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Aktenzeichen / Case Number / N° du recours : T 105/87 - 3.3.1

Anmeldenummer / Filing No / N° de la demande : 80 104 707.7

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Bezeichnung der Erfindung: Bismuth containing steel

Title of invention:

Titre de l'invention :

Klassifikation / Classification / Classement : C22C 38/60

**ENTSCHEIDUNG / DECISION**

vom / of / du 25 February 1988

Anmelder / Applicant / Demandeur :

Patentinhaber / Proprietor of the patent /  
Titulaire du brevet :

Inland Steel Company

Einsprechender / Opponent / Opposant :

Thyssen Stahl AG  
British Steel Corporation

Stichwort / Headword / Référence :

EPO / EPC / CBE Article 54

Kennwort / Keyword / Mot clé :

"Novelty" - "Disclaiming public prior use"  
"Appeal admissible" - "Limitation of claims  
removing the grounds of revocation"

Leitsatz / Headnote / Sommaire



Case Number : T 105/87 - 3.3.1

**DECISION**  
of the Technical Board of Appeal 3.3.1  
of 25 February 1988

**Appellant :**  
(Proprietor of the patent) Inland Steel Company  
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**Decision under appeal :** Decision of the Opposition Division of the  
European Patent Office dated 8 October 1986,  
posted on 7 January 1987, revoking European patent  
No. 0 027 510 pursuant to Article 102(1) EPC.

**Composition of the Board :**

**Chairman :** K. Jahn  
**Members :** J. Arbouw  
E. Persson

**Summary of Facts and Submissions**

I. European patent No. 27 510, incorporating six claims, was granted on 19 October 1983 to the Appellants on the basis of European patent application No. 80 104 707.7 filed on 11 August 1980 and claiming priority of 29 August 1979 from a prior application in the United States.

The only independent claim of the patent as granted reads:

"A free machining cast steel shape characterised in that said shape comprising of, in wt.%,

carbon	0.06 to 1.0
manganese	0.3-1.6
silicon	0.30 max.
sulphur	0.03-0.50
phosphorus	0.12 max.
bismuth	0.05-0.40
lead	0-0.30
tellurium	0-0.06
iron	essentially the balance,

and wherein:

the total amount of ingredients which lower the wetting ability of bismuth is less than the bismuth content of said steel."

II. Notices of opposition were filed by the Respondents on 30 June 1984 and 9 July 1984 respectively, requesting the revocation of the patent in its entirety on the grounds referred to in Article 100(a) and (b) EPC.

The opposition was based, inter alia, on three invoices purporting that steels falling under the patent-in-suit had been sold by the British Steel Corporation before the priority date.

- III. By its decision of 8 October 1986 posted on 7 January 1987 the Opposition Division revoked the patent.

This decision was based on the argument that its subject-matter is not novel in view of the steel compositions sold by British Steel Corporation. It was held that the expression "iron essentially the balance" as used in Claim 1 of the patent as granted also includes those impurities usually found in steel, and that therefore the claims of the patent-in-suit are anticipated by the steel compositions sold by British Steel Corporation.

- IV. A notice of Appeal was filed by the Appellants against this decision on 25 February 1987 and the appeal fee was also paid in due time. A Statement of Grounds was filed on 6 May 1987.

The Appellants argued that the bismuth containing steels sold by the British Steel Corporation are renitrogenised steels, whereas the patent-in-suit relates to non-renitrogenised steels. The expression "iron essentially the balance" does not include intentionally added ingredients as is the case for the steels sold by British Steel Corporation. However, in order to overcome the objections raised by the Opposition Division, assuming that the decision under appeal was correct in these respects, an amended Claim 1 was filed together with four alternative versions for consideration, all of which included certain steel making process features but specified that no measures should be taken to control nitrogen content.

