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**Datasheet for the decision
of 25 January 2017**

Case Number: T 2068/15 - 3.3.09

Application Number: 06751415.8

Publication Number: 1874541

IPC: B32B27/40

Language of the proceedings: EN

Title of invention:

MULTILAYER POLYURETHANE PROTECTIVE FILMS

Patent Proprietor:

3M Innovative Properties Company

Opponents:

tesa SE
Kay Automotive Graphics

Headword:

Relevant legal provisions:

EPC Art. 54, 56

Keyword:

Public prior use - implicit confidentiality (no)
Public prior use - standard of proof
Public prior use - analysability of product (yes)
Public prior use - closest prior art (yes)
Admission of late-filed documents (yes)
Unsubstantiated auxiliary requests - not deemed to be validly
filed

Decisions cited:

G 0001/92, G 0004/95, T 0328/87, T 0782/92, T 1732/10,
T 1784/14

Catchword:



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Case Number: T 2068/15 - 3.3.09

D E C I S I O N
of Technical Board of Appeal 3.3.09
of 25 January 2017

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Decision under appeal: **Interlocutory decision of the Opposition**
Division of the European Patent Office posted on
25 August 2015 concerning maintenance of the
European Patent No. 1874541 in amended form.

Composition of the Board:

Chairman	W. Sieber
Members:	M. O. Müller
	F. Blumer
	N. Perakis
	D. Prietzel-Funk

Summary of Facts and Submissions

- I. This decision concerns the appeals filed by opponents 1 and 2 and the patent proprietor against the decision of the opposition division that European patent No. 1 874 541 as amended met the requirements of the EPC.
- II. With their notices of opposition the opponents had requested revocation of the patent in its entirety on the grounds under Article 100(a) (lack of novelty and inventive step) and 100(b) EPC.

The documents submitted during the opposition proceedings included:

- D7: JP 2004-307532 A;
- D25: Exhibit A (urethane programs prior to 2005);
- D26: Exhibit B (specification tender);
- D29: Exhibit E (Stonebridge report, dated 30 July 2012);
- D34: Exhibit J (material safety data sheet, 1,6-hexamethylene diisocyanate-based polyisocyanate);
- D41: Exhibit Q (job ticket, Nissan Frontier Anti Chip (LH and RH));
- D55: Exhibit S (material inventory by part number, 1 page);
- D56: Exhibit T (photos, relating to 93893 8Z400,

- 4 pages);
- D57: Exhibit U (shipping department inventory card (Archive), 1 page);
- D58: Exhibit V (packing list, 3 pages);
- D59: Exhibit W (invoice, 7 pages);
- D60: Exhibit X (payment confirmation, 1 page);
- D61: Exhibit Y (packing list, 4 pages);
- D62: Exhibit Z (invoice, 9 pages);
- D63: Exhibit AA (payment confirmation);
- D64: Exhibit BB (second Stonebridge report, dated 15 August 2014);
- D71: Extract from Internet regarding the tape 3M 610;
- D72: Letter to Mr Saeki Nami;
- D73: DE 103 61 538 A1;
- D74: EP 0 316 557 A2;
- D77: Updated experimental report from 3M;
- D78: Exhibit DD (expert opinion of Mr H. Schmidbaur of 21 May 2015); and
- D79: Exhibit EE (shipping history report).

III. The opposition division's decision was based on a main request (claims as granted) and an auxiliary request 1.

Claim 1 of the main request reads as follows:

"1. A multilayer protective film comprising:

a first layer comprising a polyurethane, said polyurethane being a polyester-based polyurethane, a polycarbonate-based polyurethane or a combination of both,

a second layer comprising a polycaprolactone-based [sic] thermoplastic polyurethane; and

a PSA layer comprising a pressure sensitive adhesive,

wherein said first layer is bonded to one major surface of said second layer and

said PSA layer is bonded to an opposite major surface of said second layer such that said second layer is sandwiched between said first layer and said PSA layer."

IV. As regards novelty of the main request over an alleged public prior use, which is the only aspect of the opposition division's decision relevant to the present decision, the opposition division reasoned as follows:

It had been proven beyond reasonable doubt by written evidence and by the testimony of the witness Mr B. Stump that 37 films with part numbers 93892-8Z400 and 93893-8Z400 had been sold and delivered to Nissan with shipper ID numbers 72067 and 72446 and without any obligation of secrecy. These films had therefore been

made public. However, it had not been proven up to the hilt that these films had first and second layers as claimed. Therefore, the subject-matter of the main request was novel over the alleged public prior use. The main request was however rejected for not being novel over the printed prior art.

Unlike the main request, the opposition division found auxiliary request 1 to be allowable. Furthermore, it did not admit *inter alia* documents D71 to D74, D77 and D79 into the proceedings.

V. This decision was appealed by all parties. As the opponents and the patent proprietor are each appellant and respondent in the present appeal proceedings, for simplicity the board will continue to refer to them as opponent 1, opponent 2 and the proprietor.

VI. The statements of grounds of appeal of the parties contained the following documents:

Opponent 1:

GLP1: Feature analysis of claim 1 of EP 1 874 541;

GLP2: Analytical report of Currenta dated
10 February 2015;

GLP3: Analytical report of tesa SE dated
21 December 2015;

GLP3a: Datasheet Argotec 46510;

GLP3b: E-mail exchange of Mr D. Collette;

GLP3c: Production sheet for Argotec LLC; and

GLP4: Test report of Tesa dated 25 November 2015.

Opponent 2:

D81: Experimental report from JordiLabs, dated 18 December 2015;

D82: Analytical report of tesa SE dated 21 December 2015 (nearly identical to GLP3);

D83: Analytical report of Currenta dated 10 February 2015;

D84: Affidavit by Mr B. Stump, signed on 17 December 2015;

D85: Experimental data - gravelometer tests;

D86: Datasheet Argotec 46510; (nearly identical to GLP3a);

D87: Test norm GMW15957;

D88: Test norm GMW14700; and

D89: Test norm SAE J400 OCT2012.

Proprietor:

Main request and auxiliary requests 1 to 17.

VII. Responses to the proprietor's statement of grounds of appeal were filed by opponents 1 and 2, each with

letter of 27 May 2016. The response of opponent 1 contained:

GLP5: Letter of Mr Kaminishi, dated 13 April 2016 with enclosures; and

GLP6: Patent and utility model number search.

