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**Datasheet for the decision
of 31 January 2013**

Case Number: T 0554/11 - 3.2.08

Application Number: 01924728.7

Publication Number: 1274950

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Language of the proceedings: EN

Title of invention:
Ball bearing mechanical disc brake

Patent Proprietor:
SRAM Corporation

Opponent:
SHIMANO INC.

Headword:
-

Relevant legal provisions:
EPC Art. 84, 100(c), 101(3)(2)

Keyword:
"Introduction of new main request into the proceedings (yes)"
"Added subject-matter (no)"
"Objection of lack of clarity (not arising out of amendments)"

Decisions cited:
-

Catchword:
-



Case Number: T 0554/11 - 3.2.08

D E C I S I O N
of the Technical Board of Appeal 3.2.08
of 31 January 2013

Appellant: SRAM Corporation
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 5 January 2011
revoking European patent No. 1274950 pursuant
to Article 101(3) (b) EPC.

Composition of the Board:

Chairman: T. Kriner
Members: M. Alvazzi Delfrate
D. T. Keeling

Summary of Facts and Submissions

- I. By decision posted on 5 January 2011 the opposition division revoked European patent No. 1 274 950 on the grounds of Articles 100(c) and 123(2) EPC. The grounds of opposition under Article 100(a) EPC, which were also raised in the notice of opposition, were not decided upon.
- II. The appellant (patent proprietor) lodged an appeal against this decision on 4 March 2011, paying the appeal fee on the same day. The statement setting out the grounds for appeal was filed on 13 May 2011.
- III. Oral proceedings before the Board of appeal took place on 31 January 2013.

The appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of the main request filed at the oral proceedings.

The respondent (opponent) requested that the new main request filed at the oral proceedings not be admitted into the proceedings and that the appeal be dismissed.

- IV. Claim 1 reads as follows (amendments in respect of claim 1 as granted underlined):

"A ball bearing mechanical bicycle disc brake having a caliper housing (18) configured for attachment to a bicycle frame (12), a pair of opposing brake pad assemblies (72, 74) received within the housing (18) configured to reside on opposite sides of a disc (14)

operatively associated therewith, a drive mechanism within the housing (18) operatively associated with at least one of the brake pad assemblies (72, 74), the drive mechanism being configured to advance and retract the at least one brake pad assembly (72, 74) relative to the disc (14) along an advancement axis to effect braking, an adjustment knob (264; 106) attached to the housing (18) for rotation about a rotation axis, the adjustment knob (264;106) being fixed against axial movement relative to the housing (18); and a rotary to linear linkage between one of the brake pad assemblies (72, 74) and the adjustment knob (264;106) providing axial advancement of the linked brake pad assembly (72, 74) relative to the housing (18) and the disc (14) upon axial rotation of the adjustment knob (264;106) in a select direction, the mechanical disc brake being characterized in that the caliper housing (18) is configured to be rigidly fixed to the bicycle frame (12) to prevent lateral movement of the caliper housing (18) relative to the disc (14), such that rotation of the adjustment knob (264;106) allows a select distance to be fixed between the linked brake pad assembly (72, 74) and the disc (14)."

V. The arguments of the appellant can be summarised as follows:

Introduction of the new main request into the proceedings.

Claim 1 of the new main request was based on claim 1 as granted with two minor amendments. The dependent claims were based on the dependent claims as granted, wherein a correction had been done in the wording of claim 7.

Independent claim 9 and claim 10 dependent on it had been deleted. Therefore, the main request should be admitted into the proceedings.

Article 100(c) EPC.

Claim 1 was essentially based on claim 1 as originally filed. Furthermore reference could be made to page 1, lines 4 to 5; page 14, lines 4 to 20; page 26, line 20 to page 27, line 4 and to Figures 1, 2, 5 and 6.

The apparatus of originally filed claim 1 was to be used in a ball bearing mechanical bicycle disc brake, as shown for instance in the drawings. Although the disc brake caliper and the pad wear compensation apparatus mentioned in claim 1 as originally filed were not explicitly cited in present claim 1, no features had been omitted from originally filed claim 1, since the sole element of the caliper was its housing, now cited in claim 1, and the claimed brake comprised all the elements forming the pad wear compensating apparatus.

It was also clear that in the apparatus of originally filed claim 1 the pad assembly could be advanced relative to the disc to compensate wear, since that compensation was obtained by a movement along the same advancement axis along which braking was effected.

Furthermore, the application disclosed that the caliper housing was fixed to the frame. This was done in a rigid manner. Also in the embodiment described on page 14, lines 11 to 20, the housing was rigidly fixed to the frame by means of mounting bolts.

The select distance mentioned in claim 1 was clearly not a fixed distance which remained constant during the braking, since otherwise braking would be impossible. Rather it was merely the new rest distance of the pad assembly, once the compensation of the wear, already disclosed in claim 1 as originally filed, had been performed. That rest distance was also called "operative gap" in the description on page 27, line 4.

Accordingly, claim 1 did not contain subject-matter which extended beyond the content of the application as originally filed.

