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**Datasheet for the decision  
of 2 October 2012**

**Case Number:** T 1009/09 - 3.2.06

**Application Number:** 03029154.6

**Publication Number:** 1431172

**IPC:** B62M9/10

**Language of the proceedings:** EN

**Title of invention:**

Multiple sprocket assembly

**Patentee:**

SRAM Deutschland GmbH

**Opponent:**

SHIMANO INC.

**Relevant legal provisions:**

EPC Art. 123(2), 113(2)

RPBA Art. 13(1)

**Keyword:**

Each request prima facie not allowable - not admitted into the proceedings



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Case Number: T1009/09 - 3.2.06

**D E C I S I O N**  
**of the Technical Board of Appeal 3.2.06**  
**of 2 October 2012**

**Appellant:** SRAM Deutschland GmbH  
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**Decision under appeal:** **Decision of the Opposition Division of the  
European Patent Office posted 8 April 2009  
revoking European patent No. 1431172 pursuant to  
Article 101(3) (b) EPC.**

**Composition of the Board:**

**Chairman:** M. Harrison  
**Members:** G. Kadner  
R. Menapace

## **Summary of Facts and Submissions**

I. The mention of grant of European patent No. 1 431 172, on the basis of European patent application No. 03029154.6 filed on 18 December 2003 and claiming a German priority from 21 December 2002, was published on 7 June 2006.

II. Notice of opposition, in which revocation of the patent on the grounds of Articles 100(a) and 100(b) EPC was requested, was filed against the granted patent.

By way of its decision posted on 8 April 2009, the opposition division revoked the European patent. The opposition division held that claim 1 as amended according to the main request did not meet the requirement of Article 123(2) EPC. The subject-matter of claim 1 of the first auxiliary request did not meet the requirement of novelty over

E1: EP-A-1 074 462.

III. Notice of appeal was filed against this decision by the appellant (patentee) on 29 April 2009, and the appeal fee was paid on the same day. With its grounds of appeal dated 7 August 2009, the appellant filed a new main request and three auxiliary requests.

IV. In a communication accompanying the summons to oral proceedings the Board expressed its preliminary view that neither the new main request nor one of the auxiliary requests seemed to be admissible with respect to Article 123(2) EPC, and that novelty and inventive step would only need to be discussed if an admissible request were on file.

V. On 31 July 2012 the appellant filed a replacement main request and replacement first to third auxiliary requests.

VI. Oral proceedings were held before the Board on 2 October 2012 during which the appellant replaced the former first to third auxiliary requests by new first and second auxiliary requests.

The appellant requested that the decision under appeal be set aside and that the patent be maintained with the claims according to the Main Request filed on 31 July 2012 or according to the Auxiliary Requests I or II filed during the oral proceedings before the Board.

The respondent (opponent) requested that the appeal be dismissed.

i) Claim 1 according to the main request reads as follows (amendments with respect to claim 1 as granted marked by strike-through for deletions and underlining for additions):

"A sprocket assembly including at least three sprockets (11, 3, 2) having different tooth counts, the sprocket assembly comprising:

a sprocket carrier (4) including a hub ring (5) having an internal profile (7) for transmitting torque, a plurality of carrier arms (6) radially extending from the hub ring (5), the carrier arms (6) having a first receiving surface (10) and a second receiving surface (10a) opposite the first receiving surface (10); first and second sprockets (11, 3) mounted to the carrier arms (6); wherein the first sprocket (11) includes a first plurality of mounting holes (12), the second sprocket

includes a second plurality of mounting holes (12a), the carrier arms (6) including a third plurality of mounting holes (12b) that align with the first and second plurality of mounting holes (10, 10a) of the first and second sprockets (11, 3), the first and second sprockets (11, 3) mounted to the carrier arms (6) by a common fastening element (13); characterized in that wherein the third sprocket (2) has a lower tooth count than the first sprocket (11) and a higher tooth count than (1\*aux) the second sprocket (3), wherein the first and second sprockets (11, 3) are mounted to the opposite first and second receiving surfaces (10, 10a), respectively, ~~and that~~ wherein the third sprocket (2) is arranged between the first and second sprockets (11, 3), characterized in that one of the first and second sprockets (11, 3) including a fourth plurality of mounting holes (12c) for mounting of the third sprocket (2) to one of the first and second sprockets (11, 3), such that (2\*aux) said third sprocket (2) is supported by one of said first and second sprockets (11, 3) (3\*aux)."

