

## **DECISIONS OF THE BOARDS OF APPEAL**

**Decision of Technical Board of Appeal 3.3.3 dated 14 February 1996**

**T 39/93 - 3.3.3\***

(Language of proceedings)

Composition of the board:

Chairman: C. Gérardin

Members: R. Young

J. A. Stephens-Ofner

**Patent proprietor/Respondent: ALLIED COLLOIDS LIMITED**

**Opponent/Appellant: SNF Floerger**

**Headword: Polymer powders/ALLIED COLLOIDS LIMITED**

**Article: 56, 113(2), 114(1), (2) EPC**

**Rule: 27(1)(c), 55(c), 71a EPC**

**Keyword: "Inventive step (yes) - combination of physical and compositional features not in accordance with the prior art teaching" - "Problem solution approach - reformulation of technical problem - objective problem" - "Late filed material confirming evidence previously submitted" - "Limits on investigative function of the Boards of Appeal" - "Effects of Rule 71a EPC considered"**

*Headnote*

*I. New Rule 71a EPC should not be construed as an invitation to file new evidence or other material departing from the legal and factual framework of issues and grounds pleaded and evidenced throughout the proceedings prior to the hearing of the appeal (point 3.3 of Reasons).*

*II. The technical problem as originally presented, in accordance with Rule 27(1)(c) EPC, in the application or patent in suit, which is to be regarded as the "subjective" technical problem, may require reformulation on the basis of objectively more relevant elements originally not taken into account by the Applicant or Patentee. This reformulation yields a definition of the "objective" technical problem. The latter represents the ultimate residue (effect), corresponding to the objective contribution provided by the subject-matter defined in the relevant claim (features)(Points 5.3.1, 5.3.2, 5.3.3 of Reasons).*

*III. Whilst generally accepted definitions of the notional "person skilled in the art" do not always use identical language to define the qualities of such a person, they have one thing in common, namely that none of them suggests that he is possessed of any inventive capability. It is the presence of such capability in the inventor which sets him apart from the notional skilled person (point 7.8.4 of Reasons).*

**Summary of Facts and Submissions**

I. The mention of the grant of European patent No. 0 169 674, in respect of European patent application No. 85 304 517.7, filed on 25 June 1985 and claiming a GB priority of 28 June 1984 (GB 8416454) was announced on 9 May 1990 (cf. Bulletin 90/19). Claim 1 read as follows:

"A process in which a water soluble or water swellable high molecular weight polymer is dispersed into a liquid phase to form a fluid composition comprising the polymer in the form of gel particles interconnected by the liquid phase and the polymer is worked while present as the fluid composition, characterised in that the gel particles have a size during the working of at least 20µm and the liquid phase is an aqueous solution of an equilibrating agent that substantially prevents aggregation of the particles or dissolution of the polymer during working, the concentration of equilibrating agent in the aqueous solution is 10% to 70% by weight, the ratio (dry weight) of high molecular weight polymer to equilibrating agent is from 1:0.3 to 1:10, the ratio (by weight) of the aqueous solution to gel particles is from 0.5:1 to less than 10:1, and the gel polymer and equilibrating agent are selected from the combinations of gel polymer and equilibrating agent consisting of: (a) the gel polymer is an anionic polymer and the equilibrating agent a water soluble anionic polymer of ethylenically unsaturated monomers, blends of water soluble cationic polymers of ethylenically unsaturated monomers with inorganic salts, and polydiallyldimethyl ammonium chloride; (b) the gel polymer is a cationic polymer and the equilibrating agent is a water soluble cationic polymer of ethylenically unsaturated monomers, polyethylene imine, dimethylamine epichlorhydrin reaction product, and blends of water soluble anionic polymer of ethylenically unsaturated monomers with inorganic salts; (c) the gel polymer is a non-ionic polymer and the equilibrating agent is a water soluble anionic polymer of ethylenically unsaturated monomers or a water soluble cationic

polymer of ethylenically unsaturated monomers; and (d) the gel polymer is a cellulosic or starch polymer and the equilibrating agent is a water soluble anionic polymer of ethylenically unsaturated monomers."

Claims 2 to 16 related to elaborations of the process of Claim 1.

