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D E C I S I O N
of 28 March 2002

Case Number: T 0846/98 - 3.3.5

Application Number: 93900813.2

Publication Number: 0626878

IPC: B01D 35/06

Language of the proceedings: EN

Title of invention:

Scrim inserted electrostatic fibrous filter web

Patentee:

MINNESOTA MINING AND MANUFACTURING COMPANY

Opponent:

AIRFLO EUROPE B.V.

Headword:

Electrostatic filter web/MINNESOTA MINING AND MANUFACTURING

Relevant legal provisions:

EPC Art. 56

Keyword:

"Inventive step (yes) - non-obvious modification"

Decisions cited:

-

Catchword:

-



Case Number: T 0846/98 - 3.3.5

D E C I S I O N
of the Technical Board of Appeal 3.3.5
of 28 March 2002

Appellant:
(Opponent)

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(Proprietor of the patent)

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Decision under appeal:

Interlocutory decision of the Opposition Division
of the European Patent Office posted 25 June 1998
concerning maintenance of European patent
No. 0 626 878 in amended form (Article 106(3)
EPC).

Composition of the Board:

Chairman: R. K. Spangenberg
Members: B. P. Czech
J. H. Van Moer

Summary of Facts and Submissions

I. The appeal is from the interlocutory decision of the opposition division to maintain European patent 0 626 878 in amended form. The amended independent claims 1 and 7 underlying that decision read as follows

"1. A method for forming an electret nonwoven filter comprising the steps of:

- a) providing electrostatically charged dielectric fibers formed by fibrillation of a web or film,
- b) forming said dielectric fibers into at least one nonwoven filter web layer (10 or 10') by carding or air-laying,
- c) joining the at least one non-woven filter web layer to a reinforcement scrim (11), and
- d) needle punching (5) the at least one nonwoven filter web layer (10 or 10') and reinforcement scrim (11) to form a filter with uniform basis weight, pressure drop and percent penetration across the filter."

"7. A uniform electret nonwoven filter or filter web comprising at least one carded or air-laid nonwoven filter web layer (10 or 10') of electrostatically charged dielectric fibers and a reinforcement scrim (11) joined together by needlepunching, wherein the electrostatically charged dielectric fibers are fibrillated from a film of a film forming polymer, wherein the needlepunching provides uniformity in the nonwoven filter web layer basis weight, pressure drop and percent penetration."

II. In the contested decision the opposition division considered 13 documents, including the following:

- D1: US-Re-30 782
- D2/D2a: "Nonwoven filter fabrics for dust control",
K.N. Chatterjee et al., Indian Textile Journal,
101, N°5, February 1991, pages 72-76, and
corresponding database abstract
- D3: Database abstract of "Polyester needle-punched
nonwoven dust filter for controlling air
pollution, K.N. Chatterjee et al., Manmade
Textiles in India, 34, N°5, May 1991,
pages 172-179
- D4/D4a: "Nonwoven filter fabrics for emission control",
K.N. Chatterjee et al., Indian Textile Journal,
101, N°3, December 1990, pages 132-136, 139-
144, 147-154, and corresponding database
abstract
- D5/D5a: "Die Abhängigkeit des Vernadelungsvorgangs und
der Eigenschaften von Nadelfilzen mit
eingenadelten Trägergeweben von den
Herstellungsbedingungen", Lünenschloss J. et
al., Textilbetrieb, 95, October 1977, pages 32-
34, and corresponding database abstract
- D6/D6a: "Die Abhängigkeit des Vernadelungsvorgangs und
der Eigenschaften von Nadelfilzen mit
eingenadelten Trägergeweben von den
Herstellungsbedingungen", Lünenschloss J. et
al., Textilbetrieb, 95, December 1977,
pages 47-50 and 52-45, and corresponding
database abstract
- D7/D7a: "Die Abhängigkeit des Vernadelungsvorgangs und

der Eigenschaften von Nadelfilzen mit
eingenadelten Trägergeweben von den
Herstellungsbedingungen", Lünenschloss J. et
al., Textilbetrieb, 95, November 1977,
pages 23-28

D8: "Einfluss der Nadeleinstichgeometrie auf die
Filtereigenschaften von Nadelvliesstoffen mit
eingenadeltem Trägergewebe", Lünenschloss J. et
al., Textilbetrieb, April 1979, pages 28-30

D10: NL-C-160 303 and patent family member

D10': GB-A-1 469 740

D11: EP-A-0 141 674

D12a: Kirk-Othmer, Encyclopedia of Chemical
Technology, 3rd edition, Vol.16, 1981,
pages 111-113, and

D16: US-A-3 998 916 (of which D1 is a re-issue)

The opposition division inter alia came to the
conclusion that, starting from D1 as the closest prior
art, the claimed subject-matter was neither derivable
from the cited prior art, nor was did it lie within the
scope of a person skilled in filtration technology.

