

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 37

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte SHINJI MARUI

---

Appeal No. 1997-3340  
Application No. 08/323,500

---

ON BRIEF<sup>1</sup>

---

Before COHEN, ABRAMS and BAHR, Administrative Patent Judges.  
BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 3-11, 14-17, 20-28, 32, 34-38<sup>2</sup> and 40. Claims 18, 19, 29-31, 33 and 39 stand withdrawn from further

---

<sup>1</sup> Appellant's requested oral hearing, scheduled for December 9, 1999, was waived (Paper No. 36, received November 12, 1999 by facsimile transmission). Accordingly, this appeal is on brief.

<sup>2</sup> Although appellant's brief (Paper No. 29, page 2) omitted claims 34-38 from the list of claims being appealed, appellant's reply brief (Paper No. 31, page 5) clarifies that such omission was inadvertent and confirms that all standing rejections of claims 34-38 are appealed. The inclusion of claims 34-38 in this appeal is consistent with the content of appellant's brief as a whole and with the Notice of Appeal (Paper No. 27).

consideration under 37 CFR § 1.142(b) as being directed to a non-elected invention. Claim 2 has been indicated as allowable and claims 12 and 13 have been objected to as being dependent on a rejected claim. No other claims remain pending in this application. The only amendment after final rejection filed in this application (Paper No. 23) has not been entered. We reverse.

### BACKGROUND

The appellant's invention relates to a clipless bicycle pedal including a binding mechanism having a clamping member and an engaging member for engaging and clamping a binding plate which is fixed to the sole of a rider's shoe. A biasing mechanism is integrated with the binding mechanism to bias the clamping member and engaging member in such a way that the binding plate is secured to the binding mechanism (specification, page 3). A copy of the claims on appeal appears in the appendix to the appellant's reply brief (Paper No. 31).

The prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Ogino	Japanese Abstract 03-34987	Aug. 15, 1989 <sup>3</sup>
	(unexamined utility model patent application)	

---

<sup>3</sup> An English language translation of this abstract, prepared by the Patent and Trademark Office, is appended hereto. In determining the teachings of the Ogino abstract, we have relied upon both the appended PTO translation and the unofficial translation supplied by appellant (Paper No. 5) in parent application No. 08/044,837, which are consistent with one another.

The following rejections are before us for review.

1. Claims 1, 3-9, 14-17, 20, 21, 23-28, 32 and 34-37<sup>4</sup> stand rejected under 35 U.S.C. § 112, first paragraph, as, according to the examiner, the specification, as originally filed, does not provide support for the invention as is now claimed.<sup>5</sup>
2. Claims 1, 3-9, 14-17, 20, 21, 23-28, 32 and 34-37<sup>6</sup> stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the appellant regards as the invention.
3. Claims 1, 3, 4, 6, 7, 14-17, 20-28, 32, 34-38 and 40 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Ogino.
4. Claims 1, 3, 4, 6, 7, 10, 11, 14-17, 20-28, 32, 34-38 and 40 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ogino.

Reference is made to the main and reply briefs (Papers No. 29 and 31) and the answer (Paper No. 30) for the respective positions of the appellant and the examiner with regard to the merits of these rejections.

---

<sup>4</sup> The examiner's inclusion of claims 38 and 40 in the statement of this rejection appears to have been an inadvertent error as these claims do not contain the limitations that the examiner urges are not supported by appellant's specification and as independent claim 22, from which they depend, has not been included in this rejection.

<sup>5</sup> While the adequacy of the originally filed disclosure, including the drawings, in providing support for the claimed subject matter as required by the first paragraph of 35 U.S.C. § 112 is an appealable matter, the examiner is correct that the issue of whether the drawings comply with 37 CFR § 1.83 is a petitionable matter and not an appealable matter. See Manual of Patent Examining Procedure (MPEP) §§ 1002 and 1201.

<sup>6</sup> The examiner's inclusion of claims 38 and 40 in this rejection appears to have been an inadvertent error as these claims do not contain the limitations which the examiner considers to be misdescriptive or imprecise.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art reference, and to the respective positions articulated by the appellant and the examiner. Based on our review, we make the determinations which follow.

***The inadequate written description rejection***

In rejecting claims 1, 3-5, 14-17, 20, 21, 23-28, 32 and 34-37 under 35 U.S.C. § 112, first paragraph, the examiner's position (final rejection, page 4) is that the limitations in independent claims 1, 14 and 23 with regard to relative rotation or pivoting of the plate engaging means and plate clamping means in opposite angular directions are not supported by appellant's original disclosure. For the reasons cited on pages 13 and 14 of appellant's brief, we cannot sustain this rejection.