V. The Respondents filed responses to the Grounds for Appeal. British Steel Corporation argued, as far as the procedure is concerned, that the appeal should be rejected as simply "vexatious", since it was not based on arguments that the decision of the Opposition Division was wrong. The appeal was rather a request for examination of a revised set of claims. Such an examination is, it was submitted, outside the competence of a Board of Appeal, which only has to decide on whether or not the decision of the first instance is wrong on the facts and arguments presented to that lower forum. In substance, both Respondents submitted that the amended claims were not supported by the application as originally filed. The application as originally filed has no basis for a limitation to steel produced from a mixture of hot metal and scrap or for a limitation of the nitrogen content as suggested in the amended claims. The Respondents further submitted that depending on the type of steel making process the nitrogen content may well come within the range as disclosed in the invoices filed by BSC. For instance, the nitrogen content for induction melted steel is 0.010-0.015%, and for arc-melted 0.007-0.010%.

VI. At oral proceedings held on 25 February 1988 the Appellants filed a new Claim 1 (main request), in order to overcome the substantive objections expressed by the Board, together with five alternative Claims 1. Claim 1 according to the main request differs from that as granted by disclaiming steel containing 0.008, 0.009 or 0.010% nitrogen and in defining the upper limit of the range concerning the manganese content as "1.60" instead of "1.6".

They submitted that Claim 1 according to the main request is novel over the alloys sold by the British Steel Corporation in that these alloys have been disclaimed. It was further submitted that patent-in-suit discloses a

novel teaching, i.e. that the wetting ability of bismuth in steel is diminished by copper, nickel, tin and zinc.

The wetting ability of bismuth is related to its function as a liquid metal embrittler. Therefore, the rule given in Claim 1 allows the man skilled in the art to enhance the ability of bismuth to function as a liquid metal embrittler.

VII. The Respondents agreed that Claim 1 according to the main request is novel over the three steel composition sold by the British Steel Corporation.

However, they submitted that the application as originally filed has no basis for this disclaimer.

VIII. The Appellants requested that the decision under appeal be set aside and that the patent be maintained on the basis of one of the claims submitted in the oral proceedings in the sequence indicated therein.

The Respondents 1 (Thyssen) requested that the case be remitted to the Opposition Division for further prosecution. The Respondents 2 (British Steel) requested that the appeal be dismissed as inadmissible.

#### Reasons for the Decision

1. The question of admissibility of the appeal raised by British Steel has to be considered in the light of Articles 106 to 108 and Rule 64 EPC. There is nothing in the wording of these provisions supporting the idea that the task of a Board of Appeal should be strictly limited to consider whether or not the decision of the first instance is correct on the basis only of facts and arguments presented before that instance, as argued by

British Steel. Nor is there anywhere else in the EPC any support for this idea. On the contrary, it is clearly foreseen that, depending on the particular circumstances of each individual case, new facts and arguments may be presented in the appeal proceedings and considered by the Board of Appeal subject to the provisions of Article 114(2) EPC giving the Board the power to disregard facts or evidence which are not submitted in due time by the parties concerned. The principles for how the appeal proceedings shall be conducted in these respects, including the question of amendments of claims (or descriptions or drawings), have been set out in "Guidance for appellants and their representatives" issued by the EPO and published in the Official Journal (last time in OJ EPO 1984, 376). These principles have also been dealt with in a number of previous decisions by the Boards of Appeal (see e.g. T 153/85, OJ EPO 1988, 1, and further references given in the reasons for that decision).

The Board has in one case dismissed an appeal as inadmissible because the grounds advanced in support of the appeal could not be regarded in terms of content as having met the time limit laid down in Article 108, third sentence (T 222/83, OJ 1986, 249). In the Statement of Grounds for this appeal it was only submitted that the impugned decision was incorrect without any statement of legal or factual reasons why the decision should be set aside. In the appeal under consideration the Appellant has admitted that the negative decision was correct for the claims on which the decision was based. However the Appellant further submitted that the reasons given for the impugned decision no longer applied to the limited claim relating to novel steel compositions. By limiting the subject-matter of the claim and by submitting reasons for the patentability of such a claim the Appellant has sufficiently dealt with the grounds of the decision of the first instance.