III. With its statement of the grounds of appeal, the
appellant filed a further document

D12b: Excerpt from the Book of Papers of the INDA's
Needle Punch Conference December 4-5, 1990;
G.W. Anderson, "A new needlepunched spunbonded

product", pages 57, 58 and 60.

and

five test reports, R1 to R5.

Relying on the test reports and on documents D2 to D8, D10, D11 and D12b, it contested the findings of the opposition division and argued that the claimed subject-matter lacked the required inventive step.

IV. With its reply, the respondent filed two further documents, namely

D13: Product standard of "FILTTRETE™ non-woven webs", effective as of August 1988, and a list - labelled "STANDARD PRODUCTS" of various "Needle Punched Nonwoven Web" materials.

and

D14: An affidavit of Mrs Agresti.

Moreover, it stated that both the appellant and the respondent had, for nearly 25 years, produced and sold needle-punched fibrillated electrostatically charged non-woven filter webs having basis weights of less than 200 g/m², but without a reinforcement scrim. In discussing inventive step, it referred to

D15: US-A-4 363 682 (cited in contested patent).

V. Oral proceedings took place on 28 March 2002, during which

(i) the proprietor explicitly confirmed that products as referred to in D13, i.e. air-laid and needle-

punched non-woven filtering webs made of charged fibrillated fibres were known and sold before the priority date of the contested patent; and

- (ii) the appellant showed several filtering products comprising non-woven webs allegedly produced according to the method disclosed in D1 and consolidated by needle punching.

VI. The parties' oral and written submissions, as far as they are relevant for the present decision, can be summarised as follows:

Referring to the samples shown at the oral proceedings, the appellant submitted that the products disclosed in D1 were usually needled to make them more coherent and that such products, provided with a mechanical support, were generally considered as satisfactory until the idea arose to use them for other purposes and in other shapes. Looking at these products again, the skilled person would have, depending on the intended use of the materials, considered the needle-punching thereof to a support scrim as an obvious measure, especially at low basis weights of the charged fibre webs. More particularly, it argued that, starting from the disclosure of D1 as closest prior art, the claimed subject-matter lacked the required inventive step if combined with the disclosure of D2 to D4, or if combined with the disclosure of D12b, or in view of the common general knowledge at the priority date as illustrated by D5 to D8. It submitted that D2 to D8 showed that the needle punching of non-woven filtering webs to support scrims in order to improve their coherence, and implicitly their uniformity, was a well known technology at the priority date. Air-laid or

carded fibre webs, whether electrostatically charged or not, needed to be needle-punched in order to get a coherent and uniform web, especially at low basis weights. D12b disclosed or at least suggested that the needle-punching of a non-woven web to a reinforcement scrim improved the uniformity of its properties. Moreover, it argued that the claimed invention also lacked the required inventive step in view of the disclosure of document D11 taken as closest prior art, which disclosed the needling of electrostatically charged fibres to a support scrim.

Concerning the unexpected improvement in "uniformity" of the properties of the products claimed as mentioned in the contested decision, the appellant, contesting the clarity of the wording of the claims, and relying on the data given in the contested patent and in reports R1 to R5, submitted that such an unexpected improvement had not been convincingly shown. He argued that if there was such an improvement, it had to be considered as a bonus effect achieved when carrying out an otherwise obvious technical teaching. Whether the non-woven web was charged or non-charged was to be considered as irrelevant in this respect.

