Case Number: T 0897/01 - 3.2.7
Application Number: 90905189.8
Publication Number: 0463071
IPC: B65D 30/08

Language of the proceedings: EN

Title of invention: A packing material

Patentee: CHRISTIANSEN, Henning

Opponent: ULFOSS PLASTIC A/S
Lindknud Plast A/S

Headword: -

Relevant legal provisions: EPC Art. 54, 56, 111(1)

Keyword: "Declaration - credibility"
"Novelty - yes"
"Inventive step - remitted to first instance"
"Late filed documents - not all admitted"

Decisions cited: -

Catchword: -
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DECISION
of the Technical Board of Appeal 3.2.7
of 19 February 2004

Appellant: CHRISTIANSEN, Henning
(Proprietor of the patent)
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Representative: Holme, Edvard
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Respondent I: ULFOSS PLASTIC A/S
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Representative: Jensen, Peter Kim
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Respondent II: Lindknud Plast A/S
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Representative: Larsen, Hans Ole
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 5 June 2001 revoking European patent No. 0463071 pursuant to Article 102(1) EPC.

Composition of the Board:
Chairman: A. Burkhart
Members: P. A. O'Reilly
C. Holtz
K. Poalas
E. Lachacinski
Summary of Facts and Submissions

I. The appellant (proprietor) filed an appeal against the decision of the Opposition Division to revoke the European Patent No. 0 463 071.

II. Oppositions were filed by respondents I and II against the patent as a whole and based on Article 100(a) EPC (lack of novelty and lack of inventive step).

The Opposition Division held that the subject-matter of claim 1 of the only request was not novel.

The most relevant prior art document for the present decision is:

D4: Danish application No. 1242/89

III. The appellant requested that the decision under appeal be set aside and the patent be maintained unamended. Alternatively, the appellant requested that the case be remitted to the first instance for further prosecution to give the appellant the possibility of examination for inventive step by two instances.

Respondent I requested that the appeal be dismissed. Alternatively, respondent I requested that the case be remitted to the first instance for further prosecution to give respondent I the possibility of examination of inventive step by two instances.

IV. The independent claim of the main request reads as follows:
"1. A packing material for protecting potatoes and similar light-sensitive vegetables against UV light, comprising at least one plastics sheet, at least one light reflecting metal coating applied to the surface of the plastics sheet or one of these sheets, and at least one light absorbing colouring matter which is incorporated in the plastics sheet of one of these sheets, characterized in that said light reflecting metal coating is applied in the form of metal particles suspended in a binder, that the thickness or density of the light reflecting metal coating is so adapted that just a part of the incident light is reflected, and that the light absorbing colouring matter is coated on or incorporated in at least one of the plastics sheets in such an amount, depending the type of the colouring matter, that a considerable portion of the UV light which is not reflected by the metal coating is absorbed by said colouring matter."

V. The appellant argued in written and oral submissions essentially as follows:

(i) It is accepted that claim 1 is not entitled to the priority date.

(ii) The samples of the invention which were filed with the priority application of the patent were open to public inspection in the Danish patent office. However, this inspection could only be carried out in a non-degrading manner. Inspection by microscope could only be allowed insofar as this inspection did not degrade the samples. The use of a light beam on a microscope
could not be allowed as the light beam would heat up the sample and degrade it. In the declaration of Mr. Pedersen of 12 October 1999 it was stated that analysis of the samples was not allowed. The person who refused permission for the analysis was a scientist who would have known that microscopes use light beams which would heat up the sample and degrade it. There is a declaration of 12 January 2000 by an officer of the Danish patent office stating that the use of a microscope would be allowed. However, this declaration was made by a lawyer who would not have understood that the use of a microscope with a light beam could degrade a sample. The declarations of the Danish patent office are contradictory and thus it is not established that the use of a microscope with a light beam would have been permitted.

