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**Datasheet for the decision
of 12 January 2024**

Case Number: T 1997/22 - 3.3.05

Application Number: 10382360.5

Publication Number: 2471967

IPC: C22C21/04, C22F1/043, C22C1/02,
C22C1/03

Language of the proceedings: EN

Title of invention:

Method for obtaining improved mechanical properties in recycled aluminium castings free of platelet-shaped beta-phases

Patent Proprietor:

Casa Maristas Azterlan
Befesa Aluminio, S.L.

Opponents:

TRIMET Aluminium SE
BorgWarner, Inc.

Headword:

Recycled aluminium casting/Casa Maristas Azterlan

Relevant legal provisions:

EPC Art. 84

Keyword:

Claims - support in the description - main request (no) -
auxiliary request (yes)

Decisions cited:

Catchword:



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Case Number: T 1997/22 - 3.3.05

D E C I S I O N
of Technical Board of Appeal 3.3.05
of 12 January 2024

Appellant: TRIMET Aluminium SE
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Flaccus · Müller-Wolff
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Respondent: Casa Maristas Azterlan
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Respondent: Befesa Aluminio, S.L.
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Party as of right: BorgWarner, Inc.
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Representative: Hoefler & Partner Patentanwälte mbB
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Decision under appeal: **Interlocutory decision of the Opposition**
Division of the European Patent Office posted on

27 June 2022 concerning maintenance of the
European Patent No. 2471967 in amended form.

Composition of the Board:

| | |
|-----------------|-------------------------|
| Chairman | G. Glod |
| Members: | S. Besselmann |
| | S. Fernández de Córdoba |

Summary of Facts and Submissions

I. In its earlier decision T 1051/17, relating to the same European patent EP 2 471 967 B1, this board had remitted the case to the opposition division with the order to maintain the patent in amended form on the basis of the sole request filed as auxiliary request III on 15 October 2019 and a description to be adapted.

II. Claim 1 of that sole request reads:

"1. A process for the preparation of an iron containing aluminium alloy casting free of primary platelet-shaped beta-phase of the Al₅FeSi-type in the solidified structure presenting the following composition (amounts expressed in % by weight in respect to the total weight of the alloy):

| | |
|---------------------|---------------------|
| <i>Si</i> | <i>6.00 - 9.50</i> |
| <i>Fe</i> | <i>0.15 - 0.60</i> |
| <i>Mn</i> | <i>0.04 - 0.60</i> |
| <i>Mg</i> | <i>0.20 - 0.70</i> |
| <i>Cr</i> | <i>0.01 - 0.60</i> |
| <i>Ti</i> | <i>0.05 - 0.30</i> |
| <i>Sr and/or Na</i> | <i>0.001 - 0.25</i> |
| <i>V</i> | <i>0.00 - 0.60</i> |
| <i>Cu</i> | <i>0.01 - 0.25</i> |
| <i>Ni</i> | <i>0.01 - 0.1</i> |
| <i>Zn</i> | <i>0.01 - 0.1</i> |

balance being Al and incidental impurities, wherein the iron-containing aluminium alloy casting presents a composition characterized in that the total amount of Mn and Cr in weight percentage (wt.%) is equal or larger than 50 % of the Fe amount, or wherein the iron-containing aluminium alloy casting

presents a composition characterized in that the total amount of Mn, Cr and V in weight percentage (wt.%) is equal or larger than 50 % of the Fe amount comprising:

- a) melting a secondary AlSi7Mg ingot of second fusion,
- b) adding either Mn and Cr, or Mn and Cr and V, to the base composition of the secondary AlSi7Mg ingot of second fusion,
- c) adding a grain refiner and a eutectic silicon modification agent,
- d) submitting the molten alloy obtained in step c) to a degassing process,
- e) introducing the degassed molten alloy in a mould,
- f) casting solidification inside the mould,
- g) casting extraction from the mould, and submitting the solidified casting of step g) to a T6 heat treatment
- h)

wherein the casting obtained in step h) presents a tensile strength between 250-300 MPa, a yield strength between 190-230 MPa and elongation values between 4,5-9%."

Independent claim 4 reads:

"4. An aluminium alloy casting presenting the composition as defined in any of claims 1 to 3 and presenting a tensile strength between 250-300 MPa, a yield strength between 190-230 MPa and elongation values between 4,5-9% which is obtainable by the process of any one of claims 1 to 3."

Claims 2 and 3 define preferred embodiments of the process of claim 1. Claim 5 defines a use of the aluminium alloy casting of claim 4, and claim 6 defines a component made from this aluminium alloy casting.