In the present case, the Appellants, furthermore, presented amended claims already with the grounds of appeal, i.e. at a very early stage of the appeal proceedings which is in accordance with what has been generally recommended by this Board in its decision in case T 153/85 (OJ EPO 1988, 1, see point 2.1 of the reasons for the decision). No abuse of the appeal procedure can therefore reasonably be considered to have taken place. The further amendments were made in the light of the discussion of the case at the oral proceedings and did, in the Board's view, neither constitute any such abuse. The Board, exercising the power of the first instance under Article 111(1) EPC, sees no reason to refuse its consent to these amendments, having regard to the fact that this appeal also fulfills the further conditions to be allowable in the sense of the above cited decision (see points 2.2 and 3).

In passing, the Board wishes to add the following: The fact that in this particular case the Appellants, for the purpose of the appeal, accepted the conclusions of the Opposition Division and, therefore, did not maintain the claims considered by this instance, should, of course, not put him into a less favourable situation than if he had disagreed with the Opposition Division and maintained these claims as a main request and presented amended claims only as an alternative request. An opposite view on this point could obviously lead to the result that an Appellant, in order to avoid any formal trouble, artificially would argue against the decision under appeal which would only be detrimental to the interest of providing for an as efficient appeal procedure as possible. The views expressed by the Board on this subject are not, as suggested by British Steel, in contradiction with the discussion on the possibilities of presenting amended claims in the appeal proceedings which took place

at the Munich Diplomatic Conference in 1973 (cf. Minutes of that Conference, M/PR/I, point 508-510). This discussion was, for the rest, limited to the particular situation of an application containing "a principal and a secondary claim" and did not cover the situation which is at stake in the present case.

In summing up, the appeal complies, in the Board's view, with Articles 106 to 108 and Rule 64 EPC and is, therefore, admissible.

- 2. There is no formal objection to the current version of Claim 1 according to the main request, since it is adequately supported by the original documents and does not extend the protection conferred by the patent as granted.

It is established jurisprudence of the Boards of Appeal that when there is an overlap between the prior art and the claimed subject-matter, this specific prior art may be excluded by way of a disclaimer even in the absence of support for the disclaimed matter in the original documents (see the decisions T 433/86 of 11 December 1987, paragraph 2 and T 04/80, "Polyetherpolyols/Bayer", OJ EPO 4/1982, page 149).

The upper limit for the manganese content (1.60 wt.%) is disclosed in Table 1, Column B.

- 3. The closest prior art is represented by the public prior use of three bismuth containing steel alloys (Cast No. 9971/2, Cast No. 16704 and Cast No. 16871) having the following compositions:

	9971/2	16704	16871
C	.09	.1	.08
Si	.02	.012	.01

Mn	1.3	1.39	1.32
P	.087	.091	.087
S	.37	.37	.36
Pb	.2	.20	.19
N <sub>2</sub>	.010	.008	.009
Cr	.14	.14	.13
Bi	.12	.13	.11
Mo	.002	.002	.001
Ni	.019	.026	.029
Cu	.018	.022	.02
Sb	.001	.001	.001
Co	.009	.008	.008

These alloys fall - as was admitted by the Appellants - within the ranges claimed in the patent as granted and are therefore detrimental to the novelty thereof.

However, in Claim 1 according to the main request, these prior used steels have been disclaimed by the indication that steels having a nitrogen content of 0.008, 0.009, 0.010% - i.e. those of the prior used steels - are excluded.

Therefore, the prior used steels with cast numbers 9971/2, 16704 and 16871 are no longer detrimental to the novelty of the subject-matter of Claim 1 according to the main request.

4. Since the only ground for refusal - lack of novelty over the steel composition sold by the British Steel Corporation - is no longer valid for Claim 1 according to the main request, the decision under appeal must be set aside. However, a final decision on the maintenance of the patent cannot be taken since the Opposition Division has not yet examined all grounds for opposition. The Board therefore makes use of its power under Article 111(1) EPC to remit the case to the Opposition Division for further prosecution.

Order

For the above reasons, it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the Opposition Division for further prosecution on the basis of Claim 1 according to the main request.

The Registrar

The Chairman



F.Klein

K.Jahn