VIII. With letter dated 27 May 2016, the proprietor requested a two-month extension of the time limit for replying to the opponents' statement of grounds of appeal. After this request had been granted by the board, the proprietor filed another request for a further extension of the time limit to reply, which was refused (EPO form 3040 dated 12 August 2016).

IX. With letter dated 28 July 2016, opponent 2 filed:

D90: Excerpt from Wikipedia, keyword "paint".

X. With its letter dated 11 August 2016, i.e. shortly after the expiry of the extended time limit to respond to the opponents' statement of grounds of appeal, the proprietor filed its response, including auxiliary requests 18 to 21 and

D93: Analytical technical report from 3M using field emission scanning electron microscopy;

D94: Search result from Nissan USA eStore Parts & Accessories;

D95: Analytical technical report from 3M using infrared spectroscopy;

D96: Analytical technical report from 3M using

stereo microscopy;

- D97: Declaration by Mr B. Dippel, signed on
1 August 2016;
- D98: Copies from a Japanese online dictionary;
- D99: Experimental report by Ms I. Fuchs;
- D100: Picture of the standard test medium used in
D85 and D90;
- D101: European norm EN ISO 20567-1 of October 2006;
and
- D102: Experimental heat resistance data.

The proprietor requested that if any of D81 to D89 and
GLP3 to GLP6 were admitted into the proceedings, the
case be remitted to the opposition division for further
prosecution.

XI. By its communication dated 19 August 2016, the board
provided its preliminary opinion.

XII. The following documents were submitted in the
subsequent written proceedings:

Opponent 1:

GLP7: Expert opinion of Prof. S. Förster, signed
13 January 2017.

Opponent 2:

D103: Production run sheet;

- D104: Job tickets from run numbers 2 to 5, 7 and 9 to 11;
- D105: Shipping history report;
- D106a: Invoice 33865 dated 04/10/2002;
- D106b: Invoice 35809 dated 05/22/2002;
- D106c: Invoice 37249 dated 06/24/2002;
- D106d: Invoice 38999 dated 08/12/2002;
- D106e: Invoice 41055 dated 09/25/2002;
- D106f: Straight bill of lading dated 02/18/2004;
- D106g: Straight bill of lading dated 03/24/2004;
- D106h: Straight bill of lading dated 05/04/2004;
- D106i: Straight bill of lading dated 08/12/2004;
- D106j: Straight bill of lading dated 09/09/2004;
- D107: Analysis report from JordiLabs dated 8 November 2016;
- D108: Packing slip with shipping date 09/12/2016;
- D109: "Analysis of Polymers", T.R. Crompton, Pergamon Press 1991, 9 pages; and
- D110: "Comprehensive Polymer Science - The Synthesis, Characterization, Reactions &

Applications of Polymers", volume 1, Pergamon Press 1989, 7 pages.

D113: Affidavit by Mr D.L. Duggan, signed on 23 December 2016.

D114: Supplementary affidavit by Mr B. Stump signed on 11 January 2017.

Proprietor:

D111: Experimental report "Comparison of gravel test media"; and

D112: Experimental report "Gravel testing of multilayer films having base layers based on different thermoplastic polyurethanes".

XIII. On 25 January 2017, oral proceedings were held before the board. The proprietor declared that the request for remittal was not maintained as far as the documents concerning production run number 12 (i.e. in particular the 37 films sold to Nissan) were concerned. Furthermore, it was requested that Mr T. Sokolowski be heard as a technical expert. The proprietor requested that Mr Sokolowski not be allowed to address the board.

The main request concerns the claims as granted (for claim 1, see point III above).

Claim 1 of auxiliary request 4 differs from claim 1 of the main request in that at the end of the claim, the following wording has been added:

"wherein said film is sized and shaped to conform to a surface of a vehicle body part, and is in

combination with a vehicle body part having a painted surface, with said painted surface being protected by said multilayer protective film".

Claim 1 of auxiliary request 5, which corresponds to auxiliary request 1 found allowable by the opposition division, differs from claim 1 of the main request in that the polycaprolactone-based polyurethane of the second layer is defined to be aliphatic.

Claim 1 of auxiliary request 7 differs from claim 1 of the main request in that the following wording has been added at the end of the claim:

"and wherein said polyurethane is the reaction product of a polyol and at least a diisocyanate, and said polyol is a polyester polyol, a polycarbonate polyol or a combination of both, wherein said polyurethane is the reaction product of said polyol and a mixture of a diisocyanate and a triisocyanate".

XIV. So far as relevant to the present decision, the opponents' arguments can be summarised as follows:

- D95 to D97 should not be admitted into the proceedings for being filed late. D81 to D84, D86 and GLP3 should be admitted since they were a reaction to a change of case that occurred late during the opposition proceedings.
- The subject-matter of claim 1 of the main request lacked novelty over 37 films of part number 93893-8Z400 of production run number 12 sold by opponent 2 to Nissan in 2004.

Contrary to the proprietor's assertion, these films were not part of a joint development project between opponent 2 and Nissan and thus were not subject to any confidentiality agreement with Nissan. The films had been sold to Nissan as usual and had been packed and shipped to Nissan together with various other types of products. They were part of a huge production run of in total 12600 parts and lastly had been sold as service parts to the Nissan Parts Redistribution Center, which spoke against involvement in development projects. Since service parts were not needed in large numbers, this also explained the small number of 37 films. These films had thus been made public. This was not changed by the stamp "CONFIDENTIAL" on D26. On the contrary, this only implied that Nissan wanted its specification tender to be treated as confidential. This was supported by the fact that of the two boxes "Trial" and "Production" in D26, the latter was ticked. Irrespective of all this, any confidentiality of D26 was irrelevant since the sale of the 37 films did not take place until more than 2 years later. Lastly, the proprietor's reference to the statement of the witness Mr B. Stump that "there was confidentiality" was not convincing, since it had been taken completely out of context.

As proven by D81 to D83 and GLP3, the composition of the 37 films sold was as required by claim 1. Contrary to the proprietor's assertion, the polyurethane of the second layer was thermoplastic since it was completely dissolvable in chloroform. Furthermore, again contrary to the proprietor's assertion, D81 to D83 showed that the polyurethanes

of the first and second layer were polyester-based and caprolactone-based.

