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D E C I S I O N
of 18 April 2001

Case Number: T 0780/97 - 3.3.1

Application Number: 91402167.0

Publication Number: 0470004

IPC: C07C 213/10

Language of the proceedings: EN

Title of invention:
A highly purified 1-aminopropanediol-2,3 and a method for the purification thereof

Patentee:
DAICEL CHEMICAL INDUSTRIES, LTD.

Opponent:
Borregaard Fine Chemicals A.S.

Headword:
purified 1-aminopropanediol-2,3/DAICEL

Relevant legal provisions:
EPC Art. 54(1)(2), 123(2)(3), 111(1), 102(3), 112(1)(a)

Keyword:
"Novelty of process claim (no)"
"Referral to Enlarged Board of Appeal (no) - hypothetical question"
"Remittal to Opposition Division (no) - legal and factual basis of appeal not changed"

Decisions cited:
G 0002/88, T 0536/88, T 0233/90, T 0288/90, T 0766/91, T 0303/94, T 0401/95, T 0446/95, T 0578/95, T 0812/95

Catchword:
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Case Number: T 0780/97 - 3.3.1

D E C I S I O N
of the Technical Board of Appeal 3.3.1
of 18 April 2001

Appellant I: (Proprietor of the patent)
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Decision under appeal: **Interlocutory decision of the Opposition Division of the European Patent Office posted 27 May 1997 concerning maintenance of European patent No. 0 470 004 in amended form.**

Composition of the Board:

Chairman: A. J. Nuss
Members: P. F. Ranguis
R. T. Menapace

Summary of Facts and Submissions

I. Appellant I (Proprietor of the patent) and Appellant II (Opponent) lodged an appeal against the interlocutory decision of the Opposition Division to maintain the European patent No. 0 470 004 (application No. 91 402 167.0) in the form as amended (fourth auxiliary request filed before the Opposition Division) pursuant to Article 102(3)(a) EPC.

II. The patent as granted comprised fifteen claims, independent Claims 1 and 4 reading as follows:

"1. A highly purified 1-aminopropanediol-2,3 which contains less than 0.30% by weight of 2-aminopropanediol-1,3."

"4. A process for the preparation of a highly purified 1-aminopropanediol-2,3, said 1-aminopropanediol-2,3 containing less than 0.3% by weight of 2-aminopropanediol-1,3, which process comprises distilling a crude 1-aminopropanediol-2,3 containing at least 0.30% of 2-aminopropanediol-1,3 based on the weight of 1-aminopropanediol-2,3 with a distillation column, said distillation column having a pressure loss of not more than 66.5 Pa (0.5 Torr) per one theoretical plate."

III. The opposition which sought revocation of the patent in suit in its entirety on the ground that the subject-matter of the patent in suit was not patentable (Article 100(a) EPC), was based inter alia on the following document:

(4) Technische Rundschau Sulzer 1/1975, p. 1-16

IV. In the course of the opposition proceedings, the Proprietor of the patent abandoned the claims as granted and filed numerous requests, namely:

- an amended main request with letter of 23 May 1996,

- a further amended main request and five auxiliary requests with letter of 28 March 1997,

- further main requests A, B, C and five auxiliary requests during the oral proceedings.

Some of these requests were maintained in the appeal proceedings and are, therefore, relevant for the present decision.

Main request C (Annex 5 of the decision under appeal) comprised fifteen claims, independent Claim 1 reading as follows:

"1. A highly purified 1-aminopropanediol-2,3, which contains 2-aminopropanediol-1,3, in an amount less than 0.30% by weight, based on the weight of 1-amino-propanediol-2,3."

and independent Claim 4 being the same as Claim 4 as granted.

Second auxiliary request (Annex 7 of the decision under appeal) comprised fifteen claims, independent Claims 1 and 4 reading as follows:

"1. A highly purified 1-aminopropanediol-2,3, which contains 2-aminopropanediol-1,3, in an amount less than 0.30% by weight, based on the weight of 1-amino-

propanediol-2,3, said 1-aminopropanediol-2,3 being prepared by the reaction of ammonia with glycidol or glycerine-α-mono-chlorohydrin."

