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**Datasheet for the decision
of 11 December 2014**

Case Number: T 0984/12 - 3.3.06

Application Number: 05810468.8

Publication Number: 1804961

IPC: B01D67/00, B01D69/02, B01D71/68

Language of the proceedings: EN

Title of invention:
METHOD FOR PREPARING HYDROPHILIC POLYETHERSULFONE MEMBRANE

Applicant:
3M Innovative Properties Company

Headword:
Hydrophilizing PES membranes /3M

Relevant legal provisions:
EPC Art. 52(1), 54, 56, 84, 114(2)

Keyword:
Auxiliary requests filed at the oral proceedings -
Admissibility (yes)
Clarity (Main request and 1st Auxiliary Request) - no
Inventive step (2nd Auxiliary Request) - yes

Decisions cited:

Catchword:



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Chambres de recours**

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Case Number: T 0984/12 - 3.3.06

**D E C I S I O N
of Technical Board of Appeal 3.3.06
of 11 December 2014**

Appellant: 3M Innovative Properties Company
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted on 22 November
2011 refusing European patent application No.
05810468.8 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman B. Czech
Members: P. Ammendola
J. Geschwind

Summary of Facts and Submissions

I. This appeal is against the decision of the Examining Division to refuse European patent application No. 05 810 468.8.

II. In its decision, the Examining Division found *inter alia* that claim 1 according to the then pending **Main Request** (filed with a letter dated 3 October 2011) lacked clarity (Article 84 EPC).

Said Claim 1 reads as follows:

"1. *A method of manufacturing hydrophilic polyethersulfone (PES) membrane comprising the acts of:*
providing hydrophobic PES membrane;
prewetting the hydrophobic PES membrane in a sufficient amount of a liquid having a sufficiently low surface tension;
exposing the wet hydrophobic PES membrane to a sufficient amount of an aqueous solution of oxidizer; and
after the exposing act, heating the hydrophobic PES membrane for a sufficient time at a sufficient temperature."

III. In the statement of grounds of appeal the Appellant (Applicant) maintained said Main Request, but it also filed therewith a set of claims labelled Auxiliary Request.

IV. The Board summoned the Appellant to oral proceedings, enclosing a communication expressing its preliminary opinion regarding, *inter alia*, the lack of clarity of the respective claims 1 of both pending requests. In

this communication reference was also made to the documents already cited in the proceedings before the Department of first instance, which include

D4 = US 5,254,143 A

as well as to document

D5 = US 4,493,373 A

cited in the application as filed (published under the PCT as WO 2006/044463); see page 6, lines 10 to 13.

V. The Appellant replied with a letter of 11 November 2014 enclosing therewith a further set of claims labelled 2nd Auxiliary Request.

VI. At the oral proceedings the Appellant:

- stated to only rely on its written submissions as regards the compliance with Article 84 EPC of claim 1 of the Main Request;
- replaced the then pending auxiliary requests by two new sets of claims respectively labelled 1st and 2nd Auxiliary Requests; and
- filed an amended version of pages 10 and 11 of the description of the application.

VII. The Appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims according to the Main Request filed with letter of 3 October 2011 or, alternatively, of the claims according to the 1st Auxiliary Request filed during the oral proceedings, or on the basis of claims

1 to 6 according to the 2nd Auxiliary Request and the amended description pages 10 and 11 filed during the oral proceedings.

VIII. Claim 1 of the **1st Auxiliary Request** filed at the oral proceedings reads (emphasis added by the board):

"1. A method of manufacturing a hydrophilic polyethersulfone (PES) membrane comprising the acts of:
providing a hydrophobic PES membrane;
prewetting the hydrophobic PES membrane in alcohol;
washing the hydrophobic PES membrane with deionized water;
immersing the washed membrane in an aqueous solution of about 2 to about 9% ammonium persulfate;
heating the solution with the immersed membrane from ambient temperature to about 80 to about 95°C and then maintaining the resultant membrane at about 80°C to about 95°C for about 15 minutes;
washing the membrane in water; and
then drying the resultant membrane."

The six claims according to the **2nd Auxiliary Request** filed at the oral proceedings read as follows:

"1. A method of manufacturing a hydrophilic polyethersulfone (PES) membrane comprising the acts of:
providing a hydrophobic PES membrane;
prewetting the hydrophobic PES membrane in isopropyl alcohol (IPA);
washing the resultant membrane with deionized water; and

immersing the resultant membrane in an about 12% aqueous solution of sodium hypochlorite for about 3 minutes at 90°C to 95°C."