- III. The appeal of opponent 1 (appellant) in this case is against the opposition division's subsequent interlocutory decision that the patent could be maintained on the basis of the above-mentioned request and the description and figures of the patent as granted, except for paragraphs [0001], [0013], [0015], [0016], [0018], [0024] and [0025] which were filed on 10 December 2020.
- IV. In its statement of grounds of appeal, the appellant raised two objections under Article 84 EPC, because in its opinion the claims were not supported by the description as amended.
- V. The patent proprietors (respondents) defended the patent as maintained by the opposition division and, as an auxiliary request, filed a description in which paragraphs [0017], [0022] and [0030] had also been amended.
- VI. In its preliminary opinion pursuant to Article 15(1) RPBA 2020 of 10 November 2023, the board informed the parties that the patent could be maintained on the basis of the auxiliary request. The respondents were requested to file fresh replacement pages for amended paragraphs [0017], [0022] and [0030] of the auxiliary request.
- VII. In reply (submission of 30 November 2023), the respondents filed the requested replacement pages for the auxiliary request. At the same time, they withdrew their request for oral proceedings on the condition that the board maintain its preliminary opinion and the patent be maintained on the basis of the auxiliary request.

- VIII. The appellant then withdrew its request for oral proceedings on the same condition by letter dated 4 December 2023, received on 7 December 2023.
- IX. Opponent 2 (party as of right) did not make any submission as to the substance of the case.
- X. The board informed the parties that the summons to oral proceedings was cancelled and the proceedings would be continued in writing (notification dated 14 December 2023).
- XI. The appellant (opponent 1) requested that the decision under appeal be set aside and the patent be revoked.

The respondents (patent proprietors) requested that the appeal be dismissed (main request), or alternatively that the patent be maintained with the description of the patent as granted, except for paragraphs [0001], [0013], [0015], [0016], [0018], [0024] and [0025] which were filed on 10 December 2020 and paragraphs [0017], [0022] and [0030] which were submitted on 30 November 2023.

Reasons for the Decision

1. Article 12(8) RPBA 2020
- 1.1 There is no need for oral proceedings because the appellant and the respondents have withdrawn their requests for oral proceedings on the condition that the board maintain its preliminary opinion. This condition being met, the decision can be rendered in writing (Article 12(8) RPBA 2020).

Main request

2. Article 84 EPC

2.1 It follows from the requirements of Article 84 EPC that the claims define the matter for which protection is sought and that they are supported by the description. In addition, the description should be consistent with the claims and should not cast doubt on the intended scope of protection. This was not contested.

2.2 Claim 1 was amended during the opposition proceedings to specifically relate to a process for the preparation of an iron containing aluminium alloy casting [emphasis added]). The independent claims thus relate to a process for producing the iron containing aluminium alloy casting, an aluminium alloy casting, the use of the aluminium alloy casting and a component made from the aluminium alloy casting.

The description in paragraphs [0017] and [0022], however, refers to "*the iron-containing aluminium alloy of the invention*" and "*the process for the preparation of the aluminium alloy of the invention*", respectively, suggesting that the invention is an alloy as such and the preparation of an alloy as such. An alloy as such is a broader technical concept than an aluminium alloy casting. The indicated parts of the description are therefore inconsistent with the claims. Furthermore, there is no reason why the term "casting" was inserted in paragraphs [0015] and [0016] but not [0017], and why it was inserted in paragraph [0018] but not [0022].

2.3 The requirements of Article 84 EPC are therefore not met.

Auxiliary request

3. Article 84 EPC

3.1 Paragraphs [0017] and [0022] now refer to "castings", thus removing the inconsistency present in the main request.

The appellant's remaining objection concerns paragraph [0030]. In its opinion, the amendment including "as defined in claim 1" did not remove the doubt as to whether additional elements may be added, outside the closed composition in claim 1.

Paragraph [0030] states that "*besides the additions of Mn, Cr and V other elements as defined in claim 1 may be added for other purposes*". It is thus clear that it refers to those elements which are specified in claim 1. The wording that elements are "*added*" does not lead to a different conclusion, but parallels the use of the word "*additions*" for Mn, Cr and V, which are also specified in claim 1. Thus no contradiction is present.

3.2 The appellant's objection is not convincing and the requirements of Article 84 EPC are met.

4. Rule 103(4)(c) EPC

4.1 The appellant withdrew its request for oral proceedings within one month of notification of the communication issued by the board in preparation for the oral proceedings (see the dates indicated under points VI

and VIII above), and no oral proceedings took place.
The appeal fee is to be reimbursed at 25%.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division with the order to maintain the patent with the following documents:
 - claims of the sole request underlying T 1051/17
 - description of the patent as granted, except for paragraphs [0001], [0013], [0015], [0016], [0018], [0024] and [0025] which were filed on 10 December 2020 and paragraphs [0017], [0022] and [0030] which were submitted on 30 November 2023
 - figures as granted.
3. The appellant's appeal fee is reimbursed at 25%.

The Registrar:

The Chairman:



C. Vodz

G. Glod

Decision electronically authenticated