

Internal distribution code:

- (A) [-] Publication in OJ
(B) [-] To Chairmen and Members
(C) [-] To Chairmen
(D) [X] No distribution

**Datasheet for the decision
of 17 May 2017**

Case Number: T 2203/14 - 3.3.05

Application Number: 04028690.8

Publication Number: 1538240

IPC: C25D11/04, C25D11/20, C09D5/44,
C25D11/18

Language of the proceedings: EN

Title of invention:
Corrosion resistant part and method for manufacturing same

Patent Proprietor:
SHIMANO INC.

Opponent:
SRAM Deutschland GmbH

Headword:
Corrosion resistant part/Shimano

Relevant legal provisions:
EPC Art. 100(c)
RPBA Art. 13(1)

Keyword:
Grounds for opposition - added subject-matter (yes)
Late-filed request - admitted (no)

Decisions cited:

G 0001/93, T 0175/97, T 0871/08, T 1634/09, T 0419/12

Catchword:



Beschwerdekammern
Boards of Appeal
Chambres de recours

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 2203/14 - 3.3.05

D E C I S I O N
of Technical Board of Appeal 3.3.05
of 17 May 2017

Appellant I: SHIMANO INC.
(Patent Proprietor) 3-77, Oimatsu-cho
Sakai-ku,
Sakai City
Osaka 590-8577 (JP)

Representative: Grosse Schumacher Knauer von Hirschhausen
Patent- und Rechtsanwälte
Nymphenburger Strasse 14
80335 München (DE)

Appellant II: SRAM Deutschland GmbH
(Opponent) 97404 Schweinfurt (DE)

Representative: Weickmann & Weickmann PartmbB
Postfach 860 820
81635 München (DE)

Decision under appeal: **Interlocutory decision of the Opposition**
Division of the European Patent Office posted on
29 September 2014 concerning maintenance of the
European Patent No. 1538240 in amended form.

Composition of the Board:

Chairman E. Bendl
Members: G. Glod
O. Loizou

Summary of Facts and Submissions

I. The present appeals by the patent proprietor (appellant I) and the opponent (appellant II) both lie from the interlocutory decision of the opposition division to maintain European patent EP-B-1 538 240 in amended form on the basis of the first auxiliary request. The claims as granted were found not to meet the requirements of Article 83 EPC.

II. Claim 1 of the patent as granted reads as follows:

"1. A corrosion resistant part (100) that is exposed to a corrosive environment when in normal use, wherein the part comprises:

a part main body (10), wherein the part main body (10) comprises an aluminum alloy with a normal portion (12) and a flawed portion (11), wherein the flawed portion (11) consists of a void or of a recess in the aluminum alloy part;

an alumite layer (20) comprising a normal portion alumite layer (21) disposed on the normal portion (12), and

a corrosion resistant layer (30) formed from an ionic resin, wherein the corrosion resistant layer (30) comprises a normal portion corrosion resistant layer (31) disposed on the normal portion (12), wherein the normal portion corrosion resistant layer (31) has a thickness less than or equal to approximately 5.0 micrometers, and a flawed portion corrosion resistant layer (32),

characterized in that *the alumite layer (20) further comprises a flawed portion alumite layer (22) disposed on the flawed portion (11), wherein the normal portion alumite layer (21) has a thickness between approximately 0.5 micrometers and 5.0 micrometers, and wherein the flawed portion alumite layer (22) has a*

thickness of about 1.0 micrometer, and the flawed portion corrosion resistant layer (32) is disposed on the flawed portion alumite layer (22)."

III. In the communication pursuant to Article 15(1) RPBA of 15 December 2016, the board was of the preliminary opinion *inter alia* that the subject-matter of claim 1 of the patent as granted (main request) was not directly and unambiguously derivable from the application as filed.

IV. Oral proceedings took place on 17 May 2017. In the course of them appellant I submitted a new sole auxiliary request, replacing the three auxiliary requests submitted in the course of the preceding appeal procedure. Claim 1 of this request differs from claim 1 of the main request as follows (insertions and deletions highlighted by the board):

"[...] wherein the normal portion corrosion resistant layer (31) has a thickness ~~less than or equal to approximately 5.0 micrometers~~ of 0.7 micrometers, [...], wherein the normal portion alumite layer (21) has a thickness ~~between approximately 0.5 micrometers and 5.0 micrometers~~ of 2 micrometers, [...]"

