Datasheet for the decision of 5 February 2008

Case Number: T 0902/06 - 3.2.01
Application Number: 98202816.9
Publication Number: 0899140
IPC: B60J 7/02
Language of the proceedings: EN

Title of invention:
Open roof construction for a vehicle

Patentee:
Inalfa Roof Systems Group B.V.

Opponent:
Webasto AG

Headword:
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Relevant legal provisions:
-

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

Keyword:
"Inventive step (yes)"

Decisions cited:
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Catchword:
-
Case Number: T 0902/06 - 3.2.01

DECISION
of the Technical Board of Appeal 3.2.01
of 5 February 2008

Appellant: Webasto AG
(Opponent)
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Respondent: Inalfa Roof Systems Group B.V.
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 7 April 2006 rejecting the opposition filed against European patent No. 0899140 pursuant to Article 102(2) EPC.

Composition of the Board:
Chairman: S. Crane
Members: P. L. P. Weber
T. Karamanli
Summary of Facts and Submissions

I. The appeal of the opponent is directed against the decision of the opposition division posted on 7 April 2006 to reject the opposition.

The notice of appeal was filed on 14 June 2006 and the fee paid on the same day. The statement of the grounds of appeal was filed on 16 August 2006.

II. The appellant requests that the decision under appeal be set aside and the patent revoked.

The respondent (patentee) requests that the appeal be dismissed or, in the alternative, that the patent be maintained in amended form on the basis of the auxiliary request filed with letter of 19 December 2007.

III. Claim 1 as granted reads as follows:

An open roof construction for a vehicle having an opening (2) in its fixed roof (1), which construction comprises a closing element (3), in particular a panel, for selectively closing or at least partially releasing the roof opening, and an operating mechanism (6) comprising a link (4) formed of a metal plate or the like, which is connected to said closing element and which is fixed at the location of points of attachment (11) for attaching said link (4) to the closing element (3), whilst said link is provided with a slot (5) for guiding a pin (7) of the operating mechanism or the like, which slot is defined by plastic material (10) on at least one of its upper side or underside, which plastic material is at least partially bounded by metal
plates (8,9) on its left and right sides, characterised in that said link (4) is formed of a single metal plate (8), at least at the location of said points of attachment (11).

IV. The following documents played a role in the appeal proceedings:

D1: DE-U-9116421  
D2: DE-C-4405742  

V. The arguments of the appellant can be summarized as follows:

The subject-matter of claim 1 as granted is not inventive over the combination of D3 with the teaching of D1. 
D3 discloses all the features of the first part of claim 1. 
The only difference between the claimed construction and this prior art is that the link is formed of a single metal plate, at least at the location of said points of attachment. It is however well known to the skilled man that single metal plates as used in D1 are also stable enough and usable as a link so that the feature of the characterising portion cannot be considered inventive. Reducing the amount of metal used is anyway a constant desire of the man skilled in the art, so that he would adopt the claimed solution in the link according to D3, even without the knowledge of D1. 
If the particular form of the attachment point disclosed in D3 is not needed the skilled man would simply dispense with the second plate which anyway
plays a secondary role in providing a secure attachment since it is the first plate which is provided with the screw thread.

VI. The arguments of the respondent can be summarized as follows:

Claim 1 as granted is not meant to cover the links according to Figures 4 and 5 of the patent. These links do not fall under the scope of claim 1, they were in the original application to provide support for another independent claim which is not in the patent as granted and they remained only in the patent because of a lack of proper adaptation of the description.

The invention relates to the particular type of link provided with a slot defined by plastics material, which plastics material is at least partially bounded by metal plates both on its left and right sides.

For the man skilled in the art there are two types of links of this kind, which either have only one metal plate (D1, D4) or have two plates extending all over the link (D2, D3). For different uses the man skilled in the art would choose one or the other type of link but not a mixture of both.

In addition, the historical development goes from D1 to D2 and then to D3. D1 represents the oldest situation in which one metal plate was used with plastics material located at the slot only. In D2 the aim was to build a more stable construction than the one of D1 by providing a sandwich construction and in D3 the
The skilled man when starting from the state of the art according to D3 would thus not go back to the one plate structure he came from.

