

Europäisches
Patentamt

Beschwerdekammern

European Patent
Office

Boards of Appeal

Office européen
des brevets

Chambres de recours



Case Number: T 201 / 83

DECISION of 10 September 1984

correcting errors in the decision **of the Technical Board of Appeal** 3.3.1

of 9 May 1984

Appellant: Shell Internationale Research Maatschappij B.V.
Carel van Bylandtlaan 30
NL-2596 HR Den Haag

Representative: Mr. A.T. Puister
P.O.Box 302
NL-2501 CH The Hague

Composition of the Board:

Chairman: D. Cadman
Member: G. Szabo
Member: F. Benussi

In application of Rule 89 EPC the Decision given on
9 May 1984 is hereby ordered to be corrected as follows:

page 8, line 8 from below:

replace "Rule 27(1)(d) EPC" by "Article 84 EPC".

The Registrar

J. Rie

The Chairman

D. P. Cadman

Rie 10.9.84.
Rie 5.9.84

Europäisches
Patentamt

Beschwerdekammern

European Patent
Office

Boards of Appeal

Office européen
des brevets

Chambres de recours



Case Number: T 201 / 83

DECISION
of the Technical Board of Appeal 3.3.1
of 9 May 1984

Appellant: Shell Internationale Research Maatschappij B.V.
Carel van Bylandtlaan 30
NL-2596 HR Den Haag

Representative: Mr. A.T. Puister
P.O.Box 302
NL-2501 CH The Hague

Decision under appeal: Decision of Examining Division 017 of the European Patent
Office dated 8 July 1983 refusing European patent
application No 80200322.8 pursuant to Article 97(1)
EPC

Composition of the Board:

Chairman: D. Cadman
Member: G. Szabo
Member: L. Gotti Porcinari

Summary of Facts and Submissions

- I. European patent application 80 200 322.8 filed on 11 April 1980 and published on 10 December 1980 with publication number 19 945, claiming priority of the prior application on 14 May 1979, was refused by the decision of the Examining Division 017 of the European Patent Office dated 8 July 1983. The decision was based on a single claim worded as follows:

"Lead alloy comprising 1 to 80 ppm magnesium and a small amount of calcium, characterised in that the calcium content of the alloy is 690 to 900 ppm".

- II. The stated ground for the refusal was that the subject-matter of the claim extended beyond the content of the application as filed so that it was not admissible in accordance with Article 123(2) EPC. Although the range of 1 to 80 ppm for magnesium and the upper limit of 900 ppm calcium of the claimed alloy were disclosed as endpoints of preferred ranges, the lower limit of 690 ppm calcium was only taken from an example for a specific alloy (melt No. 8). The claim was thus obtained by separating a specific calcium content from the context of a definite embodiment and introducing it as the lower limit of a generic range. The resulting range of 690 to 900 ppm had therefore "some character of novelty" within the originally disclosed page of 100 to 900 ppm, so that it represented new subject-matter within the meaning of Article 123(2) EPC.
- III. The applicant filed an appeal against the decision on 1 September 1983, and subsequently paid the fee and lodg-

ed a Statement of Grounds within the prescribed time. The description within the specification was revised and amended. The appellant submitted the following arguments in support of the appeal:

- (a) The lower limit of 690 ppm cannot represent novel subject-matter because that figure is disclosed in a working example and there is no better way of describing an invention than by way of such an example. The skilled reader would have no doubt that 690 ppm calcium is part of the invention as is the upper limit of 900 ppm. If, according to the decision of the Board in the "Methylenebisphenylisocyanate/Mobay" case (T 02/81, OJ 1982/10, 394-402) a specific range can be derived from a generic and a preferred range, a similar derivation should be permissible in the present case by analogy.
- (b) According to the Guidelines (C.VI - 5.6) if a claimed apparatus is disclosed to be mounted on "resilient supports" and the drawings show "helical springs" as interpreted by the skilled person, the latter term could be introduced and substituted for the former. If such an amendment would not be seen as representing new subject-matter, the suggested introduction of the feature from an example should not be construed as such either.
- (c) Furthermore, the Decision of the TBA in case T 54/82 ("Disclosure/MOBIL", OJ 1983/11, 446-450) also supports the view that the applicant is entitled to receive a granted patent claim which is based on a combination of features contained in the descriptive part of the specification and in the working examples.

- IV. After the Board requested an amendment of the claim and indicated that the modified text of the specification might not be acceptable in view of some amendments contained therein, a new claim was lodged and the original text of the application was reinstated as an alternative text for consideration. The new claim has the following wording:

"Lead alloy comprising a small amount of magnesium and calcium, characterised in that the calcium content of the alloy is 690 to 900 ppm and the magnesium content 1 to 80 ppm".

