DECISION
of 23 August 2001

Case Number: T 0675/99 - 3.2.1
Application Number: 94111505.7
Publication Number: 0636518
IPC: B60R 13/08, F02B 77/13

Language of the proceedings: EN

Title of invention:
Vehicle soundproofing device, particularly for motor vehicles

Patentee:
IVECO FIAT S.p.A

Opponent:
MAN Nutzfahrzeuge Aktiengesellschaft

Headword:
-

Relevant legal provisions:
EPC Art. 56, 117

Keyword:
"Inventive step (yes)"
"Prior use, evidence-substantiated (no)"

Decisions cited:
-

Catchword:
-
Case Number: T 0675/99 - 3.2.1

DE C I S I O N
of the Technical Board of Appeal 3.2.1
of 23 August 2001

Appellant: MAN Nutzfahrzeuge Aktiengesellschaft
(Opponent) Postfach 50 06 20
D-80976 München (DE)

Representative: -

Respondent: IVECO FIAT S.p.A
(Proprietor of the patent) Via Puglia 35
I-10156 Torino (IT)

Representative: Jorio, Paolo, Dr. Ing.
Studio Torta S.r.l.
Via Viotti, 9
I-10121 Torino (IT)

Decision under appeal: Interlocutory decision of the Opposition Division of the European Patent Office posted 3 November 1999 concerning maintenance of European patent No. 0 636 518 in amended form.

Composition of the Board:
Chairman: F. J. Pröls
Members: J. Osborne
          G. E. Weiss
Summary of Facts and Submissions

I. The opponent’s appeal is against the decision of the Opposition Division that European patent No. 0 636 518 and the invention to which it relates meet the requirements of the EPC, account being taken of amendments made by the patent proprietor according to an auxiliary request during the opposition proceedings.

II. The patent had been opposed on the grounds that the subject-matter of the claims lacked inventive step (Article 100(a) EPC). The following evidence was cited during the opposition proceedings:

   E2: DE-C-25 34 421
   E3: DE-A-32 42 604

III. The decision of the Opposition Division was posted on 3 November 1999. Notice of appeal together with payment of the appeal fee was received on 8 December 1999 and the reasons for appeal were received on 4 March 2000. The appellant requested that the appealed decision be set aside and that the patent be revoked in its entirety due to lack of inventive step of the subject-matter of Claim 1 according to the auxiliary request approved by the Opposition Division. Together with the reasons for appeal the appellant filed additional evidence relating to an alleged prior use of a sound insulating element:

   E4: "VW ETKA", Spare parts list for VW Golf Diesel 1991 (Extract, Plate 137-10), dated

IV. The respondent (patent proprietor) requested with a letter dated 22 September 2000 that the appeal be dismissed and that the patent be maintained in the form according to the auxiliary request approved by the Opposition Division, based on the following documents:

Description: as granted;
Claim 1 filed during oral proceedings 8 October 1999;
Claims 2 to 4 as granted;
Drawings: as granted.

V. The Board summoned the parties to oral proceedings and, in a communication pursuant to Article 12 RPBA, indicated its provisional opinion that the allegation of prior use was insufficiently substantiated in respect of both the circumstances and the technical subject-matter. The Board additionally indicated its provisional opinion that, even if the allegation of prior use were to be substantiated, the evidence appeared not to be important to the decision.

VI. The respondent indicated with a letter dated 7 August 2001 that it would not attend the oral proceedings. During the oral proceedings held on 23 August 2001 the appellant confirmed the request to revoke the patent.

VII. Claim 1 according to the respondent’s request reads:
"A vehicle soundproofing device (9) for motor vehicles comprising an engine (5) and a frame (3) supporting the engine (5), the device (9) including a first bottom casing (10) enclosing a bottom end portion of the engine (5), and screen means (12, 15) connected to the frame (3), extending on opposite lateral sides of the
engine (5), and cooperating with the outer surfaces of said first casing (10),
characterized in that said first bottom casing (10) is made of acoustically insulating material,
said screen means (12, 15) including at least a pair of screens (12) made of acoustically insulating material, which project downwards from the frame (3) and have respective substantially flat first portions (13) facing said engine on opposite sides thereof; said screen means (12, 15) further including two respective elastic lips (15) made of acoustically insulating material and connected to respective said screens (12), said lips (15) comprising respective first portions (16) which extend on opposite lateral sides of the engine (5) and cooperate elastically in a sliding manner with said outer surfaces of said first casing (10)."

Dependent Claims 2 to 4 according to the respondent’s request define preferred embodiments of the subject matter of Claim 1.

VIII. The appellant’s arguments can be summarised as follows: The closest prior art is known from E1, which discloses all features of the preamble of Claim 1. Additionally, the features of a first bottom casing and at least a pair of screens all being made of acoustically insulating material are known from E1. The skilled person faced with the problem of reducing noise emission from a vehicle engine is aware that it is necessary to close the "acoustic holes" between the frame and the cab and between the engine and the frame in order to encapsulate the engine. In E1 in the embodiment of Figure 3, screens 2 carrying sealing lips
21 close the space between the frame and the cab whilst a bellows seal 15 extends from the lower edge of the frame to the engine. The skilled person is aware that the sealing lips 21 are suitable for accommodating relative movement between the engine and the frame. In the embodiment of Figure 2 the "acoustic hole" between the engine and the frame is filled by a horizontal screen 5 with a sealing lip 21 engaging the top of the frame and the skilled person could equally locate this to project below the frame, sealing to a lower portion of the engine. In the alternative, the prior use documented by E4 indicates that the features of downwardly extending flat screen portions and lip seals adjacent the lower portion of the engine, which were considered by the Opposition Division to justify an inventive step, were already known in the same technical area.