II. Notice of Opposition was filed on 7 February 1991 on the grounds that the subject-matter of the patent in suit did not involve an inventive step (Article 100(a) EPC) and furthermore extended beyond the content of the application as originally filed (Article 100(c) EPC).

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IV. On 30 December 1992, a Notice of Appeal against the above decision was filed by the Appellant (Opponent), together with payment of the prescribed fee.

In the Statement of Grounds of Appeal filed on 4 March 1993 and a subsequent written submission filed on 30 November 1993, the Appellant argued substantially as follows:

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V. The Respondent (Patentee) argued in a submission filed on 17 September 1993 in essence as follows:

...

VI. A communication was issued by the Board on 15 September 1995 with a summons pursuant to Rule 71(1) EPC to oral proceedings for 14 February 1996 and set, in accordance with Rule 71a EPC, a final date for the filing of any further submissions of one month before these oral proceedings. Both parties, however, filed several further submissions and evidence.

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VII. Oral proceedings were held before the Board on 14 February 1996, during which the Appellant additionally referred to a further item of evidence (D10), stated to be a graphical representation of the results obtained from a particle size analyser.

VIII. The Appellant requested that the decision under appeal be set aside and the patent revoked, or, auxiliarily, that the patent be maintained in a form defining the gel particles in Claim 1 in a more restrictive way, by including certain features from the description.

The Respondent requested that the patent be maintained on the basis of the claims and description attached to the decision under appeal, but subject to the amendments submitted by way of main request on 12 January 1996 and shown on page 12, also labelled "Main Request", attached thereto, or on the basis of the "First Auxiliary Request" submitted in the course of the oral proceedings.

#### **Reasons for the Decision**

1. The appeal is admissible.

*2. Admissibility of the Appellant's auxiliary request*

The auxiliary request of the Appellant to have certain features included in the claims of the patent in suit could not be entertained by the Board, since, according to Article 113(2) EPC, the EPO may consider and decide upon the patent only in the text submitted or agreed to by the Patentee (here the Respondent), and no such corresponding request or consent was provided by the Respondent.

Hence, the auxiliary request of the Appellant is rejected as inadmissible.

*3. Admissibility of recently filed evidence*

The requests and evidence filed by the parties following the issue of the communication amounted to six separate submissions, four of them filed after the final date set in accordance with Rule 71a EPC.

The Appellant's argument during the oral proceedings, that the issue of such a communication constituted an "open invitation" to file such further items of evidence, even though this flew in the face of all the judicial principles developed in recent years by the Boards of Appeal, and that if evidence filed after the final date under Rule 71a EPC "need not be considered", then evidence given before it had to be, was duly noted by the Board, subject to the following observations.

3.1 Since the issue of the above communication, the applicability of Rule 71a EPC to proceedings before the Boards of Appeal has been called into question, as it has become the subject of a referral to the Enlarged Board of Appeal.

This being the case, at the very least, the attitude of the Board to the recently filed evidence needs to be governed, not so much by Rule 71a EPC, but rather by the well established substantive criteria that had been routinely applied in such cases, and which arise from the definitive findings of the Enlarged Board of Appeal, in particular from its rulings as to the nature and function of appeals in G 9/91 and G 10/91, OJ EPO, 1993, 408 and 420, respectively.

3.1.1 According to these findings, Rule 55(c) EPC has the double function of governing the admissibility of the opposition and of establishing at the same time the **legal** and **factual** framework, within which the substantive examination of the opposition shall be conducted. Both rulings, confirming a number of earlier cases of a number of Boards of Appeal, as well as decisions G 7/91 and G 8/91, OJ EPO 1993, 356 and 346, respectively, also state that appeals are **judicial** as opposed to merely **administrative** proceedings, so that their function is mainly to decide whether the first instance decision was right on its merits.

Consequently, the **legal** and **factual** framework of the case on appeal must remain the same or substantially the same as that of the one decided by the first instance, otherwise no valid judgment on the merits of the first instance's decision could be made. One exception to this principle is, however, justified in the case where the Patentee agrees that a fresh ground of opposition may be considered (**volenti non fit injuria**), in which event the case should normally be remitted to the first instance. The Enlarged Board also expressly held that the investigative function under Article 114(1) EPC of the Boards of Appeal was severely restricted as compared with that of the first instance, administrative, divisions.

