

|                                     |         |
|-------------------------------------|---------|
| Veröffentlichung im Amtsblatt       | Ja/Nein |
| Publication in the Official Journal | Yes/No  |
| Publication au Journal Officiel     | Oui/Non |



Aktenzeichen / Case Number / N° du recours : T 139/83

Anmeldenummer / Filing No / N° de la demande : 79102766.7

Publikations-Nr. / Publication No / N° de la publication : 0007646

Bezeichnung der Erfindung: Coke oven patching and sealing material, method of  
Title of invention: patching and sealing cracks in coke ovens.  
Titre de l'invention :

**ENTSCHEIDUNG / DECISION**

vom / of / du 3 November 1983

Anmelder / Applicant / Demandeur : USS ENGINEERS AND CONSULTANTS, INC.

Stichwort / Headword / Référence :

EPÜ / EPC / CBE Articles 84, 123

"Disclosure" "Amendments"

Leitsatz / Headnote / Sommaire

Europäisches  
Patentamt

Beschwerdekammern

European Patent  
Office

Boards of Appeal

Office européen  
des brevets

Chambres de recours



Case Number: T 139 / 83

**DECISION**  
of the Technical Board of Appeal 3.3.1  
of 3 November 1983

**Appellant:** USS ENGINEERS AND CONSULTANTS, INC.

**Representative:** Patentanwälte Dipl.-Ing. A. Grünecker,  
Dr.-Ing. H. Kinkeldey,  
Dr.-Ing. W. Stockmair,  
Dr. rer. nat. K. Schumann,  
Dipl.-Ing. P. Jakob,  
Dr. rer. nat. G. Bezold,  
Maximilianstrasse 43  
D-8000 München 22  
Rep. Fed. d'Allemagne

**Decision under appeal:** Decision of Examining Division 029 of the European Patent  
Office dated 21 March 1983 refusing European patent  
application No 79 102 766.7 pursuant to Article 97(1)  
EPC

**Composition of the Board:**

Chairman: D. Cadman  
Member: K. Jahn  
Member: L. Gotti Porcinari

SUMMARY OF FACTS AND SUBMISSIONS

- I. European Patent Application No. 79 102 766.7 filed on 1 August 1979 and published on 6 February 1980 under publication No. 0 007 646, claiming the priority of the US prior application of 2 August 1978, was refused by decision of the European Patent Office dated 21 March 1983 on the basis of 5 claims received on 23.12.1981 of which claim 1 has the following wording:

"A composition for the production of mixes useful for the patching and sealing of refractory structures which are subject to thermal cycling, such composition comprising essentially, by weight on a dry basis, 55 to 80% of a high melting material selected from silica, magnesia, alumina and combinations thereof, 5 to 10% of a binder and glass having a softening point of 482 to 954°C, characterised by a glass range of 15 to 25%, at least 90% of which is finer than 100 mesh, any remainder being a fluxing agent".

- II. The stated ground for the refusal was that Claim 1 of the present application does not satisfy the requirements either of Article 84 or of Article 123(2) EPC. In the Examining Division's opinion the application as originally filed comprised two different glass ranges:

(a) 6 to 25% of a glass of which at least 90% is finer than 10 mesh (claim 1) and

(b) 15 to 20% of a glass of which at least 90% is finer than 100 mesh (claim 3).

.../...

4

The Examining Division admits that an exchange of values between the figures for percentage of glass would have been allowable if the two ranges disclosed had not been bound to different specifications of the particle sizes.

That is, if the range of "15 to 20% glass" according to claim 3 had only been a preferred range over the one according to claim 1 (6 to 25%), with both ranges being specified by identical particle size, the previous objections raised by the Examining Division with respect to the requirements of Article 84 and particularly Article 123(2) of the Convention could have been waived.

The ranges of glass, however, are characterised by different properties (particle sizes). Thus, the difference in particle size clearly indicates that the glass materials as such are not identical. The ranges as originally filed are both bound to properties which are different from each other.

III. On 20 May 1982 the appellant lodged an appeal against the decision of 21 March 1983, the relevant appeal fee was duly paid.

In the Statement of Grounds submitted on 22 July it was pointed out that neither Article 84 nor Article 123 EPC prohibit the type of amendment that appellant had made when replacing the originally claimed glass range of 6 to 25% by a glass range of 15 to 25%. The Decision of the Technical Board of Appeal T 02/81, dated 1 July 1982, (O.J. EPO 1982, pages 394-402) is of rather high significance in that it does not allow the EPO Examiners' to establish a practise of applying very restrictive standards to the allowability of amendments.

- IV. On the Board's advice the appellant submitted on 29 September 1983 a new set of 6 claims, the first of which has the following wording:

"A composition for the production of mixes useful for the patching and sealing of refractory structures which are subject to thermal cycling, containing a high melting material, a binder and a glass, characterised by a composition consisting essentially of, by weight, on a dry basis, 55 to 80% of said high melting material selected from silica, magnesia, alumina and combinations thereof, 5 to 15% of the binder and 15 to 25% of a glass having a softening point of 482 to 954°C, wherein at least 90% of the components are finer than 10 mesh and any remainder is a fluxing agent".