IX. The respondent essentially countered in writing the appellant’s arguments in respect of E4.

**Reasons for the Decision**

1. The appeal is admissible.

2. The amendments to Claim 1 have not been put into question by the appellant and the Board is satisfied that there is a basis for them in the original disclosure. Since novelty has not been challenged by the appellant it remains only to consider the question of inventive step.

3. Both parties and the Board are in agreement that the closest prior art is that known from E1 which discloses...
two embodiments, both of which comprise all features of the preamble of Claim 1. In the first embodiment, shown in Figure 2, an upper encapsulation 18 is attached to the cab and comprises downwardly extending screens 2 made of acoustically insulating material and having sealing lips 21 which engage the upper edge of the frame of the chassis frame and accommodate relative movement between the cab and the frame. The engine block, crankcase and sump are enclosed in, in the terminology of the patent in suit, a first casing 4 and the gap between the frame and this first casing is closed by a flat, horizontally arranged cover element 5 having sealing lips 21 which engage the upper edge of the frame and accommodate movement between the engine and the frame. The second embodiment shown in Figure 3 differs from the first in that a first casing 14 extends over only a lower portion of the engine and the gap between the engine and the frame is closed by a bellows seal 15 extending horizontally from the lower edge of the frame, replacing the cover element and associated sealing lips of the first embodiment. In the opinion of the Board all of the materials of the encapsulation according to E1 are acoustically insulating.

4. It follows that the subject-matter of Claim 1 differs from that of E1 in that:

- the screen means include at least a pair of screens made of acoustically insulating material which project downwards from the frame and have respective substantially flat first portions facing the engine on opposite sides thereof, the screen means further including two respective elastic lips made of acoustically insulating
material and connected to the respective screens, the lips comprising respective first portions which extend on opposite lateral sides of the engine and cooperate elastically in a sliding manner with the outer surfaces of the first casing.

4.1 The two embodiments of E1 differ essentially in that in the second the role of the upper portion of the first casing in the encapsulation of the engine is performed by the frame 13 positioned further outboard, the casing being correspondingly reduced in height. The Board interprets the wording of Claim 1 in suit which specifies that the first casing encloses "a bottom end portion of the engine" as meaning that the first casing is arranged in a manner similar to the casing of E1 such that it extends upwardly only as far as necessary to co-operate with the screen means to achieve complete encapsulation of the engine. It follows that the differentiating features have the effect that the encapsulation in an area below the frame but above the lower portion having the first casing is spaced from the engine. The corresponding problem is to permit access to an area on the engine located below the frame without the need to remove the first casing.

5. In the opinion of the Board the skilled person with knowledge of E1 would not modify either of the encapsulation arrangements known therefrom in order to arrive at the subject-matter of Claim 1. An important feature of both embodiments according to E1 is that the first casing on the engine reaches to a maximum height of the upper edge of the crankcase in order that access to the upper region of the engine is optimised (column 1, lines 47 to 52). However, there is no
teaching that the reduced height of the first casing according to Figure 3 in comparison with that of Figure 2 is beneficial. A teaching that a benefit might be achieved by a still further reduction in the height of the first casing beyond that of Figure 3 to a level below the frame is equally absent, particularly as the problem of access to the lower region of the engine, which is solved by the subject-matter of Claim 1 in suit, is not addressed in E1. The Board therefore considers that the skilled person with a knowledge of E1 and faced with the need to provide encapsulation on a vehicle having a different height relationship between the frame and engine would attempt to employ a horizontally arranged cover and adjust the height of the first casing accordingly. In the Board's opinion the feature in Claim 1 in suit of screens projecting downwards from the frame therefore is not derivable in an obvious way from E1. Moreover, there is no disclosure in E1 of elastic lips which cooperate elastically in a sliding manner with the outer surfaces of the first casing.

6. E4 was filed by the appellant in order to provide evidence that the features of screens projecting downwardly from a frame and a lip seal between these screens and the lower portion of the engine had been made available to the public before the priority date and so rendered the subject-matter of Claim 1 obvious in the light of E1. In as far as the downward projection of the screens was added to Claim 1 during the opposition procedure, the filing of E4 is in response to this amendment and E4 therefore is not to be regarded as late filed within the meaning of Article 114 (2) EPC. However, it is established jurisprudence of the Boards of Appeal that, in the case
of alleged prior use, it is necessary that it be established what was made available to the public, how it was made available and when. E4 carries both the indication "update 359" and the date 25 February 2000. It follows that, although it also carries the indication "Jahr 91", it is not clear that what is illustrated was available to the public before the priority date of the patent in suit and, moreover, there is no indication that it has ever been fitted to a car in the public domain. In respect of the feature of a lip seal, the perspective illustration showing a sound insulating undersheet for a transverse-engined vehicle merely shows a double line around three edges of a cut out through which the engine sump would protrude. There is no support for the appellant’s allegation that these lines represent a lip seal. However, even if the appellant’s allegations had been fully substantiated, the undersheet is a single item which includes downwardly projecting side portions. It follows that the feature in Claim 1 of "at least a pair of screens" is not known from the combination of E1 and E4 and so the combination would fail to render the subject matter of the claim obvious.

7. The remaining documents E2, E3 either alone or in combination with E1 also fail to render the subject matter of Claim 1 obvious. Since the appellant has not relied on these documents during the appeal proceedings it is not necessary to treat these documents in more detail.

8. The Board therefore comes to the conclusion that the subject-matter of Claim 1 and therefore also of each of Claims 2 to 4 involves an inventive step.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

S. Fabiani F. Pröls