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Datasheet for the decision of 2 March 2023

Case Number: T 0477/21 - 3.3.05

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Language of the proceedings: EN

Title of invention:
BRASS ALLOYS FOR USE IN TURBOCHARGER BEARING APPLICATIONS

Patent Proprietor:
Garrett Transportation I Inc.

Opponent:
OTTO FUCHS - Kommanditgesellschaft

Headword:
Brass alloy/Garret Transportation I

Relevant legal provisions:
EPC Art. 54, 56, 123(2)
RPBA 2020 Art. 11

Keyword:
Novelty - (yes)
Inventive step - main request (no) - auxiliary requests (no) - obvious alternative
Amendments - remaining auxiliary requests - allowable (no)
Remittal - (no)

Decisions cited:
G 0009/91

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 0477/21 - 3.3.05

D E C I S I O N
of Technical Board of Appeal 3.3.05
of 2 March 2023

Appellant: (Opponent)	OTTO FUCHS - Kommanditgesellschaft Derschlager Straße 26 58540 Meinerzhagen (DE)
Representative:	Haverkamp Patentanwälte PartG mbB Gartenstraße 61 58636 Iserlohn (DE)
Respondent: (Patent Proprietor)	Garrett Transportation I Inc. 2525 W. 190th St. Torrance, CA 90504 (US)
Representative:	Lucas, Peter Lawrence LKGlobal UK Ltd. Cambridge House, Henry Street Bath BA1 1BT (GB)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 16 March 2021 rejecting the opposition filed against European patent No. 2971819 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman	E. Bendl
Members:	S. Besselmann
	P. Guntz

Summary of Facts and Submissions

I. This appeal is against the opposition division's decision to reject the opposition against the European patent EP 2 971 819 B1. The patent in suit concerns brass alloys for use in turbocharger bearing applications.

II. Claim 1 as granted relates to an alloy and reads as follows.

"*An alloy comprising, by weight:*
57% to 60% copper;
less than 0.1 % lead;
less than 1% iron;
less than 0.4% tin;
less than 1% nickel;
1.5% to 3.0% manganese;
1.3% to 2.0% silicon;
1.3% to 2.3% aluminum; and
a balance zinc,
*with the proviso that a ratio of Si/Mn is in the range of 0.3 to 0.7, and with the further proviso that a zinc equivalent content according to the following formula: ZnEq = Zn + Si*10 – Mn/2 + Al*5 is from 51% to 58%, and comprising beta phase in an amount from 75% to 90% by weight,*
wherein the alloy is thermally processed by extrusion at a rate of 96% or greater followed by cold drawing at a rate of 5% to 8%."

III. The following documents are of relevance here:

D1 CN 102851533 A

D1' machine translation of D1 into English

D4 CuZn37Mn3Al2PbSi, Deutsches Kupferinstitut, 2005

IV. With their grounds of appeal, the opponent (appellant) maintained, *inter alia*, objections of lack of novelty in view of D1/D1' and lack of inventive step starting from D1/D1' as the closest prior art.

V. With their reply to the appeal, the patent proprietor (respondent) defended the patent as granted and resubmitted auxiliary requests 1-8 filed before the opposition division.

VI. Claim 1 of auxiliary request 1 differs from claim 1 as granted in that the following feature is inserted after the indication of beta phase in an amount from 75% to 90%:
"*comprising gamma phase in an amount less than 0.5% by weight*"

Claim 1 of auxiliary request 2 differs from claim 1 as granted in that the feature relating to the silicon content has been amended (emphasis by the board):
"*greater than 1.5~~3~~% to 2.0% silicon*"

Claim 1 of auxiliary request 3 combines the amendments of auxiliary requests 1 and 2.

Claim 1 of auxiliary request 4 differs from claim 1 as granted in that the feature "*and annealing at a temperature of 290 °C to 300 °C*" is added at the end of the claim.

Claim 1 of auxiliary request 5 combines the amendments of auxiliary requests 3 and 4.

Claim 1 of auxiliary request 6 has been amended to relate to a turbocharger bearing and its first line now reads:
"*A turbocharger bearing formed of an alloy comprising, by weight:*"
It has further been amended by adding the following at the end of the claim:
"*and wherein the turbocharger bearing exhibits a tensile strength Rm greater than 600 MPa, a proof strength Rp0.2 greater than 350MPa, and an elongation ratio greater than 12%.*"

Claim 1 of auxiliary request 7 combines the amendments of auxiliary requests 3 and 6.