ii) In claim 1 of the first auxiliary request at marking (1\*aux) "that" has been replaced by "than", at location (2\*aux), ", such that" was replaced by "with fastening elements (15) and spacers (16) disposed therebetween, wherein", and at marking (3\*aux) the following was added:

", the first sprocket (11) includes a first plurality of radially inwardly extending mounting tabs (14) including the first plurality of mounting holes (12), the second sprocket (3) including a second plurality of radially inwardly extending mounting tabs (14)

including the second plurality of mounting holes (12a)."

iii) Claim 1 of the second auxiliary request has the same amendments as that of the first auxiliary request, the last reference number "(12a)" (obviously erroneous) being changed to "(12)" and also by the following being added at the end of the claim:

", and that said third sprocket includes a third plurality of radially inwardly extending mounting tabs (14) including a fifth plurality of mounting holes (12c) for mounting to the carrier arms (16), wherein the third sprocket (3) is supported in the chain tension direction by the mounting tabs (14) attached to the carrier arms."

VII. The arguments of the appellant can be summarized as follows:

The amendments to claim 1 according to the main request had been made to overcome the novelty objection of the opposition division and distinguished the subject-matter claimed clearly from the sprocket assembly known from E1, since it was now defined not only that the third sprocket was "mounted" to the first or second sprockets, but that it was also supported by them. The inclusion of the terminology "such that" also clarified that this was the case. The amendment was derivable from e.g. the Figures but also paragraph [0014]. There was no need to include further features, since only the manner of mounting was being clarified.

Most of the added features of respective claim 1 according to the auxiliary requests were taken from the dependent claims, with some features from the summary

of the invention section of the description in paragraphs [0012] and [0014]. These parts of the description related clearly to the embodiments of the respective dependent claims. Therefore the skilled person would clearly recognise that the now claimed combination of features was originally disclosed in the application as filed (which corresponded to the text of the granted patent). In particular, the expression used to define that the third sprocket was supported by either one of the first and second sprockets, or by their mounting tabs, was clearly derivable from the description. It would also be recognised that no further features were necessary.

VIII. The respondent argued that the respective claim 1 according to all requests contravened Article 123(2) EPC because the features taken from the description had been isolated out of the context in which they were disclosed, thereby resulting in an inadmissible intermediate generalisation of the content of the application as originally filed. This related in particular to the features taken from paragraph [0014] which was notably stated as being "another embodiment" and thus not the "one embodiment" described in paragraph [0012]. Even taking the features from paragraph [0014] alone, not all the structurally and functionally related features disclosed in combination in that embodiment had been added to claim 1.

The introduced feature that the third sprocket was "supported" by one of the first or second sprocket was also not clear since, when already mounted to one of the first or second sprockets, no additional support of some type was present.

Furthermore, if the amendment relating to this "support" would be allowed, an additional search would be required. Therefore, since all the requests were filed after the grounds of appeal had been filed and were at least prima facie not allowable, none of the requests should be admitted into the proceedings.

### **Reasons for the Decision**

1. The appeal is admissible.
2. Amendments (Article 123(2) EPC)
  - 2.1 Main request (RPBA Article 13(1))
    - 2.1.1 According to the appellant, the characterizing features "one of the first and second sprockets (11, 3) including a fourth plurality of mounting holes (12c) for mounting of the third sprocket (2) to one of the first and second sprockets (11, 3), such that said third sprocket (2) is supported by one of the said first and second sprockets (11, 3)" was based on granted claim 1 with the additional features taken from the description (paragraph [0014]), the relevant part of which has the wording:

"[0014] In another embodiment of the present invention, the hub ring of the sprocket carrier is narrow in a radial direction and includes inwardly extending driver elements of different widths for transmitting torque. For weight reduction, the carrier arms may include axially extending cutouts in a root region of the sprocket carrier or can be tapered in an axial direction. The thickness of the arms in an end region of the arms is defined by the spacing between the



first, second and third sprockets and the thickness of the third sprocket. The third sprocket, like the other sprockets, possesses radially inwardly extending mounting tabs that include mounting holes. If the third sprocket is supported by one of the first and second sprockets, the third sprocket or its mounting tabs are oriented such that the third sprocket is located in front of the corresponding arm in the drive direction, thereby being supported under load. Further, if the third sprocket is supported by one of the first and second sprockets, the mounting tabs of the first or second sprockets include an additional fourth plurality of mounting holes. Another sprocket may be mounted externally on one or both of the laterally arranged first and second sprockets by a fastening element such as a rivet or screw and a spacer disposed therebetween ..."