- V. The appellants requested that the decision under appeal be set aside and the patent be granted with the above claim.

Reasons for the Decision

1. The appeal complies with Article 106 to 108 and Rule 64 EPC and is, therefore, admissible.
2. Article 123(2) EPC, which governs amendments before grant specifies that

"A European patent application ... may not be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed".

The terms corresponding to "extends beyond" in the German and French versions are "über ... hinausgeht" and "s'étende au delà". Since subject-matters are dis-

closed and defined by their essential features neither the broadening nor the narrowing of their scope is allowed by the addition of an alternative or limiting feature, respectively, if such feature is "beyond", i.e. not within the content of the application. It is understood that such content may, by implication, even include the relevant state of the art at the date of filing ("Control circuit/LANSING BAGNALL", T 11/82, OJ 1983/12, 479-492) and that features known in the art could thus be a basis for disclaimers ("Polyether polyols/BAYER", T 04/80, OJ 1982/4, 149-154).

3. The well understood purpose of the sub-article is to avoid amendments which would enable the applicant to claim subject-matter that is not supported by the application as filed. The test for compliance with Article 123(2)EPC is basically a novelty test, i.e. no new subject-matter must be generated by the amendment. Normally the test for novelty calls for an inquiry whether or not a document, or article in use, contains sufficient information so that the person skilled in the art could derive the subject-matter in question from it directly and unambiguously, including any features implicit therein (cf. Guidelines for Examination CIV - 7.2). When this maxim is applied to patent applications in order to test the propriety of proposed amendments, the first condition must be that the feature of the amendment should be contained within the same document or would have to come from the relevant background art to be incorporated in that disclosure in consequence of Rule 27(d) EPC. It is, nevertheless, also the view of the Board that the requirement is not satisfied unless the skilled man could directly recognise the same as a combination of features available from the document.

4. The disclosure of the application under appeal relates to lead alloys which contain calcium and magnesium in specified amounts. It is necessary to maintain a certain calcium level in battery lead. Unfortunately melting and exposure to air decreases the available calcium in view of oxidation, whilst excess calcium reduces the corrosion resistance of the alloy. The invention solves this problem by adding minute amounts of magnesium to the composition. This effectively inhibits the "burning off" of calcium, but magnesium also contributes to the reduction of corrosion resistance if present in increased quantities. The problem that the invention is concerned with therefore calls for the provision of an effect protecting the calcium content of the alloy without an appreciable loss of corrosion resistance.

5. As filed, the application suggests that the magnesium content should be less than 100 ppm, and preferably 1 to 80 ppm was recommended. Calcium was originally limited from 100 to 900 ppm. In the working and comparative examples which illustrated the effectiveness of the magnesium content in preventing loss of calcium, the magnesium content varied from 20 ppm to 580 ppm. The calcium content varied from 680 ppm to 710 ppm, not necessarily combining more magnesium with more calcium. In fact the specification emphasises that "very low percentages of magnesium ... almost completely inhibit the burning-off of calcium ...". Furthermore it is also stated in the general description that " It is not at any rate not largely so that the magnesium is sacrificed for the calcium since in order to prevent the calcium from being burnt off ... no stoichiometric quantity of magnesium is required but considerably

smaller quantity of magnesium is sufficient" (cf. page 2, lines 29 to 34). It is also apparent that the magnesium itself does not burn off as the calcium would do, and that the magnesium may form a very thin protective oxide skin on the melt. This means that the result may also be dependent on shape and that excess magnesium may have no additional effect.

6. Whilst the protection of the calcium may, therefore be achieved with various amounts of magnesium, the increase of magnesium content may cause a rapid decrease of corrosion resistance (cf. line 16 to 21, page 6 of the original application). This is why the applicants limit their claim to a particular range where very good resistance prevails in addition to the effect of protecting the calcium. It is, however, clear that a particular quantity of calcium can be freely chosen by the skilled man without being pinned down to the specific magnesium content suggested in an example in association with that amount of calcium. The two ingredients have different roles, the calcium determining the mechanical properties of the alloy and the magnesium protecting the same from oxidation without having to be presented strictly in a particular concentration to achieve substantially the same effect. The invention is therefore different from other types of combination products where a particular choice of a limit for a parameter restricts the choice for another one, if substantially the same result is to be achieved. Had the choice of the concentration of one of these ingredients necessitated a particular kind of choice for the other, indicating a substantial degree of interdependence of quantitative values, the isolation of one value from the rest of the conditions could not have been readily

envisaged.