- "2. *A method of manufacturing a hydrophilic polyethersulfone (PES) membrane comprising the acts of:*
providing a hydrophobic PES membrane;
prewetting the hydrophobic PES membrane with an about 50% aqueous solution of methanol;
washing the resultant membrane with deionized water;
immersing the resultant membrane in an about 20% solution of hydrogen peroxide (H₂O₂);
heating the hydrogen peroxide (H₂O₂) solution at 50°C to 70°C for about 30 minutes;
raising the temperature of the hydrogen peroxide (H₂O₂) solution to about 98°C;
maintaining the temperature of the hydrogen peroxide (H₂O₂) solution at about 98°C temperatures for about 40 minutes."
- "3. *The method of claim 2 further comprising: removing the membrane from the hydrogen peroxide (H₂O₂) solution;*
washing the resultant membrane with deionized water for about 10 minutes at a temperature of about 40°C; and drying the resultant membrane at 60°C for 40 minutes."
- "4. *The method according to any one of the previous claims, further comprising:*
removing the resultant membrane from the aqueous solution; washing the resultant membrane with deionized water for about 15 minutes at a temperature of about 40°C; and

drying the resultant membrane at 65°C for 35 minutes."

"5. *The method according to any one of the previous claims, further comprising after the exposing act in the solution of oxidizer: operatively positioning the membrane between two films so that the membrane is sandwiched therebetween; and continuously moving the sandwiched membrane through at least one heating zone."*

"6. *The method according to any one of the previous claims, further comprising during the heating act: operatively positioning the membrane in a saturated water steam medium; and continuously moving the membrane through the saturated water steam medium."*

IX. The Appellant's arguments and reasoning of relevance here may be summarized as follows.

Clarity

The Appellant argued in writing, *inter alia*, that the feature of claim 1 of the Main Request reading "*liquid having a sufficiently low surface tension*" was clear because a person skilled in the art would appreciate upon reading the whole patent application, that the purpose of the "*prewetting*" step was to provide a complete wetting by the "*aqueous solution of oxidizer*" in the "*exposing*" step, so that the oxidation reaction producing the hydrophilization of the membrane might take place also within the membrane pores. In section 2.1.2 of the statement of grounds of appeal, the Appellant explicitly held that the skilled person would

know which liquids were suitable for "prewetting" a specific hydrophobic membrane made of **polyethersulfone** (below **PES**) in the sense that the liquid had to be able to wet the hydrophobic PES membrane surface and **fill** its pores.

A different understanding of the term "prewetting" by the skilled person was however presented by the Appellant at the oral proceedings, when discussing the clarity of the expression "*prewetting the hydrophobic PES membrane in alcohol*" as present in claim 1 of the 1st Auxiliary Request. In response to the observation by the Board that whether or not a certain alcohol was able to completely fill the PES membrane pores could reasonably be assumed to depend also on the specific kind of PES membrane taken into consideration (e.g. in view of its pore sizes), the Appellant stated that the skilled reader of the patent application would immediately understand that the alcohols suitable for the prewetting step were **not** exclusively those able to **fill** (completely) the pores, but rather any alcohol that was able to penetrate them to at least an (unspecified) "**certain extent**".

The Appellant also held that the definition of wetting occurring "*instantaneously*" given in the footnote of Table 1 of Example 1 of the application represented a criterion that allowed to determine whether or not a given alcohol was "prewetting" the membrane in the sense of claim 1. As to the actual test procedure that was underlying said definition ("*wetting time was less than the time that could be measured using a stop-watch (normally less than 0.5 sec.)*", the Appellant initially maintained that it consisted in the observation of the behaviour of a membrane sample upon immersion in the wetting liquid, but finally argued that it was rather

the measurement of the time interval in which a drop, after having being deposited on the membrane surface, spreads completely onto that surface.

Inventive step

With regard to the methods defined by the independent claims according to the two auxiliary requests at issue, the Appellant stressed that none of the prior methods for imparting hydrophilicity to PES membranes encompassed their prewetting with isopropyl alcohol, or with a methanol/water mixture or with similarly hydrophilic liquids, followed by the immersion of the wetted membrane in an aqueous oxidizing solution. Hence, this prior art could not possibly render obvious the claimed methods.