Specifically, as best seen in Figures 6 and 9 and described in appellant's specification on page 21, in lines 5-14, to engage the binding plate (70) fixed to a rider's shoe with the clipless pedal, the front of the binding plate is first hooked into the engaging hook (43) of the plate engaging member (42). The rider then pushes down on the rear of the shoe, whereupon the pressure of the angled surface (72) at the rear of the plate against the clamping hook (39) of the plate clamping member (38) causes the engaging member (42) and the clamping member (38) to rotate about the axis of the pedal shaft (12) to increase the distance between the clamping hook

(39) and engaging hook (43). Once the rear of the plate has cleared a chamfered surface (74) on the clamping hook (39), the clamping member is permitted to rotate back to its original position under the biasing force of a biasing spring (20). Although not expressly illustrated or stated in appellant's specification, it is clear that the combination of contact by the front of the plate against the plate engaging member (42) and the camming effect of the angled surface (72) at the rear of the plate against the clamping hook (39) of the plate clamping member (38) causes the engaging member (42) and the clamping member (38) to rotate in opposite angular directions to increase the distance between the clamping hook (39) and engaging hook (43) and that, after insertion, the force of the biasing spring (20) causes both the clamping member and the engaging member to rotate back to their neutral positions, once again in opposite angular directions about the axis of the pedal shaft (12).

The examiner's position (final rejection, page 5) in rejecting claims 6-9 under 35 U.S.C. § 112, first paragraph, is that the limitation in claim 6, to the effect that the second pedal portion is "independently" rotatable relative to the first pedal portion, is imprecise because the first pedal portion (plate engaging unit 42, 44, 18) and second pedal portion (plate clamping unit 38, 40, 14, 16) are both mounted together to form a pedal and thus inherently rotate together. This position is not well taken. While the plate engaging unit and plate clamping unit are both mounted about the pedal shaft (12) for rotation thereabout, these units are mounted to each other via a spring bushing (22), biasing spring (20) and outer bushing (26) so as to permit

independent rotation of these units relative to one another when the binding plate (70) is inserted between the engaging hook (43) and clamping hook (39). From our viewpoint, each of the engaging and clamping units is capable of being rotated while the other is kept stationary and this capability renders them independently rotatable relative to one another.

For the foregoing reasons, we reverse the examiner's rejection of claims 1, 3-9, 14-17, 20, 21, 23-28, 32 and 34-37 under the first paragraph of 35 U.S.C. § 112.

***The indefiniteness rejection***

The examiner's rejection of claims 1, 3-9, 14-17, 20, 21, 23-28, 32 and 34-37 under the second paragraph of 35 U.S.C. § 112 is based upon the examiner's assertion that the above-noted limitations in claims 1, 14 and 23 with regard to relative rotation or pivoting in opposite angular directions and in claim 6 with regard to independently rotatable pedal portions are not supported by the appellant's disclosure and that, as such, the claims are imprecise or misdescriptive of the invention. In view of our discussion, *supra*, in reversing the examiner's 35 U.S.C. § 112, first paragraph, rejection, it should be clear that we shall also not sustain the examiner's rejection of these claims under the second paragraph of 35 U.S.C. § 112. As for the use of the term "independently" in claim 6, the fact that the engaging and clamping units can be rotated together and, thus, have some interdependence does not, in our opinion, render the use of the term "independent" imprecise. As discussed above, the capability of each of the

engaging and clamping units to be rotated while the other is kept stationary renders them "independently" rotatable relative to one another.

For the foregoing reasons, we reverse the examiner's rejection of claims 1, 3-9, 14-17, 20, 21, 23-28, 32 and 34-37 under 35 U.S.C. § 112, second paragraph.

***The anticipation rejection***

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). In other words, there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. Scripps Clinic & Research Found. v. Genentech Inc., 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991).

Turning first to the examiner's rejection of independent claim 1 as being anticipated by the Ogino abstract, we agree with appellant (brief, page 23) that Ogino lacks binding plate clamping means and binding plate engaging means which are coupled so as to rotate relative to one another in opposite angular directions, as required by the claim. While the elastic members (7) identified by the examiner as "plate engaging members" appear to move outwardly away from the front binding plate engaging hook (6) as the binding plate (8) is inserted, we find no disclosure in the Ogino abstract of any pedal components coupled so as to rotate relative to one

another in opposite angular directions. Therefore, we conclude that the Ogino abstract does not anticipate claim 1. Accordingly, we shall not sustain the examiner's rejection of claim 1 or claims 3 and 4 which depend therefrom.

Independent claim 6 requires a first pedal portion having an axis of rotation and a second pedal portion which is "independently rotatable relative to said first pedal portion, about said axis of rotation." The Ogino abstract lacks this feature. Therefore, we shall not sustain the examiner's rejection of independent claim 6 or claim 7 which depends therefrom.

Independent claim 14 requires plate engaging means and plate clamping means which "pivot relative to each other in opposite angular directions about said axis of said pedal shaft." The only pivoting of portions of the Ogino pedal about the axis of the pedal shaft occurs with (and thus in the same angular direction as) pivoting of the pedal body about the pedal shaft axis. Accordingly, we shall not sustain the examiner's rejection of claim 14 or of claims 15-17, 20, 21, 34 and 35 which depend therefrom.