7. Since certain lead alloys containing small amounts of calcium and magnesium were already disclosed in the state of the art, the appellants are anxious to limit the claim to those varieties which would not specifically embrace alloys already known. It appears that this could be achieved if the range for calcium content were restricted to 690 to 900 ppm. The whole area of lower values between the original low limit of 100 ppm and the new limit of 690 ppm would thereby be effectively disclaimed. The basis for the suggested new lower limit is Melt No. 8. which contains 690 ppm calcium, 20 ppm magnesium and 0.39% tin. The upper limit of 900 ppm was, of course, already disclosed by the original maximum range of 100 to 900 ppm.
8. The first condition for an amendment is that the feature must be, expressly or by implication, contained in the disclosure as a matter of words or numerals, and this is fulfilled in the present case. The question then arises whether or not the skilled reader could have envisaged the new range within the old one by extracting one specific value from the context of the disclosure. If it is possible to combine certain end-points of a general and a preferred range of numerical values in order to recognise a part range as disclosed by implication according to the "Methylen bisphenylisocyanate/MOBAY" case, then would it be equally proper to consider the value in Melt 8 as a singularity, which may mark an end-point for a particular sub-range?
9. Although the proportion of the ingredients may be varied between the disclosed maximum limits, the iden-

tity of the ingredients remains unchanged since the amendment only restricts the scope for choices. In view of the loose connection between particular calcium and magnesium contents with regard to the effect, the expert would treat them as features of the design that could be separately considered. The same applies to the tin content, which merely increases the sensitivity of calcium to oxidation. This is rather like the choice of appropriate "resilient supports" for a device, wherein the applicant may, according to the Guidelines, restrict the claims to "helical springs" irrespective of the reasons for preference on the basis of drawings, where the same features were disclosed together with other features. Although such a component contributes to the total effect, it can still be considered separately in view of its specific role on its own. In the present case the situation is similar since the actual quantity of the calcium content is not rigidly tied to the particular magnesium or tin content. When functioning according to its own role, the presentation of 690 ppm calcium acquires a character of its own and becomes thereby recognisable as a point within or at the end of a range of possibilities defining thereby a sub-range. It must also be remembered that the applicant is entitled to delete many of his examples as long as support for the claims is maintained according to Rule 27(1)(d) EPC, which could further emphasise the values remaining in his examples of choice.

10. The suggested limitation of the claim is not based on an arbitrary restriction of the choice of alternative components available for the purpose, i.e. a qualitative choice, but merely represents a reduction of a range to a value already envisaged within the document,

i.e. a quantitative choice. The former would mean a selection from a variety of different combinations wherein each embodiment is qualitatively distinct from all the other possibilities. This happens in chemistry where a general formula may mean a general class on the basis of a combination of a variety of substituents with a common structure. Each choice may be novel in the absence of specific disclosure identifying or implying the same to the skilled person, and represent differences in kind rather than degree.

11. Contrary to the above, a mere recombination of specifically disclosed quantities for the same components is rather in the category of altering the size or shape of the constituents of a known device. It has already been established (cf. "Disclosure/MOBIL" T 54/82, OJ 1983/11, 448-451) that separate features of the original document may be combined without necessarily generating new subject-matter. If the same document contains instructions as to certain concentrations, proportions and sizes in respect of one or more constituents, it would be within the ordinary skill of the person to select exactly one or more of these numerical values when trying to reproduce an article or process falling within the scope of a general disclosure. Nevertheless even the mere quantitative modifications of the known parameters alone might generate novelty if such distinction represents and is based upon yet unrecognised quantities (cf. Guidelines for Examination C.III-4.8). This leaves room for selection inventions in the field of alloys provided the claimed varieties exclude areas which also cover whole known classes and specific embodiments which are described, exemplified or clearly implied by the state of the art.

12. The amendment considered in the present appeal for the general range of calcium content in the alloy would not appear to anticipate anything which has not already been so affected by the contents of the original disclosure. The claim contains only information as regards its individual features and as a combination of the lower limit with the rest of the integers which the skilled person would have recognised as being expressed or implied by the disclosure. Neither can the amendment be construed as a novel selection, even if there were new properties involved. Conversely, the amendment appears to generate no hindrance for further selections based on new quantitative information within the remaining area, and is therefore acceptable in respect of the requirements of Article 123(2) EPC. The Board holds the view that an amendment of a concentration range in a claim for a mixture, such as an alloy, is allowable on the basis of a particular value described in a specific example, provided the skilled man could have readily recognised this value as not so closely associated with the other features of the example as to determine the effect of that embodiment of the invention as a whole in a unique manner and to a significant degree.

ORDER

It is decided that:

1. The Decision of the Examining Division of the European Patent Office dated 8 July 1983 is set aside.
2. The application is remitted to the first instance in

order to carry out a substantial examination as to the patentability of the claim submitted with the letter of the 7 March 1984 (received on 10 March 1984) and the propriety of any amendments consequential thereto.

Registrar:

J. Ebe
19/4/84.
Y.P. 4/5/84

Chairman:

SI Cadman