BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

Internal distribution code:
(A) [ ] Publication in OJ
(B) [ ] To Chairmen and Members
(C) [X] To Chairmen

D E C I S I O N
of 22 April 1998

Case Number: T 0489/96 - 3.3.3

Application Number: 88201904.5

Publication Number: 0306115

IPC: C08L 73/00

Language of the proceedings: EN

Title of invention:
Polymer-based container

Patentee:
Shell Internationale Research Maatschappij B.V.

Opponent:
BP Chemicals Ltd.

Headword:
-

Relevant legal provisions:
EPC Art. 56

Keyword:
"Inventive step (no) - relevant properties self-evident from standardised, routine tests"

Decisions cited:
T 0095/83, T 0153/85, T 0229/85, T 0038/89, T 0570/91

Catchword:
-

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0489/96 - 3.3.3

D E C I S I O N
of the Technical Board of Appeal 3.3.3
of 22 April 1998

Appellant: (Proprietor of the patent)
Shell Internationale Research Maatschappij B.V.
Carel van Bylandtlaan 30
2596 HR Den Haag (NL)

Representative:
-

Respondent: (Opponent)
BP Chemicals Ltd
Britannic House, 1 Finsbury Circus
London EC2M 7BA (GB)

Representative:
Preece, Michael
BP International Limited
Patents and Agreements Division
Sunbury Research Centre
Chertsey Road
Sunbury-on-Thames
Middlesex TW 16 7LN (GB)

Decision under appeal:
Decision of the Opposition Division of the European Patent Office dated 14 February 1996, issued in writing on 27 March 1996, revoking European patent No. 0 306 115 pursuant to Article 102(1) EPC.

Composition of the Board:

Chairman: C. Gérardin
Members: R. Young

A. C. G. Lindqvist

Summary of Facts and Submissions

I. The mention of the grant of European patent No. 0 306 115, entitled "Polymer-based container", in respect of European patent application No. 88 201 904.5, filed on 2 September 1988 and claiming US priorities of 4 September 1987 (US 94978 and US 94954) and 13 October 1987 (US 107215 and US 107216) was announced on 22 December 1993 (Bulletin 93/51).

II. Notice of Opposition was filed on 21 September 1994 on the grounds of lack of novelty and inventive step. The opposition was supported by the document:

D1: EP-A-0 213 671.

The Patentee furthermore referred to a number of documents, in particular:

D2: "Ullmann's Encyclopedia of Industrial Chemistry", vol. 11, pages 590 to 597.

III. By a decision which was given at the end of oral proceedings held on 14 February May 1996 and issued in writing on 27 March 1996, the Opposition Division revoked the patent. The decision was based on two sets of claims, forming a main and an auxiliary request respectively. The main request was a set of 10 Claims filed with a letter dated 11 January 1996, Claim 1 of which read as follows:

"Polymer-based container suitable for use with food or beverages at high temperatures, characterized in that the container is a monolayer container and the polymer is a linear alternating polymer of CO and ethylene, and optionally one or more other olefinically unsaturated hydrocarbons C_aH_b, having the empirical formula:

$$-[-CO-CH_2CH_2-]_x--[-CO-C_aH_b-]_y-$$

wherein $a \geq 3$; $b \geq 6$; and $x/y \geq 8$."

Claim 2, an independent claim, read as follows:

"Polymer-based container suitable for use with food or beverages at high temperatures, characterized in that the container is obtainable by thermoforming and the polymer is a linear alternating polymer of CO and ethylene, and optionally one or more other olefinically unsaturated hydrocarbons C_aH_b, having the empirical formula:

$$-[-CO-CH_2CH_2-]_x--[-CO-C_aH_b-]_y-$$

wherein $a \geq 3$; $b \geq 6$; and $x/y \geq 8$."

Claims 3 to 10 were dependent claims directed to elaborations of the container according to Claim 1 or 2.

The auxiliary request was a set of claims 1 to 9, corresponding to the main request, but in which independent Claim 2 had been deleted, and the remaining claims renumbered accordingly.