Also contrary to the proprietor's assertion, the films could be analysed with respect to the number of layers and their composition at the priority date of the patent. In this respect the proprietor's allegation was not true that the research institutes that had carried out the tests in D81 to D83 had been informed beforehand about the number of layers and their specific composition. Even without knowing that the film was composed of three layers, the skilled person would have found the first top layer by simply using electron microscopy at a sufficiently large magnification. Furthermore, the proprietor's argument that the skilled person would not have been able to identify the relevant IR reference spectra to determine the composition of these films ignored the fact that IR spectra gave some information already without the use of any reference spectra and that it was common practice to apply more than one analytical method in order to obtain information about the composition of a material. Taking together the results obtained from IR, NMR and pyrolysis GC-MS, the skilled person would have been able to identify the exact nature of the polyurethanes of the various layers.

- The subject-matter of claim 1 of auxiliary request 4 lacked inventive step over the 37 films sold, since these films had been intended for use on a car to protect it against stone chipping and it would have been obvious to use them for their intended purpose and thus to combine them with the

painted surface of a vehicle body part as required by claim 1.

- The subject-matter of claim 1 of auxiliary request 5 lacked novelty over the 37 films sold since the polycaprolactone-based polyurethane of the second layer of these films was aliphatic as required by claim 1.

- The subject-matter of claim 1 of auxiliary request 7 lacked inventive step over the 37 sold films in combination with D7. The patent did not attribute any particular technical effect to the distinguishing feature, namely the use of a mixture of di- and triisocyanates. Therefore, the objective technical problem was the provision of an alternative multilayer protective film. The solution, i.e. the use of such a mixture of di- and triisocyanates, was already known from D7. As regards the improved gravel resistance referred to by the proprietor, there was no indication in the patent that it was obtained by the use of a mixture of di- and triisocyanates. This effect thus could not be taken into account.

XV. So far as relevant to the present decision, the proprietor's arguments can be summarised as follows:

- D81 to D84, D86, GLP3, D109 and D110 should not be admitted into the proceedings since they had been filed late and could have already been filed in the opposition proceedings. D95 to D97 should be admitted since they were a reaction to the opponents' late filing of D81 to D84, D86, GLP3.

- The subject-matter of claim 1 of the main request was novel over the 37 films that had been sold to Nissan.

Contrary to the opponents' assertion, this sale had happened as part of a joint development project between opponent 2 and Nissan, so the parties were implicitly bound by secrecy. In line with T 782/92, this followed from the low number of films sold. Contrary to opponent 2's assertion, the redistribution centre of Nissan could also be a mailing centre to which all mail for Nissan went within the joint development project. The presence of confidentiality was further supported by the fact that the specification tender D26 was marked "CONFIDENTIAL" and that the witness Mr B. Stump, when asked about confidentiality clauses in sales contracts stated: "Yes, there will be confidentiality. Yes".

Furthermore, the composition of the 37 films sold was not as required by claim 1. There was no evidence that the second layer was a thermoplastic polyurethane. This was not changed by the finding that the second layer was dissolvable in chloroform, since some reversibly crosslinked elastomers also became dissolvable at higher temperatures. Furthermore, it had not been shown in D81 to D83 that the polyol components of the polyurethanes of the first and second layers were based on a polyester and a polycaprolactone. Moreover, the term "proposed" on page 6 of D81 showed that the author of the report was not quite sure about his results. D82 was not reliable either, since the polyurethane of the first top layer contained H₁₂MDI, contrary to what was

disclosed in the product specification D34 for this layer. As shown in D97, D81 to D83 contained several flaws.

Lastly, the 37 films sold could not have been successfully analysed at the priority date of the patent and for that reason too were not novelty-destroying. If the three research institutes that carried out the tests in D81 to D83 had not been informed beforehand that the films were composed of three layers and what their specific composition was, they would not have been able to identify the thin top layer and the specific composition of the individual layers. They would in particular not have been able to determine which reference spectra were needed for the analysis of the IR data, and would not have been able to attribute the correct chemical entities to the individual peaks in the NMR and pyrolysis GC-MS spectra.

- The proprietor declared that it had no comments on auxiliary requests 1 to 3, 5, 6 and 8 to 21.
- The subject-matter of auxiliary request 4 was novel and inventive over the 37 films sold, since there was no evidence on file that Nissan had put one or more of them on a car with a painted surface, and it would not have been obvious to do so.
- The subject-matter of auxiliary request 7 was novel over the 37 films sold, since it differed from them in that the polyurethane of the first top layer was the reaction product of a polyester polyol and a mixture of a diisocyanate and a triisocyanate, rather than a diisocyanate alone. The patent aimed at improved gravel resistance and there was no

incentive in D7 to replace the first top layer of the sold films with that of D7 in order to achieve this goal. Furthermore it was not derivable from the 37 films sold that one of their layers could be varied. Lastly, a selection was necessary from D7 to arrive at a polyurethane as required for the first top layer in claim 1, namely of a polyester or polycarbonate polyol from the polyols disclosed in D7 and of a mixture of di- and triisocyanates.

XVI. The opponents requested that the decision under appeal be set aside and that the patent be revoked in its entirety.

Opponent 1 further requested that the opposition division's decision not to admit D79 into the proceedings be reversed.

Opponent 2 requested that if the board deviated from the decision of the opposition division relating to the public availability of the films of production run number 12, Mr B. Stump be reheard as a witness to verify and explain the facts given in his affidavits and the respective exhibits.

Opponent 2 furthermore requested that

- the opposition division's decision not to admit D71 to D74 and D77 be maintained,
- the opposition division's decision not to admit D79 be reversed,
- D93 to D102, D111 and D112 not be admitted into the proceedings,

- auxiliary requests 18 to 21 not be admitted into the proceedings.

XVII. The proprietor requested

- that the decision under appeal be set aside and that the opposed patent be maintained on the basis of
 - the claims as granted (main request) or
 - the claims of any of auxiliary requests 1 to 4 filed with letter dated 4 January 2016, or
- that the opponents' appeals be dismissed; or
- that the decision under appeal be set aside and that the patent be maintained on the basis of
 - the claims of any of auxiliary requests 6 to 17 filed with letter dated 4 January 2016 or
 - the claims of any of auxiliary requests 18 to 21 filed with letter dated 11 August 2016.

The proprietor furthermore requested that the opposition division's decision not to admit D71 to D74 and D77 be reversed and that the documents be admitted into the proceedings.

The proprietor also requested that D81 to D89, GLP3 to GLP6, D103 to D105, D106a to D106j and D107 to D110 not be admitted into the proceedings.

Reasons for the Decision

Main request (claims as granted)

1. Admission of documents

- 1.1 The proprietor requested that D81 to D84, D86, GLP3, D109 and D110 not be admitted into the proceedings. Opponent 2 requested that D95 to D97 not be admitted into the proceedings.

