Datasheet for the decision of 7 September 2012

Case Number: T 1076/12 - 3.2.06
Application Number: 09009916.9
Publication Number: 2110302
IPC: B62M 3/00, B62K 19/16, B29C 70/58

Language of the proceedings: EN

Title of invention: Bicycle component

Applicant: CAMPAGNOLO s.r.l.

Headword: -

Relevant legal provisions:
EPC Art. 123(2)
RPBA Art. 13(1)

Relevant legal provisions (EPC 1973):
EPC Art. 76(1) sentence 2, 14(2), 84, 56

Keyword:
"Divisional application - added subject-matter (no) - after amendment"
"Inventive step - main request (no)"

Decisions cited: -

Catchword: -
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DECISION
of the Technical Board of Appeal 3.2.06
of 7 September 2012

Appellant: CAMPAGNOLO S.r.l.
(Applicant)
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 16 December 2011 refusing European patent application No. 09009916.9 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman: M. Harrison
Members: M. Hannam
W. Sekretaruk
Summary of Facts and Submissions

I. The appellant (applicant) filed an appeal against the decision of the examining division refusing European patent application No. 09009916.9, this being a divisional application of European patent application No. 03425530.7.

II. In its decision the examining division found that the subject matter of claim 1 of the applicant's sole request lacked an inventive step at least in view of a combination of

D1: US-A-5 435 869 and

III. In its grounds of appeal, the appellant requested that the decision under appeal be set aside and that a patent be granted based on the claims of the request refused before the examining division, or alternatively based on an auxiliary request.

IV. The Board issued a summons to oral proceedings including a communication containing its provisional opinion regarding the requests. In regard to both the main and auxiliary request, the Board indicated inter alia that the requirements of Article 76(1) EPC 1973 appeared not to be met by the expression "small sheets" in the divisional application, the parent application as filed (in its English translation) having disclosed "small pieces". The Board furthermore considered that it was not clear in claim 1 of the main request how "the end" and "the zone" were to be understood relative to the bicycle component. Additionally, in the
auxiliary request, "the ends" of the first and second end parts along with "the zones" at the respective end parts lacked clarity, as did the positioning of the "one or more arms" with respect to the elongated body. The Board also gave provisional comments in regard to the subject matter of claim 1 of the main request, stating that this appeared to lack an inventive step when starting from D1 and combining this with the teaching of D5.

V. In its submission of 6 August 2012, the appellant filed replacement main and auxiliary requests. Amendments to claim 1 of each request included inter alia the replacement of the expression "small sheets" by "small leaves".

VI. The Board issued a further communication dated 23 August 2012, in which the appellant was informed inter alia that the amendment of "small sheets" to "small leaves" appeared to contravene Article 123(2) EPC.

VII. Oral proceedings were held before the Board on 7 September 2012, during which the appellant amended the expression "small leaves" in claim 1 of the main request back to "small sheets". A replacement auxiliary request was also filed. Printouts of internet-based dictionaries were also filed with regard to the correct English translation of the Italian word "foglioline".

VIII. Claim 1 of the main request reads as follows:

"Bicycle component (1; 20) comprising an elongated body (2) consisting of structural fibres incorporated in a
matrix of polymeric material (18; 38) and having, in a first end part thereof (3, 4; 403a, 403b, 403c, 403d), a first seat (5, 6; 45, 46; 405a, 405b, 405c, 405d, 406) for the mechanical coupling with an element of a bicycle, wherein at a first zone (9, 10; 29, 30) between said first seat (5, 6; 45, 46; 405a, 405b, 405c, 405d, 406) and an end (11, 12) of said first end part (3, 4; 403a, 403b, 403c, 403d) of said body (2) there is at least one continuous layer of structural fibres (13, 14; 33, 34; 53, 54; 413a, 413b, 413c, 413d) at least partially surrounding said first seat (5, 6; 45, 46; 405a, 405b, 405c, 405d, 406) to ensure mechanical continuity in said first zone (9, 10; 29, 30), characterised in that said matrix of polymeric material comprises small sheets of structural fibres arranged randomly inside the matrix."