According to the decision, the closest state of the art document D1 made available a polyketone container suitable for food and drinks, but did not mention a monolayer structure. The effect of selecting polyketones with good barrier properties and heat distortion temperature could not be taken into account, since the chemical nature of the polymers was not a distinguishing feature. The use of monolayer containers with food or beverages was, however, standard in the art. Furthermore, it had not been disputed that the skilled person, in studying the properties of a material for use as a container, would first of all prepare a monolayer container. Consequently, making such a monolayer container was the most obvious way of "completing" the teaching of D1 and the subject-matter of Claim 1, although novel, did not involve an inventive step.

IV. On 20 May 1996, a Notice of Appeal against the above decision was filed, together with payment of the prescribed fee.

In the Statement of Grounds of Appeal filed on 25 July 1996, the Appellant (Patentee) argued in substance as follows:

(a) D1 did not make available the barrier properties, in particular the water vapour barrier properties (which had been demonstrated by comparative experiment in opposition proceedings), and the heat distortion temperatures of the polyketones according to Claim 1 of the patent in suit.

Consequently, these properties should be taken into account in the formulation of the objective problem. There was, however, no incentive in D1 to explore water vapour barrier performance or to select polyketones having the relevant claimed values of x/y.

(b) It was accepted that, at the priority date of the patent in suit, there was not a single resin capable of meeting the right balance of performance properties and economics required in packaging. The emphasis in industry had been on combining or modifying existing polymers rather than developing new polymers. Such barrier properties, together with the ability to be hot-filled and the retortability of the monolayer containers of Claim 1 could not have been expected on the basis of D1, and hence there was no incentive to explore such properties in the expectation of finding good results in all of them.

(c) In contrast to known monolayer containers, the claimed containers did not require multiple process steps.

(d) The finding in the decision under appeal, that the skilled person would study a polyketone first in the form of a monolayer container before deciding whether and how its properties had to be improved, related to the question of whether or how the skilled person could arrive at the claimed subject-matter. This was not, however, a correct

question to be asked. The correct question was whether the skilled person would select the polyketones and make a monolayer container in the expectation of arriving at a container with the set of properties described in the patent in suit.

A number of standard texts were referred to for the first time in the Statement of Grounds of Appeal, as evidence of general knowledge, in particular:

D5: "Encyclopedia of Polymer Science and Engineering", Vol. 2, 1985, pages 181 to 184.

The Appellant also filed, on 18 March 1998, a facsimile copy of a Declaration of Professor Donald R. Paul of the University of Texas at Austin, in support of the above arguments.

V. The Respondent (Opponent) supported the findings of the decision under appeal, and furthermore argued, in a submission filed on 10 February 1997, substantially as follows:

(a) The words "packaging" in D1 and "container" in Claim 1 of the patent in suit were synonymous, since packaging material for beverages must necessarily represent a three-dimensional container.

(b) The references in D1 to packaging foods and drinks, and to the excellent mechanical properties and high melting points of the polyketones would have suggested to the skilled person a suitability

for food or beverages at high temperatures. There were then only two choices open, namely a monolayer or a multilayer container. The latter was much more complicated and expensive, and consequently the obvious choice would be a monolayer container.

(c) The barrier, etc. properties argued by the Appellant were based on only a single result of an incompletely specified comparison, and even if accepted were mere discoveries because the properties were inherent to the polymers themselves. On the contrary, the suitability for packing foods and beverages stemmed from the admittedly excellent mechanical properties of the polymers of D1. It was thus obvious from D1 to make containers according to Claim 1, regardless of the newly measured properties.

VI. Oral proceedings were held before the Board on 22 April 1998. At the outset of the oral proceedings, the Appellant presented nine sets of claims, consisting of a main request and eight auxiliary requests. The claims of the sets forming the main request and fifth auxiliary request corresponded, however, to the main and auxiliary requests respectively underlying the decision under appeal. After preliminary discussion, three of the auxiliary requests (first, third and sixth) were withdrawn, leaving a main request and five auxiliary requests, of which the third corresponded to the previous fifth auxiliary request. After discussion with the parties of the admissibility of these requests and deliberation of the Board, the decision was announced that the first, second, fourth and fifth

auxiliary requests would not be admitted into the proceedings. The remaining requests were thus the main request and the third auxiliary request. These correspond to the main and auxiliary request respectively underlying the decision under appeal.