D81 to D84, D86 and GLP3 were filed with the opponents' statements of grounds of appeal, i.e. at the earliest possible time during the appeal proceedings. These documents can be considered to be a reaction to a change of case that occurred late in the opposition proceedings. More specifically, during those proceedings, the opponents had filed experimental data D29 and D64 to show that a prior-used product was as required by claim 1. In view of these experimental data, the opposition division observed in its preliminary opinion that the prior-used product appeared to be in agreement with the claimed subject-matter. Thereafter, the proprietor made objections against D29 and D64 and only during the oral proceedings did the opposition division change its mind and consider D29 and D64 insufficient to prove that the prior-used product was as required by the claims. With D81 to D84, D86 and GLP3 the opponents tried to overcome these objections.

The board therefore decided to admit D81 to D84, D86 and GLP3 into the proceedings.

- 1.2 D95 to D97 were filed by the proprietor with its letter dated 11 August 2016, i.e. shortly after the time limit for responding to the opponents' statements of grounds of appeal had expired. With D95 and D96, the proprietor tried to show that the skilled person would not have been able to identify the composition of the prior-used product. D97 is an expert opinion allegedly showing that the test results in D81 to D83 contained several flaws. These documents can thus be considered to be a response to newly filed documents D81 to D84, D86 and GLP3 from the opponents. Since they were filed more than 4 months prior to the oral proceedings, the opponents had enough time to deal with the issues raised in these documents, and in fact filed D109 and D110 in reply (see point 1.3).

The board therefore decided to admit D95 to D97 into the proceedings.

- 1.3 D109 and D110 were filed by opponent 2 with its letter dated 25 November 2016 to show that the techniques applied in D81 to D83 were available before the priority date of the patent, so that the skilled person would have been able to identify the composition of the prior-used films. Thus D109 and D110 are a direct response to the filing of D95 and D96 by the proprietor.

The board therefore decided to admit D109 and D110 into the proceedings.

- 1.4 The parties had objected to the admissibility of numerous further documents (see points XVIII and XIX above). Since, however, these documents turned out not to be relevant to the present decision, the board did not need to decide on their admission.

2. Lack of novelty - alleged public prior use

2.1 Both opponents contested novelty in view of a public prior use of films which they said had a composition as defined in claim 1 and were part of the state of the art before the date of filing of the patent in suit (Article 54(2) EPC).

2.2 To substantiate a public prior use, it must be established when the prior use occurred, what was used, and the circumstances relating to the alleged use (T 328/87, headnote).

2.3 Date of the alleged public prior use

2.3.1 In February 2002, Kay Automotive Graphics, who is opponent 2 in the present proceedings, received a specification tender dated 25 February 2002 from Nissan to initiate production of part numbers 93892-8Z400 and 93893-8Z400 (D26). On 29 September 2004, a job ticket was issued to initiate production run number 12 of 12600 of each of these two part numbers for the customer Nissan (D41). Once produced, the parts were placed at inventory location WHB-703-G within opponent 2's facility (D55 and D56).

Twenty films of part number 93893-8Z400 were taken from inventory location WHB-703-G and packed for shipment to Nissan on 15 November 2004 under shipping ID number 72067 (D57 and D58). Nissan was invoiced for this shipping ID number on 15 November 2004 (page 6 of D59) and paid for it on 21 December 2004 (D60).

Furthermore, seventeen films of the same part number 93893-8Z400 were taken from inventory location

WHB-703-G and packed for shipment to Nissan on 3 December 2004 under shipping ID number 72446 (D57 and D61). Nissan was invoiced for this shipping ID number on 3 December 2004 (page 5 of D62) and paid for it on 8 January 2005 (D63).

2.3.2 Consequently, in line with the decision of the opposition division, it is credible that in one case 20 and in a second case 17 films, i.e. in total 37 films, of part number 93893-8Z400 were sold by opponent 2 and delivered to Nissan in 2004, i.e. before the relevant date of the patent (29 April 2005). In fact, this was not disputed by the proprietor.

2.4 Circumstances of the alleged public prior use

2.4.1 It was a matter of dispute between the parties whether the films had been made available to Nissan without any obligation of secrecy. It was uncontested in this respect that there was no explicit confidentiality agreement. The point of dispute was whether there was an implicit agreement on secrecy. The proprietor argued that the circumstances, in particular the low number of 37 films which had been sent to Nissan, indicated that they were part of a joint development project to find new protective films and were thus not publicly available. Within such joint development projects, the parties were implicitly bound by secrecy and this was also the case here.

2.4.2 It can be accepted that, if joint development projects are agreed, they often are - explicitly or implicitly - combined with an obligation of confidentiality. In the case at hand, the board does however not see enough indications from which it could be convincingly concluded that there existed a joint development

project between opponent 2 and Nissan and, linked to that, confidentiality as regards the nature (composition and layer sequence) of the films. The reasons are as follows:

- 2.4.3 As set out above, and as not disputed by the proprietor, the 37 films were sold by opponent 2 to Nissan. Selling products to be developed to project partners is however not normal practice within joint development projects.
- 2.4.4 Furthermore, the 37 films were undisputedly packed and shipped to Nissan together with many other products. More specifically, 20 of the 37 films were packed and shipped together with 19 other types of product in 40 boxes on one pallet (packing list D58). The remaining 17 films were packed and shipped together with 26 other types of product in 69 boxes on two pallets (packing list D61). This too is suggestive of ordinary sales rather than a sending of samples in the framework of a joint development project.
- 2.4.5 Moreover, the 37 films were not the only films produced by opponent 2 but were part of in total 12600 parts 93893 8Z400 of production run 12 (D41) as shown by the opponents. The production of such a large number is not indicative of test purposes either.
- 2.4.6 Lastly, the films were sold to the Nissan Parts Redistribution Center (see the upper left-hand corner of the invoices D59 and D62). A redistribution centre is not a research facility or similar institution typically involved in development projects. In fact, as explained by opponent 2, redistribution centres of car manufacturers distribute service parts to automobile dealerships or repair shops e.g. for repair work or the

replacement of worn-out films on cars. Because the demand for service parts is relatively small and is difficult to predict, shipments of this kind are typically less frequent and in smaller quantities than production parts.

The proprietor argued that the Nissan redistribution centre, to which the films were sent could also be a mailing centre to which all mail for Nissan went and that redistributed this mail subsequently to the final addressees within Nissan. However, the proprietor did not submit any details or evidence supporting this hypothesis. Furthermore, the invoices D59 and D62 contain the entry "**Sold to:** NISSAN PARTS REDIST. CENTER" and it is contrary to life experience for alleged test products, like films in this case, to be sold to a mail distribution centre. The proprietor's argument is thus not convincing.