"4. A process for the preparation of a highly purified 1-aminopropanediol-2,3, said 1-aminopropanediol-2,3 containing less than 0.3% by weight of 2-aminopropanediol-1,3, which process comprises distilling a crude 1-aminopropanediol-2,3 containing at least 0.30% of 2-aminopropanediol-1,3 based on the weight of 1-aminopropanediol-2,3 with a distillation column, said distillation column having a pressure loss of not more than 66.5 Pa (0.5 Torr) per one theoretical plate, in a temperature range of from 80 to 200°C and a pressure range of from 0.1 to 30 torrs, and said purified 1-aminopropanediol-2,3 being produced as distillate."

Third auxiliary request (Annex 8 of the decision under appeal) comprised fifteen claims, independent Claim 1 reading as follows:

"1. A highly purified 1-aminopropanediol-2,3, which contains 2-aminopropanediol-1,3, in an amount less than 0.30% by weight, based on the weight of 1-amino-propanediol-2,3, said 1-aminopropanediol-2,3 being prepared by the reaction of ammonia with glycidol or glycerine-α-mono-chlorohydrin, and being mainly purified by distillation."

and independent Claim 4 being the same as Claim 4 of the second auxiliary request.

Fourth auxiliary request (Annex 9 of the decision under appeal) comprised twelve claims, independent Claim 1 being the same as Claim 4 of the second auxiliary request.

V. In its decision, the Opposition Division held that Claim 1 of the main request C and Claim 1 of the second and third auxiliary requests did not involve an inventive step.

Claims 1 to 12 of the fourth auxiliary request were considered as novel in view of all documents cited. Those claims were also regarded as inventive.

The claims of this fourth auxiliary request were maintained by the Opposition Division.

VI. In the statement setting out grounds of appeal, Appellant I requested that the patent be maintained, as main request on the basis of the main request C or on the basis of the second, third or fourth auxiliary request filed before the Opposition Division (see point IV above).

VII. In a first communication from the Board of Appeal dated 19 January 2001 accompanying the summons to oral proceedings, the parties were informed, in particular, that the novelty of the claims of each request were to be discussed in view of document

(9) US-A- 4 356 323

which was considered as highly relevant prior art in the patent in suit itself.

VIII. In its response dated 22 March 2001, Appellant I filed another auxiliary request (request C1) comprising fifteen claims, independent Claim 1 reading as follows:

"1. A highly purified 1-aminopropanediol-2,3, containing compound, which further contains 2-aminopropanediol-1,3, in an amount less than 0.30% by weight, based on the weight of 1-amino-propanediol-2,3."

and independent Claim 4 being the same as Claim 4 of the patent as granted (see point II above).

IX. In a second communication sent by fax on 5 April 2001, the Board of Appeal raised the question whether in the present case the purification was to be regarded as involving common general knowledge or not, in view of document

(10) Ullmanns Encyclopädie der technischen Chemie, 1972, Bd. 2 (Verfahrenstechnik I), Section 4.4, p. 533-535

in addition to, in particular, document (4) mentioned in the Board's previous communication.

X. The arguments submitted by Appellant I in support of the novelty of Claim 4 of each request over document (9) were in essence as follows:

- Document (9) was silent about the presence of 2-aminopropanediol-1,3. It was, furthermore, not possible to discriminate by the "amine titration" method used in this document (see column 2, last line) 1-aminopropanediol-2,3 from 2-aminopropanediol-1,3 as evidenced by