The substantive issues were discussed in relation to these requests, particularly in the light of the submissions in the declaration of Professor Paul, according to which (a) the claimed polyketones represented a selection from the disclosure of D1 and (b) the skilled person, starting out from the polymers of D1 and investigating their suitability for packaging, would not, as a first step, make a monolayer container, but would rather form the polymer into a standard test specimen of the appropriate shape for testing the relevant property.

VII. The Appellant requested that the decision under appeal be set aside, and the patent be maintained on the basis of Claims 1 to 10 filed as main request, or alternatively on the basis of Claims 1 to 9 filed as third auxiliary request, both submitted at the oral proceedings.

The Respondent requested that the appeal be dismissed.

Reasons for the Decision

1. The appeal is admissible.

2. *Admissibility of late-filed documents*

The document D5 is a short extract from an encyclopedia, relied upon by the Appellant to support an argument submitted in the Statement of Grounds of Appeal. It was filed together with the statement, and its relevant content does not go beyond the factual framework of the proceedings so far. Nor was any objection raised to its introduction by the Respondent. Consequently, the Board has allowed its introduction into the proceedings under Article 114(1) EPC.

3. *Admissibility of late-filed claims*

The same cannot be said of the eight auxiliary requests submitted at the beginning of the oral proceedings before the Board.

3.1 No reason for the late submission of these claims was given, beyond an indication that the ideas behind them had only occurred to the Appellant during the final stage of preparation for the oral proceedings.

3.2 Furthermore, the Respondent complained of having been taken by surprise, in view of the earlier written submission of the Appellant, that it was not necessary to comment on the dependent claims (Statement of Grounds of Appeal, page 5, third paragraph), and, not being in a position to provide relevant counterarguments, opposed the introduction of the auxiliary requests.

3.3 It is the established case law of the Boards of Appeal

that Boards of Appeal may refuse late-filed amendments, e.g. new claims presented at oral proceedings, if such claims are not clearly allowable or if the Proprietor of the patent can provide no justification for the late filing (T 0095/83, OJ EPO 1985, 075; T O153/85, OJ EPO 1988, 001). Furthermore, as set out in decision T 0038/89 of 21 August 1990 (not published in OJ EPO), it is quite clear that the Boards of Appeal have a general discretion to refuse all late-filed amendments depending in particular on any excuses put forward for the apparent lateness, and the inconvenience that would be caused if the amendments were admitted into the proceedings.

3.4 This jurisprudence is also in conformity with Article 11(3) of the Rules of Procedure of the Boards of Appeal, which states that "if oral proceedings take place, the Board shall endeavour to ensure that each case is ready for decision at the conclusion of the oral proceedings, unless there are special reasons to the contrary."

3.5 In the present case, the pattern of the claims was, in the Board's view, relatively complex, even after the number of such requests had been reduced to five, and a paper had been submitted summarising relevant sub-claims (Claims 4, 5 and 9) to which the subject-matter of the various auxiliary requests had allegedly been limited. In particular, it was not explained to the Board which, if any, of the multiplicity of combinations claimed should be regarded as "clearly allowable". On the contrary, the argument of the Appellant, at the oral proceedings, that the purpose of

the auxiliary requests was merely to clarify peripheral points, such as the precise meaning of the term "container" in the claims, contributed to the impression that the auxiliary requests, if admitted, would ultimately fare no differently than the main and auxiliary requests originally relied upon and underlying the decision under appeal.

3.6 Furthermore, admission of the auxiliary requests in the present case (with the exception of the third auxiliary request, which corresponded to the auxiliary request underlying the decision under appeal) would have prevented a final decision being taken at the oral proceedings, and consequently would have resulted in a considerable delay in the proceedings.

3.7 Under these circumstances, there was no basis for the Board to exercise its discretion favourably to the Patentee. On the contrary, to do so would have invited similar behaviour in the future. Consequently, it was decided that the first, second, fourth and fifth auxiliary requests would not be admitted into the proceedings.

4. *Admissibility of amendments*

A. Main request

No objection has been raised under Article 123(2) or 123(3) EPC against the amended form of the patent in suit, which corresponds to that of the main request underlying the decision under appeal, and the Board sees no reason to raise an objection of its own.

Consequently, no objection under Article 123 EPC arises in respect of the claims under consideration.