- 2.4.7 The above is not at variance with T 782/92 relied upon by the proprietor. In the case underlying that decision (see in particular point 2.2), 15 dampers had been delivered to Daimler Benz AG and no details about the conditions of the transaction were available, in particular whether this constituted a normal delivery of dampers for use in the production of vehicles or rather concerned a small batch of dampers intended for experimental or test purposes. In view of the relatively small number of dampers involved, the board in that case decided that the latter appeared to be true. That case differs however from the present one in that firstly there was no invoice on file, secondly the dampers had not been packed and shipped with other different products and thirdly, the dampers had not been sent to a redistribution centre or similar of

Daimler Benz AG. So, unlike in the present case, evidence of a commercial sale was not available.

- 2.4.8 The proprietor also argued that the specification tender D26, that led in the end to the specific sales of the 37 films, was marked "CONFIDENTIAL" (upper right corner of D26) and that this implied that the 37 films had been supplied to Nissan under a confidentiality agreement.

However, D26 does not prove that the composition of the films was confidential but rather that Nissan wanted its specification tender to be treated as confidential.

This is corroborated by the fact that opponent 2 had numerous car manufacturers as customers (D25), so that it is plausible that Nissan did not want its competitors to know about its specification tender.

That the films themselves were not to be treated as confidential is also supported by the fact that of the two boxes "Trial" and "Production" in D26 (upper left-hand corner), the latter is ticked. Had the films been part of a development project and thus confidential, ticking the box "Trial" would have seemed more appropriate.

- 2.4.9 The proprietor lastly argued that the witness Mr B. Stump, when asked about confidentiality clauses in sales contracts, stated: "Yes, there will be confidentiality. Yes" (second paragraph on page 12 of the minutes of the witness hearing).

However, this statement has been taken out of context. More specifically, the cited statement together with

the relevant subsequent passages reads as follows
(emphasis added by the board):

"Witness:

Yes, there will be confidentiality. Yes. Depending on what's involved in the paperwork and everything, if there's design of the part and things like that, that is confidential between us and that customer. We can't go and share that with, let's say if I'm dealing with Ford, I cannot share that information with GM, Chrysler or any other customer.

Opposition division:

And as far as your own product is concerned, the properties of your own product, what can you tell us about confidentiality between your company and a potential buyer in this regard?

Witness:

I don't understand.

Opposition division:

Because now you just said it's like a specification from GM which you can't share with another one, but the properties of your own product, of the film?

Witness:

We sell that to them. We don't have to go through every single layer and tell them exactly what it is. We would hope that they wouldn't also take our

parts and share that with one of our competitors either."

From the above statements in their entirety, it is clear that the witness was talking about confidentiality only in as far as the design of the parts which came from Nissan was concerned, but not with respect to the composition of the film. Regarding the latter, the witness only expressed a "hope" that this would not be shared with other companies. This would not be understandable if confidentiality had been seriously agreed.

The proprietor's reference to the witness statement thus does not support its view that the composition of the films was confidential.

2.4.10 Consequently, in the light of all the submissions of the parties the board concludes that there was not enough support on file for the proprietor's assertion that Nissan was bound by a confidentiality agreement with opponent 2 covering the 37 films sold. It concludes rather that Nissan was part of the public, so when the films were sold and delivered to it, they entered the public domain.

2.5 Object of the alleged public prior use - identity with claim 1

2.5.1 It was a matter of dispute whether the sold films were as required by claim 1.

2.5.2 To prove that the films were as claimed, the opponents submitted test reports D81 to D83 and GLP3 in the present appeal proceedings (GLP3 is largely identical to D82).

2.5.3 In D81 from JordiLabs, a sample 93893-8Z400 from production run number 12 (page 3 of D81) was analysed using IR for the first top layer, ¹H NMR and pyrolysis GC-MS for the second layer and pyrolysis GC-MS for the pressure-sensitive adhesive layer. The results were as follows:

- first top layer: polyester urethane (page 13 of D81)
- second layer: polyurethane from hydrogenated methylene diphenyl diisocyanate H₁₂MDI and epsilon-caprolactone soft segments and possibly butanediol as polyol components (pages 6 and 10 of D81)
- pressure-sensitive adhesive layer: two polymers of 2-butyl acrylate and 2-ethyl hexyl acrylate or their copolymer (page 8 of D81).

2.5.4 In D82, a sample 93893-8Z400 from production run number 12 was analysed, using IR, pyrolysis GC-MS and 1D and 2D ¹H and ¹³C-NMR for the first top layer, IR, 1D and 2D ¹H and ¹³C-NMR, GPC and pyrolysis GC-MS for the second layer and IR and ¹³C-NMR for the pressure-sensitive adhesive layer. The results were as follows:

- first top layer: polyesterurethane-polyacrylate, the polyesterurethane being composed of HDI, H₁₂MDI, 1,4-butanediol, 1,6-hexanediol, epsilon-caprolactone, isophthalic acid, phthalic acid and adipic acid (penultimate paragraph on page 15 of D82),

- second layer: aliphatic thermoplastic polyurethane mainly composed of polycaprolactone and hydrogenated H₁₂MDI and, as side components, 1,4-butanediol and diethylene glycol (page 8 of D82),
- pressure-sensitive adhesive layer: polyacrylate with the comonomers n-butylacrylate and 2-ethylhexylacrylate (pages 4 and 5 of D82).

For the analysis of the second layer by NMR, GPC and GC-MS, the second layer was separated from the first insoluble top layer by dissolution in chloroform. It is reported that dissolution of the second layer was complete.

2.5.5 In D83 from Currenta, a sample 93893-8Z400 from production run number 12 was analysed using IR, ¹H-NMR and pyrolysis GC-MS for both the first top layer and the second layer. The results were as follows:

- first top layer: polyester polyurethane from hexamethylene diisocyanate HDI and a polyester from the carboxylic acids adipic acid, phthalic acid and isophthalic acid, and the glycols 1,6-hexanediol, ethyleneglycol, trimethylolpropane (TMP), epsilon-caprolactone and 1,4-butanediol and a polyacrylate (page 3 of D83)
- second layer: polyester polyurethane made from H₁₂MDI and a polyester from epsiloncaprolactone and the glycol monomers 1,4-butanediol and diethyleneglycol (page 3 of D83)
- adhesive layer: not analysed.

