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**Datasheet for the decision
of 22 March 2013**

Case Number: T 1164/09 - 3.2.05

Application Number: 03014875.3

Publication Number: 1362687

IPC: B29C 59/00

Language of the proceedings: EN

Title of invention:

Process for manufacturing an automotive trim piece preweakened to form an air bag deployment opening

Patent Proprietor:

TIP Engineering Group, Inc.

Opponent:

Jenoptik Automatisierungstechnik GmbH

Headword:

-

Relevant legal provisions (EPC 1973):

EPC Art. 56

Keyword:

"Inventive step - yes"

Decisions cited:

-

Catchword:

-



Case Number: T 1164/09 - 3.2.05

D E C I S I O N
of the Technical Board of Appeal 3.2.05
of 22 March 2013

Appellant:
(Opponent)

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Respondent:
(Patent Proprietor)

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Decision under appeal:

**Decision of the Opposition Division of the
European Patent Office posted 3 March 2009
rejecting the opposition filed against European
patent No. 1362687 pursuant to Article 101(2)
EPC.**

Composition of the Board:

Chairman: H. Schram
Members: S. Bridge
W. Ungler

Summary of Facts and Submissions

- I. The appellant (opponent) lodged an appeal against the decision of the Opposition Division of 3 March 2009, by which its opposition against European patent No. 1 362 687 was rejected.
- II. In a communication dated 11 January 2013 annexed to the summons to attend oral proceedings the Board expressed its provisional opinion (see points 5.2 and 5.3) that the process of claim 1 as granted provided a clear technical advantage over the closest prior art. The Board also stated (see point 5.4) that, in exercising its discretionary power under Article 114(2) EPC, it was currently not inclined to admit document JP-A 2 99324 and its English translation into the appeal proceedings, since these documents did not appear to be *prima facie* more relevant than the documents on file.
- III. In reply to the summons the appellant and the respondent informed the Board on 22 February 2013 and 20 March 2013, respectively, that they would neither attend nor be represented at the oral proceedings.
- IV. Oral proceedings were held before the Board of Appeal on 22 March 2013 in the absence of the parties.
- V. The appellant requested that the decision under appeal be set aside and that the patent in suit be revoked.

The respondent (patent proprietor) requested as main request that the appeal be dismissed, or, as an auxiliary measure, that the decision under appeal be set aside and that the patent be maintained on the

basis of one of the first to third auxiliary requests submitted on 3 December 2009.

VI. Claim 1 of the patent as granted reads as follows:

"1. A process for constructing a trim piece (10, 10A) having a section preweakened in a pattern to allow formation of one or more deployment doors (14A, 14B; 32) for an air bag installation to be overlain by said trim piece preweakened section, the process comprising the steps of:

forming a substrate panel (12, 12A) having an opening therein; and

subsequently recessing one or more door panels (14A, 14B; 32) into said opening, with a predetermined gap (18) between adjacent portions of said one or more door panels (14A, 14B; 32) as well as between the one or more door panels and the perimeter of said opening, said one or more door panels (14A, 14B; 32) joined along one side to said substrate panel (12, 12A) to form a hinge;

overlying said substrate panel (12,12A) with one or more cover layers (20, 22) extending across said one or more door panels (14A, 14B) and said gap (18) therebetween;

preweakening said overlying covering layers (20, 22) by scoring portions of the inside of at least one of said cover layers (20, 22) at least partially along said gap (18)."

VII. The documents referred to in the appeal proceedings included the following:

D2 DE-A 44 09 405.

VIII. The arguments of the appellant in the written proceedings can be summarized as follows:

The invention was the result of a foreseeable disadvantageous modification of the process known from document D2, which the skilled person could clearly predict and correctly assess.

Document D2, which represented the closest prior art, disclosed a process for constructing a trim piece having a section preweakened in a pattern to allow formation of one or more deployment door panels for an air bag installation, comprising a single process step, namely cutting a break line in the cover from the inside through the inner moulding in order to form door panels. According to the process according to the invention the door panels and the substrate panel (door frame) were produced integrally with the substrate panel or separately, the door panels were then inserted into the opening of the substrate panel and joined along one side to said substrate panel.

The trim piece produced by the process according to the invention and the one produced by the process known from document D2 were the same, apart from the fact that in the trim piece of document D2 a thin connection between the door panels and the door frame was present.