V. The arguments of appellant I (patentee) that are relevant to the present decision may be summarised as follows:

Main request

Article 100(c) EPC - added matter

It was unequivocally clear that the terms "5 microns" and "5.0 microns" could be used exchangeably. This was

also in line with paragraph 14 of the A2 document, where 5 and 0.7 were used. It would be inconsistent to have the same parameter defined with two different "accuracies" within one sentence. The application as filed did not disclose that the normal portion corrosion resistant layer ranged from 4.5 μm to 5.4 μm or that it ranged from 4.95 μm to 5.04 μm . The expression "approximately" was present, since a layer having an exact μm value over the whole alloy part could not be obtained.

According to G 1/93, an added feature could be maintained in a claim if this added feature did not improve the position of the applicant/patent proprietor, if it limited the scope of protection conferred by the patent as granted by excluding a part of the subject-matter of the invention claimed in the original application and if it did not provide a technical contribution to the subject-matter of the claimed invention. These three conditions were fulfilled in the present case. In particular, the limitation did not provide any technical contribution, since the skilled person knew that the best way to carry out the invention would lie somewhere within the claimed range for the thickness of the normal portion corrosion resistant layer. Further, the person skilled in the art did not attach any importance to the higher accuracy given for the upper limit, nor could he derive any technical teaching from it. It was evident that the technical effect indicated in column 4, lines 55 and 56, of the patent was not influenced by the change made in claim 1.

Auxiliary request

The request had been filed during the oral proceedings, since it was only at that stage that there was a need for appellant I to file such a request that clearly overcame the objections under Article 123(2) EPC, albeit it was very limited in scope. It should be admitted into the proceedings, since it was clearly allowable. The exact thickness values could be obtained by trial and error following the information provided in the patent.

- VI. The arguments of appellant II (opponent) that are relevant to the present decision may be summarised as follows:

Main request

Article 100(c) - added matter

The indication of "5.0 micrometers" for the thickness of the normal portion corrosion resistant layer differed from "5 micrometers" and was not directly and unambiguously derivable from the application as filed. This was in line with the fact that the value of 5.08 would be covered by 5 but not by 5.0. The alumite layer thickness could not be linked to the corrosion resistant layer thickness. 0.7 and 5 both had one significant digit, while 5.0 had two significant digits.

The conditions of G 1/93 were not fulfilled, since the amendment provided an advantage to the patent proprietor - as admitted in his submissions of 11 June 2015 - and was technically relevant.

Auxiliary request

The request should not be admitted, since the objection it tried to overcome had already been raised in the notice of opposition. It could not be said to be *prima facie* allowable, since there was no guidance in the patent on exactly how to obtain the claimed well-defined thicknesses.

- VII. Appellant I (patent proprietor) requested that the decision under appeal be set aside and that a patent be maintained as granted (main request) or, in the alternative, that the patent be maintained in amended form on the basis of the sole auxiliary request filed during oral proceedings before the board.

Appellant II (opponent) requested that the decision under appeal be set aside and that the patent be revoked.

Reasons for the Decision

Main request - patent as granted

1. Article 100(c) EPC
- 1.1 Claim 1 of the patent as granted specifies "*wherein the normal portion corrosion resistant layer (31) has a thickness less than or equal to approximately 5.0 micrometers*".

Claim 1 as filed indicated "*wherein the normal portion corrosion resistant layer (31) has a thickness less than or equal to approximately 5 microns*".

1.2 Due to the use of the term "approximately" in the present context it is evident that the proprietor did not intend to refer to the exact value of "5", but rather wanted to refer to a more vaguely defined upper limit of the normal portion corrosion resistant layer. Thus, the question arises whether "approximately 5.0" and "approximately 5" have a different meaning when describing the upper limit of the claimed range and, if so, whether approximately 5.0 is directly and unambiguously derivable from the application as filed.