3.1.2 According to the decision T 1002/92, OJ EPO 1995, 605, it follows from both these rulings that the same principles also govern the admissibility of late-filed new "facts, evidence and related arguments", since it is these which make up the **factual** framework of the case under appeal, whilst the extent to which the patent is opposed and the grounds of opposition constitute the **legal** framework.

This decision accordingly concluded inter alia that, in relation to proceedings before the Boards of Appeal, such "new facts, evidence and related arguments" should only very exceptionally be admitted into the proceedings, if such new material is *prima facie* highly relevant in the sense that it is **highly likely to prejudice maintenance of the European patent in suit** (Reasons for the decision, points 3.3 and 3.4).

3.2 Reverting, for the sake of completeness, to the Board's views on the relevance to appeal proceedings of Rule 71a EPC, the Board cannot accept the Appellant's legal proposition that an amendment to a procedural rule (i.e. old Rule 71 EPC) is capable of overriding those well-established legal principles, laid down in the points of law above referred to, that define the nature and function of appeals, and in particular the scope and effect of Article 114(1) EPC in relation to that function.

In other words, the meaning of an Article of the EPC (here, Article 114), on its true interpretation as established by a ruling of the Enlarged Board of Appeal cannot, in the Board's view, be overturned by a newly drafted Rule of the Implementing Regulations, the effect of which is to conflict with this interpretation. This is because, according to Article 164(2) EPC, in the case of conflict between the provisions of this Convention (the EPC Article) and those of the Implementing Regulations, the provisions of this Convention shall prevail.

3.3 In any case, a communication sent to the parties pursuant to new Rule 71a EPC should not be construed as an invitation to file new evidence or other material departing from the legal and factual framework of the issues and grounds pleaded and evidenced throughout the opposition and appeal proceedings prior to the hearing of the appeal.

3.4 In the present case, as was mentioned before, the Respondent explicitly withdrew all objection to the introduction of the late filed evidence (D6 to D8) by the Appellant and, furthermore, the latter raised no objection either to the introduction of the Respondent's evidence (D9) in response to this late filed evidence.

Consequently, applying the principle of "**volenti non fit injuria**", the legal exception provided by the Enlarged Board is fulfilled, thereby empowering the Board to admit all such late filed matter to which no objection was made by the Patentee.

3.5 An important point in this connection is that all the new evidence is related to what happens when carrying out the process disclosed in D3, and in particular to the nature of any particles formed. It cannot, therefore, be said to change the framework of facts, evidence and arguments forming the case to be decided by the Board, since it is a practical elucidation which crystallises the implicit disclosure of this document, which has itself formed part of the proceedings from the very start.

Thus, the Board is not here confronted with a fresh or different case as a result of exceptionally admitting this evidence, and so there is no consequent need to refer the case back to the first instance.

3.6 In the light of all these considerations, it is, therefore, only necessary to consider all the recently filed evidence from the point of view of its relevance, i.e. its evidential weight in relation to the other documents already in the proceedings, and from the point of view of general procedural fairness.

3.7 Turning now to the items of evidence submitted to the Board, it is worth noting that both D6 and D7 originated from another and quite different case, wherein they had been adduced in evidence by a party (there the Patentee) who is not a party in the present case, and in which the present Appellant was also the Opponent. D6 was an experimental report including a repetition of a process as exemplified in D3, and D7 was a photomicrograph relating to a product of such a process. The original photomicrograph - of which D7 filed in the present case is a photocopy - is a piece of evidence that is private to the case in which it was introduced. This Board has to decide this appeal on the basis of the evidence and arguments adduced in this case and this case alone. It would be wholly wrong for it to take cognizance of any matter that is not actually in this particular case; since, as was said before, its investigative functions are severely limited by the fact that it is a judicial as opposed to an administrative body.

Consequently, in the case of D7, the Board was limited to a consideration of the photocopy filed in the present appeal.

Notwithstanding the above, each of D6 to D9 supplements the disclosure of D3 by providing details and/or photographs and/or samples of the products obtained when working the process described and exemplified in D3.

Consequently they must have, read in the context of D3, an evidential weight greater than that of D3 alone.

3.8 Furthermore, the Respondent having filed counterevidence (D9) in reply to that of the Appellant (D6 to D8), there is no procedural imbalance which could result in unfairness.