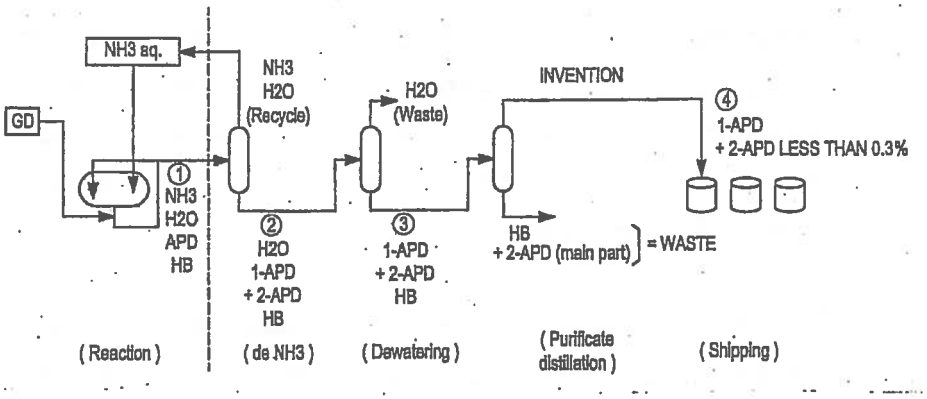
(11) Declaration of Dr. HIROSHI KOYAMA (evidence 4) filed before the Patent and Trade Mark Office of the United States of America.

Examples Nos. 1 to 4 of document (9) disclosing a process for preparing 1-aminopropanediol-2,3 of purity ≥ 95% (dosage made by amine titration) were, therefore, misleading given that the obtained 1-aminopropanediol-2,3 contained 2-aminopropanediol-1,3, although it could not be discriminated.

No one was, therefore, aware before the present invention, that 2-aminopropanediol-1,3 was present; it followed that a process for the preparation of a highly purified 1-aminopropanediol-2,3, said 1-aminopropanediol-2,3 containing less than 0.3% by weight of 2-aminopropanediol-1,3 from a crude 1-aminopropanediol-2,3 containing at least 0.30% of 2-aminopropanediol-1,3 based on the weight of 1-aminopropanediol-2,3 was novel.

- Moreover, document (9) disclosed a process for preparing 1-aminopropanediol-2,3 with a significant amount of 2-aminopropanediol-1,3. In fact, under the conditions disclosed in example No. 1 (temperature of 85°C), about 1% of 2-aminopropanediol-1,3 was produced. Furthermore, the reaction between glycidol with ammonia led to a mixture containing, in addition to 1-aminopropanediol-2,3 and 2-aminopropanediol-1,3, other high boiling point components and ammonia. The subsequent distillation was not designed to discriminate 2-aminopropanediol-1,3 from 1-aminopropanediol-2,3 but to evacuate all the ammonia from the mixture. In support, Appellant I submitted during the oral proceedings before the Board a chart (see below)

FLOW CHART for APD PRODUCTION < DAICEL >



wherein

GD is glycidol,
1-ADP is 1-aminopropanediol-2,3
2-ADP is 2-aminopropanediol-1,3
HB are high boiling point components

aiming to illustrate the difference between the process according to the patent in suit and that of document (9).

Notwithstanding the absence of water in the process according to document (9), the distinguishing feature of the claimed process consisted in the last distillation step (called "invention"), this step being not disclosed in document (9).

- Document (4) was not representing common general knowledge and, therefore, could not be combined with document (9). However, even assuming that the Board considered that this was the case (which was denied), this common general knowledge would not

apply to document (9) because no one was aware before the now claimed invention, that 2-aminopropanediol-1,3 was present and was to be removed. Common general knowledge could only be combined with evidence of prior art on condition that this common general knowledge aimed at the same purpose as the said prior art. Should the Board disagree, this issue should be submitted to the Enlarged Board of Appeal.

- If the Board of Appeal decided to introduce document (10) in the present appeal proceedings, then remittal to the first instance was requested in order not to deprive Appellant I of the benefit of two instances in the fresh case created thereby.

XI. The arguments submitted by Appellant II against the novelty of Claim 4 of each request on the basis of document (9) were in essence as follows:

- The public had been aware of the presence of 2-aminopropanediol-1,3 in the marketed 1-aminopropanediol-2,3 since 1983 as acknowledged by the Proprietor of the patent (cf. letter of 22 march 2001, page 13, second paragraph).