1.2.1 It is accepted jurisprudence that when comparing a value from the state of the art with a claimed value, the state of the art value has to be given the same accuracy as the one claimed (T 871/08, Reasons 2.3 and decisions cited therein). Applying this teaching *mutatis mutandis* to the present case means that prior art disclosing a value of 5.2 would be considered relevant for novelty with respect to the upper end value of 5 as present in the claim as filed, but not with respect to the value of 5.0 as present in claim 1 as granted. Therefore, "approximately 5.0" and "approximately 5" can - in the present context - not have the same meaning.

This is also in line with T 175/97 (Reasons 2.7), where it is indicated that the value of 0.8 mol present in the claim has to be interpreted as 0.75 to 0.84 mol.

1.2.2 The application as filed consistently mentions only the value of 5 micrometers as upper limit for the thickness of the normal portion corrosion resistant layer (page 2, last line of first paragraph; page 5, line 3; claim 1). The fact that the upper limit of the normal portion alumite layer in the application as filed is given as 5.0 and 5 (claim 1 and page 4, line 2) has no bearing

on the thickness of the normal portion corrosion resistant layer, since the two layers are not linked to such a degree that a certain accuracy for one layer would inevitably imply the same accuracy for the other layer.

There is also no reason why a skilled person would recognise from the sentence on page 5, lines 2 to 4, of the application as filed which contains "*5 microns or less, preferably 0.7 microns*" that 5 should be read as 5.0. The skilled person would rather understand that the upper limit is given with less accuracy than the specific preferred value - the upper limit representing a layer considerably thicker than the preferred thickness.

- 1.3 Therefore, the value "*approximately 5.0*" describing the upper limit of the range relating to the thickness of the corrosion resistant layer is not directly and unambiguously derivable from the application as filed.
- 1.4 The argument that this limitation did not provide an unwarranted advantage to appellant I is not acceptable, since it is a limitation with respect to the disclosure of D3 and is at least of relevance in that context. This is also confirmed by appellant I itself in its submissions, in particular in the letters of 11 June 2015 (page 7, eighth paragraph) and of 29 March 2016 (page 4, Table), which confirm that the value of "*approximately 5.0*" is distinguished from the 5.08 that is disclosed in D3. Although this difference appears minor and possibly artificial to the skilled person, it has a clear impact when defining the scope of the claim. The limitation leads to a distinguishing feature with respect to D3, albeit possibly not the only one, that was not present in the application as

filed and would have to be taken into account when discussing inventive step.

Further, it is not unequivocally clear that the amendment does not provide a technical contribution. According to the patent, the thickness of the normal portion corrosion resistant layer controls the appearance of the film coating (column 4, lines 52 to 55). The preferred thickness is indicated as 0.7 microns, meaning that a rather thin layer already has a sufficient effect to provide the desired appearance. As a consequence, it is to be concluded that a rather small difference in thickness has an impact on the appearance. In particular, the appearance of the alloy may therefore be different if the thickness is 5.4 microns - a thickness covered by claim 1 as filed - compared to 5.04 microns - the upper limit of claim 1 as granted, depending on the type of resin and/or alloy used.

- 1.5 To conclude, the conditions laid down in G 1/93 - defining when a feature which has not been disclosed in the application as filed but which has been added to the application during examination, as in the present case, can be maintained in a claim - are not considered to be fulfilled. As the feature at issue was not originally disclosed, claim 1 of the main request does not meet the requirements of Article 123(2) EPC.

Auxiliary request

2. Article 13(1) RPBA
- 2.1 According to Article 13(1) RPBA, any amendment to a party's case after it has filed its grounds of appeal or reply may be admitted and considered at the board's

discretion. This discretion is to be exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy.

2.2 T 419/12 (Reasons 2.2.3) applied the approach of T 1634/09 (Reasons 3.2) to decide whether a request filed after the oral proceedings had been arranged should be admitted. According to that approach (see also Case Law of the Boards of Appeal of the EPO, 8th edition 2016, IV.E.4.2.5, page 1133), such a request may be admitted and considered at the board's discretion

(i) if sound reasons exist for filing it so far into the proceedings,

(ii) if the amended request does not extend the scope of discussion as determined by the grounds of appeal and the respondent's reply,

(iii) if the amended request is clearly or obviously allowable.