As to document D5, which was the only available document describing prewetting the surface and pores of a hydrophobic membrane with a water-soluble alcohol and subsequent treatment of the membrane with an aqueous oxidizing solution, the Appellant stressed that it referred exclusively to a membrane made of **polyvinylidene fluoride** (below **PVF**) and to an oxidation reaction scheme that was totally different from those now specified in the claims at issue and that could not be applied to membranes made of PES, due to the completely different structure of this latter polymer. Therefore, the person skilled in the art looking for a simple method for providing hydrophilicity to the surface and the pores of PES membranes would find the technical teachings of D5 not relevant at all and would thus not envisage applying them to hydrophilize a PES membrane.

Reasons for the Decision

Procedural issues

Admissibility of the claims requests of the Appellant

1. The set of claims according to the Main Request had already been filed and dealt with in the first instance proceedings, so that there can be no question about its admissibility.

2. As regards the admissibility into the appeal proceedings of the new sets of claims according to the 1st and 2nd Auxiliary Requests at issue (see VIII *supra*), and the amended description pages 10 and 11, all of which were filed at the oral proceedings before the Board, the following is noted:

The two sets of claims at issue can both be considered to be derived from the set of claims which was already filed as auxiliary request with the statement of grounds of appeal .

The modifications made at the oral proceedings constitute an attempt to overcome the pending clarity objections raised by the Board in writing and orally. They narrow down the ambit of the independent method claims by the inclusion of more specific process conditions. The amendments made thus contributed to the convergence of the debate and did not raise any issues of particular complexity and could be dealt with by the Board without adjournment of the oral proceedings.

3. As regards the admissibility into the appeal proceedings of the amended description pages 10 and 11 also filed at the oral proceedings, the Board notes

that the amendments made consist exclusively in the deletion of vague statements as to the meaning to be attributed to the term "about", and were made in reaction to considerations expressed orally by the Board.

4. Taking into account all the above aspects, the Board decided to admit the claim sets labelled 1st and 2nd Auxiliary Requests, as well as the amended description pages 10 and 11, into the appeal proceedings despite their late filing (Article 114(2) EPC and 13(3) RPBA).

Main request

5. Lack of clarity - Claim 1
 - 5.1 Claim 1 at issue (see II *supra*) defines a method for manufacturing a hydrophilic PES membrane that comprises, *inter alia*, a step of "**prewetting** the hydrophobic PES membrane in a sufficient amount of a liquid having a **sufficiently low** surface tension" (emphasis added).
 - 5.2 As regards the meaning to be given to the term "prewetting" in the context of claim 1 at issue, the Board notes the following:
 - 5.2.1 According to the initial line of argument of the Appellant (section 2.1.2 of the statement of grounds), the skilled person reading claim 1 at issue would understand that the liquids suitable for "prewetting" must not only wet the outer surface of the PES membrane but must also **fill** its pores.
 - 5.2.2 Subsequently, during the discussion at the oral proceedings of the clarity of claim 1 of the

1st Auxiliary Request, the Appellant maintained that, in particular, alcohols suitable for "prewetting" were **not** exclusively those capable of filling completely the pores of PES membranes, but rather any alcohol that was able to penetrate their pores at least to an (unspecified) "**certain extent**". The Appellant thus maintained finally, in contradiction with its initial statement, that the skilled reader of the present application would rather associate to the term "prewetting" the requirement of an **at least partial** pore penetration.

5.2.3 The Board accepts the argument of the Appellant that the person skilled in the art may be assumed to be familiar with some prior art processes in which membranes are subjected to a step identified or identifiable as "prewetting" (see e.g. D5 *infra*).

However, it is neither apparent to the Board, nor was it alleged by the Appellant that the person skilled in the art would also know, as part of common general knowledge or from some prior art document,

i) whether a given liquid would be suitable for "prewetting" a PES membrane (in any of the two meanings of this term proposed by the Appellant itself), and/or

ii) a test method conventionally used to distinguish between liquids only wetting the membrane bulk or outer surface from those that also penetrate (in part or completely) the membrane pores.