In the same way as in D82, the second layer was separated from the first top layer by dissolution.

2.5.6 Hence, all test reports come to the same conclusion, namely that the analysed films were composed of three layers:

- a top layer of a polyesterurethane, corresponding to the polyester-based polyurethane of the first layer of claim 1;
- a second layer of a polyurethane composed of at least hydrogenated methylene diphenyl diisocyanate H₁₂MDI and epsilon-caprolactone, corresponding to the polycaprolactone-based thermoplastic polyurethane of the second layer of claim 1; and
- a pressure-sensitive adhesive layer, corresponding to the PSA layer of claim 1.

The 37 films sold thus had a composition as required by claim 1.

2.5.7 The proprietor argued that there was no evidence that the second layer was a thermoplastic polyurethane. It has however been observed in D82 and D83 that this second layer is completely dissolvable in chloroform. This implies that the material of this layer is uncrosslinked and thus thermoplastic. The proprietor argued in this respect that some elastomers existed that were reversibly crosslinked. If these elastomers were heated, the crosslinks would open and thus the elastomers would become dissolvable in chloroform. Therefore, the observation in D82 and D83 that the second layer was dissolvable in chloroform did not necessarily imply that it was thermoplastic. This

argument however ignores the fact that no such heating is described in D82, and that from D83 it is even derivable that the second layer dissolved when stored in chloroform for 2 days at room temperature (page 1, "Ergebnisse"). The proprietor's argument must therefore fail.

- 2.5.8 The proprietor furthermore argued that it had not been shown in D81 to D83 that the polyol component of the polyurethane of the first top layer was based on, and thus comprised as a major component, a polyester and that of the second layer was based on, and thus comprised as a major component, a polycaprolactone.

This is not correct. As regards the first top layer, all three test reports D81 to D83 refer to a polyester urethane (first sentence on page 13 of D81, sixth line of the penultimate paragraph on page 15 of D82, third paragraph "Ergebnis" from the bottom of page 3 of D83). There can thus be no doubt that the polyurethane of the first top layer is polyester-based as required by claim 1.

As regards the second layer, it is true that D81 and D83 do not contain any information about the amount of polycaprolactone relative to other polyol components. However, D82, the only document addressing this issue, states on page 8 that the material of the second layer ("Trägerschicht") is a polyurethane that is mainly composed of polycaprolactone and hydrogenated H₁₂MDI and, as side components, 1,4-butanediol and diethylene glycol. Hence, there can be no doubt that polycaprolactone is the main polyol component of the second layer, so that the polyurethane of this layer is polycaprolactone-based as required by claim 1.

2.5.9 The proprietor also argued that the term "proposed" on page 6 of D81 showed that the author of the report was not quite sure about his results. The proprietor is however ignoring the fact that the same results were obtained in two further reports D82 and D83, where no doubts were expressed.

According to the proprietor, D82 too was flawed, since the polyurethane of the first top layer contained, next to the 1,6 hexamethylene diisocyanate, H₁₂MDI, i.e. 4,4' dicyclohexylmethane diisocyanate, as an isocyanate component while the material safety data sheet D34 submitted by the proprietor for this material only mentioned the 1,6-hexamethylene diisocyanate. However, claim 1 does not specify the type of isocyanate of which the polyurethane of the first top layer is composed. It is thus irrelevant what the isocyanate component of this polyurethane was found to be in D82 and D34.

In the written proceedings, the proprietor had relied on expert opinion D97, which allegedly showed that D81 to D83 contained several further flaws. In this opinion, the expert Mr B. Dippel doubted whether the first and second layers had been separated before being analysed in D81 to D83 by NMR and pyrolysis GC-MS. D81 however presents results for the individual layers, so there can be no doubt that these had been separated before analysis. Furthermore, as set out above, in D82 and D83 the second layer was separated from the insoluble first layer by way of dissolution.

According to Mr B. Dippel, the reports were flawed for the further reason that the infrared analysis in D82 did not reveal the type of polyurethane in the top layer and the pyrolysis GC-MS results did not fully

support the conclusion that the polyurethane was a polyester-based polyurethane. Even if this were true, it is however irrelevant since this information is supplemented in D82 by $^1\text{H}/^{13}\text{C}$ -NMR and is furthermore confirmed by the other test reports D81 and D83.

2.5.10 Referring to the test reports D29 and D64, the opposition division reasoned that the caprolactone detected in the second layer could be due to contamination from the first top layer. However, in D82 and D83, the second layer was separated from the first layer by dissolution and it is credible that the caprolactone detected in the dissolved material comes from this material rather than the first insoluble layer.

2.5.11 Hence, the conclusion remains valid that the 37 films sold had all the features required by claim 1.

2.6 Object of the alleged public prior use - analysability

2.6.1 The proprietor argued that even if the 37 films sold had been public and had been as required by claim 1, they would still not have been novelty-destroying, since at the priority date of the patent the skilled person would not have been able to gain knowledge about the chemical composition of the films sold.

The board acknowledges that a precondition for the chemical composition of a product to be prior art is that it can be analysed by the skilled person (G 1/92, point 1 of the headnote). This question therefore has to be examined in the present case.

2.6.2 The proprietor argued that if the three research institutes that carried out the tests in D81 to D83 had

not been informed beforehand that the film was composed of three layers, they would have overlooked the very thin first top layer, which had a thickness of only 5 microns. The proprietor relied in this respect on its test report D96, where with a stereomicroscope at 5-fold magnification only the second layer and the adhesive layer were identified (second layer with a thickness of 194 microns and 201 microns and adhesive layer with a thickness of 55 microns and 62 microns).

However, it is not realistic to assume that the skilled person wanting to analyse the morphology of a film would use the extremely low 5-fold magnification applied in D96. And even if one were to assume in the proprietor's favour that the skilled person would start with this magnification, at the latest when realising that the film contained two thin layers in the micron range, the skilled person would have increased the magnification to obtain more information about the layer morphology. The board therefore considers the approach chosen by opponent 1 in D82 to be much more realistic, namely to use electron microscopy at a magnification of 500. As can be seen in figure 1 of D82, at this still not very high magnification the first top layer is clearly visible as a separate, clearly distinct layer. This is even more apparent at the higher magnification of 5000, where the top layer shows a morphology completely different from the underlying second layer (figure 2 of D82). As was not disputed by the proprietor, electron microscopy was well known at the priority date of the patent. The skilled person analysing the film with the techniques known at that time would thus not have overlooked the first top layer.