The appellant requests that the decision refusing the application be set aside and that a patent be granted on this basis.

#### REASONS FOR THE DECISION

1. The appeal is in accordance with Articles 106-108 and Rule 64 EPC; it is therefore admissible.
2. As mentioned above, according to the view of the Examining Division, the combination of end points of the general and the preferred range values for the concentration of one component of the composition, i.e. the glass, as it recurs in claim 1 in suit, is considered to offend against either Article 84 or Article 123(2) EPC. In the Board's view only Article 123(2) EPC can be referred to in the present case, since this regulation is

4

concerned with the question of admissibility of amendments. The purpose of this provision must be seen in ensuring that no fresh matter is introduced into an application by amendment.

However, in assessing the admissibility of the amendment as requested by the applicant, the Examining Division directed its attention unilaterally at claims 1 and 3. It should be mentioned that claim 3 fails to be a proper basis for restricting the quantitative range of the concentration for the glass component in claim 1, since claim 3 by depending on claim 2 covers exclusively such mixes which contain a siliceous high melting material, in contrast to claim 1 involving magnesia and alumina as high melting material as well.

3. As enunciated in an earlier decision of this Board (cf. "vinylchlorid resins", T 14/83 dated 7 June 1983, intended to be reported) the source of disclosure of an invention is of no importance. The question whether or not an invention is disclosed must not be judged solely on the basis of claims, as the Examining Division did. In accordance with the original claim 1 it is disclosed in the description of the application as filed that the mixes consist essentially of

(a) 55 to 80% of a high melting material selected from silica, magnesia, alumina and combinations thereof,

(b) 5 to 15% of a binder and

(c) 6 to 25% of a glass having a softening point of 482 to 954°C,

.../...

wherein at least 90% of the components are finer than 10 mesh (cf. page 2 line 25 to page 3 line 7).

The provision that at least 90% of each of the components are finer than 10 mesh is reiterated and reinforced in page 3 paragraph 2 and claim 5 as filed where the use of the composition is described and claimed.

After explaining a new adherence test which is better related to actual service conditions and after pointing out the merits of the claimed mixes beyond those of the prior art, the description continues with more details with regard to the components and their concentrations in the composition (cf. pages 8 and 9). In this context, besides the general range of concentration of the glass component (c), i.e. from 6 to 25%, its preferred range is disclosed as being between 15 to 20% (see page 9 lines 3 to 6). It is true that the only relevant sentence following this statement informs the reader about the general and preferred softening range of the glass without repeating the definition of its maximum size as disclosed in page 3. However, since that size is clearly disclosed in this application as an obligatory feature for all components including glass (cf. claims 1 and 5 in combination with page 3 lines 1 to 7 and 15/16) the provision that at least 90% of the glass component must be of a size finer than 10 mesh applies irrespective of the concentration of this component, i.e. be it in the general range between 6 to 25% or in the preferred range from 15 to 20% named in the same breath (cf. page 9 lines 3/4).

The statement that the low melting phase, i.e. the glass, desirably be of a size finer than that of the re-

fractory phase, i.e. the high melting material (see page 9 lines 23 to 27) which is explained in more detail in the following text (page 10), is not inconsistent with the foregoing, since this optional, albeit preferred, embodiment is devoid of any link with a particular range for the concentration of these components.

Consequently, the teaching that at least 90% of the glass component has a size finer than 10 mesh, irrespective of its concentration in the claimed composition, be it the general range from 6 to 25 or the preferred range from 15 to 20%, was originally disclosed.

4. Claim 1 in suit differs from that as originally filed in its precharacterising part mainly in the lower end of the range with regard to the glass component in that the original figure 6 is replaced by 15 stemming from the lower end of the preferred range. No objection to such an exchange of values between the two originally disclosed composition ranges arises in view of two earlier decisions of this board (cf. "methylen-bis(phenylisocyanate" O.J. 1982, 394, 398 and "Furnaceruße T 53/82 point 2 paragraph 3, unreported). Hence claim 1 is in conformity with Article 123(2) EPC.
5. The revision of the preamble of claim 1 was put forward in view of FR-A-2 202 053 which teaches different (albeit overlapping) ranges with regard to both components (a) and (b). Further, the Examining Division's objection that the components of the claimed mixes do not add up to the requisite total was met by inserting "whereby any remainder is a fluxing agent".

6. There can be no formal objection to the current version of the other claims, since it is adequately supported by the specification as originally filed. Claims 1 to 6 are based on the original claims 1 to 5 and 8, account being taken of the amendment requested on 3 October 1983.
7. From the foregoing, it follows that the decision under appeal is not supported by the grounds for refusal. However, the patent sought cannot be granted at present, since substantive examination has not yet been completed.

ORDER

It is decided that:

- (i) The decision of the Examining Division of the European Patent Office dated 21 March 1983 is set aside.
- (ii) The case is remitted to the first instance for substantive examination on the basis of the 6 claims dated 28 September received on 29 September 1983, account being taken of the amendment requested on 3 October 1983.

*J. R. G.*

*J. P. C. Cadman*