Independent claim 22 requires binding plate engaging means and binding plate clamping means pivotable about a common axis and "common biasing means for biasing said plate engaging means relative to said plate clamping means about said common axis such that said binding plate clamping means and engaging means are biased toward each other about said common axis." The Ogino pedal comprises plate engaging means (the hook 6 at the front of the pedal) and clamping means (elastic elements 7) which are disposed on the pedal body (5)

for pivoting about the axis of the pedal shaft of a pedal crank arm. Further, the elastic members (7) are biased toward the front plate engaging hook (6) by the elasticity of the elements (7), allowing secure engagement of the binding plate and the pedal. However, as pointed out by appellant (brief, page 26), the biasing action in Ogino, accomplished by the elastic action of the members (7), occurs locally across two different axes parallel to and on opposite sides of the pedal shaft and not about a common axis, as required by claim 22. In other words, Ogino lacks a common biasing means for biasing the plate engaging means relative to the plate clamping means about the pedal shaft axis such that the plate engaging and clamping means are biased toward each other about the pedal shaft axis. Thus, we conclude that the Ogino abstract does not anticipate claim 22. Accordingly, we shall not sustain the examiner's rejection of claim 22 or claims 38 and 40 which depend therefrom.

As to claim 23, the Ogino abstract lacks binding plate engaging means and clamping means which are configured to rotate relative to each other "about a common axis but in opposite angular directions" as required by the claim. Therefore, we also shall not sustain the examiner's rejection of claim 23 or claims 24-28, 32, 36 and 37 which depend therefrom.

### ***The obviousness rejections***

In rejecting claims 1, 3, 4, 6, 7, 10, 11, 14-17, 20-28, 32, 34-38 and 40 under 35 U.S.C. § 103, the examiner (final rejection, pages 9 and 10) asserts that

. . . [the Ogino abstract] teaches the invention substantially as claimed. See the attached exhibit. However, [the Ogino abstract] forms the biasing means,

engaging means, clamping means, inner, central and outer mounting blocks as one piece, meanwhile, applicant forms these means and blocks as separate pieces and [attaches] them together.

It is common knowledge in the art to change one piece to multiple pieces and [attach] them together in order to facilitate the manufacturing process. See, e.g., *In re Larson*, 144 USPQ 347 (CCPA 1965).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the biasing means, engaging means, clamping means, inner, central and outer mounting blocks of [the Ogino abstract] as different pieces and [attach] them together in order to facilitate the manufacturing process as suggested by common knowledge in the art.

With regard to claims 1, 3, 4, 6, 7, 14-17, 20-28, 32, 34-38 and 40, as pointed out by appellant (brief, pages 28 and 29), the modification proposed by the examiner would not overcome the above-noted deficiencies of the Ogino abstract. Accordingly, we shall not sustain the examiner's rejection of these claims under 35 U.S.C. § 103.

With regard to independent claim 10, appellant (brief, pages 29 and 30) argues that the examiner has failed to provide any explanation of why the specific structural elements connected as recited in claim 10 would be the result of the examiner's proposed modification and urges that

any assemblage of components for the [Ogino abstract] would . . . not have inner and outer blocks coupled together via a clamping member and surrounding a central block coupled to an engaging member.

We interpret appellant's argument as being directed to the recitation in claim 10 of "a clamp member mounted to said inner and outer mounting blocks and an engaging member mounted to

said central mounting block." Even if one of ordinary skill in the art were to form the various portions of the Ogino pedal as separate components attached together as suggested by the examiner, it is not apparent to us what would have motivated such an artisan to provide the particular arrangement of elements recited in claim 10.

Rejections based on 35 U.S.C. § 103 must rest on a factual basis. In making such a rejection, the examiner has the initial duty of supplying the requisite factual basis and may not, because of doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 177-78 (CCPA 1967). In establishing a *prima facie* case of obviousness, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, e.g., Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988).

As the examiner has failed to respond to appellant's argument by providing a reason why one of ordinary skill in the art would have been led to modify the Ogino pedal to arrive at

the invention recited in claim 10, we are constrained to reverse the examiner's 35 U.S.C. § 103 rejection of independent claim 10 and claim 11 which depends therefrom.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 3-9, 14-17, 20, 21, 23-28, 32 and 34-37 under the first and second paragraphs of 35 U.S.C. § 112, claims 1, 3, 4, 6, 7, 14-17, 20-28, 32, 34-38 and 40 under 35 U.S.C. § 102(b) and claims 1, 3, 4, 6, 7, 10, 11, 14-17, 20-28, 32, 34-38 and 40 under 35 U.S.C. § 103 is reversed.

REVERSED

IRWIN CHARLES COHEN  
Administrative Patent Judge

NEAL E. ABRAMS  
Administrative Patent Judge

)  
)  
)  
)  
)  
)  
) BOARD OF PATENT  
) APPEALS  
) AND  
) INTERFERENCES  
)

JENNIFER D. BAHR  
Administrative Patent Judge

)  
)  
)  
)

JB/pgg

Appeal No. 1997-3340  
Application No. 08/323,500

Page 14

David L. Henty  
Graham & James  
801 South Figueroa Street, 14th Floor  
Los Angeles, CA 90017-5554