

The opinion in support of the decision being entered today was **not** written for publication and is **not** precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte YOSHINO MATSUOKA and SHOJI ICHIKAWA

Appeal No. 1999-0932
Application No. 08/723,889

HEARD: October 26, 2000

Before CALVERT, FRANKFORT and JENNIFER D. 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, 6-9, 11, 14, 15 and 17. Claims 2-5, 13, 18 and 19, the only other claims remaining in the application, stand allowed.¹

¹ An amendment (Paper No. 10) filed subsequent to the final rejection, re-writing claims 2 and 13 in independent form and amending claim 8, has been entered (Paper No. 11).

BACKGROUND

The appellants' invention relates to a disk brake. An understanding of the invention can be derived from a reading of exemplary claims 1 and 9, which appear in the appendix to the appellants' brief.²

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

Suzuki	5,161,652	Nov. 10, 1992
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The following rejection is before us for review.³

Claims 1, 6-9, 11, 14, 15 and 17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Suzuki.⁴

Reference is made to the brief and reply brief (Paper Nos. 15 and 18) and the final rejection and answer (Paper Nos. 7 and 16) for the respective positions of the appellants and the examiner with regard to the merits of this rejection.

² The copy of claim 8 in the appendix is incorrect, in that it does not reflect the amendment of Paper No. 10.

³ The examiner's objection to the drawings relates to a petitionable matter and not to an appealable matter. See Manual of Patent Examining Procedure (MPEP) §§ 1002 and 1201. Accordingly, we will not review the first issue raised by the appellants on page 4 of the brief.

⁴ At the outset, we note that the page numbering in the answer (Paper No. 16) is irregular, in that the first and second pages are not numbered and the third and fourth pages are labeled pages 2 and 3, respectively. For clarity in this decision, we shall refer to the first through fourth pages of the answer as pages 1 through 4, respectively, without regard to the page number printed thereon. Although the examiner has not explicitly re-stated the rejection in the answer, it is apparent from a reading of pages 2-4 of the answer that the claims stand rejected under 35 U.S.C. § 102(b) as set forth in the final rejection.

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OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the Suzuki reference, and to the respective positions articulated by the appellants and the examiner. For the reasons which follow, we shall sustain the examiner's 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). It is not necessary that the reference teach what the subject application teaches, but only that the claim read on something disclosed in the reference, i.e., that all of the limitations in the claim be found in or fully met by the reference. Kalman v. Kimberly Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

We agree with the examiner that the Suzuki disk brake anticipates the subject matter of the appellants' claims. To aid in the discussion of how the claims read on the Suzuki disk

brake, we refer to the attached drawings (ATTACHMENT A) from the Suzuki patent, which we have marked with reference letters and coloring to highlight features thereof.

With regard to the disk caliper for applying a braking force (required by each of independent claims 1 and 9), we note that the appellants do not contest the examiner's statement that "the examiner has considered the device of Suzuki to also include a disk caliper" (answer, page 2). Further, in this regard, we note Suzuki's references to a pair of brake pads for frictionally engaging the friction plates 5a, 5b on the brake rotor (column 1, lines 17-18; column 2, lines 6-7; column 3, lines 5-6). As Suzuki's disclosure of a caliper does not appear to be in contention, we shall focus our attention in this decision on the details of the rotor recited in the claims.

Suzuki discloses a brake rotor comprising a cup-shaped central hub 3 and an annular part 4 consisting of friction plates 5a, 5b axially spaced from each other by a plurality of radial slots 7 therebetween. The radial slots 7 are communicated with the interior of the central hub by way of holes 8 extending radially through the cylindrical wall of the hub (column 2, lines 49-62). As seen in Figures 1 and 2, a plurality of arcuate slots 10 and small holes 11 also communicate with the slots 7.

With particular regard to claim 1, the Suzuki rotor comprises a hat (the portion of the hub labeled A and highlighted in yellow in the attached Figure 2) and a disk element. The disk element includes the portions of friction plates 5a, 5b located radially outside the grooves 9a, 9b

(highlighted in blue), ribs 6b (highlighted in pink), and the portions of ribs 6a disposed radially outside the grooves 9a, 9b (highlighted in solid green). The hat and disk element have adjacent edges (labeled E1 and E2, respectively, in attached Figure 2) which are spaced from each other in radial and axial directions relative to the rotor and are joined to each other by a junction (labeled J in attached Figure 2 and highlighted in orange). The outer surfaces of the friction plates 5a, 5b form sliding surfaces slidably engageable by a disk caliper (column 3, lines 5-6). A plurality of communication passages (slots 10, holes 11 and holes 8) provide communication between the sliding surfaces and permit passage of cooling air. As seen in attached Figure 2, the slots 10 and holes 8, 11 are all defined in the junction.