2.6.3 The proprietor furthermore argued that the research institutes that carried out the tests in D81 to D83 had been informed beforehand about the specific polymers present in the three layers of the film. Had they not had this information, they would not have been able to find the relevant reference spectra needed for the analysis of the IR data, as evidenced by D95. Thus, they would not have been able to attribute the correct chemical entities to the individual peaks in the NMR and GC-MS spectra.

The board does not share this view.

First of all, at least as far as D81 and D83 are concerned, there is no evidence that the two research institutes had indeed been informed beforehand about the specific composition of the films. From D81, it can only be derived, if anything, that JordiLabs had been told that the film was composed of a topcoat layer, a polyurethane layer and an adhesive layer ("Objective" on page 2), and D83 does not contain any indication at all that Currenta had received any information beforehand. The proprietor's starting assumption that the three research institutes knew beforehand the specific composition of the film is thus unfounded, at least as far as D81 and D83 are concerned.

Secondly, even if all the research institutes had known the specific composition of the film beforehand, this alone would not allow the reverse conclusion to be drawn that, if they had not known it, they could not have identified it. In particular, the argument that without knowing the specific nature of the polyurethane of in particular the second layer, the skilled person would not have been able to identify the correct IR reference spectra in the databases available at the

priority date of the patent and would not have been able to attribute the correct chemical entities to the individual peaks in the NMR and GC-MS spectra is not convincing. This applies even if, as asserted by the proprietor, the IR reference spectrum of Argotec 46510 for the polycaprolactone-based polyurethane of the second layer was not available at all at the priority date of the patent. More specifically, the proprietor's argument ignores the fact that IR spectra give some information already without the use of any reference spectra. For instance, certain chemical groups give infrared signals at certain specific wave numbers (e.g. carbonyl groups typically result in a peak around 1600 cm^{-1}). Hence, from the infrared spectra alone, i.e. without the help of reference spectra, the skilled person would already have been able to obtain some basic information about the chemical composition of the layers, e.g. that the first and second layers were polyurethanes. Furthermore, as not disputed by the proprietor, it was common practice at the priority date of the patent to apply more than one analytical method in order to obtain information about the composition of a material. So the skilled person who carried out infrared spectroscopy and obtained some basic information about the composition of the layers of the film would not have stopped there, but would have applied further analytical methods available at the priority date of the patent, such as ^1H and ^{13}C NMR and pyrolysis GC-MS (see D78). By using his knowledge gathered by IR spectroscopy, namely that the spectra thus obtained can be attributed to polyurethane components, and by looking at the results of the ^1H and ^{13}C NMR and pyrolysis GC-MS in combination, he would have been able to identify the exact nature of the polyurethanes. With this information he would have been able to select appropriate IR reference spectra in the

databases available at the priority date of the patent, to verify his assumptions about the nature of the polyurethanes. So, the comparison with IR reference spectra is just one of many jigsaw pieces that lead to the complete picture provided by the totality of measurement methods, and in fact is needed only to confirm what was already established by the other techniques. Therefore, even if, as argued by the proprietor, the IR reference spectrum of Argotec 46510 for the polycaprolactone-based polyurethane of the second layer was not available at the priority date of the patent, the skilled person could still have determined the composition of this layer.

2.6.4 The skilled person at the priority date of the patent would thus have been able to determine the exact composition of the 37 films sold.

2.7 In conclusion, those 37 films were made available to the public by selling them to Nissan, as set out above, on a date prior to the filing date of the patent pursuant to Article 54(2) EPC. The films therefore formed part of the state of the art and have to be taken into consideration when establishing the question of novelty. Since they had a composition identical to the one defined in claim 1, they are to be considered novelty-destroying for the subject-matter of this claim.

3. Request to hear Mr T. Sokolowski

During the oral proceedings, it was requested that Mr T. Sokolowski be heard on whether the skilled person at the priority date of the patent would have been able to analyse the composition of the 37 films. The board rejected this request, since, unlike in G 4/95, no

details had been given in the written proceedings about what Mr T. Sokolowski would be talking about.

4. Conditional request to hear Mr B. Stump as a witness

Opponent 2 had requested that if the board deviated from the decision of the opposition division that the films of production run number 12 were publicly available, Mr B. Stump be re-heard as a witness. In view of the fact that the board found the 37 films to have been publicly available, there was no need to hear the witness and to decide on this request.

Auxiliary requests 1 to 3, 6 and 8 to 21

5. Procedural issues

5.1 Auxiliary requests 1 to 3, 6 and 8 to 17 were filed with letter dated 4 January 2016.

5.2 The only comment the proprietor made during the entire written appeal proceedings on these auxiliary requests was the following:

"As regards support for and patentability of the subject-matter claimed in the Auxiliary Requests, reference is made to our submissions made during the first instance proceedings, in particular, our submissions dated May 4, 2015 (Item 4) and August 21, 2014 (Item 4)" (point 2.7 of the proprietor's statement of grounds of appeal dated 4 January 2016).

The only statements made as regards the patentability of the then pending auxiliary requests in the first-

instance submissions referred to in the above passage are the following:

"The subject-matter according to each of the Auxiliary Requests complies with Art. 83 EPC and is neither disclosed in the cited prior art documents nor rendered obvious thereby" (letter dated 4 May 2015, item 1)

"The subject-matter according to these Auxiliary Requests is neither disclosed in the cited prior art documents nor rendered obvious thereby" (letter dated 21 August 2014, item 1)

5.3 Auxiliary requests 18 to 21 were filed with letter dated 11 August 2016. The only comment the proprietor made as regards the patentability of these auxiliary requests is the following:

"The subject-matter of Auxiliary Requests 18 to 21 specifically relates to an automobile paint protection film. The subject-matter according to these requests is neither disclosed in nor rendered obvious by the prior art documents cited by the Opponents" (item 1.3 of letter dated 11 August 2016).

5.4 Apart from these very general comments, the proprietor did not provide a single argument during the entire written appeal proceedings to substantiate why it filed these requests and why the amendments made overcame the opponents' patentability objections. Even after the board had mentioned this in its preliminary opinion (last page), the proprietor did not react. And even during the oral proceedings, the proprietor said it had

no comments on these requests. The filing of auxiliary requests 1 to 3, 6 and 8 to 21 is thus unsubstantiated.

Reasons why amendments are filed may exceptionally not be needed if they are self-explanatory in the sense that they are such as to put the board and the other party in a position to understand - without any further explanation - why they overcome any outstanding objections. In the present case, it has not been argued by the proprietor that, and the board does not see any reasons why, the amendments in these auxiliary requests are self-explanatory.