In the light of all the above considerations and in accordance with the requests of both parties, the Board, in its discretion, has decided to admit, pursuant to Article 114(1) EPC, the evidence contained and set out in documents D6, D7, D8 and D9 to the proceedings.

3.9 The evidence relating to particle size distribution in the form of graphical results from a particle size analyser (D10), sought to be introduced by the Appellant on the day of the oral proceedings, is, however, of a different character.

3.9.1 Firstly, filing such evidence even on the day before the oral proceedings is not considered to be acceptable conduct on the part of the submitting party, since this allows the other party only to consider and respond to it during the oral proceedings (T 741/91 of 22 September 1993, not published in OJ EPO; Reasons for the decision, point 4.6).

This conclusion applies a fortiori where, as in the present case, the evidence in question was not filed until the actual day of the oral proceedings.

3.9.2 Secondly, the relevance of such additional information as could be derived from a particle size distribution analysis, over and above that which is available from the other documents already admitted to the proceedings, is not apparent to the Board.

3.9.3 Consequently, the Board has decided to exclude the latter item of evidence, (D10), from the proceedings pursuant to Article 114(2) EPC.

*4. Allowability of amendments*

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*5. The closest state of the art; the technical problem*

5.1 The patent in suit is concerned with subjecting a water soluble or water swellable polymer to some working operation, such as, for example, comminuting the polymer or transporting it from one part of a manufacturer's plant to another (page 2, lines 3 to 7). A particular problem arises when the working involves conversion of a rigid aqueous gel of the polymer into particles, since there is a tendency for the particles temporarily to form an agglomerated mass upon initial contact with water (page 2, lines 18 to 20 and 35 to 37).

To avoid this disadvantage, the water soluble or water swellable high molecular weight polymer is dispersed into a liquid phase to form a fluid composition comprising the polymer in the form of gel particles interconnected by the liquid phase, and the polymer is worked while present as the fluid composition, the process

being characterised in that the gel particles have a size during the working of at least 20µm and the liquid phase is an aqueous solution of an equilibrating agent that substantially prevents aggregation of the particles or dissolution of the polymer during working (page 3, lines 12 to 17).

Such a process is, however, known from D5, which is considered to form the closest state of the art, since it is also concerned with the tendency, when a water soluble polymer powder is dissolved in water, for the polymer to swell and form clumps resulting from the agglomeration of the particles. These clumps, surrounded by a thin gelatinised surface film, are difficult to de-aggregate and dissolve (page 1, third paragraph).

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5.3 Although there was general agreement that D5 constituted the closest state of the art, the precise statement of the technical problem objectively arising from its disclosure was the subject of some discussion during the oral proceedings. In particular, the Appellant, without referring to any specific Article or Rule of the EPC, objected to a reformulation of the technical problem.

Consequently, it is considered appropriate at this point to summarise the main principles applied by the Board to the formulation of such a problem.

5.3.1 According to Rule 27(1)(c) EPC, the description of an application should "disclose the invention, as claimed, in such terms that the technical problem (even if not expressly stated as such) and its solution can be understood, and state any

advantageous effects of the invention with reference to the background art". The documents referred to in the description must thus be assumed to reflect the Applicant's knowledge of the relevant background art at the filing date of the application; consequently, the technical problem as first defined is to be regarded as "subjective".

5.3.2 Although it is desirable to take the same approach as the Applicant regarding the definition of the technical problem (T 246/91 of 14 September 1993, Reasons for the decision, point 4.4; T 495/91 of 20 July 1993, Reasons for the decision, point 4.2; and T 741/91 of 22 September 1993, Reasons for the decision, point 3.3; all unpublished in OJ EPO), it is not unusual that the latter may have to be reformulated in view of the documents cited in the search report and/or subsequently relied upon in opposition/appeal proceedings, if these citations represent a closer state of the art than that originally mentioned in the application.

Similarly, the technical problem arising may have further to be reformulated, in particular in less ambitious terms, if it appears in view of experimental evidence that the combination of features in the claim does not solve this problem over the whole area defined in the claim (T 20/81, OJ EPO 1982, 217).