5. *The patent in suit; the closest state of the art*

The patent in suit is concerned with a polymer-based shaped article suitable for use in connection with packaging food or beverages, the polymer being a linear alternating polymer of CO and ethylene, and optionally one or more other olefinically unsaturated hydrocarbons C_aH_b, having the empirical formula:

$$-[-CO-CH_2CH_2-]_x--[-CO-C_aH_b-]_y-$$

wherein $a \geq 3$; $b \geq 6$; and $x/y \geq 8$ (Claim 1). Such an article is, however, known from D1, which was considered in the decision under appeal to represent the closest state of the art.

5.1 According to D1, polymers of carbon monoxide with ethene and with one or more other olefinically unsaturated hydrocarbons (A), with less than 20 carbon atoms, are characterised in that,

(a) the polymers have a linear structure,

(b) they consist of units $-C0(C_2H_4)-$ and units -CO-(A)-,

(c) the units -CO-(A)- are distributed at random points in the polymer, and

(d) the polymers have a melting point of between 150

and 245°C (Claim 1).

This melting point is lower than that of polymers without the units of -CO-(A)-, which melt around 257°C, the reduction in melting point being achieved without serious detriment to the thermal stability and depending *inter alia* on the quotient m/n, where m represents the average number of units -CO-(A)- and n the average number of units -C0(C_2H_4)- in the polymer (column 1, lines 24 to 33; column 2, lines 11 to 15 and 31 to 40). The value of m/n thus corresponds to the **reciprocal** of x/y in Claim 1 of the patent in suit.

The polymers have excellent mechanical properties, in particular a very high strength, rigidity and impact resistance. They can be processed by means of the usual techniques into films, sheets, plates, fibres, moulded objects and the like. On account of their superior properties, the polymers are suitable for many applications, such as the manufacture of packaging material for foods and drinks and for a variety of applications in the domestic sphere (column 6, line 47 to column 7, line 2).

According to test results tabulated according to Example 9, a carbon monoxide/ethene/propene terpolymer prepared according to Example 6, having a m/n value of 0.104 (and hence a x/y value of 9.6) and a melting point of 214°C was pressed for 15 minutes at 240°C, there being no gelling (less than 0.5%) and no discoloration (description, page 7, lines 27 to 32 and Table).

5.2 Compared with this state of the art, the technical problem may be seen as the reduction to practice of the teaching of D1 so as to provide useful alternative polymer products.

5.3 The solution proposed according to Claim 1 of the patent in suit was to modify the plate of Example 6 to provide a monolayer container for use with food or beverages at high temperatures.

5.4 The Board is aware that this statement of problem differs from that canvassed by the Appellant during the oral proceedings, namely "to find thermoplastic polymers with an improved combination of barrier performance and heat and steam stability for making monolayer or thermoformed containers suitable as hot-fillable retortable barrier containers" as well as from the somewhat similarly worded statement of problem in the patent in suit itself (page 3, lines 38 to 40).

5.4.1 Starting from the disclosure of D1, however, such a statement of problem is impermissible, since it contains, in its references to heat and steam stability and monolayer containers, pointers to the solution (T 0229/85, OJ EPO 1987, 237). It is any case inappropriate, since D1 only teaches one type of polymer.

5.4.2 In this connection, it is evident to the Board that the latter statement of problem has been derived from a different starting point. Such a starting point would be, for instance, the disclosure of D2, which is an

extract from an encyclopedia in which the advantages and disadvantages of various plastics materials for different types of packaging, including monolayer containers are discussed.

5.4.3 The disclosure of D2 does not, however, make any reference to polyketones. It is thus less relevant than D1, which refers both to polyketones and their suitability for manufacturing packaging material for food and drinks.

5.4.4 No argument was put forward as to why a disclosure such as D2 should have been taken as the starting point, instead of D1 as was done in the decision under appeal.

5.4.5 Consequently, the Board holds that the choice of D1 as the closest state of the art was appropriate. This leads objectively to the technical problem and solution as stated by the Board (sections 5.2, 5.3, above).

5.5 It is evident from the examples and other experimental data in the patent in suit, in particular the comparative data given in Table 4 concerning the relevant properties such as permeability to 0_2, CO_2 and H_2O, impact strength, heat distortion temperature, hot fillability, and retortability of polyketone containers compared with those of other common polymers, that the resulting food or beverage container is shelf stable, impact resistant, dimensionally heat stable, may be used in all kinds of ovens, is hot fillable (to 100°C) and retortable (to 135°C) and is rigid but not brittle.