Claim 1 of auxiliary request 8 combines the amendments of auxiliary requests 4 and 7.

VII. The appellant's arguments, where relevant to the present decision, can be summarised as follows.

Claim 1 as granted lacked novelty in view of D1. The composition described in the text of Example 1, which represented the target composition and was the same as the batch composition prior to the melting and casting steps, fulfilled all the requirements of claim 1, including the microstructure. Example 1 also disclosed the processing steps, namely hot extrusion at a rate of 98.2% and cold drawing (stretching) at a rate of 12%, as could be calculated. The precise cold-drawing rate as a "product-by-process" feature was irrelevant for the final product.

Example 1 of D1 was the closest prior art for assessing inventive step. The objective technical problem was providing an alternative. None of the alloys of the

patent in suit (Table 1) was within the scope of the claim. The mechanical properties described in the patent in suit did not differ from those of the known alloys. There was no improvement in the machinability. To provide an alternative, the skilled person would readily select a cold-drawing rate of 5% to 8%. It was known that cold-drawing rates of 0% to 15% were generally possible.

Claim 1 in all auxiliary requests lacked novelty or inventive step.

VIII. The respondent's arguments, where relevant to the present decision, can be summarised as follows.

The subject-matter of claim 1 differed from the final alloy products described in D1. This was the relevant disclosure in D1, not the target composition. Furthermore, D1 disclosed a cold-drawing rate of 12%, which was outside the claimed rate of 5% to 8%.

Example 2 of D1 was the closest prior art because it met the Si/Mn requirement (Si/Mn=0.70) and the zinc equivalent requirement (ZnEq=54.5%), which were necessary to meet the beta phase requirement (paragraph [0020] of the patent in suit). Example 1 (Si/Mn=0.75; ZnEq=54.9%) was less relevant since the Si/Mn ratio, and thus the beta phase constituency, was outside the claimed range.

If the skilled person were nevertheless to start from Example 1, the silicon and manganese contents, and thus the Si/Mn ratio, would need to be changed. This would affect the beta phase constituency. The method known from D1, involving cold drawing at 12%, would result in

poor machinability when applied to such an alloy. The solution proposed in D1 for such alloys was the hot-forging method, as shown in Example 2. The patent in suit, by contrast, taught that a thermal processing method involving a cold-drawing rate of 5% to 8% provided good machinability. This teaching of the patent in suit (paragraphs [0021] and [0028]) was proven by empirical data (Table 2).

Table 2 indicated whether the thermal processing method of the invention had been employed. There was a readily apparent error in the title of the fourth column of Table 2, which in fact related to "thermal processing" and not "machinability". As regards the reference to "known prior art procedures" in paragraph [0028], no details were available.

Starting from D1, the skilled person would not have arrived at the claimed thermal processing involving a medium cold-drawing rate of 5% to 8% without hindsight.

While the patent and D1 had similar objectives, the patent achieved its technical objective in a non-obvious, alternative manner to that of D1.

Auxiliary requests

Auxiliary request 3 combined the amendments of auxiliary requests 1 and 2. In claim 1 of auxiliary request 3, features relating to the gamma phase content and the silicon content had been included. They worked together to provide further improved machinability, as derived from paragraphs [0011], [0017] and [0020] of the patent in suit. An inventive step was present because this effect did not derive from D1.

Auxiliary request 4 was already on file during opposition proceedings but an objection under Article 123(2) EPC had not been raised. Hence, compliance with Article 123(2) EPC should not be considered in these opposition appeal proceedings. If it were to be considered, the case should be remitted to the opposition division. The requirements of Article 123(2) EPC were met because the temperature value of 300°C was disclosed in the examples (paragraph [0028] of the application). Restricting a disclosed temperature range on the basis of this value did not establish a new relationship between parameters.

In auxiliary request 6, the claims were limited on the basis of claim 5 as granted.

The other auxiliary requests 5, 7 and 8 were combinations of preceding auxiliary requests.

IX. The appellant (opponent) requested that the decision under appeal be set aside and that the European patent be revoked.