Claim 1 of the auxiliary request reads as follows:

"Bicycle component (1; 20) comprising an elongated body (2) consisting of structural fibres incorporated in a matrix of polymeric material (18; 38) and having, in a first end part thereof (3, 4; 403a, 403b, 403c, 403d), a first seat (5, 6; 45, 46; 405a, 405b, 405c, 405d, 406) for the mechanical coupling with an element of a bicycle and, in a second end part thereof (4, 3), a second seat (6, 5; 46, 45; 406) for the mechanical coupling with a second component of said bicycle, wherein at a first zone (9, 10; 29, 30) between said first seat (5, 6; 45, 46; 405a, 405b, 405c, 405d, 406) and an end (11, 12) of said first end part (3, 4; 403a, 403b, 403c, 403d) of said body (2) and at a second zone (10, 9; 30, 29) opposite to said first seat (5, 6; 45, 46; 405a, 405b, 405c, 405d, 406) with respect to said
second seat (6, 5; 46, 45; 406) there is at least one continuous layer of structural fibres (13, 14; 33, 34; 53, 54; 413a, 413b, 413c, 413d) at least partially surrounding said first and second seats (5, 6; 45, 46; 405a, 405b, 405c, 405d, 406) to ensure mechanical continuity in said first and second zones (9, 10; 29, 30), the bicycle component (1; 20) further comprises, at one of said first and second end parts of said elongated body, one or more spokes wherein said one or more spokes have, on respective free end parts thereof (403a, 403b, 403c, 403d), third seats (405a, 405b, 405c, 405d) for the mechanical coupling with a third component of said bicycle, characterised in that said matrix of polymeric material comprises small sheets of structural fibres arranged randomly inside the matrix and in that at a third zone between at least one of said third seats (405a, 405b, 405c, 405d) and an end of the free end part (403a, 403b, 403c, 403d) of the respective spoke there is at least one continuous layer of structural fibres (413a, 413b, 413c, 413d) which at least partially surrounds said third seat (405a, 405b, 405c, 405d) to ensure mechanical continuity in said third zone.

IX. The arguments of the appellant, as far as they are relevant for the current decision, may be summarised as follows:

(a) Article 76(1) EPC 1973

In the parent application, originally filed in Italian, a correction of translation pursuant to Article 14(2) EPC 1973 was requested whereby the translation of the Italian word "foglioline" was to be corrected from the
originally translated expression "small pieces" to "small leaves". The examining division dealing with the parent application subsequently suggested the expression "small sheets" as being more appropriate than "small leaves" in the technical field of the application. The suggested expression "small sheets" was thus adopted by the applicant instead of "small leaves" when filing the present divisional application, thus providing a correctly translated and technically appropriate term. That this was the correct translation, was proven by the printouts of the online dictionaries filed during oral proceedings.

(b) Main request - Inventive step

D1 was the closest prior art from which the subject matter of claim 1 differed in that the matrix of polymeric material comprised small sheets of structural fibres arranged randomly inside the matrix. The objective problem solved by the subject matter of claim 1 was to increase the structural strength of the component whilst reducing its cost of manufacture yet maintaining good fluidity during moulding. D5, whilst disclosing the use of small sheets of structural fibres, would not be considered by the skilled person as solving the problem since the interaction of the small sheets with the filament roving of D1 would result in a significantly poorer moulding fluidity. The advantage of potentially greater component structural strength offered by the small sheets of structural fibres would be offset by the disadvantage of reduced fluidity, thus dissuading the skilled person from this document combination.
(c) Auxiliary request – Article 84 EPC 1973 and Article 123(2) EPC

In order to overcome the lack of clarity associated with defining the location of the second zone in relation to a second end part of the body, the auxiliary request relied on defining the location in relation to the first and second seats, each of which had a clearly defined position on the body. The position of the second zone could also be inferred onto the right pedal crank embodiment from its position on the elongated body in the embodiment of Figs. 1 and 2. Regarding disclosure of the features of claim 1 in the originally filed documents, the use of the term "spokes" rather than "arms" was supported throughout the description of the Fig. 15 and 16 embodiment, for example on page 11, line 3. Furthermore, the continuous layer of structural fibres at the third zone was no longer claimed as the same layer of structural fibres at the first and second zones, thus restricting the claim to the disclosure of the Fig. 15 and 16 embodiment.