The same applied to claim 2 since the indicator was already mentioned in claim 2 as originally filed and this function could be carried out by the element with reference number 86.

Article 84 EPC

The clarity of the wording "select distance" should not be considered, since that wording was already present in claim 1 as granted and clarity was not a ground of opposition.

- VI. The arguments of the respondent can be summarised as follows:

Introduction of the new main request into the proceedings.

The new main request was filed at a very late stage of the proceedings. Moreover, it comprised a complete set

of claims, wherein also the dependent claims had been amended, since in claim 7 the knob had been specified to be an adjustment knob. By contrast, none of the requests filed together with the statement of grounds comprised a complete set of claims. Therefore, the main request was not to be admitted into the proceedings.

Article 100(c) EPC.

Present claim 1 was directed to a disc brake. Therefore, originally filed claim 1, which related to a pad wear compensation apparatus for a disc brake caliper, could not serve as a basis for it. As to the drawings, they showed particular embodiments from which the combination of features of claim 1 could not be isolated. Hence, the application as originally filed did not disclose a disc brake with all the features stipulated by claim 1.

Even considering originally filed claim 1 as a possible basis, some features had been omitted from it. Present claim 1 did not mention a pad wear compensation apparatus, an essential feature of originally filed claim 1. Moreover, the claimed brake did not comprise any more a disc brake caliper.

Additionally, according to present claim 1 the brake pad assembly could be axially advanced relative to the disc. However, the application as originally filed was completely silent on this feature since it did not disclose the relationship between the pad assembly and the disc.

The application as originally filed did not disclose either that the caliper housing was attached to the bicycle frame, not to mention rigidly fixed to it. If anything, on page 14 it was disclosed that the caliper is mounted on a fork, which was not part of the bicycle frame. Moreover, in the embodiment described on page 14, lines 11 to 20 the caliper was attached in an adjustable way, i.e. it was not rigidly fixed. Furthermore, a number of features of that embodiment were not included in claim 1.

Nor could the feature according to which the rotation of the adjustment knob allows a select distance to be fixed between the linked brake pad assembly and the disc be found in the originally filed application. As a matter of fact, the wording "select distance" never appeared in the application as filed. That distance could not be the same as the operative gap mentioned on page 27, line 4, which did not relate to the wear compensation but to the initial setup of the brake. Moreover, according to claim 1 the select distance between the linked brake pad assembly and the disc was fixed, thus preventing a contact between those elements and rendering braking impossible. Such a non-functioning disc brake was not disclosed in the application as originally filed.

Accordingly, claim 1 had been amended in a way which extended beyond the content of the application as originally filed.

Claim 2 also resulted in an extension of the subject-matter, since in that claim reference number 86 was used for the indicator, while in the application as

originally filed it was used for the inboard pressure foot.

Article 84 EPC

Since the claims had been amended their compliance with the requirements of the EPC, inter alia Article 84 EPC, should be examined. It was not clear in claim 1 which distance was to be understood as a select distance. Moreover, the fact that the select distance was fixed, i.e. maintained constant, was in contradiction with the provision of a drive mechanism configured to advance and retract the brake pad assembly relative to the disc. Therefore, claim 1 lacked clarity.

Reasons for the Decision

1. The appeal is admissible.
2. Introduction of the new main request into the proceedings.

The new main request has been filed at a very late stage of the proceedings. However, its claim 1 differs from claim 1 as granted solely in that it specifies that the mechanical bicycle disc brake is a "ball bearing" brake and in that the brake pad assemblies are "opposing". Both the amendments are of a very simple nature. Moreover, the amendment relating to the opposing brake pad assemblies was already present in the claims filed one month before the oral proceedings. The other amendment, concerning the feature that the brake is a ball bearing one, was a reaction to an

objection raised by the respondent for the first time during the oral proceedings.

It is true that the main request comprises also dependent claims, whereas this was not the case for the requests submitted with the statement of grounds. However, those dependent claims correspond, with the exception of a correction of the wording of claim 7, wherein the knob is specified to be an adjustment knob to bring it into line with the remaining claims, to dependent claims 2 to 8 as granted. No objection originates from the deletion of claims 9 and 10.

Accordingly, the amendments were not surprising for the respondent, and it could be expected to deal with them without the need to adjourn the proceedings.

Under these circumstances, the main request was admitted into the proceedings.

3. Article 100(c) EPC.

3.1 Present claim 1 is directed to a ball bearing mechanical disc brake whereas originally filed claim 1 relates to a pad wear compensation apparatus for a disc brake caliper. However, the application discloses on page 1, lines 4 and 5 that the invention is directed toward bicycle brakes, and more particularly toward a ball bearing mechanical disc brake. Hence, it disclosed a ball bearing mechanical bicycle disc brake comprising the apparatus of originally filed claim 1.