The respondent (patent proprietor) requested that the appeal be dismissed or, alternatively, that the patent be maintained as amended on the basis of one of auxiliary requests 1 to 8, filed during the opposition proceedings on 21 December 2020 and resubmitted with the reply to the statement of grounds of appeal.

Reasons for the Decision

Main request

1. Novelty

1.1 D1 does not directly and unambiguously disclose all the claimed features in combination.

1.2 The general compositional ranges indicated in D1 (D1', page 1, *Description*, first paragraph; D1', claim 1) overlap with the chemical composition claimed, but several selections (of at least the copper content, the manganese content, the silicon content and the aluminium content) are necessary to arrive at a chemical composition within the scope of claim 1 at issue. The general disclosure of D1 thus does not anticipate the chemical composition stipulated in this claim. Moreover, D1 not only discloses thermal processing by hot extrusion and cold drawing, but also describes hot forging as an alternative (D1', page 8). Starting from the general disclosure of D1/D1', it is thus also necessary to select the thermal processing method.

1.3 The appellant relied specifically on the disclosure of Example 1 on page 11 of D1'. It relates to a brass bar with 59.5% Cu, 1.8% Al, 1.8% Mn, 1.3% Si, 0.2% Sn, 0.25% Fe and 0.2% Ni by weight, the rest being Zn. The Si/Mn ratio is not expressly mentioned. It may be calculated as 0.72, which according to the appellant could be rounded to 0.7. The resulting value of the zinc equivalent was also within the scope of the claim.

1.4 However, the disclosure on which the appellant relied is merely the target or batch composition of Example 1 prior to melting and casting, which is not identical to the actual values in the final alloy. Table 2 shows the actual composition. Compared with the target composition, it has a lower manganese content of 1.65% (within the claimed range) and a silicon content of 1.23%, outside the claimed range. The resulting Si/Mn ratio is 0.75% and thus also outside the claimed range.

1.5 Even when considering the target composition on its own, a value obtained by calculating a Si/Mn ratio from the target values of the silicon and manganese contents and then applying rounding cannot be regarded as directly and unambiguously disclosed. This is even more so where the target values are not identical to those in the final alloy and are thus uncertain.

1.6 The subject-matter of claim 1 is therefore novel over D1.

2. Inventive step

2.1 The patent in suit relates to lead-free brass alloys for use in manufacturing components for use in turbochargers (paragraph [0001]).

2.2 D1 relates to the same purpose (D1', page 1, *Description*, first paragraph, and page 2, *Background Technique*, first two paragraphs) and may therefore be regarded as the closest prior art. Within the disclosure of D1, Example 1 (Table 2) represents the most promising springboard because it not only has the chemical composition that is closest to the claim but it is also an extruded and cold-drawn product (D1',

page 12). It is therefore more relevant than Example 2, which is obtained by hot forging. Example 1 is consequently the most suitable starting point for assessing inventive step.

2.3 The patent in suit addresses the technical problem of providing improved lead-free alloys for use in manufacturing components for gas turbine engines, and more particularly for such components for passenger vehicles, such as turbocharger bearings (paragraphs [0001] and [0005]).

2.4 The alloy of claim 1 is proposed as the solution to this technical problem.

2.5 The technical problem may have to be reformulated, in particular in less ambitious terms, if the combination of features in the claim does not solve this problem over the whole area defined in the claim (Case Law of the Boards of Appeal of the EPO, 10th edition, 2022, I.D.4.4.1).

2.6 In this case, there is no indication that the claimed alloy would lead to an improvement in the mechanical properties or the machinability compared with Example 1 of D1.

2.6.1 The only examples in the patent in suit relate to alloy compositions outside the claimed ranges (see Tables 1 and 2). No single example within the scope of the claim is provided.

2.6.2 The alloys known from D1 already provide the desired mechanical properties (D1', page 3, *Summary of the invention*, first paragraph, Example 1 and page 17, claim 9; Table 3 in D1). These known alloys are not

only suitable for automobile turbocharger bearings (D1', claim 12 and the last paragraph on page 9); it can also be seen that their properties are very similar to those described in claim 5 of the patent in suit. The alloys tested in the patent in suit (Table 3) - if considered despite not being within the scope of the claim - do not show any improvement in their physical properties in comparison with the known Example 1 of D1 (Table 3).

