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Datasheet for the decision of 26 February 2013

Case Number: T 2235/10 - 3.2.01

Application Number: 01975122.1

Publication Number: 1326765

IPC: B60R 19/02

Language of the proceedings: EN

Title of invention:
A bumper arrangement

Applicant:
Gestamp HardTech Aktiebolag

Headword:
-

Relevant legal provisions (EPC 1973):
EPC Art. 56

Keyword:
"Inventive step: yes (after amendments)"

Decisions cited:
-

Catchword:
-

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Case Number: T 2235/10 - 3.2.01

D E C I S I O N
of the Technical Board of Appeal 3.2.01
of 26 February 2013

Appellant: (Applicant)
Gestamp HardTech Aktiebolag
P.O. Box 828
971 25 Luleå (SE)

Representative:
Aslund, G. Roland
Gestamp HardTech AB
P.O. Box 828
971 25 Luleå (SE)

Decision under appeal:
Decision of the Examining Division of the European Patent Office posted 25 August 2010 refusing European patent application No. 01975122.1 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman: G. Pricolo
Members: Y. Lemblé
S. Hoffmann

Summary of Facts and Submissions

I. European patent application No. 01 975 122.1 was refused by a decision of the Examining Division posted 25 August 2010.

II. The reason given in the decision of the examining division was that the claimed subject-matter did not involve an inventive step in view of the prior art disclosed in document:

D1: WO-A-99/20490.

Furthermore, the following documents were cited in the search report:

D2: WO-A-00/17017,
D3: DE-A-199 07 783,
D4: US-A-5 154 462.

III. On 12 October 2010 the Appellant (Applicant) lodged an appeal against this decision and paid the prescribed appeal fee. The statement setting out the grounds of appeal was filed with the notice of appeal.

IV. Following a communication of the Board dated 20 September 2012, the Appellant filed new claims with letter dated 15 October 2012 and requested with letter dated 24 January 2013 that the decision under appeal be set aside and that a patent be granted on the basis of the following documents:

Claims:

- 1-3, as filed with letter dated 15 October 2012;

Description:

- page 1, as filed with letter dated 15 October 2012,
- pages 2-3 as originally filed (WO 02/30714);

Figures:

- 1/3-3/3 as originally filed (WO 02/30714).

V. Independent claim 1 according to this request reads as follows:

"A bumper arrangement for a vehicle, comprising a bumper beam (17) having two mounting portions fastened on two crash boxes (11,12) which are fastenable on side rails (12,13) of the vehicle, wherein the bumper beam (17) is formed as a profile with a central flange (18) and two webs (19,20), the bumper profile forming at its mounting portions a U-profile formed of the central flange (18) and the two webs (19,20) with the opening of the U-profile towards the vehicle and with the central flange having a recess (21) that is shallow relative to the webs,
characterized in that
said shallow recess (21) deepens between the mountings such that it is deeper than the webs (19,20) for at least one third of the length between the mounting portions."

Dependent claims 2 and 3 define features additional to those specified in claim 1.

These claims read as follows:

"2. A bumper arrangement according to claim 1, **characterised in that** said recess (21) is deeper than the webs for at least half the length between the mounting portions."

"3. A bumper arrangement according to claim 1 or 2, **characterised in that** the bottom (22) of the recess (21) is narrower than half the distance between said webs (19,20) of the profile."

Reasons for the Decision

1. The appeal is admissible.

2. Admissibility of the amendments under Article 123(2) EPC

There are no formal objections under Article 123(2) EPC to the amendments made to the claims and the description.
The claim has been reformulated in the two-part form. All the features of claim 1 as originally filed are present in claim 1. The preamble of the claim recites the features that are known from the nearest prior art document D1.
The feature that the bumper beam has two "mountings" i.e. "mounting portions" to the crash boxes is disclosed on page 1, fourth paragraph of the application as originally filed (WO 02/30714, hereinafter referred to as D0).

The feature that the two crash boxes are fastenable on side rails of the vehicle is taken from page 2, first paragraph of D0. Since the side rails are not part of the bumper arrangement but of the vehicle, the adjective "fastenable" makes clear that it is only the suitability of the crash boxes to be fastened to the side rails which is required.
The expression of the original claim 1 "its opening towards the vehicle" has been clarified in "the opening of the U -profile towards the vehicle".
Concerning the adjective "shallow", the claim now specifies with respect to which part of the bumper (webs) the recess has the required shallowness (Guidelines F-IV, 4.6).

Dependent claims 2 and 3 correspond to original dependent claims 2 and 3.

The description has been amended to cite document D1 as the nearest prior art.

3. Novelty

None of the documents cited in the search report discloses a bumper arrangement as defined in claim 1. The bumper arrangement of independent claim 1 is therefore novel. Novelty has not been an issue in the first instance proceedings.

4. Inventive step

4.1 Claim 1 is based in its pre-characterising portion on the disclosure of the prior art document D1 which

represents the nearest prior art and is acknowledged in the introductory part of the description.
Accordingly figure 5 and figure 8 of document D1 disclose a bumper arrangement for a vehicle, comprising a bumper beam 11 having two mounting portions fastened on two crash boxes (in analogy to the beam of figure 4: see side beams 30,31) which are fastenable on side rails of the vehicle. The bumper beam 11 is formed as a profile with a central flange 3 and two webs 13,14, the bumper profile forming at its mounting portions a U-profile formed of the central flange 3 and the two webs 13,14 with the opening of the U-profile towards the vehicle and with the central flange having a recess (in the middle of the flange 3) that is shallow relative to the webs.

4.2 The features that said shallow recess deepens between the mountings such that it is deeper than the webs for at least one third of the length between the mountings are not known from document D1.

4.3 Considering the effect achieved by these distinguishing features, the technical problem solved by the invention can be formulated as follows: to propose a bumper arrangement in which the bumper beam can transfer substantial force to both crash boxes also when it hits a barrier with only one side (see third paragraph of page 1 of the description).

None of the documents D2 to D4 cited in the search report shows a bumper arrangement with a bumper beam having a U-profile and with the central flange of the U-profile having a recess which deepens between the mountings such that it is deeper than the webs of the

U-profile. Thus, having regard to the documents D1 to D4 cited in the search report, the claimed bumper arrangement is not obvious to the skilled person.

4.4 The Board therefore concludes that the bumper arrangement of independent claim 1 involves an inventive step (Article 56 EPC 1973).

4.5 Dependent claims 2 and 3 relate to further developments of the inventive concept disclosed in claim 1 and by virtue of their dependency contain all of the features of claim 1. The above conclusions regarding novelty and inventive step apply equally to these claims which likewise meet the requirements of the EPC.

5. The description has been brought into conformity with the amendments made in the claims.

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 with the order to grant a patent on the basis of the documents indicated in point IV above.

The Registrar The Chairman

A. Vottner G. Pricolo