In both cases, reformulation of the technical problem as originally disclosed, in accordance with Rule 27(1)(c) EPC, in the application or patent in suit (the "subjective" technical problem), on the basis of objectively relevant elements originally not taken into account by the Applicant or Patentee, yields a definition of the "objective" technical problem.

5.3.3 The "objective" technical problem thus established represents the ultimate residue (effect), corresponding to the objective contribution provided by the subject-matter defined in the relevant claim (features).

5.3.4 In the present case, the content of D5 has already been acknowledged, according to Rule 27(1)(c) EPC, in the description of the patent in suit (page 2, line 65 to page 3, line 4) and a technical problem derived in the following terms: "None of these proposals meet the desired objective of the provision of an aqueous suspension of a water soluble or water swellable polymer that is stable and that, when used, does not carry unwanted material, in particular surfactant, into the environment" (page 3, lines 9 to 11).

Thus, in the present case, the "subjective" technical problem and the "objective" technical problem start out from the same (closest) state of the art and should therefore be essentially the same. In this connection, the particles in the "aqueous suspension" according to D5 are exemplified as being of appreciable size, of the order of hundreds of micrometers (section 5.2.6, above).

5.3.5 The objection of the Appellant, that the specific reference to "surfactant" as unwanted material was not mentioned in the statement of problem in the application as originally filed, is irrelevant.

5.3.5.1 Firstly, for the reasons set out in sections 5.3.1 to 5.3.3 above, the statement of objective problem may be changed in the light of the prevailing relevant circumstances. Such a reformulation of the technical problem is not objectionable

under Article 123(2) EPC if the problem could be deduced by a person skilled in the art from the application as originally filed (T 13/84, OJ EPO 1986, 253).

In this connection, the polluting effects of surfactants are perhaps the most generally well known of any environmentally undesirable material. In any case, the allowability of this amendment, which was made pre-grant (section 4.1, above), was not disputed.

5.3.5.2 Secondly, the statement of problem in the patent in suit in any case does not depend on the reference to surfactants, since it merely mentions them as examples of unwanted materials.

5.3.6 The further argument of the Appellant, that the statement of the problem would have to involve the replacement of the surfactant, is itself contradicted by the objection of the same party to the mention of "surfactant" in the statement of problem in the patent in suit (section 5.3.5 etc., above). It is, however, in any case untenable, since the replacement of the surfactant itself (as opposed to the avoidance of the problems caused by surfactants) is an aspect of the solution rather than the problem. It is not, as is well established, permitted, according to the problem and solution approach, to formulate the technical problem in terms which contain pointers to the solution (T 229/85, OJ EPO 1987, 237).

In summary, the mention of "surfactant" in the statement of problem in the patent in suit, whilst being neither objectionable nor unjustified in itself, is also neither essential nor, as a direct parameter, necessarily appropriate to the objective definition of the technical problem.

5.3.7 In view of the above considerations, the objective technical problem arising from the disclosure of D5 is, in the Board's view, to be seen as the definition of an alternative process for providing an aqueous suspension of water soluble or water swellable polymer particles having an appreciable size (at least 20µm), that is stable and that, when used, does not carry undesirable material into the environment.

5.3.8 The solution of this problem proposed according to Claim 1 of the patent in suit is to replace the surfactants in D5 by an aqueous solution containing above 10 wt% but below 70 wt% of an equilibrating agent comprising a water soluble ionic polymer of ethylenically unsaturated monomers, the ratio (dry weight) of the high molecular weight polymer to equilibrating agent being 1:0.3 to 1:10, and the polarity of these polymers being selected in dependence on the ionic character, if any, and type of the high molecular weight gel polymer to be stabilised, such that (a) if the gel polymer is an anionic polymer, then the equilibrating agent polymer is anionic, cationic blended with inorganic salt, or polydiallyldimethyl ammonium chloride; (b) if the gel polymer is a cationic polymer, then the equilibrating agent polymer is cationic, polyethylene imine, polydimethylamine epichlorhydrin, or anionic blended with inorganic salt; (c) if the gel polymer is a non-ionic polymer, then the equilibrating agent polymer is anionic or cationic; and (d) if the gel polymer is a cellulosic or starch polymer, then the equilibrating agent polymer is anionic.

5.3.9 It is evident from the large number of examples and comparisons given in the patent in suit that stable dispersions of appreciable particle size (of the order of 1 000µm) can be established and worked using the claimed measures. Moreover, none of these results has been disputed by the Appellant.