2.6.3 Furthermore, the alloys known from D1 already exhibit good machinability (D1', page 3, *Summary of the invention*, first paragraph; page 6, second paragraph to page 7, first paragraph; sentence bridging pages 7-8).

2.7 There is no indication that the claimed alloy could otherwise be regarded as a purposive selection or modification of the alloy known from D1.

2.7.1 The respondent held that good machinability of alloys having a beta phase constituency in the range of 75% to 90% could only be obtained by the claimed thermal processing method involving a cold-drawing rate of 5% to 8%. According to the respondent, this teaching of the patent in suit was not present in D1 or any of the cited prior art and represented a non-obvious alternative to D1, which described hot forging for such alloys.

2.7.2 However, the actual teachings of the patent in suit and D1 do not support this view.

While the claimed cold-drawing rate uncontestedly differs from that employed in Example 1 of D1 (which involved hot extrusion at a rate of 98.2% and cold drawing at a rate of 12%, as calculated by the

appellant on the basis of the respective initial and final diameters; this was not questioned), the alleged criticality of the cold-drawing rate may not be derived from the patent in suit because the cold-drawing rate is not individually addressed. What is taught is that thermal processing with the claimed relatively high extrusion rate and medium cold-drawing rate was found to beneficially strengthen the alloy (paragraph [0021]), and that alloys having a beta phase constituency in the range of 75% to 90% benefit in that the high-rate extrusion / medium-rate cold drawing / anneal procedure described in the examples provides good machinability, whereas alloys having a beta phase constituency greater than about 90% do not require this procedure (paragraph [0028]). The thermal processing is thus described as a whole, without discussing the individual role of the cold-drawing rate.

2.7.3 The individual role of the cold-drawing rate is not evaluated experimentally in the patent in suit. Even if it were accepted that the available examples - which all relate to alloy compositions outside the claimed ranges (see Table 1) - are nevertheless comparable with the claimed invention, and additionally that the fourth column in Table 2 of the patent in suit indicates whether thermal processing was performed, as explained by the respondent (see point VIII. above), no effect of the cold-drawing rate can be derived. All that can be concluded is that an alloy (Example 1) not subjected to the described thermal processing had poor machinability whereas the same alloy subjected to the described thermal processing exhibited good machinability. It is unknown if an alternative treatment was carried out in the example without thermal processing. The details of the "known prior art procedures" mentioned in this context (paragraph [0028]) are also unknown.

Furthermore, Table 2 relates to a comparison with microstructures having a beta phase content greater than 90% (see also paragraph [0028]) which are not representative of Example 1 of D1, in which the beta phase content is inherently lower than 90% due to the presence of 18% alpha phase and 0.3% gamma phase (Table 3 of D1).

2.7.4 The teaching of the patent in suit therefore does not provide any basis for assuming that the method known from D1, involving a cold-drawing rate of 12%, would not lead to the desired good machinability in some cases, namely when the Si/Mn ratio is in the range of 0.3 to 0.7 and the beta phase constituency is in the range of 75% to 90%. Moreover, this assumption would contradict the actual teaching of D1, according to which good machinability is obtained for a range of alloy compositions and microstructures. It was not contested that the general disclosure of the alloy composition and microstructure in D1 overlapped with the claim at issue.

2.7.5 There is no teaching in D1 to apply the hot-extrusion / cold-drawing method to only some of the disclosed alloy compositions and the hot-forging method to others. D1 rather teaches choosing the method according to the production objective (D1', page 8, penultimate paragraph). The examples of D1 show that the same batch composition of the alloy is subjected to either method in Examples 1 and 2, respectively (pages 11-13 of D1').

2.8 In the light of the above, the objective technical problem can only be regarded as providing an alternative.

2.9 The skilled person, faced with this not-very-ambitious technical problem, would readily modify Example 1 of D1 within the general disclosure of D1 and would, for instance, increase the silicon and manganese contents, thus obtaining a chemical composition within the scope of the claim at issue.

As directly follows from the observations regarding novelty (see points 1.3 and 1.4 above), merely aligning the silicon and manganese contents of Example 1 with the target composition of this example and providing a slightly higher manganese content (1.3% silicon and e.g. 1.85% manganese) would result in a chemical composition within the scope of the claim, with a Si/Mn ratio of 0.7 and a zinc equivalent value within the claimed range. This modification would be well within the general disclosure of D1 (0.8% to 2.8% silicon and 1.2% to 4.0% manganese; see D1', page 1, first paragraph of the description). The Si/Mn ratio of 0.7 is furthermore encompassed by the corresponding range of D1, which is 1.3-1.8 expressed as Mn/Si.