(iii) The declaration of 7 January 2000 by technical experts from The Graphic Arts Institute of Denmark is worthless. The questions given to the experts by respondent I were guiding questions so that the experts were not in the position of the ordinary skilled person inspecting the samples without knowledge of the European patent application. The fact that the experts later corrected their declaration shows that their declaration does not correspond to what they saw. Also, it is not known if the state of the sample when the experts inspected it was
still the same as its state before the application date of the patent in suit. The bag is made of plastics material which degrades with time. The experts are paid for their work and thus are not independent.

(iv) Claim 1 is novel over the disclosure of the sample since the ordinary skilled person could not observe all the features of claim 1 without degrading the sample.

(v) The subject-matter of claim 1 involves an inventive step.

VI. Respondent I argued in written and oral submissions essentially as follows:

(i) Claim 1 is not entitled to its priority date.

(ii) The samples of the invention filed with the Danish priority application were open to inspection by the public. This is established by the declarations of the Danish patent office dated 18 June 1996 and 12 January 2000. In the latter declaration it was expressly stated that inspection which would not degrade the sample with a microscope was possible. A normal microscope uses a light beam to light up the material under inspection.

(iii) The declaration of 7 January 2000 by technical experts from The Graphic Arts Institute of Denmark shows that the features
of claim 1 were available to the public before the filing date of the patent in suit. It is correct that not all the features mentioned in the declaration were actually observable by the experts. Some of the features are general knowledge.

(iv) If the availability to the public of the sample of the invention in the Danish patent office is not considered to disclose all the features of claim 1 then it is acknowledged that claim 1 is novel over the disclosure of the priority application.

(v) The subject-matter of claim 1 does not involve an inventive step.

VII. Respondent II made no submissions during the appeal proceedings and did not attend the oral proceedings before the Board.

**Reasons for the Decision**

**Priority**

1. The appellant acknowledged that claim 1 of the patent in suit was not entitled to the priority date as claimed. The Board concurs with this view.

**Availability of the priority application to the public**

2.1 DK 1241/89, which is the priority application of the patent in suit, contained a description, a claim, 0819.D
drawings and an abstract. Three documentary enclosures were filed with the application, as well as samples of both prior art bags and bags according to the invention. These enclosures and samples were referred to as exhibits.

According to a declaration dated 18 June 1996 by an official of the Danish patent office the priority application was made available to the public on 7 September 1989. The mention of this availability was published on 9 October 1989 in the Danish patent office official journal. These dates are well before the filing date of the patent in suit. According to this declaration the application and the enclosures, including the samples, were publicly available from the date mentioned.

The appellant does not dispute that the enclosures were available to the public before the filing date of the patent in suit. Nor does the appellant dispute that the samples of the invention could be inspected by a member of the public within the Danish patent office. What the appellant does dispute is that the public were allowed to analyse the samples in a way which would degrade the samples, in particular by inspection with a microscope which uses a light beam.

In a letter dated 12 October 1999 a Mr. Pedersen of the Danish Technological Institute reported that he went to the Danish patent office and asked to analyse the samples inside or outside the Danish patent office. He reported that this request was refused. He further considered that an analysis of importance inside the Danish patent office was not possible and a visual
inspection was of no benefit. The Board would note that this report is totally silent on the type of analysis that was requested so that it is not possible to deduce what type of analysis would have been refused in the Danish patent office. The appellant has argued that the officer of the Danish patent office who refused to allow Mr. Pedersen to analyse the samples was a scientist who would have known the degrading effects of light beams on plastics materials.

A further letter dated 12 January 2000 from another official of the Danish patent office (Ms. Dyeberg) essentially confirmed the earlier letter of the Danish patent office and furthermore confirmed that the samples could not be removed for testing. The letter indicates that examination which does not affect or damage the sample including inspection by microscope was possible within the Danish patent office even without the permission of the applicant.

In a declaration dated 22 December 1999 by two technical experts of the Graphic Arts Institute of Denmark it was stated that the two experts were allowed to inspect the samples in the Danish patent office using a microscope. The type of microscope used during the inspection was not specified in the declaration.