Reasons for the Decision

1. Main request

1.1 Compliance with Article 123(2) EPC

The re-introduction of the expression "small sheets" into claim 1 of the main request is identical to the expression used in the divisional application as originally filed. The Board therefore has no objections.
under Article 123(2) EPC for claim 1 of the main request.

1.2 Compliance with Article 76(1) EPC 1973

The expression "small sheets" in claim 1 has also to meet the requirement of Article 76(1) EPC 1973 concerning the subject matter not extending beyond the content of the earlier application as filed.

According to Article 14(2) EPC 1973, an applicant may file an application in a non-official language of the European Patent Office (EPO) under certain conditions, providing that a translation into an official language of the EPO is provided within the time limit specified in the Implementing Regulations. This translation may also be brought into conformity with the original text of the application throughout the proceedings before the EPO. The Board thus concludes that it is the text of the application as originally filed, even if the text is not in an official language of the EPO, that must be used, together with any other non-text portions of the application as filed, to determine the "content of the earlier application as filed" referred to in Article 76(1) EPC 1973. Thus, having regard to the parent application of the present application, even if subsequent errors in translation of the parent application are identified (as in the present case), irrespective of whether the translation of the parent application has indeed been brought into conformity with the original (Italian) text thereof or indeed whether any patent granted thereon might contain an incorrect translation as a result of any such
translation error, the true content of the originally filed application remains constant.

In the present case, therefore, the information content of the originally filed Italian expression "foglioline" in the context of the application has to be established. The appellant submitted extracts from three different online dictionaries which consistently translated the Italian word "foglio" into "sheet" as one of its meanings. The Board regarded this evidence as convincing for an interpretation of the true content of the earlier application, particularly when seen in a correct technical context. The Board furthermore accepts that the suffix "-line" indicated a diminutive plural in Italian, such that "foglioline" is correctly translated in the present context as "small sheets".

Regarding claim 1 of the present divisional application, it thus follows that the expression "small sheets" is the true content of the earlier (parent) application such that the use of this expression in the present application is not subject matter which extends beyond the content of the earlier application as filed. The requirement of Article 76(1) EPC 1973 is thus fulfilled.

1.3 Inventive step (Article 56 EPC 1973)

It was undisputed by the appellant that D1 represented the closest prior art and disclosed all features of the preamble of claim 1. The Board also finds no reason to differ in this regard. The subject matter of claim 1 thus differed from the bicycle component known from D1 in that the "matrix of polymeric material comprises
small sheets of structural fibres arranged randomly inside the matrix”.

Starting from D1 and in regard to the technical problem solved by these features in the context of claim 1, the appellant argued that the objective technical problem to be solved was to increase the structural strength of the component while reducing its manufacturing cost and maintaining good fluidity during moulding. The Board however finds that this technical problem is not objective when considering the characterising features of claim 1. Firstly, an undefined number of small sheets of structural fibres (as is the case in claim 1), in the limit possibly only two, could not be necessarily credited with an increase in structural strength of the component compared to that in D1. Even if their being "randomly arranged" inside the matrix might imply that a greater number of small sheets must be present, as few as four or five such sheets would satisfy the condition of being randomly arranged without implying an increase of the structural strength of the component compared to that in D1. Secondly, if the alleged increase in structural strength is not recognised, the reduction in component cost through a reduction in necessary unidirectional structural fibres can also not be recognised. Finally, maintaining good fluidity during moulding pertains to a method of manufacturing such a component, rather than to the finished component itself; a method of manufacture is however not part of the claimed component. The Board thus held that the appellant's technical problem could not be seen as the objective technical problem when starting from D1.
In formulating an objective technical problem it is necessary to identify features of the claim differing with respect to the starting point chosen as being the closest prior art (in this case D1) and to identify the technical effect resulting from these features. As indicated above (for the technical problem formulated by the appellant), the alleged technical advantages of the characterising features of claim 1 do not objectively reside in increased strength, a cost saving or improved mouldability. The Board can only identify a less ambitious problem as representing the objective technical problem to be solved, this being namely the provision of an alternative structural fibre composition in the matrix of the bicycle component.