The respondent did not contest that the changes necessary to obtain an alloy composition within the scope of the claim were compatible with the general disclosure of D1.

According to the respondent's submission, the beta phase constituency was governed by the chemical composition of the alloy, and a beta phase constituency in the range of 75% to 90% was obtained if the requirements regarding the Si/Mn ratio and the zinc equivalent of claim 1 were met. On this basis, the beta phase constituency would not need to be independently selected, but would merely be the consequence of the selected chemical composition.

In addition, it is known from D1 that the microstructure is beta phase-based and includes alpha phase, manganese silicide (Mn5Si3) and gamma phase (D1', page 7, last full paragraph and D1, Table 3). In Example 1, the alpha phase contents and gamma phase contents are 18% and 0.3%, respectively. The manganese silicide content may be assumed to be comparable with that in the patent in suit, where values of 2% to 6% are observed (Table 2), because the contents of manganese and silicon are also comparable. This is a reasonable approximation even though the proportion of manganese silicide in the microstructure does not strictly correlate with the manganese and silicon contents in the alloy. Altogether, this allows for the presence of an amount of beta phase that falls within the range stipulated in the claim at issue.

As indicated, the drawing rate used in Example 1 of D1 is 12%, but this drawing rate is not an essential feature of the disclosed process (see the general process definition in claim 10 of D1'). The skilled person, knowing that the deformation rate during cold drawing of such brass alloys is in a range between 0% and 15% (page 8 of the impugned decision, last paragraph; see also D4, page 7, table in section 7.1), would thus routinely select alternative suitable cold-drawing rates, such as a medium rate of 5% to 8%, irrespective of whether it actually results in a distinguishing structural feature of the resulting alloy.

2.10 As indicated, only selections within the general disclosure of D1 are necessary to arrive at an alloy within the scope of the claim at issue. There is no indication in D1 to exclude certain areas from this

general disclosure. In the light of the not-very-ambitious technical problem of providing an alternative, the selections are arbitrary. The skilled person consequently needs no specific pointer to the claimed solution (Case Law of the Boards of Appeal of the EPO, 10th edition, 2022, I.D.9.21.9).

2.11 In conclusion, the subject-matter of claim 1 does not involve an inventive step.

Auxiliary request 3

3. Inventive step

3.1 Reference is made to the considerations regarding the main request (point 2. above).

3.2 Compared with the main request, claim 1 includes the additional features that the alloy comprises gamma phase in an amount of less than 0.5% by weight, and an increased lower limit of the silicon content, namely greater than 1.5%.

3.3 According to the respondent, these features provided further improved machinability, as derived from paragraphs [0011], [0017] and [0020] of the patent in suit.

3.4 However, specifying the gamma phase content provides no additional delimitation from Example 1 of D1, which discloses a gamma phase content of 0.3% (Table 3). Furthermore, as indicated, the problem of providing good machinability is already solved in D1. For want of any experimental data relating to an alloy within the scope of the claim, there is no discernible basis for

the alleged improvement. A silicon content of greater than 1.5% is even further away from the alloys tested in the patent in suit; see Table 1 (e.g. 0.83% and 0.91% silicon in Examples 1 and 4, respectively). Example 1 of D1 has a silicon content of 1.23%, which is in fact closer to the claimed range.

3.5 Starting from Example 1 of D1, the silicon content and the manganese content need to be increased to a greater extent than discussed for the main request in order to obtain an alloy composition within the scope of the claim, including the required Si/Mn ratio. However, the silicon and manganese contents remain well within the ranges generally disclosed in D1, as these known ranges fully encompass the claimed ranges. The board cannot see any incompatibility of the claimed alloy with the teaching of D1, nor has this been argued by the respondent.

3.6 The claimed alloy remains a mere selection within the general disclosure of D1. As indicated, the technical problem also remains the same as for the main request, namely providing an alternative. In the light of this not-very-ambitious technical problem, the selection is to be regarded as arbitrary and thus obvious.