5.6 In summary, it is credible to the Board that the claimed measure provides an effective solution of the technical problem as stated by the Board.

6. *Novelty*

Claim 1 requires that the defined polymer forms the basis of a "container suitable for use with food or beverages at high temperatures". Whilst there was some discussion, during the oral proceedings before the Board, of the precise scope of the term "container", the Board accepts the Appellant's submission that, on reading Claim 1 of the patent in suit in the light of the description, it becomes evident that what is meant by "container" is a three-dimensional, self-supporting hollow shaped object, such as a tray, cup, bowl or tub (page 6, lines 19 to 22).

6.1 The "plate" according to Example 9 in conjunction with Example 6 of D1, although not stated to be flat, is also not stated to have the character of a "container" in the sense referred to above. Consequently, the product of Example 9 cannot be regarded as being a "monolayer container" in the sense of Claim 1.

6.2 As regards the general reference to the suitability of the polyketones of D1 for "packaging material", the polymers are not disclosed in the form of a package for food or drinks, but merely as being suitable for the **manufacture** of packaging **material** for food or drinks (emphasis by the Board).

6.2.1 The argument of the Appellant, at the oral proceedings,

that the skilled person would interpret this passage as applying exclusively to thin films is not supported by the context of the passage, since the sentence immediately following states that the polymers can be processed also into sheets, plates, moulded objects etc., and not just films (column 6, lines 50 to 52). Consequently, the Board sees no justification for such a restrictive interpretation of the reference to "packaging material".

6.2.2 Nor is the Board impressed by the argument of the Respondent, according to which the reference was tantamount to the disclosure of a three-dimensional package per se. A mere reference to a packaging **material** cannot, in the Board's view, be regarded as a disclosure of a particular package. In any case, it does not amount to the disclosure of a three-dimensional, self-supporting "monolayer container" in the sense of Claim 1 of the patent in suit.

6.3 Consequently, the subject-matter of Claim 1 is novel.

7. *Inventive step*

It is necessary, in the assessment of inventive step, to consider what the skilled person, starting from the disclosure of D1 and attempting, in the normal course of his work, to reduce the teaching of D1 to practice so as to provide useful alternative polymer products, would do.

7.1 The Board is of the opinion that the skilled person would always start from a specific, rather than a

general disclosure. Such an approach is in line with the normal development work of a person skilled in the art who tries to adapt, to modify or to improve an existing embodiment in order to solve a particular technical problem. Indeed, it has been held by another Board, that at least in mechanical embodiments the closest prior art must be unequivocally and clearly defined, at least for the constructional elements which are important for the claimed invention with which the closest prior art is being compared (T 0570/91 of 26 November 1993, not published in OJ EPO, Reasons for the decision, point 4.3).

7.1.1 In the case of D1, such a specific embodiment would be an illustrative example of the relevant teaching, and the only such example which teaches a mechanically shaped article of any kind in D1 is the "sheet", pressed, according to Example 9. This is a polyketone prepared according to Example 6.

7.1.2 Consequently, the skilled person would, in practice, start from this polyketone "plate".

7.2 In the further search for useful alternatives to this "plate", the reference in D1 to the specific applicability of the polyketones to making packaging material for foods and drinks is regarded as an invitation to the skilled person to investigate or "screen" the relevant polyketone for its suitability for use in packaging applications involving food and beverages.

7.2.1 Such screening, although no doubt requiring a sustained effort, would, in the Board's understanding, in

practice involve nothing more than following through a series of standardised, routine tests, the nature of which would be predetermined once the general field of application had been defined. In the present case, the field of application is packaging food or beverages.

7.2.2 It is, in this connection, generally understood in the art that packaging material for food and beverages needs to meet certain specific requirements, in particular in relation to barrier properties to oxygen, carbon dioxide and moisture (water), as well as mechanical properties.

7.2.3 The argument of the Appellant, at the oral proceedings, that there was a disincentive for the skilled person to test for "barrier properties", because the reference to packaging was to be understood merely as making available a capability of containing liquids for a short time, cannot be accepted. The reference is neither to liquids in general, nor is it couched in terms which suggest only brief storage. It cannot be concluded, therefore, that there was any such disincentive.