The respondent contested the argumentation of the appellant. More particularly, it considered the products referred to in D13 to represent the closest prior art. Starting from these products which were already coherent due to the needling thereof, the skilled person would not have - without knowledge of the invention as claimed - considered the joining thereof to a support scrim in order to improve the uniformity of their properties. It submitted that D2 to D8, D11 and D12b did not mention electrostatically

charged fibres obtained by fibrillation of a web, and that the skilled person would not, therefore, consider these documents when trying to improve the products according to D13. Moreover, none of these documents suggested that the uniformity of the properties of the non-woven filtering web could be improved by needling it to a support scrim. D11 related to an entirely different product, obtained by loosely laying charged endless filaments onto and subsequently needling them to a scrim in order to prepare a web. It submitted that the test results given in the contested patent showed a significant improvement of the uniformity of the claimed products, which improvement was unexpected, since the prior art did not suggest needle-punching a web to a scrim for this purpose. It considered the experimental details referred to in the appellant's test reports and the conclusions drawn therefrom to be incorrect and/or not relevant. Since, starting from D13 as closest prior art, the claimed measures and their purpose were not rendered obvious by the cited prior art, "bonus effect" considerations were not applicable.

VII. The appellant requested that the decision under appeal be set aside and that the patent be revoked.

The respondent requested that the appeal be dismissed and that the patent be maintained.

Reasons for the Decision

1. Only inventive step was at issue in the present case.
2. *Construction of the claims*

2.1 Independent claim 1 does not specify clear ranges of values concerning the relative term "uniform". Hence the broadest possible interpretation of this term is to be considered in the examination of patentability of the claimed products. Moreover, neither claim 7 itself, nor the description clearly specify in comparison to which other "similar products" the uniformity provided by needle-punching of the properties referred to in claim 7 has actually been measured (see examples, page 3, line 31 to 31), and hence in comparison to which products an improvement was allegedly obtained. Whereas in its letter dated 8 September 1999, see paragraph bridging pages 8 and 9, the respondent argued that the comparative tests carried out by the appellant were not relevant because they were carried out with pre-needled comparative material, it stated on the day of the oral proceedings that the material used in the comparative tests according to the patent was of the type referred to in D13, ie needled. Moreover, as pointed out by the appellant during the oral proceedings, whereas claim 1 referred to the uniformity of the properties of the entire filter, claim 7 referred to the uniformity of the non-woven filter web layer. Hence the expression "provides uniformity" does not imply any further clear limitation of the claimed method.

2.2 As will appear from the following there was no need for the board to decide on the meaning of the contested expression, since irrespective of the issues of whether any kind of improvement of uniformity was actually obtained, and in comparison to which material, the combination of structural features recited in the independent claims already suffices to make the claimed subject-matter inventive.

3. *Closest prior art*

3.1 As explicitly conceded by the respondent during the oral proceedings, products consisting of needle-punched non-woven filter webs obtained by air-laying of electrostatically charged fibres fibrillated from a polymer film, as referred to in D13, were known and commercially available before the priority date of the patent. This was not disputed by the appellant. The board also considers this statement to be plausible in view of the contents of D13, which document is dated 25 August 1988, see page 1 thereof. Pages 1 and 2 of D13 refer to "FILTRETTE NON WOVEN WEB", which is specified to be an air-laid web. On page 4 of D13, products are listed which are labelled as "needle punched non-woven web" and which are apparently based on the "FILTRETTE" air-laid webs mentioned on pages 1 and 2, see the "type" designations of the products (left-hand column on page 1 and second column from the left on page 4). The suitability of these materials for filtering purposes, as well as their electrostatically charged condition, is reflected in the designation "FILTRETTE" and the properties as listed on page 1, see the two right-hand side columns.

3.2 The board considers the products according to D13 as the closest prior art, because they are similar to the ones claimed insofar as they consist of a non-woven filter web of fibrillated, electrostatically charged fibres. The webs are needle-punched and therefore must have certain, although possibly poor, degrees of coherence and uniformity in the X-Y directions.

3.3 According to one of the appellant's lines of arguments, the disclosure of D1 was to be considered as the

closest prior art. D1, as well as the patent family members D10/D10', which are all based on the same Netherlands priority application 7403975, disclose the preparation of an electrostatically charged fibrous filter material comprising electrostatically charging a polymeric film, fibrillating the film, collecting the fibre material obtained and processing the material into a filter of desired shape. See D1, column 1, lines 30 to 37. The only indications concerning the processing and shaping of the fibres into a filter are to be found in column 1, lines 55 to 60 of D1, according to which the charged and fibrillated material is "collected in layers onto a take-up roller and there processed into filter cloth of the thickness and shape desired by taking one or more layers, which are laying one on top of the other, together and at the same time from the roller". See also page 2, lines 11 to 16 and the example of D10'. These passages neither explicitly address web formation by air-laying or carding, nor do they address or suggest any kind of web consolidation such as needle punching, or the joining of the electret fibres to a supporting scrim. Therefore, the board considers the products disclosed in D1 (and D10/D10') to be less relevant than those according to D13, and hence less appropriate as a starting point in the assessment of inventive step.