5.2.4 As regards point i) *supra*

The Board notes that the Appellant's submissions (points 5.2.1 to 5.2.2 *supra*) as to the meaning to be

given to the term "*prewetting*" manifestly imply that a liquid suitable for "*prewetting*" the PES membrane within the meaning of the invention (below also **liquid suitable for "*prewetting*"**) may **not** by any liquid (e.g. any alcohol) whose surface tension is low enough to allow some wetting of the PES membrane (e.g. only of its outer surface), but that said liquid had to belong **exclusively** to a special group of such wetting liquids that is characterized by a special technical effect (i.e. at least some pore penetration).

It is not disputed by the Appellant that the person skilled in the art knows that in addition to the liquid's "*surface tension*" addressed in claim 1 also other factors, unrelated to the kind of liquid used for prewetting, may determine whether or not a given liquid (e.g. a given alcohol) penetrates completely or to any possible "*certain extent*" the pores of a given membrane. For instance, in case the pore size of a given PES membrane has a relatively broad distribution, a given liquid (e.g. a given alcohol) may penetrate to some extent only some (larger) pores but not other (smaller) pores present in the very same membrane. Similarly, a given liquid (e.g. a given alcohol) having one and the same "*surface tension*" may penetrate to at least a certain extent a PES membrane having pores of a certain diameter, but may not penetrate at all another PES membrane having smaller pores.

5.2.5 As regard point ii) *supra*

Accordingly, for the Board, claim 1 at issue could only be held to be clear within the meaning of Article 84 EPC provided the person skilled in the art in a position to verify the occurrence of such technical

effect, supposed to characterize the set of liquids suitable for performing the "prewetting" step of the invention.

In other words, since it is apparent from the Appellant's own submissions that an essential feature of the invention lies in the use for membrane prewetting of a liquid from the set of liquids that produce a certain technical effect (i.e. the liquids suitable for "prewetting"), the skilled person reading the definition of the prewetting step in claim 1 at issue must understand how to identify such suitable liquids. Absent such information, the extent of protection sought-for by virtue of claim 1 at issue remains ambiguous.

However, neither claim 1 at issue nor even in the whole description of the application mention, let alone describe, a specific test method for univocally verifying the occurrence of partial or complete pore penetration.

Hence, the Board concludes that the skilled person, considering that "prewetting" requires (as held by the Appellant) that the liquids to be used therefor must provide partial or complete pore penetration is **not** able to univocally identify whether or not a given liquid is suitable for "prewetting".

In this respect the Board finds unconvincing the Appellant's allegation that a definition of such a test method was implied by the reference, in Table 1 of Example 1 of the application, to the wetting of a PES membrane occurring "instantaneously", meaning that "the wetting time was less than ... 0.5 sec". Indeed, even accepting for the sake of argument in the Appellant's favour (and disregarding the latter's shift in

explanation) that it were apparent to the skilled person that the method used for measuring the wetting time referred to in Table 1 could only be that of placing a drop of the liquid to be tested (e.g. an alcohol) onto the surface of the membrane and then determining the time required until the drop spread completely on that surface, still there was no explicit or implicit indication in the application that the liquids displaying the required ("*sufficiently low*") surface tension and/or those which were suitable for "*prewetting*", were possibly the same liquids that were able to produce such fast wetting of the PES membrane. Nor has the Appellant provided any further evidence (e.g. of some common general knowledge or some theoretical reasoning) possibly suggesting that the skilled reader of Table 1 would consider such fast spreading of the liquid drop as evidence of a partial or complete penetration of the tested liquid into the pores of the tested membrane.

5.3 For these reasons the Board comes to the conclusion that attributing to the term "*prewetting*" in claim 1 of the Main Request one or the other of the two meanings proposed by the Appellant (filling or at least partial penetration of the pores of the membrane) does not imply a clear definition of the liquids suitable for "*prewetting*" the PES membrane within the meaning of claim 1.

5.4 In the Board's judgement, claim 1 at issue does not, therefore, meet the clarity requirement according to Article 84 EPC.

Consequently, the Main Request is not allowable.