2.2 The Board therefore comes to the conclusion that it was possible for the public to analyse the samples in a way which would not degrade the samples. It is not necessary for the Board to decide whether inspection with a microscope having a light beam could be performed, as this does not have a bearing on the
outcome of the present proceedings as becomes clear below.

Disclosure of the priority application via file inspection

3.1 The Board considers that all the written documents in the file of DK 1242/89 were disclosed to the public on the date that the application was laid open to public inspection. The appellant has agreed that this was the case.

As regards the samples of the invention, respondent I supplied expert evidence as to what a skilled person could have discerned from the samples by visiting the Danish patent office with a microscope. The expert evidence was the above mentioned declaration of 22 December 1999 by two experts from the Graphic Arts Institute of Denmark.

The declaration comprises the answers to a number of questions which had been put to the two experts by respondent I before the experts visited to the Danish patent office. The declaration gave no information as regards the type and power of the microscope used by the experts during their visit.

3.2 Turning to the answers to the questions, questions 1 and 2 concern the colouring of the bag. The answers indicate that the front of the bag was coated with layers of black, white and silver ink and that the layers were coated in this order. The answers do not however explain how the experts were able to determine this order or that the colours were applied by coating
or that the coating was an ink. The experts claim to have determined that there was a white layer between the silver and black layers. There is no indication in the declaration as to how the presence of the white layer had been determined. Normally the white layer would not have been visible. The representative of respondent I argued that the white layer would have been visible at the edges of the layers due to imperfect printing causing a small portion of the white layer to be visible there. However, the representative is not entitled to state what the experts actually saw. The experts have not indicated in their declaration that the procedure suggested by the representative was the one which they used to determine the presence of the white layer between the black and silver layers. The Board therefore concludes that the evidence is insufficient to confirm the answers.

Questions 3 and 4 concern the method by which the layers were applied and the state of the layers as applied. The answers are that the layers were applied by flexographic printing and were applied in a liquid state. There is however no indication as to how this information could be discerned by mere observation of the bag. The Board therefore concludes that the evidence is insufficient to confirm these answers.

Question 5 concerns the composition of the layers in the state in which they were applied. The answers of the experts list the composition of each layer; in particular that the black layer is carbon black and the silver layer is metal particles. It is also stated that each layer has solid binder, solvent and various additives. The answer gives no explanation of how the
composition could be discerned by mere visual inspection. Indeed, in a further declaration dated 17 January 2000 the experts withdrew their statement regarding carbon black. They explained that the presence of carbon black cannot be established by microscopic inspection and that they should have stated that the black layer was a fine-grained powder, such as carbon black. The Board therefore considers that the statements of the experts do not distinguish between what they actually observed and what may have been normal in the art. The Board concludes that the declarations do not provide credible evidence as to the composition of the layers.

Question 6 concerns the reflection and absorption properties of the black, white and silver layers. The answer explains these properties for the layers. However, there is no indication that the experts derived these properties from actual observations. Observation of the white layer would not have been possible as the layer was hidden between the black and silver layers. The Board concludes that the answer to this question is a general statement of the light transmitting and reflecting properties of black, white and silver layers and not a statement of what was actually observed by the experts on the sample.

Question 7 concerns whether the coating would prevent light from penetrating it. The answer explained that only an imperceptible portion of the light penetrates the coating and that this also applies to infrared and ultraviolet light. The Board could accept that it is possible to observe visually whether visible light penetrates a layer. However, the representative of
respondent I showed the Board a sample of the invention during the oral proceedings. The sample had been obtained from the file of the priority application with the permission of the applicant. The sample in fact allowed sufficient light to pass through it that a logo on one side of the bag was visible through the light reflecting/absorbing layers. This is in contradiction to the statements of the experts. Moreover, infrared and ultraviolet light are not perceivable by the human eye so that observations of these wavelengths could not have been made by the experts. The credibility of the answer of the experts to this question is therefore in doubt.

Question 8 concerns how much light is reflected by the silver layer. The answer is that a high percentage, but not all, is reflected. The answer does not explain how the experts discerned that not all was reflected, e.g. which instruments they used to carry out the measurement. The Board concludes that this answer does not provide credible proof that the experts actually observed that not all the light incident on the sample was reflected.

