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**Datasheet for the decision
of 15 March 2011**

Case Number: T 0601/08 - 3.2.08

Application Number: 01203892.3

Publication Number: 1197673

IPC: F16F 7/12

Language of the proceedings: EN

Title of invention:

Improved efficiency impact absorption device

Patentee:

Adlev S.r.l.

Opponent:

Adler Plastic S.p.A.

Headword:

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Relevant legal provisions:

EPC Art. 56, 100(a)

Relevant legal provisions (EPC 1973):

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Keyword:

"Inventive step (no)"

Decisions cited:

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Catchword:

-



Case Number: T 0601/08 - 3.2.08

D E C I S I O N
of the Technical Board of Appeal 3.2.08
of 15 March 2011

Appellant:
(Patent Proprietor)

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Representative:

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Respondent:
(Opponent)

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Representative:

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Decision under appeal:

Decision of the Opposition Division of the
European Patent Office posted 14 January 2008
revoking European patent No. 1197673 pursuant
to Article 101(2) EPC.

Composition of the Board:

Chairman: T. Kriner
Members: M. Alvazzi Delfrate
E. Dufrasne

Summary of Facts and Submissions

- I. By its decision posted on 14 January 2008 the opposition division revoked European patent No. 1 197 673.

The opposition division held that claim 1 of the main request and the auxiliary request 1 then on file were in contradiction to the requirements of Art. 84 EPC, and that the subject-matter of claim 1 of the auxiliary request 2 then on file did not involve an inventive step with respect to the teaching of documents

D4: EP -A- 705 994 and

D5: FR -A- 2 364 788.

- II. The appellant (patent proprietor) lodged an appeal against this decision on 14 March 2008, paying the appeal fee on the same day. The statement setting out the grounds for appeal was filed on 22 May 2008.
- III. Oral proceedings before the board of appeal were held on 15 March 2011.
- IV. The appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of claim 1 filed with the letter dated 6 May 2010.

The respondent (opponent) requested that the appeal be dismissed.

V. Claim 1 reads as follows:

"Impact absorption device (10, 10'), of the type comprising a honeycomb (20), where the above-mentioned honeycomb (20) features a number of ribs (11) that define respective channels (12), having a preferably hexagonal section, terminating in holes (13) at one longitudinal end of the honeycomb (20), the above-mentioned honeycomb (20) being injection-moulded in plastic and the opposite longitudinal end of the above-mentioned honeycomb featuring a taper characterised in that the honeycomb is combined with a deformation containment element wrapped around the above-mentioned tapered end and the above-mentioned plastic is plastic resin derived from polycarbonate or rubber filled polypropylene."

VI. The arguments of the appellant can be summarised essentially as follows:

The claimed subject-matter was novel, since D5 did not disclose a plastic as defined in claim 1. Starting from this document the gist of the claimed invention lay in the combination of said plastic with the deformation containment element. While the latter element limited the internal deformation of the honeycomb, the specific plastic chosen provided advantageous properties, as disclosed in paragraphs [0032] to [0038]. Therefore, the claimed invention also involved an inventive step.

The arguments of the respondent can be summarised essentially as follows:

D5 disclosed in Figure 7 an impact absorption device according to the preamble of claim 1. Since in case of an impact the tapered end of the honeycomb would be the first part to deform, the bumper arranged around the honeycomb could be considered as representing a deformation containment element. Moreover, as the term "wrapped around" in claim 1 was not clear, this feature could not distinguish the claimed device from the one known from D5. Accordingly, the sole distinguishing feature was the specific plastic according to claim 1. However, this feature could not justify an inventive step, since polycarbonate was commonly used for energy absorption elements, as for example described in D4. Therefore, the subject-matter of claim 1 did not involve an inventive step.

Reasons for the Decision

1. The appeal is admissible.
2. Inventive step
 - 2.1 D5 undisputedly discloses an impact absorption device of the type comprising a honeycomb (see Figure 7) where the above-mentioned honeycomb features a number of ribs (11) that define respective channels (see also Figure 5 and claim 1) terminating in holes at one longitudinal end of the honeycomb (on the right-hand side in Figure 7), the above-mentioned honeycomb being injection-moulded in plastic (see page 1, lines 5-7) and the opposite longitudinal end of the above-mentioned honeycomb featuring a taper (see page 3, lines 10-14, and Figure 7).

In the patent in suit the deformation containment element "wrapped around" the tapered end of the honeycomb may be a monolithic element as shown in Figure 5 or even be obtained directly on the vehicle (see paragraph [0045]). Therefore, the wording "wrapped around" in claim 1 must be construed as meaning merely that the element is somehow arranged around the tapered end of the honeycomb. However, this is also the case for the bumper shown in Figure 7 of D5.

Moreover, the tapered end of the honeycomb shown in Figure 7 exhibits a cross section of the ribs thinner than in the rest of the honeycomb. Therefore, said tapered end would be the first part of the honeycomb to deform in case of an impact. Accordingly, the bumper element arranged around it can be regarded as a deformation containment element.

Hence, D5 also discloses the feature according to which the honeycomb is combined with a deformation containment element wrapped around the tapered end of the honeycomb.

2.2 The object underlying the claimed invention starting from the device disclosed in D5 can be seen in the selection of a plastic material for the honeycomb to provide an efficient impact absorption device.

According to claim 1 this object is achieved by the sole distinguishing feature over D5, i.e. the choice of either a plastic resin derived from polycarbonate or rubber-filled polypropylene for the plastic material.

2.3 D4 also relates to impact energy absorption devices comprising a honeycomb structure made of moulded plastic materials (see abstract and Figure 1). This document points out that said structure is preferably made of a thermoplastic resin, for instance polycarbonate (see page 3, lines 39-43). Therefore, D4 teaches the person skilled in the art that a honeycomb structure with good impact properties can be made of a plastic resin derived from polycarbonate. Under these circumstances, the selection of this material for the honeycomb of the impact absorption device according to D5 was obvious.

2.4 The appellant's view that the selection of polycarbonate for the honeycomb according to D5 was not obvious is not convincing. It is true that the materials cited in claim 1 both provide good impact properties (see paragraphs [0032] to [0038] of the application as published). However, as shown above, at least with respect to the plastic resin derived from polycarbonate, this was already known from D4.

2.5 In view of the above findings, the claimed subject-matter does not involve an inventive step.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

V. Commare

T. Kriner