The only advantage of the claimed process was that there was no need to cut a break line through the inner moulding in the cover as in document D2. The process according to the invention required however three additional steps: forming a substrate panel having an opening therein, forming door panels, and recessing said door panels into the opening in the substrate with a predetermined gap there between. The last step required a high manufacturing precision. That fitting a separate door panel into an opening molded into the substrate panel required additional processing steps was also admitted in the patent in suit itself, see paragraph [0008]. In the invention the preweakening step was limited to the covering layers only, which had the expected technical advantage that it was faster, required less energy and that in the case of laser cutting no by-products were produced.

Summarizing, since the predictable disadvantages outnumbered the advantages over the prior art, the claimed invention did not involve an inventive step, cf Guidelines for Examination, G-VII, 10.1 (in the version of June 2012).

IX. The respondent's arguments in the written proceedings can be summarized as follows:

According to the section of the Guidelines cited by the appellant, an invention, which was the result of a foreseeable disadvantageous modification of the closest prior art, and which was not accompanied by an unexpected technical advantage, did not involve an inventive step.

In the preweakening step of the process according to claim 1 of the patent as granted the substrate was not cut as in document D2. The disadvantages of such a cutting step mentioned in paragraph [0009] of the patent were therefore avoided. In the invention the overlaying covering layers were preweakened by scoring portions of at least one of said cover layers (see claim 1 of the patent as granted) without having to cut through the substrate panel, which could be done rapidly and accurately, cf paragraph [0037] of the patent.

The present invention had several other advantages as well: the door panels could be manufactured separately from and at different times than the substrate panels. This offered more design flexibility to the process for constructing a trim piece. Moreover, the door panels and the substrate panels could be formed of different materials and/or by different processes. The manufacturer had additional flexibility in forming the hinge, ie the way the door panels were joined to the substrate panel.

The invention provided therefore a clear technical advantage over document D2, so that the precondition mentioned in the cited passage of the Guidelines was not fulfilled.

The available prior art did not suggested the subject-matter of claim 1 of the patent as granted, which therefore involved an inventive step.

Reasons for the Decision

1. *Ground for opposition "lack of inventive step", Article 100 (a) EPC 1973 in combination with Article 56 EPC 1973*

1.1 The invention concerns the manufacture of trim pieces such as instrument panels and steering wheel covers which overlie air bag installations, and, more particularly, a process for manufacturing trim pieces which have air bag canisters installed behind the trim pieces which are preweakened to allow an inflating air bag to form a deployment opening by forcing a concealed door section of the trim piece to separate and swing out from the adjacent portion of the trim piece structure.

It is the object of the present invention to provide a simplified method of manufacturing a trim piece which is preweakened to form an invisible seam deployment door opening for air bags.

This object is solved by the subject-matter of claim 1 of the patent as granted, in particular, by forming a substrate panel having an opening therein, forming door panels and subsequently recessing said door panels into the opening in the substrate with a predetermined gap there between, followed by overlaying said substrate panel and gap with one or more cover layers and preweakening said overlaying covering layers by scoring portions of the inside of at least one of said cover layers through and along said gap without having to cut through the substrate panel.

This solution therefore provides a clear technical advantage, see paragraph [0009] of the patent in suit.

The argument of the appellant that the invention was a mere foreseeable worsening of the prior art which was not accompanied by an unexpected technical advantage, and, for that reason alone, did not involve an inventive step, therefore cannot be accepted.

- 1.2 Document D2 represents the closest state of the art. This document discloses a method of producing an airbag cover having an inner moulding of relatively hard polymer material and an outer layer of relatively soft polymer material, the method comprising the step of manufacturing the cover and subsequently cutting a break line in the cover, from the inside of the cover, the break line completely penetrating the inner moulding, the cutting being effected utilising a cutting technique that does not exert pressure on the cover.

In the embodiment shown in Figure 3 (see column 5, lines 9 to 31) a cut forming the break line 7 is formed in an elongated region of the inner layer 3 having a reduced thickness, said cut extending into the outer layer 4. The central region 6 of the cover, which is substantially surrounded by said break line 7, forms a door panel.

The trim piece according to document D2 does not involve forming a substrate panel having an opening therein.

Since none of the steps mentioned in claim 1 of the patent as granted are known from, or suggested by, the prior art cited by the appellant, it follows that the subject-matter of said claim is not obvious to the person skilled in the art, and hence involves an inventive step, Article 56 EPC 1973.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

D. Meyfarth

H. Schram