In solving this technical problem, the skilled person would refer to D5 which discloses small sheets of structural fibres arranged randomly in a matrix (see col.3, lines 10-13, 20-28 and 48-58) for the production of fibre-reinforced plastic moulded articles (col.1, lines 7-11). It would thus be obvious for the skilled person to combine the teaching of D5, regarding small randomly arranged sheets of structural fibres in a matrix, with the bicycle component of D1, thus solving the objective technical problem and arriving at the subject matter of claim 1. It may also be added that, even if the appellant’s partial problem of providing improved strength were considered, the inclusion of small sheets of structural fibres in D5 is also directed at solving this problem.

The subject matter of claim 1 thus lacks an inventive step when starting from D1 and considering the teaching of D5.
2. **Auxiliary request**

*Non-admittance into proceedings (Article 13(1) of the Rules of Procedure of the Boards of Appeal (RPBA))*

Since the appellant filed this request during the oral proceedings, i.e. after having filed its grounds of appeal, the Board has to exercise its discretion in accordance with Article 13(1) RPBA when deciding whether or not to allow the appellant to amend its case in this way. In order for a request to be admitted, the request should not itself give rise at least *prima facie* to further objections. For the reasons given below, the Board exercised its discretion not to admit the request into proceedings.

2.1 **Article 84 EPC 1973**

The location of the second zone, defined as being 'opposite to said first seat with respect to said second seat' is not clear. Whilst the definition might perhaps suggest that the second zone is located in some manner on the other side of the second seat when compared to the location of the first seat, this is not clearly defined, and the definition is thus, at best, vague as regards the location of this particular structural feature.

The appellant argued that the second zone must be located in a similar position relative to the second seat as the first zone is to the first seat. However the Board finds this argument non-persuasive, since the location of the first zone is defined with respect to
the first seat and an end of the first end part of the elongated body. Since the location of an end of the second end part of the elongated body is not defined (and indeed itself not clearly identifiable in e.g. a bicycle component with multiple arms at one end thereof, as now in the claim), a similar definition for the location of the second zone cannot be inferred from the position of the first zone.

The appellant also argued that the location of the second zone would be understood by a skilled person when considering the first embodiment, which had no arms at either of its ends. However, this argument fails since the claim is not directed to the first embodiment at all, but instead relates to an embodiment in which an elongated portion extends from one end portion of a bicycle component having arms, to the other end of the component (the component being exemplified, but not claimed, as being in the form of a right crank). The claim itself must be clear, and clarity of the claim is not achieved by a skilled person having to infer possibly intended meanings of the claim by reference to the description of a first embodiment having itself the form of an elongated body with two ends, noting that the first embodiment, anyway, is no longer part of the claimed invention.

2.2 Article 123(2) EPC

The subject-matter of claim 1 of the auxiliary request furthermore, at least prima facie, extends beyond the content of the application as originally filed. Claim 1 of the auxiliary request includes the feature that the bicycle component comprises 'one or more spokes' at one
of the end parts of the elongated body. The term 'spoke' is taken from the embodiment of the description depicted in Figs. 15 and 16 (see also page 10, line 33 - page 12, line 6) of the application as originally filed. However, in this embodiment there are always a plurality of spokes rather than the possibility of a single one. In addition, the embodiment is specifically for a right pedal crank rather than for a more general bicycle component as defined in claim 1. Furthermore, in the right crank disclosed, the continuous layers of structural fibres are stated as partially surrounding the seats of the end parts of the spokes for an arc of circumference of about 180°, which is also not to be found in claim 1. The inclusion of the feature 'one or more spokes' in claim 1 thus is only disclosed in the application as originally filed in combination with at least those further features of the embodiment identified above, which features are not present in claim 1.

2.3 In conclusion therefore, claim 1 at least prima facie does not meet the requirement of clarity in Article 84 EPC 1973 or the requirement of Article 123(2) EPC, at least for the reasons given above. Admittance of the request into proceedings would therefore (at least) not have been procedurally economical (Article 13(1) RPBA, second sentence).

2.4 The auxiliary request was thus not admitted into the proceedings.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar  The Chairman

M. Patin  M. Harrison