2.2.1 In applying this approach to the present case, the board notes the following:

Re (i): The present request is a reaction to the objection under Article 100(c) that had already been raised in the notice of opposition. The opposition division decided that it was unfounded. In the statement setting out its grounds of appeal, appellant II reiterated the objection. In its preliminary opinion that was issued approximately five months before the oral proceedings, the board indicated that the requirements of Article 123(2) EPC did not seem to be

fulfilled. It was only in the course of the oral proceedings before the board, after the discussion of the main request, that appellant II submitted the auxiliary request. The board cannot see any reason why this request was not filed at an earlier stage, since the situation and arguments did not change over time. The fear of being left without a patent cannot justify the late filing, since appellant II should have been aware of this possibility throughout the proceedings, but at the very latest when receiving the communication pursuant to Article 15(1) RPBA. Therefore, for the board there are no sound reasons for filing the auxiliary request at that stage of the proceedings.

Re (ii): Claim 1 of the patent as granted and of the then first and second auxiliary requests submitted with the statement of grounds of appeal defined both the thickness of the normal portion corrosion resistant layer and the thickness of the normal portion alumite layer as a range of values. Claim 1 of the then third auxiliary request also submitted with the statement of grounds of appeal defined the thickness of the normal portion corrosion resistant layer as a range of values, while the thickness of the normal portion alumite layer was defined as an exact value of 2.0 micrometers. Claim 1 of the present auxiliary request now defines both the thickness of the normal portion corrosion resistant layer and the thickness of the normal portion alumite layer as **exact** values (0.7 and 2.0 micrometers, respectively).

As known to the skilled person and indicated in the patent, the thickness of the alumite layer has an influence on the electrical resistance of that layer (paragraph [0014]), which itself is of importance for

electrodeposition of the ionic resin (normal portion corrosion resistant layer) (paragraph [0017]).

This means that for the first time the question arises whether the patent contains enough information to allow the skilled person to produce both layers with such well-defined **exact** thicknesses of both layers. This is also corroborated by the fact that it was common ground during the discussion on Article 100(c) that the reason for using the term "approximately" in claim 1 was to emphasise that the production of layers with well-defined thicknesses was not straightforward.

As a consequence, this amendment extends the scope of discussion, especially with regard to Article 83 EPC.

Re (iii): Clearly or obviously allowable means that the board has to recognise immediately that all the outstanding objections are overcome. In the present case, this does not apply for the following reasons:

The present request differs from the then third auxiliary request submitted with the statement of grounds of appeal only in that the normal portion corrosion resistant layer is defined as an exact value of 0.7 micrometers. In its preliminary opinion the board was of the view that said third auxiliary request probably met the requirements of Article 83 EPC. However, as indicated above, the situation has now changed, since the normal portion corrosion resistant layer too has to have an exact thickness, instead of lying within a given range. This means that the process conditions have to be chosen such that the **exact** thicknesses of both the normal portion corrosion resistant layer and the normal portion alumite layer

are obtained. As admitted by appellant I, this could only be achieved by trial and error.

The board cannot *prima facie* recognise that the patent contains enough guidance on how this trial-and-error approach leads to success in a structured manner. There is no information on what to do to obtain the desired results in case of failure. The information provided in paragraphs [0011] to [0016] of the patent in suit is rather general and does not provide a specific example from which the skilled person could start. This conclusion is also in line with the statement of the appellant that the production of layers with well-defined thicknesses was not straightforward. As a consequence, the proposed wording of the claims raises doubts as to whether the requirements of Article 83 EPC are fulfilled.

Therefore it cannot be concluded that the request is clearly allowable, and hence the board cannot exercise its discretion in favour of appellant I.

- 2.2.2 Since none of conditions (i), (ii) and (iii) above are fulfilled, the board does not admit the auxiliary request into the proceedings.

Order

For these reasons it is decided that:

1. The impugned decision is set aside.

2. The patent is revoked.

The Registrar:

The Chairman:



C. Vodz

E. Bendl

Decision electronically authenticated