3.4 Applications of the prior art products

As pointed out by the appellant during the oral proceedings, commercial filter webs produced according to the teaching of D1 are often needle punched to improve their coherence. This statement was not disputed by the respondent and appears to be in line with the information given in the contested

patent, see page 2, lines 4 to 7 and page 2, line 59 to page 3, line 1. The products referred to in D13 must be considered as examples illustrating this kind of product. The known needled or non-needled products referred to in D13 and D1/D10/D10', i.e.

electrostatically charged filter webs obtained by a method comprising the fibrillation of a polymer film, were usually put into use in some kind of mechanical support structure. This is further confirmed by D15 (published 1982), which relates to the uses of such webs, and where mention is made of filters comprising layers of the fibrillated charged fibres arranged in and/or confining and/or supporting structures such as "a box, a bag, or the like", see column 1, lines 33 to 34. Examples of prior art "cassettes" comprising needle-punched webs of fibrillated, electrostatically charged fibres were also displayed by the appellant during the oral proceedings. D15 also mentions filtering breathing masks comprising such a layer affixed to a relatively rigid porous support such as by gluing or other means not detrimental to the porosity, and covered with a further porous layer, see column 1, lines 35 to 38, 47 to 54 and 61 to 67, and column 2, lines 43 to 52.

4. *The technical problem*

In contrast therewith, according to the present invention, the electret fibre web is needle-punched to a support scrim, i.e. a light and flexible textile product.

- 4.1 The integral composite products obtained by needle-punching the electret fibre web to a scrim are undisputedly more coherent and stronger ("reinforced")

than the starting fibre web. Hence they lend themselves to applications/ways of using them not addressed or envisaged in the prior art. Moreover, as acknowledged by the appellant during oral proceedings, useful products comprising a lower (than prior art) basis weight charged fibre web, but still being coherent and strong, may be provided.

4.2 Considering the broadest interpretation to be given to the relative term "uniform", and considering the ambiguity and the controversial character of the expression "provides uniformity", the board felt that it was appropriate, in a first approach to the examination of inventive step, not to consider these features as distinctive over the prior art according to D13, D1, D10/D10' or D15.

4.3 Starting from either the products referred to in D13 or the disclosures of D1 (or of D10, D10' and D15), the technical problem to be solved by the claimed subject-matter can hence be seen in the provision of further filter products based on non-woven webs of fibrillated electrostatically charged fibres having uniform (in the broadest sense) properties, and a method for the preparation thereof. This problem has undisputedly, and also to the satisfaction of the board, been solved by the claimed subject-matter.

5. *Solution not suggested by prior art*

5.1 As acknowledged by the appellant during the oral proceedings, the known needled or non-needled electrostatically charged webs were fully satisfactory, ie not only in terms of their uniformity, in the applications in which they were used, such as filtering

cassettes or breathing masks. In other words, as far as these applications are concerned, the skilled person was not aware of any particular problem associated with these products that needed to be overcome. As will appear from the following, the prior art relating to charged non-woven filter webs does not direct the skilled person towards making structural modifications to these materials. Hence it remains to be seen whether the prior art relied upon by the appellant suggests the claimed modification of the structure of the known products by integrating an additional structural component, i.e. a support scrim, by needle punching.

5.2 Due to their consolidation by needle-punching, the air-laid electrostatically charged fibrillated fibre webs according to D13 have mechanical properties, and in particular a certain coherence, which, as demonstrated by the appellant during oral proceedings, make them suitable for certain applications, e.g. for incorporation into filtering cassettes. These fully satisfactory prior art products could not - per se - suggest any modifications whatsoever which would make them suitable for further applications.

5.3 Assuming in the appellant's favour that the skilled person would implicitly understand from D1, as alleged by it during the oral proceedings, that the fibrillated material had to be stretched, cut into staples, and then needle-punched before being formed into filter products, D1 (or D10/D10') still does not disclose or suggest more than the products referred to in D13. In particular, D1 does not lead the skilled person to conceive modifications to the structure of the products disclosed in order to improve their cohesion and strength, let alone the incorporation of a supporting

scrim by means of needle-punching.