And even if he were to combine the teachings of D1 and D3 he would not unambiguously arrive at the patented solution, since even if one metal plate only partially covered the other one, it is not clear where there should be two plates and where not. Several options are possible, and in D3 the statement that the combination of the plates at the points of attachment results in a secure attachment would lead the man skilled in the art away from the present invention.

**Reasons for the Decision**

1. The appeal is admissible

   **Inventive step**

2. D3, which forms the basis for the preamble of granted claim 1, is the closest state of the art.

   The link disclosed in D3 is a sandwich construction with one middle plate 2 made of plastics material and two metal supporting plates 3, 4 arranged on each side of it.

   In this state of the art link there is no plastics material in the area of the points of attachment of the
link to the closing element and the two metal plates are in contact with the each other here.

3. The difference between the open roof construction according to D3 and the one of claim 1 is that the link according to the latter is only formed of a single metal plate at the location of the points of attachment. This enables the design to be chosen such that the metal and the plastics material is only present at those location where this is advantageous from a construction point of view, thus minimizing the amount of material (cf. para. [0005] of the patent specification).

4. It is a general problem of the man skilled in the art to try and reduce the amount of material used and to reduce the weight of vehicle parts.

5. In the board's view the skilled man starting from D3 would however not take away part of one of the metal plates at the points of attachment. The points of attachments are an important location on the link. These points are fixing the link to the closing element. This connection is essential for a good guiding of the closing element from its position when the roof is closed to its position when the roof is opened and vice versa. Without a good connection of the link to the closing element not only disturbing noises as rattling or like might appear, but the closing element might not properly close the roof with the consequence of cold air or water entering the vehicle, not to mention a possible blocking of the mechanism during the movement of the closing element from one position to the other.
A certain rigidity and stability of the connection is therefore essential and must be guaranteed at these points of attachment.

6. Thus, it was the aim of the invention in D3 to improve the fixation of the link to the closing element (see column 1, lines 22 to 25) because it had been observed that in the sandwich like constructions of the link, as shown in D2, at the location of the points of attachment the plastics layer was susceptible to be compressed which thus lead to a loosening of the connection between the link and the closing element.

7. The solution to this problem proposed in D3 was to eliminate the plastics material between the metal plates at the points of attachment and have the metal plates joining each other in order to obtain a secure fixation. This is not only mentioned at several places in the document, as for example column 3, lines 43 to 47 (...Durch die unmittelbar Anlage des ersten Stützkörpers 3 mittels des Vorsprungs 9 am zweiten Stützkörper 4 ist eine sichere Verschraubung des Deckels im Bereich der Befestigungspunkte 8 gewährleistet.), but is the invention claimed for in D3.

8. In the link disclosed in D3 the joining of the two metal plates is obtained in that the one plate (first plate) is deformed by stamping at the location of the points of attachment to bring one surface of the first plate in contact with the adjacent surface of the second plate. Quite clearly the skilled man would not have used such a precise stamping process for manufacturing the first plate if a simple stamping away of parts of the first plate at the points of attachment
had been sufficient to solve the problem mentioned in D3 and to satisfy the requirements of rigidity and stability of the connection.

9. To go against the very teaching of this document by eliminating one of the plates at the points of attachment is thus not an obvious step for the skilled man to take on the basis of his common general knowledge.

10. The presence in the state of the art of links consisting of one metal plate only as for instance shown in D1 does not change this finding, since the one plate technology has been abandoned for the sandwich technology for which the link according to D2 is a typical example, and there is no obvious reason as to why the skilled man would go back to that abandoned technology.

11. Hence neither the combination of the teaching of D3 with the general knowledge of the skilled man, nor the combination of the teachings of D3 and D1 lead in an obvious manner to the subject-matter of claim 1. The subject-matter of claim 1 thus involves an inventive step pursuant to Article 56 EPC 1973.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: 

The Chairman:

A. Vottner  S. Crane