyewear*, 672 F.3d at 1349. We agree with Appellant that the phrase “configured to” is a structural limitation that requires a structure that is more than just “capable of performing” the function that follows it, but is actually “made to” perform the function.

Regarding the structure and function of the cleat guiding structure, Appellant references paragraph 34 of the Specification, which describes the cleat movement restricting member 6 having a first slanted face 6c shown in Figure 3. Reply Br. 11; Spec. ¶ 34. As described, the first slanted face 6c is arranged and configured such that when the heel of a shoe is turned outward, the rear portion 22b of the cleat 22 is guided upward by first slanted face 6c. Spec. ¶ 34, Fig. 3. We agree with Appellant that, applying the proper meaning of “configured to” in view of the Specification, the claimed slanted surface limitation recites structure, and not merely function. Reply Br. 11.

To the extent the Examiner did not address both of the limitations “first slanted surface” and “configured to” in claims 1 and 15 as structural limitations, the Examiner has not established that “Peyre discloses a device that is identical, or substantially *structurally* identical, to the [claimed] device,” as the Examiner finds. Final Act. 6 (emphasis added). The Examiner’s position is that Peyre inherently (i.e., necessarily) discloses the cleat movement restricting member, as claimed. However, Peyre appears to provide no disclosure that describes or implies that rear abutment 22 has a slanted surface configured to guide plate 23 upwardly such that it detaches from the coupling mechanism. First, we agree with Appellant that the curved surface of plate 23 appears to be located below the bottom of plate 23, and it is not apparent how plate 23 would even contact this curved surface during disengagement of plate 23 from the pedal. *See* Reply Br. 5.

Second, Peyre describes that “on each main face A, B of the pedal body is provided a rear abutment 22, as considered in the travel direction F. This rear abutment cooperates with the curved rear support surface 56 of the plate.” Peyre, col. 5, ll. 39–42. Peyre describes the act of “stepping out of the pedal,” explaining “[d]uring the course of this release, if a force component occurs rearwardly in the longitudinal direction, this force component is taken by the rear abutment 22.” *Id.* at col. 7, ll. 11–31. Accordingly, we understand that, during “a cleat disengagement operation” in Peyre, rear abutment 22 cooperates with curved rear support surface 56 of plate 23 by taking up forces acting rearwardly in the longitudinal direction during release of plate 23 from the pedal. This description does not indicate that rear abutment 22 also guides plate 23 upward such that plate 23 detaches from a coupling mechanism of the pedal.

“Inherency . . . may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) (citations and internal quotation marks omitted). Even assuming that the curved front surface of Peyre’s rear abutment 22 can be considered a “slanted surface,” as found by the Examiner, the Examiner does not provide sufficient evidence or technical reasoning to establish that this curved front surface, which is located and configured to take up forces acting rearwardly in the longitudinal direction during release of plate 23 from the pedal, *necessarily* also “is configured to guide the cleat upward such that the cleat detaches from the coupling mechanism” during a cleat disengagement operation in which plate 22 detaches from the “coupling mechanism.”

Accordingly, we are not persuaded that Peyre inherently discloses the claimed cleat movement restricting member.

For the foregoing reasons, we do not sustain the rejection of claims 1 and 15, or claims 2–14 depending from claim 1, as anticipated by Peyre.

*Claims 1–15 as Anticipated by Bryne*

As for claim 1, the Examiner finds that Bryne discloses, *inter alia*, a cleat movement restricting member (forward crosslink 58, flange 82, countersunk hole 84) “having a first slanted face (fig 7) that is configured {to guide the cleat upward such that the cleat detaches from the coupling mechanism}.” Final Act. 7–8.<sup>4</sup> The Examiner makes closely similar findings for claim 15, including, *inter alia*, that Bryne discloses a cleat movement restricting member (forward crosslink 58, flange 82, countersunk hole 84) “{configured to restrict movement of the cleat in a rearward direction}, the cleat movement restricting member having a first slanted surface (fig 7) that is {configured to guide the cleat in an upward direction such that the rear portion of the cleat pushes against the second cleat securing member to detach the cleat from the coupling mechanism}.” *Id.* at 10.

Appellant contends that Bryne fails to disclose a cleat movement restricting member that is capable of providing an upward movement to the cleat during a disengagement operation, as required by claims 1 and 15. Appeal Br. 17. Appellant contends that, in Bryne, the alleged “cleat movement restricting member” is incapable of guiding the cleat upward

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<sup>4</sup> The Examiner explains that the brackets “{}” have the same meaning as noted above. Final Act. 10.

during a cleat disengagement operation because the forward crosslink 58, flange 82, and countersunk hole 84 are all disposed *far below* the rotating portion of the cleat during such operation, and thus, likely to make *no* contact with the cleat during a disengagement operation. *Id.* at 17, 18. In support, Appellant provides an annotated Figure 5 of Bryne. *Id.* at 18.

The Examiner responds that there is no illustrated structural difference between Appellant's cleat movement restricting member 6 and the cleat movement restricting member of Bryne. Ans. 18. According to the Examiner, each of these cleat movement restricting members "is a surface that is inclined relative to the XY-plane." *Id.* Therefore, the Examiner submits, "Bryne is inherently capable of the claimed functions in the same way that the cleat movement restricting member is inherently capable of the claimed functions." *Id.*

Appellant replies that the Examiner has failed to show that the first forward crosslink 58, flange 82, and countersunk hole 84 in Bryne are "made to" perform the claimed guiding function, as required by *Aspex Eyewear*. Reply Br. 8. Rather, Appellant contends, Bryne describes that countersunk hole 84 in flange 82 is made to receive the head of adjustment screw 80, such that rotation of the adjustment screw effectively moves stop plate 74 upward or downward relative to forward crosslink 58, to tighten or loosen the spring tension. *Id.* (citing Bryne, col. 6, ll. 40–50). Appellant contends that Bryne does not mention that countersunk hole 84 or flange 82 guides a cleat upward to release the cleat, as claimed.

Appellant's contentions are persuasive. Even assuming that Bryne's "cleat movement restricting member" including forward crosslink 58, flange 82, and countersunk hole 84 can be considered to have a "slanted surface,"

as claimed, the Examiner does not direct us to any disclosure in Bryne that supports the position that this slanted surface is configured to guide the cleat upward such that it detaches from the coupling mechanism of the pedal during a cleat disengagement operation, as the Examiner finds. Thus, we are not persuaded that Bryne inherently discloses the claimed cleat movement restricting member.

We do not sustain the rejection of claims 1 and 15, or claims 2–14 depending from claim 1, as anticipated by Bryne.

#### DECISION SUMMARY

In summary:

| <b>Claim(s)<br/>Rejected</b> | <b>35 U.S.C. §</b>    | <b>Reference(s)/Basis</b> | <b>Affirmed</b> | <b>Reversed</b> |
|------------------------------|-----------------------|---------------------------|-----------------|-----------------|
| 15                           | 112, second paragraph | Indefiniteness            | 15              |                 |
| 1–15                         | 102(b)                | Peyre                     |                 | 1–15            |
| 1–15                         | 102(b)                | Bryne                     |                 | 1–15            |
| <b>Overall Outcome</b>       |                       |                           | 15              | 1–14            |

#### TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED IN PART