The board therefore decided that auxiliary requests 1 to 3, 6 and 8 to 21 were not validly filed (T 1784/14, point 3; see also T 1732/10; point 1.5). There was thus no need for the board to examine whether they overcame the opponents' objections of lack of novelty and lack of inventive step raised against the main request.

Auxiliary requests 4, 5 and 7

6. During the oral proceedings, the proprietor explained why it considered auxiliary requests 4 and 7 to be novel and inventive. These auxiliary requests were hence substantiated, and thus validly filed, during the oral proceedings. Auxiliary request 5 corresponds to auxiliary request 1 found allowable by the opposition division, and is thus in fact a request to dismiss the opponents' appeals. This request therefore must also be dealt with by the board.

7. Novelty of auxiliary request 4

7.1 Claim 1 of auxiliary request 4 differs from claim 1 of the main request in that at the end of the claim, the following wording has been added:

"wherein said film is sized and shaped to conform to a surface of a vehicle body part, and is in combination with a vehicle body part having a painted surface, with said painted surface being protected by said multilayer protective film".

7.2 The board agrees with the proprietor that there is no evidence on file that Nissan has put one or more of the 37 sold films on a car with a painted surface. The feature of claim 1 of auxiliary request 4 that the film is in combination with a vehicle body part having a painted surface is thus a distinguishing feature. Therefore, the subject-matter of claim 1 of auxiliary request 4, and by the same token of all remaining claims, is novel over the 37 sold films.

8. Inventive step of auxiliary request 4

8.1 The invention underlying the opposed patent pertains to multilayer films used to protect surfaces of a vehicle, especially those surfaces that are exposed to hazards like flying debris, such as sand or rocks (paragraphs [0001] and [0023]).

8.2 From various documents on file, it is apparent that the use for which the 37 sold films were intended was to put them on a car to protect it against stone chipping. More specifically, specification tender D26 makes reference to "body fitting" and "guard-side, RH" and "guard-side, LH" (RH and LH stand for right- and left-

hand) and invoices D59 and D62 refer to "Nissan anti-chip guard LH" (page 6 of D59 and page 5 of D62). The purpose underlying the 37 sold films is thus the same as that envisaged in the patent. Therefore, the 37 sold films can be considered to represent the closest prior art.

8.3 As set out previously, the use for which the 37 sold films were intended was to put them on a car to protect it against stone chipping. Even though there is no evidence that this use actually took place before the priority date of the patent, it would at the very least have been obvious to use these films for their intended purpose. The skilled person would thereby have combined the films with the painted surface of a vehicle body part and would thus have arrived at the subject-matter of claim 1. Therefore, the subject-matter of this claim lacks inventive step in view of the public prior use.

9. Novelty of auxiliary request 5

Claim 1 of auxiliary request 5 differs from claim 1 of the main request in that the polycaprolactone-based polyurethane of the second layer is defined as being aliphatic. As not disputed by the proprietor, the polycaprolactone-based polyurethane of the second layer of the 37 films was aliphatic. The subject-matter of claim 1 of auxiliary request 5 thus lacks novelty over those films.

10. Inventive step of auxiliary request 7

10.1 Claim 1 of auxiliary request 7 differs from claim 1 of the main request in that the following wording has been added at the end of the claim:

"and wherein said polyurethane [i.e. the polyurethane of the first top layer] is the reaction product of a polyol and at least a diisocyanate, and said polyol is a polyester polyol, a polycarbonate polyol or a combination of both, wherein said polyurethane is the reaction product of said polyol and a mixture of a diisocyanate and a triisocyanate" (insertion in square brackets by the board).

10.1.1 As set out for auxiliary request 4, the 37 sold films form the closest prior art.

10.1.2 The polyurethane of the first top layer of those films is the reaction product of a polyester polyol and hexamethylene diisocyanate (HDI) and possibly H₁₂MDI, which are both diisocyanates.

The subject-matter of claim 1 thus differs from the sold films in that the polyurethane of the first top layer is the reaction product of a polyester polyol and a mixture of a diisocyanate and a triisocyanate, rather than a diisocyanate alone.

10.1.3 Even though the patent refers in general terms to protection against flying debris, it does not attribute this (or any other) technical effect to the use of a mixture of di- and triisocyanates. Therefore, the objective technical problem is the provision of an alternative multilayer protective film.

10.1.4 D7 refers to an adhesive marking film to be used in particular for curved surfaces in environments where gasoline is present, such as automobile side surfaces (page 1, lines 8 to 10). It may e.g. be used to add a different representation on top of a pre-existing paint (page 2, lines 19 to 22). The film is composed of a

polyurethane top layer, a polypropylene base layer and an adhesive layer (claim 1). For the isocyanate component of which the polyurethane top layer is composed, polyisocyanates or mixtures thereof are disclosed (page 7, lines 15 to 17). As examples of these polyisocyanates, various diisocyanates and triisocyanates are mentioned (page 7, lines 18 to 27).

The skilled person starting from the 37 sold films and looking for an alternative would thus have known from D7 that instead of a polyurethane from a diisocyanate he could have used a polyurethane from a mixture of a di- and triisocyanate in the first top layer. He would thereby have arrived at the subject-matter of claim 1. The subject-matter of this claim therefore lacks inventive step in view of the 37 sold films in combination with D7.

- 10.1.5 The proprietor argued that it could not be derived from the prior-used product, namely the 37 sold films, that one of their layers could be varied. This argument is however not convincing since the problem-and-solution approach does not require the closest prior art to contain an indication of how the objective technical problem can be solved, namely in the present case by varying one of the layers of the sold films.

The proprietor furthermore argued that a selection was necessary from D7 to arrive at a polyurethane as required for the first top layer in claim 1, namely of a polyester or polycarbonate polyol from the polyols disclosed on page 8, lines 27 to 29 of D7 and of a mixture of di- and triisocyanates. However, since no unexpected technical effect is obtained by this selection, it is arbitrary and thus cannot contribute to inventive step.

The board's conclusion that the subject-matter of claim 1 lacks inventive step in view of the 37 sold films in combination with D7 thus remains valid.

Conclusion

11. The main request and auxiliary requests 4, 5 and 7 are not allowable. The remaining auxiliary requests 1 to 3, 6 and 8 to 21 are deemed not to have been validly filed.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:



M. Cañueto Carbajo

W. Sieber

Decision electronically authenticated