- Novelty could not, therefore, be recognized in a novel purposive feature.

- The process disclosed in document (9) involved the reaction of ammonia and glycidol followed by vacuum fractional distillation at 80-106°C and 0.1-0.15 mmHg (13.3-20 Pa), which values are within the range defined in the claims . No

equipment was mentioned. Moreover, the packed Sulzer columns were used in the art for that type of fractional distillation as confirmed by document (4).

- In addition, document (10) which documented what was common general knowledge, disclosed, first, that the columns for carrying out vacuum distillation in a range from 0.1 mbar to 10 mbar (10-1000 Pa) required a loss of pressure from 17 to 50 Pa per m of packing and, secondly, that Sulzer Packing columns showed a loss of pressure per theoretical plate of 25 to 42 Pa.

- Fractional vacuum distillation according to document (9) was not designed to remove ammonia for this reactant had already been removed up to over 99% before fractional distillation took place.

- 1-aminopropanediol-2,3 containing 2-aminopropanediol-1,3 with a content range of 0.3 to 0.5% was known as admitted by the Proprietor of the patent. A distillation using a simple column without any packing would already have lowered the amount of 2-aminopropanediol-1,3 below 0.3% as confirmed by the comparative example No. 3 of the patent in suit.

XII. Oral proceedings took place on 18 April 2001 at the end of which the requests of the parties were as follows:

Appellant I requested that the decision be set aside and the patent be maintained on the following basis:

- main request: set of 15 claims filed before the Opposition Division as "Main request C",

- first auxiliary request: set of 15 claims filed during the appeal proceedings as "Request C1",

- second auxiliary request: set of 15 claims filed before the Opposition Division, Annex 7 of the decision under appeal,

- third auxiliary request: set of 15 claims filed before the Opposition Division, Annex 8 of the decision under appeal,

- fourth auxiliary request: set of claims which the Opposition Division considered to be in compliance with the requirements of the EPC, Annex 9 of the decision under appeal.

Furthermore, Appellant I requested:

- to send the case back to the first instance, should document (10) be considered by the Board;

- to submit the following question to the Enlarged board of Appeal:

(a) "Is it possible to take as a general knowledge a prior art document for a purpose that is not disclosed in the closest prior art?

(b) If the response is yes, is it possible to use this general knowledge to destroy novelty?".

Appellant II requested that the decision be set aside and the patent be revoked.

XIII. At the end of the oral proceedings the decision of the Board was given orally.

Reasons for the Decision

1. *Admissibility*

The appeals filed by the Proprietor of the patent and the Opponent both comply with Articles 106 to 108 EPC and Rule 64 EPC and are, therefore, admissible.

2. *Scope of the Appeal*

2.1 In the present case, the issue is not the admissibility of novelty as a ground of opposition but that of the evidence to be considered under this opposition ground. This was never put into question.

2.2 It is established jurisprudence that a document indicated in the European patent as highly relevant prior art forms part of the opposition or opposition appeal proceedings even if not expressly cited within the opposition period (see decision T 536/88, OJ EPO 1992, 638 in particular point 2.1 of the Reasons and T 812/95 of 13 May 1997, in particular point 3 of the Reasons). Moreover, as set out below, in the present case that highly relevant prior art document mentioned in the patent in suit could not be said to have been ignored by the Opposition division and the parties.

2.3 Document (9) was acknowledged in the patent in suit (see page 2 , lines 26 to 36) as disclosing a process for preparing 1-aminopropanediol by reaction of glycidol with liquid ammonia under pressurized conditions. According to the patent in suit, it was known by the prior techniques, including document (9), that 2-aminopropanediol could not be reduced to less than 0.3% (see in particular page 2, lines 34 to 36). The Board also observes that, in its decision, the Opposition Division had **de facto** considered the

relevance of document (9), in the context of at least inventive step, in stating, eg. that the industrially used process for preparing 1-ADP (*1-amino-propanediol-2,3*), reaction of glycidol with ammonia, typically gave rise to 1-ADP containing > 0.3% 2-ADP (*2-aminopropanediol-1,3*) (see page 6, first paragraph, of the decision under appeal).