3.2 It is true that the wording "pad wear compensation apparatus" is not comprised any more in present claim 1.

Nevertheless the structural elements of said apparatus, namely the adjustment knob and the rotary to linear linkage, are comprised in the present claim. Moreover, according to present claim 1 the rotary to linear linkage between one of the brake pad assemblies and the adjustment knob provides axial advancement of the linked brake pad assembly not only relative to the housing, but also relative to the disc. In such a way it is possible to compensate the pad wear by advancing the brake pad assembly along the advancement axis. Hence, albeit this wording is not used in the claim, the brake according to present claim 1 comprises "a pad wear compensation apparatus".

3.3 According to the respondent the brake of present claim 1 does not comprise a caliper, whereas this was the case for the apparatus of the originally filed claim 1. However this view cannot be shared because the brake of present claim 1 comprises a caliper housing and, as a consequence, a caliper.

3.4 According to the application as originally filed the caliper is mounted to a bicycle frame (see for instance page 14, lines 4 to 6 and lines 14 to 17). Hence, the caliper housing is configured for attachment to a bicycle frame.

It is true that the application as originally filed does not literally stipulate that the caliper housing is "rigidly fixed" to the bicycle frame. However, this feature means merely that that housing is attached in a stiff manner. It neither requires a permanent attachment nor excludes the possibility of an adjustment of that attachment, as is the case in the

specific embodiment described on page 14, lines 11 to 20. A rigid fixing of the caliper housing to the frame is a feature not only of that specific embodiment but of any functioning ball bearing mechanical bicycle disc brake. Otherwise, it would be impossible to transmit the force between the brake pad assemblies received within the housing and the disc, which is essential for braking. Indeed nothing else is shown in the embodiments disclosed in the application as filed. Therefore, the feature according to which the caliper housing is configured to be rigidly fixed to the bicycle frame is disclosed in the application as originally filed.

- 3.5 Claim 1 as originally filed stipulates that by rotating the knob a brake pad assembly is advanced along the advancement axis relative to the housing. It is true that the application as originally filed does not literally disclose that that advancement is also relative to the disc. However, it discloses that braking is effected by moving the brake pad assembly relative to the disc along the very same advancement axis along which the rotation of the knob advances it (see page 32, lines 4 to 6 and lines 7 to 8 of the application as published). Accordingly, it is clear that an advancement of the pad assembly along the advancement axis on rotation of the knob must be relative not only to the housing but also to the disc. Hence, the application as filed discloses that a rotary to linear linkage between one of the brake pad assemblies and the adjustment knob provides axial advancement of the linked brake pad assembly relative to the housing and the disc upon axial rotation of the adjustment knob in a select direction.

3.6 It is also true that the term "select distance" does not appear in the application as originally filed. However, this wording indicates merely a given unspecified distance, for instance the rest distance, since claim 1 does not further define that "select distance".

Moreover, the feature that said select distance between the linked brake pad assembly and the disc is "to be fixed" cannot be construed, contrary to the respondent's view, to mean that that distance remains constant during braking. This interpretation would not only be at odds with the feature according to which the drive mechanism is configured to advance and retract the pad assembly relative to the disc but is technically meaningless, since it would prevent a contact between the disc and the pad, which is essential for the braking action.

Therefore, the feature that rotation of the adjustment knob allows a select distance to be fixed between the linked brake pad assembly and the disc means merely that the linked brake pad assembly can be moved to a given, unspecified distance from the disc by rotation of the adjustment knob. This feature, as explained above, was already disclosed in originally filed claim 1.

3.7 With respect to the findings above, claim 1 does not contain subject-matter which extends beyond the content of the application as originally filed.

3.8 In respect of claim 2, wherein an indicator is associated with reference number 86, it is pointed out that the reference signs are not to be construed as limiting the claim. Moreover, the application as originally filed discloses on page 15, lines 23 to 24 that the inboard pressure foot 86 functions as an indicator. Hence, claim 2 does not contain subject-matter which extends beyond the content of the application as originally filed either.

3.9 Therefore, the patent in suit cannot be revoked on the grounds of Article 100(c) EPC.

4. Article 84 EPC

When amendments are made to a patent during an opposition, Article 101(3)(a) EPC requires examining whether the patent and the invention to which it relates meet the requirements of the EPC, including Article 84 EPC. However, this does not allow objections to be based upon Article 84 EPC if they did not arise out of the amendments made, as it would be somewhat absurd if making a minor amendment were to enable objections outside Article 100 EPC to be raised which had no connection with the amendment itself (see Case Law of the Boards of Appeal of the European Patent Office, 6th edition 2010, VII.D.4.2).

In the present case the objection under Article 84 EPC raised by the respondent concerns the term "select distance". This term was already present in claim 1 as granted and its significance has not been changed by the amendments carried out after grant of the patent. Hence, this objection does not arise out of those

amendments and, as a consequence, the Board has no power to consider it.

5. The patent in suit has been opposed also on the basis of Article 100(a). However, the appealed decision does not deal with this issue. Therefore, the Board considers it appropriate to remit the case to the first instance.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the first instance for further prosecution on the basis of the main request filed at the oral proceedings.

The Registrar:

The Chairman:

V. Commare

T. Kriner