The appellants have not separately argued the patentability of claims 6 and 7 apart from independent claim 1 from which they depend. Therefore, claims 6 and 7 shall stand or fall with representative claim 1. See In re Young, 927 F.2d 588, 590, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); In re Wood, 582 F.2d 638, 642, 199 USPQ 137, 140 (CCPA 1978).

With regard to claim 8, even if it is true that Suzuki's holes extend radially, not axially⁵, through the hub (see brief, page 7), slots 10 and holes 11, which define communication

⁵ Broadly speaking, each of the slots 10 and holes 8, 11 extends both radially and axially, in that they each extend in a first direction through the material in which they are formed and in a direction normal to the first direction.

passages between the sliding surfaces, are defined in the junction between the cooling fins (ribs 6a)⁶ and extend axially of the hat.

Claims 9 and 17 read on the disclosure of Suzuki in substantially the same manner as claim 1 discussed *supra*. The portion of Suzuki's rotor labeled A and highlighted in yellow responds to the "raised central portion" recited in claim 9. Claim 9 further requires that each communication passage have "portions which extend radially and axially of said disk element." Each of the communication passages (defined by slots 10 and holes 8, 11) of Suzuki comprises portions which extend radially (hole 8) and axially (slot 10 and hole 11). Further, as noted above, all of the slots 10 and holes 8, 11 are defined in the junction portion of the rotor.

With regard to claim 14, the appellants argue that Suzuki's hub and plates can never be considered as having a junction formed by base portions of cooling fins integrally joined to the raised central portion with the communication passages defined between adjacent ones of the base portions (brief, page 7; reply brief, page 3). We do not agree. From our perspective, the base portions of the fins (ribs 6a) which are highlighted in alternating green and orange in the attached Figures 1 and 2 are integrally joined to the raised central portion (A, highlighted in yellow) and can be considered to form part of the junction joining adjacent edges E1 and E2. Further, we consider the slots 10 and holes 8, 11 to be defined between adjacent ones of the fin base portions.

⁶ Suzuki's disclosure in column 3, lines 6-16, and in Figures 1 and 2 belies the appellants' argument on page 7 of the brief that the slots 10 and holes 11 are not defined between the fins (ribs 6a).

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The appellants have not separately argued the patentability of claims 11⁷ and 15 apart from claims 9 and 14 from which they depend. Therefore, claim 11 shall stand or fall with representative claim 9 and claim 15 shall stand or fall with representative claim 14.

We have carefully considered the appellants' arguments on pages 5-7 of the brief and in the reply brief, but we do not find them persuasive. The fact that Suzuki describes the rotor as comprising a central hub and an annular part including a pair of friction plates "directly attached to the central hub" (column 3, lines 29-33), rather than as a hat (or raised central portion) and a disk element, with the structure joining the hat and disk element being considered a "junction," does not alter our conclusion that Suzuki anticipates the subject matter of claims 1, 6-9, 11, 14, 15 and 17 in the manner discussed *supra*. A reference does not fail as an anticipation merely because it does not contain a description of the subject matter of the appealed claim in *ipsissimis verbis*. *In re May*, 574 F.2d 1082, 1090, 197 USPQ 601, 607 (CCPA 1978). Just as the appellants are not precluded from characterizing the unitary rotor structure disclosed in their specification as comprising a hat (or raised central portion), junction and disk element, as recited in the claims, the unitary rotor structure disclosed by Suzuki can also reasonably be considered to comprise a hat (or raised central portion), junction and disk element.

⁷ In claim 11, "said communication holes" (emphasis ours) lack clear antecedent basis. For purposes of our review of this appeal, we interpret the "communication holes" as referring back to the "communication passages" recited in claim 9. We leave this informality to be addressed by the examiner in the event of further prosecution.

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CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 6-9, 11, 14, 15 and 17 under 35 U.S.C. § 102(b) is affirmed.

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

AFFIRMED

IAN A. CALVERT)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
CHARLES E. FRANKFORT)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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JENNIFER D. BAHR)	
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