5.3.10 The argument of the Appellant, that the solution proposed simply replaces one environmentally unwanted material (the surfactant) with another (the water soluble polymer of ethylenically unsaturated monomers), is merely an unsupported allegation, since no evidence was led to demonstrate that the presence of low molecular weight water soluble polymer is necessarily undesirable. On the contrary, according to an uncontested submission of the Respondent at the oral proceedings, such "bimodal" compositions may have extremely valuable properties in use. In any case, such polymers are not polluting in the same sense as surfactants typical, say, of D5 would be, if discharged into the environment.

Accordingly, the Board accepts that the claimed measures provide an effective solution of the stated problem.

#### *6. Novelty*

It was not alleged that the claimed subject-matter lacked novelty. Nor does the Board see any ground for taking a different view.

Consequently, the Board finds the claimed subject-matter to be novel.

#### *7. Inventive step*

In order to determine the issue of inventive step, it is necessary to establish whether the skilled person, starting from D5, would have expected a stable, workable (e.g. comminutable) aqueous suspension of high molecular weight gel polymer particles of appreciable size (at least 20 $\mu\text{m}$ ) to be obtained by replacing the surfactants of D5

by ionic polymers of ethylenically unsaturated monomers, where appropriate blended with inorganic salts, in the specific amounts and proportions referred to in section 5.3.8, above.

...

7.8 It was, however, a major plank in the Appellant's arguments that the obviousness of the claimed equilibrating agents could be derived from the presentation, in the application as originally filed, of the surfactants and the equilibrating agents forming the solution of the stated problem as "perfectly equivalent" (Section IV. (e), above). The inventor, so the argument ran, was also a skilled person, and if it was clear that the equilibrating agents were simple alternatives to surfactants for the purpose of stabilising gel polymer dispersions, then it was also clear to the skilled person at the priority date to make such a substitution.

...

7.8.4 Finally, the argument that what would have been obvious to the inventor must also have been obvious to the person skilled in the art, because the inventor will normally also be a person skilled in the art, rests on a fundamental confusion between the terms "inventor" and "person skilled in the art".

There are a number of generally accepted definitions of the meaning in European patent law of the term "person skilled in the art", e.g. in *Schulte*, "Patentgesetz mit EPÜ" (5th Edition, Carl Heymanns Verlag, 1994, page 116, paragraph 4.10), according to which he is the expert in the relevant field, who is possessed of average

knowledge and ability, i.e. not an exceptional, outstanding or brilliant expert, and in the EPO Guidelines (C-IV, 9.6), according to which he is presumed to be "an ordinary practitioner".

Whilst such generally accepted definitions of the notional "person skilled in the art" do not always use identical language to define the qualities of such a person, they have one thing in common, namely that none of them suggests that he is possessed of any inventive capability. On the contrary, it is the presence of such capability in the inventor, which sets him apart from the notional skilled person.

Indeed, this must be so, since inventions, no matter how surprising or inventive they turn out to be, were, when made, most probably obvious to one person, namely the inventor himself. Hence, measured against the yardstick of such an individual's capability, most if not all technical developments would not involve an inventive step within the meaning of Article 56 EPC.

Consequently, for the purposes of assessing inventive step, the right criterion to be applied is not whether the claimed subject-matter would have been obvious to an inventive person, let alone the inventor himself, but rather whether it would have been obvious to a competent but not inventive person, namely the notional "person skilled in the art".

...

7.10 In summary, the solution of the technical problem in this case did not arise in an obvious way for the person skilled in the art having regard to the state of the art. The subject-matter of Claim 1 therefore involves an inventive step. ...

**Order**

**For these reasons it is decided that:**

1. The Opposition Division's decision is set aside.
2. The case is remitted to the Opposition Division with the order to maintain the patent with the claims and description attached to the decision under appeal but subject to the amendments submitted by way of Main Request on 12 January 1996 and shown on page 12, labelled "Main Request" attached thereto and after the description has been adapted, if necessary.

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\* This is an abridged version of the decision. A copy of the full text in the language of proceedings may be obtained from the EPO Information Office in Munich on payment of a photocopying fee of DEM 1.30 per page.