7.2.4 On the contrary, the reference to packaging material specifically for food and beverages itself implies, in the Board's view, a certain level of the relevant barrier properties.

7.2.5 This is confirmed by the Declaration of Professor Paul of the University of Texas at Austin, according to which, "In the past and in present times many types of polymers have been investigated for use in packaging

food and drinks. Ordinarily, such investigations are carried out by measuring the relevant polymer properties, such as those specified in Table 4 of EP-B-306 115" (paragraph 7).

7.2.6 Closer examination of Table 4 of EP-B-306 115, i.e. the patent in suit (pages 11 to 14), furthermore, reveals that such standardised tests involve measuring, amongst other things, the permeability of the material to oxygen, carbon dioxide and water vapour, as well as its impact strength, its suitability for hot filling at 100°C, its retortability at 135°C, its moulding cycle time and its heat distortion temperature.

7.2.7 Consequently, the skilled person, reading D1 and acting on the invitation therein, would acquire, without deviation from the normal path of technical development laid out before him, the results of these tests, showing the relevant barrier properties and high temperature properties of the polyketones. Once in possession of this information, the suitability of such polyketones as a high performance packaging material for use with food and beverages at high temperatures, as well as their mechanical suitability for a self-supporting monolayer structure would be self-evident.

7.2.8 In the light of such knowledge, the formation of a monolayer such container is a matter of simple logic.

7.2.9 Since, furthermore, the relevant starting polyketone has a x/y value falling within the claimed range, the result of modifying the pressed "plate" according to

Example 9 of D1 to make a self-supporting, three-dimensional container, would be a monolayer container fulfilling all the requirements of Claim 1 of the patent in suit.

7.3 The Appellant's argument, that the skilled person would not have expected the favourable barrier properties of the claimed polyketones, or their hot-fillable and retortable properties, on the basis of a comparison with other types of polymers of similar molecular weight or having similarly high crystalline melting points, such as polyamides (Declaration of Professor Paul, paragraphs 8, 9), is irrelevant in the light of the closest state of the art, because the latter discloses only polyketones (section 5.4, etc., above). There can thus be no reason, let alone incentive, to speculate on what properties might have been expected if other polymers had been tested, the disclosure of D2 in this connection being less relevant (section 5.4, etc., above).

7.4 Finally, the argument of the Appellant that the skilled person would have been restrained from testing the polyketones according to D1 for barrier properties, etc., as a result of a general prejudice in the art, was based on statements appearing in D5, concerning "barrier polymers", according to which, in particular, "no single polymer possesses the right combination of properties for the new packaging applications." (page 182, last complete paragraph), and in D2, according to which, "In many applications, a monofilm cannot meet the demands of packaging substrates. Hence, to reach a desired property profile, several materials

are combined. This can be achieved by ...laminating webs..." (page 596, paragraph 6.5.12).

7.4.1 The disclosure of D5 is, however, dated 1985, i.e. about two years before both the priority date of the patent in suit and also the publication of D1. Its content is therefore superseded by the teaching of D1, which contains no such caveat, but on the contrary discloses just such a new polymer.

7.4.2 The passage in D2 is in any case somewhat less categorical in tone, and is furthermore of inconsequential weight compared with the more relevant teaching of D1 (section 5.4, etc., above). It would therefore have negligible significance for the skilled person in possession of D1.

7.5 In summary, the skilled person would, in the normal course of his work, arrive at the solution of the technical problem as stated by the Board, without the exercise of inventive ingenuity.

7.6 It may be observed in this connection, that if a statement of problem including the water vapour barrier properties and heat distortion temperatures, as requested by the Appellant (section IV.(b), above), had instead been adopted in relation to the disclosure of D1, the claimed solution would have been even more immediately obvious to the skilled person, without the necessity of screening the polyketones, since the relevant properties and the form of container are both already contained in the wording of the problem itself (section 5.4, above).

7.7 Similar considerations apply to the statement of problem appearing in the patent in suit (page 3, lines 38 to 40).

7.8 In other words, the subject-matter of Claim 1 does not involve an inventive step within the meaning of Article 56 EPC. Consequently, the main request must be refused.

B. Auxiliary request

8. Since the claims of this request differ from those of the main request only by the deletion of Claim 2, Claim 1 in particular being the same, the outcome must be the same as that reached with the main request.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

E. Görgmaier C. Gérardin