2.1.2 The term "such that" as used in the claim, relates to the fourth plurality of mounting holes used to mount the third sprocket to the first or second sprockets whereby the third sprocket is - in an undefined way - supported by one of the first and second sprockets, whereas according to the description, when the third sprocket is supported by one of said first or second sprockets (as is the case in question), support of the third sprocket is caused by the specific orientation of the third sprocket in relation to the corresponding arm, and its support in the drive direction under load.

2.1.3 The amendment is thus taken from the description of a specific embodiment including a particular relationship of the sprockets to be able to "support" one another. However, the manner in which this has been defined in claim 1 omits features (i.e. the features relating to the specific way in which the third sprocket is

supported) which however are an essential element in the disclosed context, involving a structural and functionally interrelated dependence. The isolation of only one of these features out of the context in which it is originally disclosed and its subsequent combination in a new and different way leads to an inadmissible intermediate generalisation of the content of the application as originally filed, with the consequence that the amendment contravenes Article 123(2) EPC. The main request is therefore at least *prima facie* not allowable and the Board thus exercised its discretion under Article 13(1) of the Rules of Procedure of the Boards of Appeal, not to admit it into the proceedings.

Although the appellant argued that the "support" used in claim 1 clarified the nature by which the mounting was effected, the terminology "support" is not used in this manner in the description, but instead is related to the orientation of the third sprocket or its mounting tabs. The description provides no indication that merely mounting by using fourth holes (as claimed) is "such that" it is "supported". Since the amendment is *prima facie* not allowable with regard to Article 123(2) EPC, it lacks relevance that the appellant argued that its intention was to overcome an objection of lack of novelty over E1 concerning the way in which "mounting" occurred.

- 2.2 First and second auxiliary requests (RPBA Article 13(1))
  - 2.2.1 The wording of the inserted feature "that one of the first and second sprockets (11, 3) including a fourth plurality of mounting holes (12c) for mounting of the third sprocket (2) to one of the first and second

sprockets (11, 3)) with fastening elements (15) and spacers (16) disposed therebetween" is disclosed in the description (paragraph [0012]) and in granted claim 6 corresponding to claim 7 of the application as filed.

The relevant part of the description and granted claim 6 read:

"[0012] One embodiment of the present invention provides ...

A first sprocket is mounted to the first receiving surface and a second sprocket is mounted to the second receiving surface. A third sprocket is arranged between the first and second sprockets. The third sprocket is mounted to the first or second sprocket with fastening elements and spacers disposed therebetween."

"6. The sprocket assembly of claim 2, wherein additional sprockets are mounted to the mounting tabs (14) of the first and second sprockets (11, 3) with fastening elements (13) and spacers (16) disposed therebetween."

2.2.2 Mounting of the third sprocket to the second sprocket with fastening elements and spacers relates to the "One embodiment" described in paragraph [0012] whereas the "support" of the third sprocket is part of "another embodiment" dealt with in paragraph [0014] (see 2.1.2 above). No coherence can be found between the specific kind of "mounting" and the specific manner of "support" of the third sprocket in relation to the first or second sprocket. Each of these features is only disclosed in its specific context relating to different embodiments, and no link is present which would suggest to the skilled person (as argued by the appellant) that a combination of the different embodiments was

intended. Additionally, the description in paragraph [0014] *inter alia* specifically discloses that the "mounting tabs of the first or second sprockets include an additional fourth plurality of mounting holes", which is a still further feature which is not defined in claim 1 relating to the first and second sprockets (these merely being defined as including a fourth plurality of mounting holes and a first and a second plurality of mounting holes, without defining - as is however the case in the disclosure given in the description - where the fourth plurality of mounting holes are located).

2.2.3 The features of claim 6 are related to "additional sprockets" which, in any case, are not identical with the third sprocket, and can therefore not provide a basis for the now claimed combination of features.

2.2.4 Consequently, the amendments made to the respective claim 1 according to the first and second auxiliary requests are, at least for the reasons given above, *prima facie* not allowable having regard to Article 123(2) EPC. Since these requests were filed during the oral proceedings (and were therefore filed at a very late stage of proceedings) the Board thus exercised its discretion under Article 13(1) RPBA not to admit them into the proceedings.

3. There being no admissible requests on file for maintenance of the patent, the appeal must be dismissed (Article 113(2) EPC).

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairman:



M. H. A. Patin

M. Harrison

Decision electronically authenticated