Question 9 concerns what happens to the light which is not reflected from the silver layer. The answer explains what happens at the white layer and the black layer. Since the white layer was hidden the Board concludes that the answer of the experts was not based on actual observations of the sample.

3.3 Although the declaration of the technical experts is meant to concern the observations of the bag in the Danish patent office, it is in fact a mixture of
observations and statements of general knowledge. Little distinction is made between these in the declaration so that it is not possible do deduce what the experts actually observed regarding the properties of the bag. It is also clear that the experts could only have investigated the properties of the sample as to visible light whereas claim 1 is directed, at least in part, to the absorption of UV light. Since UV light is not discernible with the human eye the observations of the experts cannot concern these wavelengths directly and the statements of the experts regarding these wavelengths must be extrapolations based on general knowledge.

3.4 The Board comes to the conclusion that the only features of the bag which could reasonably be accepted as having been observed by the experts are that the front sheet of the bag is silver coloured on one side and black coloured on the other side. For the other alleged properties the testimony of the experts does not suffice to establish them as observable. This conclusion is reached irrespective of whether or not a microscope with a light beam was or could have been used for the inspection.

Novelty

4. From the conclusion drawn above regarding the disclosure of the samples made available in DK 1242/89 it is clear that the subject-matter of claim 1 is novel over this disclosure. If the samples of the invention did not disclose the features of claim 1, respondent I acknowledged that the subject-matter of claim 1 was new with respect to the rest of the disclosure of
DK 1242/89, i.e. the written disclosures. The Board concurs with this view since none of the prior art available to the public before the date of filing of the patent in suit discloses all the features of claim 1.

Therefore, the subject-matter of claim 1 is novel in the sense of Article 54 EPC.

Inventive step

5.1 Claim 1 specifies that "the light absorbing colouring matter is coated on or incorporated in at least one of the plastics sheets". The Opposition Division revoked the patent for lack of novelty of the first alternative in claim 1. The Opposition Division considered that the second alternative provided an obvious alternative measure to the first alternative of the claim. Thus, the finding of lack of inventive step in the second alternative was based upon the assumption that the first alternative was not novel. However, the Board has decided that the first alternative, as well as the second alternative, is novel so that the considerations of the Opposition Division with regard to inventive step of the second alternative no longer apply.

5.2 The Opposition Division has not considered inventive step for the first alternative at all and has not considered inventive step for the second alternative on the basis that the first alternative is novel.

5.3 Both parties present at the oral proceedings considered that it would be appropriate to remit the case to the
first instance to discuss inventive step. The Board concurs with this view.

**Late filed documents**

6. In a submission filed more than one month before the oral proceedings before the Board respondent I filed three new documents.

The first document is a declaration of a person from the Technical University of Denmark. The declaration shows two photographs and contains a statement that the photographs were taken using a microscope with a magnification of 500X and that one of the photographs was of a potato bag. The Board decided not to admit this document as it had no bearing on what the two experts of the Graphic Arts Institute of Denmark saw when they visited the Danish patent office, since the type of microscope used during that visit was not stated.

The second document is an extract from a handbook. The Board decided to admit this document as it merely showed the general knowledge of the skilled person.

The third document is a US patent (US-A-4 233 195). Respondent I stated in the oral proceedings and in the written submission that the document was evidence of metallic inks being a well-known technique. In the written submission the document was also mentioned with respect to inventive step. The Board considered that a patent document is not normally evidence that a technique is well-known and therefore did not admit the document as regards to novelty. The Board however did
not decide whether or not the document could be admitted for inventive step as that ground was not discussed before the Board.

Remittal to the First Instance

7. In accordance with Article 111(1) EPC, the Board considers it appropriate to remit the case to the first instance so as to give the parties the possibility to argue their case before two instances.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance for further prosecution.

The Registrar: The Chairman:

A. Wolinski A. Burkhart