5.4 Documents D2 to D8 illustrate that it was well-known before the priority date of the contested patent to needle-punch non-woven fibrous filter webs to scrims.

5.4.1 D2 to D4 inter alia disclose the preparation of dust filter materials comprising the needle-punching of a non-woven fibre web, which according to documents D2 and D4 is explicitly stated to be carded, to a reinforcement. Moreover, concerning the products disclosed, the following information can be gathered from these documents: Scrims can be used as reinforcement material. The needling operation leads to a reduction in fabric thickness and air permeability, which effect was more pronounced when the web was needled to a support scrim, an increase in dust filtration efficiency, cleaning efficiency and pressure drop, and prevents the bouncing back of fibres and thus helps better locking. See in particular the abstracts D2a, D3 and D4a, D2, pages 72 to 73, section labelled "Material and methods, page 74, sections labelled "Effect of presence of scrim", page 75, section labelled "Effect of scrim", pages 74 to 75, section labelled "Conclusions"; D4, pages 132 to 134, from section labelled "Materials and methods" to Section labelled "Scrim presence", pages 144 and 148, sections labelled "Effect of presence of scrim", page 152, section labelled "Effect of scrim", pages 152 and 154, section labelled "Conclusions".

5.4.2 D5 to D7, which are considered as parts of a single document, illustrate that in the field of textiles for technical applications, inter alia filters, it was well known since the late seventies to needle-punch non-

woven filter webs to support scrims for improving their dimensional form stability and strength, see D5, right-hand column, second paragraph and D7, page 53, section "9. Conclusions", first paragraph. In order to analyse the impact of the needling operation on the properties of the final product, experiments were carried out which involved the needle-punching of slightly pre-needled non-woven webs to a support scrim, see page 33, section "3. Versuchsplanung und - durchführung" and Figures 2 and 3. The influence of process parameters such as needle type, needling angle, needling density, needling depth, basis weights of scrims and non-woven webs on properties of the products, such as strength, density and dimensional stability, were examined. Filtering properties were not assessed.

5.4.3 D8 from the same author as and referring to D5 to D7, discloses further experimental results concerning the needle-punching of non-woven webs to support scrims (see page 28, Table 1 "Versuchsdaten"). It emphasises the importance of needle-punching non-woven filter webs to a support scrim in order to obtain materials with improved strength and dimensional stability, see page 28, central column, fifth paragraph.

5.4.4 However, documents D2 to D8 are all silent regarding the use of electrostatically charged fibres, let alone of the particular fibre webs obtainable by fibrillation of a film and subsequent carding or air-laying. As pointed out by the respondent, the electrostatically charged non-woven filters are special products for which special considerations apply. The electrostatic charge of the material is of primordial importance, rather than its pore size and porosity, as in the case of conventional non-woven filters. The board is

convinced that due to these differences in terms of the fibre material used and of the filtration mechanism as such, the skilled person confronted with the stated technical problem would not - without any reason derivable from the prior art (see item 5.1 above), and without knowledge of the claimed subject-matter - consider documents relating to conventional non-charged filters and to the modification of the properties thereof by needle-punching.

In this respect, it is to be noted that composite filter materials comprising a non-woven fibre web needle-punched to a supporting scrim, as well as filter webs made from electrostatically charged fibres, were both known for more than ten years at the priority date of the contested patent, see eg D8 (published 1979) and D10 (published 1976), respectively. The fact that, nevertheless, nobody envisaged the application of the concept known from eg D8 in the field of electrostatically charged non-woven filter materials also points towards the presence of an inventive step.

Summarising, a skilled person trying to provide further non-woven filter products based on electrostatically charged fibres would not have considered any of D2 to D8. The time elapsed between the publication of D8 and the present priority date supports this view. Even though a combination of the features of the materials according to D13, D1 or D10/D10' could have led to the claimed subject-matter, the appellant has not convinced the board of any reason for which the skilled person would have considered such a combination.