2.4 Moreover, in its letter of 6 April 1998, Appellant I declared that:

"In the present case, it is undisputable that in the prior art it was known "a commercially viable process for the preparing of 1-ADP (*1-amino-propanediol-2,3*)" with a purity of up to 99.7%, namely containing 2-ADP (*2-aminopropanediol-1,3*) with a content range of 0.3 to 0.5% by weight (see the prior art discussed on page 2, lines 18 to 33 of the patent under opposition and the paragraph of page 5, lines 10 to 12 of the Patentee's brief of appeal)".

Among the prior art documents referred to in the patent in suit as disclosing industrial processes starting from glycidol (the so called Kleemann patents) document (9) was one out of three US patents explicitly mentioned in the passage indicated by Appellant I.

2.5 Furthermore, in connection with Claims 1 to 12 of the fourth auxiliary request, i.e. the form in which the patent in suit was maintained, the Opposition Division explicitly considered novelty in view of all the documents cited (see point V above).

2.6 It is the Board's power and duty pursuant to Articles 111(1) and 102(3) EPC to decide itself upon each matter and each issue with regard to requests not allowed by the Opposition Division and the Board is not bound by any finding in the decision under appeal (see

decision T 401/95, in particular point 2 of the Reasons, and T 303/94, in particular point 2 of the Reasons).

2.7 For these reasons, the Board concludes that the legal and factual basis of the appeal has not changed. Since document (9) formed part of the opposition and appeal proceedings, novelty of the claims of each request over document (9) is a matter to be decided upon in this appeal.

Main and first auxiliary request

3. *Novelty - Article 54(1) and (2) EPC*

3.1 A claimed invention lacks novelty unless it includes at least one essential technical feature which distinguishes it from the state of the art. When deciding upon novelty of a claim a basic initial consideration is therefore, to construe the claim in order to determine its technical features (see decision G 2/88, OJ EPO 1990, point 7 of the Reasons).

3.2 In that context process Claim 4 of each request directed to the preparation of a highly purified 1-aminopropanediol-2,3 comprises two features:

(a) starting from a crude 1-aminopropanediol-2,3 containing at least 0.30% of 2-aminopropanediol-1,3 based on the weight of 1-aminopropanediol-2,3.

(b) distilling that crude 1-aminopropanediol-2,3 with a distillation column, said distillation column having a pressure loss of not more than 66.5 Pa (0.5 Torr) per one theoretical plate.

3.3 Document (9) discloses a process for the production of 1-amino-propanediol-2,3 involving the reaction of glycidol with liquid ammonia (cf. col 1, lines 45 to 46); 1-amino-propanediol-2,3 is then recovered from the crude product by fractional vacuum distillation (cf. column 2, lines 55 to 57).

Examples 1 to 4 disclose such reaction whereby, after working up the reaction product by distillation, there is obtained 1-amino-propanediol-2,3 of purity ≥ 99.5%, the dosage being made by amine titration (boiling point: 94°C at 0.2 Torr (26.6 Pa)) (cf. col.2, line 60 to col.3, line 30).

As indicated in this document, in the production of 1-aminopropanediol-2,3 from glycidol and ammonia, the reaction product is distilled at 80°C-106°C/0.1-0.15 mmHg (13.3-20 Pa), which does not cause loss through thermal decomposition (cf. col.1, lines 24 to 26).