1st Auxiliary Request

6. Lack of clarity - Claim 1
 - 6.1 Claim 1 at issue differs from claim 1 according to the main request in that the clause defining the prewetting step was amended to read "*prewetting the hydrophobic PES membrane **in alcohol** ~~in a sufficient amount of a liquid having a sufficiently low surface tension~~*"
 - 6.2 For the Board, this amended wording of claim 1 does not provide a clear definition either of the essential feature of the invention that **only certain** alcohols can be used in the "*prewetting*" step.
 - 6.3 As already mentioned above (see 5.2.2 *supra*), the Appellant argued that a clear definition of such limited group of alcohols was implicit for the skilled reader of claim 1 at issue. In its opinion, the fact that the claim required that the alcohol must produce "*prewetting*" implied that it also had to penetrate the membrane pores at least to an (although unspecified) "**certain extent**".
 - 6.4 However, even assuming for the sake of argument in favour of the Appellant that a skilled person would consider the term "*prewetting*" to imply the occurrence of such at least partial (and vague) pore penetration, the considerations under points 5.2.3 to 5.3 apply *mutatis mutandis* to claim 1 at issue as well, since the mere limitation of the liquids to be used for prewetting to alcohols has no particular bearing on these considerations.
 - 6.5 Accordingly, taking into account the meaning(s) to be given to the term "*prewetting*" according to the Appellant, the definition of the prewetting step in

claim 1 of the 1st Auxiliary Request, neither provides nor implies a clear definition of the limited group of alcohols to be used in such step.

6.6 Hence, in the Board's judgement, claim 1 according to the 1st Auxiliary Request does meet the clarity requirement according to Article 84 EPC either.

6.7 Consequently, the 1st Auxiliary Request is not allowable either.

2nd Auxiliary Request

7. Allowability of the amendments

7.1 The Board is satisfied that the claims at issue (see VIII *supra*) are fairly based on the disclosure of the application as filed and, therefore, meet the requirements of Article 123(2) EPC. Reference is made in particular, from page 8, line 7 to page 9, line 2, and page 9, lines 13 to 19 of the PCT publication.

7.2 As to the issue of clarity of the claims at issue (Article 84 EPC), the Board is satisfied that the claims at issue no longer contain the vague definitions of essential features objected to by the Examining Division or by the Board. In particular, the liquid to be used in the prewetting step and the oxidizer are, *inter alia*, specified in each of two independent method claims 1 and 2.

7.3 Newly filed description pages 10 and 11 differ from the corresponding original description pages only in the deletion of the passages in these latter attributing an unconventional (vague and broader) meaning to the term "about" normally used in patents in connection with

numerical values of measurable properties. Thus, these deletions are manifestly beneficial also to the clarity of the wording used in the claims (Article 84 EPC) and do not result in the addition of previously undisclosed subject-matter (Article 123(2) EPC). Hence, the amendments carried out in the description pages 10 and 11 are found allowable.

8. Novelty

None of the documents cited by the Examining Division during the substantial examination (including document D4) discloses a method for manufacturing hydrophilic polyethersulfone membranes comprising prewetting a hydrophobic PES membrane with isopropyl alcohol or a 50% aqueous solution of methanol, followed by immersion of the membrane in a solution of an oxidizer which is sodium hypochlorite or hydrogen peroxide, respectively.

The subject-matters of independent claims 1 and 2 and, consequently, of claims 3 to 6 dependent thereon, are thus novel (Article 52(1) and 54(1)(2) EPC).

9. Inventive step

9.1 The invention

The invention relates to methods for manufacturing hydrophilic PES membranes (see claims 1 and 2; point VIII *supra*).

9.2 Closest prior art

9.2.1 In the part of the description of the application as filed devoted to the background art (see from page 1, line 4, to page 6, line 6), it is acknowledged that

several methods had already been known for providing hydrophilicity to PES membranes.

9.2.2 Hence, any of these prior art methods represents a suitable starting point for the assessment of inventive step. This was not disputed by the Appellant. More particularly, the plasma treatment method referred to in the paragraph bridging pages 3 and 4 of the application appears to represent the most appropriate starting point since it involves hydrophilization by oxidation taking place at the membrane surface.

9.3 Technical problem

9.3.1 From page 7, lines 20 to 21, of the description of the application it can be gathered that in the light of the available methods including the closest prior art identified hereinabove, the technical problem to be solved by the present invention was the provision of "*a relatively simple, cost effective and reliable*" method for the preparation of hydrophilic PES membranes.

9.4 Solution(s)

As the solution(s) to this technical problem the application proposes the two methods according to, respectively, independent claims 1 and 2.

The method of claim 1 is characterised in particular in that a PES membrane is treated by first "*prewetting*" it "*in isopropyl alcohol*" and later subjected to oxidation by "*immersing*" it in an "*aqueous solution of sodium hypochlorite for about 3 minutes at 90°C to 95°C*".