5.4.5 Although the appellant did not argue accordingly, the board is also convinced that starting from the

disclosure of document D2 as closest prior art, ie from filtering materials comprising a carded non-woven filter web needle-punched to a support scrim, the skilled person - without knowledge of the presently claimed invention - had no compelling reason and was not induced by the cited prior art concerning filter webs comprising electrostatically charged fibres fibrillated from a film, ie D1, D13 and D10/D10', to replace the conventional fibres used according to D2 by a web of these particular fibres.

5.5 Document D12b relates to needle-punched spunbonded non-woven fabrics, i.e. to products composed of continuous filaments, consolidated and reinforced by needle-punching.

5.5.1 D12b also discloses the needle-lamination of spunbonded web layers to e.g. scrims or cellulosic sheets. Inner plies consisting of pulp are explicitly mentioned. See in particular page 60, first paragraph. Moreover, D12b refers to the encapsulation - by needling - of various fibre materials within two spunbonded layers. However, D12b does not explicitly address filtering applications and is, therefore, even less relevant than documents D2 to D8. Moreover, it does not mention electrostatically charged fibres, let alone air-laid or carded webs of fibrillated charged fibres.

5.5.2 D12b repeatedly qualifies staple fibre carded webs as a less satisfactory alternative to the described spunbonded webs, in terms of uniformity, strength and the number of process steps involved in their manufacturing (see page 58, third paragraph and page 60, third paragraph). In the passage quoted by the appellant (page 58, third paragraph) carded webs are

stated to "tend to have uniformity and strength problems below 2oz/sq. yd." and to "rely on a spunbonded scrim to give the desired properties". The board does not share the view of the appellant, according to which this passage discloses or suggests needle-punching low basis weight carded fibre webs to a support scrim. Apart from the fact that a bonding of such two layers, let alone by needle-punching, is not explicitly mentioned therein, the pejorative tone of the passage rather implies that such products were considered less desirable. Concerning the passage on page 60, first and second paragraphs, the board considers that the needled composite products referred therein do not suggest the joining of a carded or air-laid web of fibrillated electret fibres to a spunbonded scrim by needle-punching. In order to arrive at the claimed subject-matter, one would rather have to - as suggested by D12b on page 60, paragraph 2 - "use imagination". In the board's view the notional skilled person is, however, and in contrast with an inventor, devoid of such imaginative capacity and needs clear incentives to go into a particular direction. D12b, however, does not provide such incentives.

5.5.3 Summarising, D12b does not comprise any relevant information going beyond the disclosure of documents D2 to D8. Hence, it cannot suggest the needle-punching of the materials according to D13 or as disclosed in D1/D10/D10' to a reinforcing scrim.

5.6 Document D11 inter alia discloses filter webs comprising electrostatically charged polymeric endless filaments needle punched to a supporting scrim, see Figure 4, page 4, lines 21 to 27, page 6, last paragraph and pages 13 to 15.

5.6.1 The filaments are deposited substantially in parallel on a supporting belt (see Figure 4 of D11). Hence, they cannot be considered as a web at all, which must implicitly have at least a low degree of coherence. A web of these filaments is only formed during the subsequent needle punching operation. Since the products according to D11 are not formed from and do not comprise a web of carded or air-laid fibrillated, i.e. relatively short fibres, they are so different from the claimed products that they cannot be considered to represent the closest prior art. Nor would the skilled person, due to the differences mentioned, consider this document when trying to provide a further filter material based on fibrillated charged fibres.

5.6.2 On page 2, lines 27 to 37 of D11, it is stated that the method - involving fibrillation of a film - according to document D16, which is also based on the same Netherlands priority application 7403975 as D1, cannot achieve the same fidelity of filament cross-section as the method according to D11, and that "continuous filament yarns provide vastly improved results such as for instance, in filtration applications". Hence, the board holds that, even assuming in the appellant's favour that the skilled person would consider this document, it cannot suggest a modification, i.e. the replacement of continuous filament yarns by staple fibres obtained by fibrillation of a film, which are explicitly stated to be inferior in terms of the properties of the filter products obtained.

5.7 For these reasons, the board holds that the documents relied upon by the appellant do not suggest the structural modifications of the known products required

to arrive at the subject-matter of independent claims 1 and 7. The board has also reached the conclusion that the remaining facts and evidence relied upon by the appellant do not relate to any more relevant information which could possibly alter this position.

6. The claimed subject-matter is thus found to be based on an inventive step (Articles 52(1) and 56 EPC).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

P. Martorana

R. Spangenberg