3.7 The claimed alloy consequently lacks an inventive step.

Auxiliary requests 1 and 2

4. The same conclusion of lack of inventive step applies to claim 1 in auxiliary requests 1 and 2, which are less limited than claim 1 in auxiliary request 3, auxiliary request 3 being a combination of auxiliary requests 1 and 2.

Auxiliary requests 1 and 2 are therefore not allowable.

Auxiliary request 4

5. Examining amendments *ex officio*

5.1 The respondent contested the board's power to examine *ex officio* whether the requirements of Article 123(2) EPC were met.

5.2 The auxiliary requests were not dealt with in the impugned decision because the main request was allowed. Claim 1 at issue includes an amendment based on the description.

5.3 Amendments to the claims or other parts of a patent in the course of opposition or appeal proceedings are to be fully examined as to their compatibility with the requirements of the EPC (e.g. with regard to the provisions of Article 123(2) and (3) EPC) (G 9/91, OJ 1993, 408, Reasons 19).

5.4 Under RPBA 2020, a board is not prohibited from raising issues of its own motion; see the explanatory remarks on Article 13(1) RPBA 2020, which state: "Where the Board raises an issue of its own motion under Article 114(1) EPC, the party's right to be heard under Article 113(1) EPC must be respected." (Case Law of the Boards of Appeal of the EPO, 10th edition, 2022, V.A.3.3.1).

5.5 The board raised the objection under Article 123(2) EPC in the preliminary opinion. The respondent could therefore have reacted to this objection as early as in reply to the preliminary opinion. During the oral

proceedings before the board, the respondent was reminded that it could react to a fresh objection, e.g. with amendments, but the respondent chose not to file further amendments.

6. Requested remittal

6.1 The respondent also requested that the case be remitted to the opposition division.

6.2 However, parties have no absolute right to have each and every matter examined at two instances (Case Law of the Boards of Appeal of the EPO, 10th edition, 2022, V.A.9.2.1).

6.3 Pursuant to Article 11 RPBA 2020, the board is not to remit a case to the department whose decision was appealed for further prosecution, unless special reasons present themselves for doing so.

The board sees no special reasons in this case.

6.4 The case is therefore not remitted to the opposition division.

7. Article 123(2) EPC

7.1 Claim 1 defines a step of annealing at a temperature of 290°C to 300°C. This range is composed of the lower limit of the general range of 290°C to 480°C disclosed in paragraph [0021] of the application as originally filed (considering the published international application) and, as the upper limit, the temperature

used in the examples (paragraph [0028] of the application).

7.2 The respondent held that the amendment was allowable because it did not establish a new relationship between parameters but merely served to restrict the more general range disclosed in paragraph [0021].

7.3 However, the amendment constitutes an inadmissible intermediate generalisation because the temperature of 300°C was extracted from the examples (paragraph [0028]) in which it was linked both to alloy compositions which are not even encompassed by the claim (Table 1) and to a specific thermal processing method involving an extrusion rate of 99.4% and a cold-drawing rate of 5.4%.

7.4 The requirements of Article 123(2) EPC are therefore not met.

Auxiliary request 5

8. Claim 1 of auxiliary request 5 contains the amendments to claim 1 of each of auxiliary requests 3 and 4, so it is not allowable for the same reasons as stated in the preceding paragraphs.

Auxiliary request 6

9. Claim 1 in auxiliary request 6 differs from claim 1 of the main request in that it relates to a turbocharger bearing formed of the alloy, the turbocharger bearing exhibiting the specified tensile strength, proof strength and elongation ratio.

10. It was not contested that D1 disclosed turbocharger bearings exhibiting these properties (D1', claims 9 and 12; D1, Table 3). This amendment thus does not provide a further distinction from D1.

The subject-matter of claim 1 of auxiliary request 6 thus lacks an inventive step for the same reasons as the main request.

Auxiliary request 7

11. Compared with auxiliary request 6, claim 1 in auxiliary request 7 contains the additional features of auxiliary request 3, so the same considerations apply.

The subject-matter of claim 1 of auxiliary request 7 lacks inventive step for the same reasons as auxiliary request 3.

Auxiliary request 8

12. Claim 1 of auxiliary request 8 contains the same feature specifying annealing at a temperature of 290°C to 300°C, so it is not allowable for the same reasons as auxiliary request 4.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

C. Vodz E. Bendl

Decision electronically authenticated