The method of claim 2 is characterised in particular in that comprises "*prewetting*" a hydrophobic PES membrane

"with an about 50% aqueous solution of methanol" and later subjected to oxidation by "immersing" it "in an about 20% solution of hydrogen peroxide (H₂O₂)" and "heating the hydrogen peroxide (H₂O₂) solution at 50°C to 70°C for about 30 minutes; raising the temperature of the hydrogen peroxide (H₂O₂) solution to about 98°C; maintaining the temperature of the hydrogen peroxide (H₂O₂) solution at about 98°C temperatures for about 40 minutes".

9.5 Success of the solution(s)

The Board has no reason to doubt that each of the two claimed methods indeed solves the technical problem posed (see 9.3 *supra*). It is plausible that the claimed methods for treating hydrophobic PES membranes result in PES membranes which are oxidised and hence hydrophilized to the desired degree at least on their bulk surface.

9.6 Non-obviousness

9.6.1 The Board concurs with the Appellant that neither the prior art methods dealing with the provision of hydrophilicity to PES membranes acknowledged in the portion devoted to the background art, nor those disclosed in the documents cited by the Department of first instance, suggest using ISA or a 50% aqueous solution of methanol for prewetting a PES membrane prior to exposing the latter to an oxidising treatment with an aqueous solution of sodium hypochlorite or hydrogen peroxide, respectively, let alone under the specific conditions defined in the claims.

9.6.2 Document D5 is the only available citation disclosing the use of a water soluble alcohol for prewetting a

(PVF) membrane followed by the displacement of alcohol by an aqueous oxidizer solution which is strongly alkaline (see in document D5 column 5, lines 8 to 45).

However the Board accepts the argument of the Appellant (see IX *supra*) that the person skilled in the art starting from the closest prior art identified under point 9.2.2 *supra* and looking for a simpler method for providing hydrophilicity to PES membranes would not consider applying the technical teachings of D5, which is limited to the treatment of PVF membranes only. Moreover, even doing so, the skilled person would not be led by D5 (see column 5, lines 46, to column 6, line 5; column 6, lines 10 to 29) without the benefit of hindsight, to use sodium hypochlorite or hydrogen peroxide as the oxidiser under the specific conditions in terms of concentrations, ingredients, temperature and duration that are required according to claims 1 and 2 at issue.

- 9.7 Document D4, the contents of which were considered to of some relevance by the Examining Division, generally refers to various hydrophobic polymeric membranes, including PES membranes (column 4, lines 27 to 50) and generally mentions that it was known to render the surface of hydrophobic membranes hydrophilic by an oxidising treatment. The numerous treatments listed include plasma treatment as well as treatments with "... an acid solution of hydrogen peroxide, a hypochlorite salt..." (column 5, lines 22 to 37). However, no example is given for the treatment of a PES membranes or for the use of a hypochlorite or hydrogen peroxide as the oxidiser. Nor does this citation comprise a suggestion to prewet a hydrophobic membrane with a relatively hydrophilic liquid (such as isopropyl alcohol or a methanol/water mixture) in a step

preceding the oxidising treatment.

Hence, for the Board, even assuming that the skilled person aware of the contents of D4 would consider using hypochlorite or hydrogen peroxide solutions as oxidising hydrophilization agents for PES membranes, he would not, without the benefit of hindsight, be induced by D4 to foresee a prewetting step as specified in claim 1 or claim 2, let alone in combination with the specific oxidation conditions respectively required by said claims.

- 9.8 Hence, the Board concludes that neither the method of claim 1 nor that of claim 2 are obvious in the light of the state of the art, let alone the methods according to dependent claims 3 to 6.

Hence, in the Board's judgement, the subject-matter of claims 1 to 6 at issue involve an inventive (Articles 52(1) and 56 EPC).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside

2. The case is remitted to the Department of first instance with the order to grant a patent on the basis of the following documents:

Claims: claims 1 to 6 of the 2nd auxiliary request filed during the oral proceedings,

Description:

- amended pages 10 and 11 of the description filed during the oral proceedings,
 - pages 1 to 9 and 12 to 26 of the description as originally filed,
- to be adapted where appropriate,

Drawings: drawing pages 1/3 to 3/3 as originally filed.

The Registrar:

The Chairman:



D. Magliano

B. Czech

Decision electronically authenticated