3.4 It is true that document (9) is silent about the presence of 2-aminopropanediol-1,3 as by-product of the reaction between glycidol and ammonia. It cannot be denied either, as stated in document (11), that dosage by amine titration does not enable to discriminate 2-aminopropanediol-1,3 from 1-aminopropanediol-2,3. However, it is not disputed by Appellant I that the resulting 1-amino-propanediol-2,3 does contain 1-aminopropanediol-2,3 by virtue of its process of preparation (see, for instance, page 2, lines 29 to 36 of the patent in suit and page 5, paragraphs 3 and 4 of the statement of the grounds of appeal). The Board also observes that the patent in suit mentions that a crude 1-aminopropanediol-2,3 obtained by the process described in document (9) can also be used as a material for treatment according to the present invention (see page 4, lines 41 to 46; ammonia, which is one of the starting materials, can be used as liquid

ammonia). It follows that document (9) discloses a crude 1-aminopropanediol-2,3 containing at least 0.3% by weight 2-aminopropanediol-1,3 and, consequently, that feature a) of Claim 4 is disclosed in document (9).

3.5 With regard to feature b), document (9) discloses the purification step in terms of operative conditions (fractional vacuum distillation), while the feature in the claim relates to the use of a physical means (a distillation column having a pressure loss of not more of 66.5 Pa per one theoretical plate).

In that context, the question is whether the term "fractional vacuum distillation" given in document (9) inevitably means for a skilled person, having the common general knowledge in mind, to use a column having a pressure loss of not more than 66.5 Pa (0.5 Torr) per one theoretical plate.

Fractional distillation referred to in document (9) is a conventional method of distillation in which rectification is used to obtain a product as nearly pure as possible. The Board observes that document (4) describes Sulzer columns for vacuum rectification. Those columns are said to be an established instrument for vacuum distillation (see page 1, left column, second paragraph) whereby reference is explicitly made in that context to document (10) Ullmanns Encyclopädie der Technischen Chemie, a well recognized encyclopedia. There is, thus, clear evidence that the information given in document (4) is common general knowledge (see decision T 766/93, point 8.2 of the Reasons).

3.6 Document (4) discloses, in particular, that columns packed with Sulzer packings have a pressure loss of 0.27 to 0.4 mbar (27 Pa to 40 Pa) per theoretical plate (see page 3, right column, last paragraph and page 5,

left column, first paragraph). Those columns are, furthermore, explicitly mentioned for use in the patent in suit (see page 5, lines 45 to 49) and in dependent process Claim 7 of each request. Document (10) also confirms, if the need arose, that columns with such Sulzer packings characterised by a high number of plates and a minor loss of pressure were developed for a vacuum from 0.1 to 10 mbar (10 Pa to 1000 Pa). Moreover, in the patent in suit these packings are referred to as well-known and commercially available and so designed that the pressure loss there through becomes low (see page 5, lines 56 to 57).

Accordingly, the Board is convinced that the operative conditions of distillation in the context of the disclosure of document (9) imply the use of columns which have a pressure loss of 0.27 to 0.4 mbar (27 Pa to 40 Pa) per theoretical plate, i.e. not more than the 66.5 Pa (0.5 Torr) required in Claim 4 of each request.

3.7 The argument of Appellant I according to which the fractional vacuum distillation mentioned in document (9) was only designed to remove ammonia, the other components (i.e. 1-amino-propanediol-2,3, 2-aminopropanediol-1,3 and high boiling points components) remaining in the composition is at variance with the facts. First, the Board observes that the patent in suit and Claim 4 of each request are silent regarding the high boiling point components, which may remain to some unspecified extent in the distilled product. Furthermore, this argument falls short in view of the fact that over 99% of the ammonia is removed from the crude product (see document (9), column 2, lines 52 to 55) before the fractional vacuum distillation is applied, and in view of the fact that

the process Claim 4 and the patent as a whole are silent on the presence of ammonia. In order to assess novelty of a claim the comparison must be made on the basis of the features disclosed in that claim.

Moreover, the "Flow Chart for APD production <DAICEL>" submitted by Appellant I at the oral proceedings and the arguments based thereupon cannot alter the above findings of the Board. As already stated, what matters when assessing novelty over the cited prior art document are the features contained in the claim and not those which are not contained in it.

3.8 Consequently, the process disclosed in document (9), in the light of the established common general knowledge, is the same as that claimed.

3.9 As Claim 4 does not comply with Article 54(1) and (2) EPC, the main and first auxiliary request of the Appellant I are dismissed.

Second, third and fourth auxiliary request

4. *Article 123(2) and (3) EPC*

4.1 Claim 4 of second, third and fourth auxiliary request differ from Claim 4 of the main and first auxiliary request in that the feature

(c) ", in a temperature range of from 80 to 200°C and a pressure range of from 0.1 to 30 torrs, and said purified 1-aminopropanediol-2,3 being produced as distillate"

was added.

4.2 The Board is satisfied that Claim 4 of each request is not amended in such a way that it contains subject-matter which extends beyond the content of the application as filed. This amendment is supported by the application as originally filed on page 14, lines 3 to 5. Claim 4 of each request is not amended in such a way as to extend the protection conferred, either. The added feature does indeed restrict said protection. Those findings were not contested by the Appellant II.

5. *Novelty - Article 54(1)(2) EPC*

5.1 As set out in section 3 above, document (9) not only discloses a process wherein a crude 1-aminopropanediol obtained by reaction of glycidol and liquid ammonia is recovered by fractional vacuum distillation, which corresponds in the light of the established common general knowledge to operative conditions involving the use of columns which have a pressure loss of 0.27 to 0.4 mbar (27 Pa to 40 Pa), i.e. features a) and b), but also the additional feature c) indicated in point 4.1 above, as set out in point 3.3, last paragraph. It follows that all the features of Claim 4 of the second, third and fourth auxiliary request are disclosed in document (9).

5.2 As Claim 4 does not comply with Article 54(1) and (2) EPC, the second, third and fourth auxiliary requests of the Appellant I are dismissed too.

6. *Requests for referral of a question to the Enlarged Board of Appeal*

6.1 Article 112(1)(a) EPC provides that the Board of Appeal during proceedings on a case, either of its own motion or following a request from a party to the appeal, shall refer any question to the Enlarged Board of

Appeal, if it considers that a decision is required for ensuring uniform application of the law or if an important point of law arises.

6.2 In the present case, there is no need to refer a question to the Enlarged Board of Appeal to **ensure uniform application of the law**, given that, according to the established jurisprudence of the Boards of Appeal, it is necessary to read a document having the general technical knowledge in mind and for this purpose to look at representative technical literature as an aid to the correct interpretation of any particular term of art encountered (see decisions T 288/90, point 4.4 of the Reasons; T 233/90, point 3.3 of the Reasons; T 446/95, point 4.1.2 of the Reasons; T 578/95, point 3.2 of the Reasons). In the present case, the Board considered document (4) as representing general technical knowledge for the reasons set out in point 3.5 above.

Neither is there any need to refer a question to the Enlarged Board of Appeal as no **important point of law arises** in the present case. Whether something constitutes general technical knowledge or not is a technical question because it requires the skilled person to interpret technical information.

Thus, the Board arrived at its conclusions by application of the EPC without departing from the established jurisprudence.

6.3 As a decision was thus possible in the present case without any need to answer the hypothetical question formulated by Appellant I (see point XII above), there is neither a reason to deal with that question or to

refer it to the Enlarged Board of Appeal, nor can there be any obligation for the Board in this respect under Article 112(1)(a) EPC.

The request for referral of a question to the Enlarged Board of Appeal is, therefore, rejected.

7. *Remittal - Article 111(1) EPC*

As set out in point 2.7 above, document (9) formed part of the opposition and appeal proceedings and document (10) was only additional evidence for the fact that document (4) represents common general knowledge. The subject of the appeal proceedings in terms of its legal and factual framework has, therefore, not changed. Thus, there is no reason to allow the request for remittal of the case to the first instance.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The request for referral of a question to the Enlarged Board of Appeal is rejected.

3. The patent is revoked.

The Registrar: The Chairman

N. Maslin A. Nuss