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# Datasheet for the decision of 1 September 2009

**Case Number:** T 0916/07 - 3.2.01

**Application Number:** 01103361.0

**Publication Number:** 1129874

**IPC:** B60J 5/04

**Language of the proceedings:** EN

**Title of invention:**
Vehicle door and process of assembling the vehicle door

**Patentee:**
Mazda Motor Corporation

**Opponent:**
Brose Fahrzeugteile GmbH & Co. KG, Coburg

**Headword:**
-

**Relevant legal provisions:**
EPC Art. 123(2)

**Relevant legal provisions (EPC 1973):**
EPC Art. 56, 84

**Keyword:**
"Added subject-matter (no)"
"Clarity - claims (yes)"
"Inventive step (yes)"

**Decisions cited:**
T 0002/83

**Catchword:**
-

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**Case Number:** T 0916/07 - 3.2.01

# D E C I S I O N
**of the Technical Board of Appeal 3.2.01**
**of 1 September 2009**

**Appellant**: (Opponent)
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**Decision under appeal:**
**Interlocutory decision of the Opposition Division of the European Patent Office posted 29 March 2007 concerning maintenance of European patent No. 1129874 in amended form.**

**Composition of the Board:**

**Chairman:** S. Crane
**Members:** H. Geuss
S. Hoffmann

## Summary of Facts and Submissions

I. The appeal is directed against the interlocutory decision posted 29 March 2007 maintaining the patent EP 1 129 874 in amended form.

II. During oral proceedings held 1 September 2009 the appellant (opponent) requested that the decision under appeal be set aside and the patent revoked.

It alleges lack of clarity (Art. 84 EPC 1973), added subject-matter (Art. 123 (2) EPC) and lack of inventive step (Art. 56 EPC 1973) concerning independent claims 1 and 6 as amended during the opposition proceedings relying in its arguments in particular on documents

D2 (DE 196 22 310 A1),
D3 (DE 297 23 025 U1) and
D6 (DE 295 07 235 U1).

III. The respondent (patentee) requested that the appeal be dismissed.

IV. Claim 1 according to the interlocutory decision of the Opposition Division reads as follows:

"A vehicle door comprising
an outer door panel (D2) disposed on a far side from a passenger compartment of a vehicle,
an inner door panel (D1) formed with an aperture (3) and disposed on a near side to the passenger compartment,
a mounting panel (P) to which functional devices of the vehicle door and door parts are mounted and which is

installed to the inner door panel (D1) to cover up the aperture (3) of the inner door panel (D1),
a door lock/unlock mechanism (33) being operative to lock and unlock the vehicle door, and
a linking member (31) connected to said door lock/unlock mechanism (33) through which said door lock/unlock mechanism (33) is operated,
a linking member guide hole (83) formed in the mounting panel (P);
wherein said linking member (31) passes through said linking member guide hole (83) from near the aperture (3) of the inner door panel (D1) and extends along the mounting panel (P) partly on said far side from the passenger compartment and partly on said near side to the passenger compartment, characterized by
a single cover member (70); wherein
the mounting panel (P) being made of plastic;
the door lock/unlock mechanism (33) being mounted to the rear part of the plastic mounting panel (P) on said far side from the passenger compartment in a space between said outer door panel (D2) and said inner door panel (D1);
the linking member guide hole (83) being formed in the plastic mounting panel (P) in close proximity to the door lock/unlock mechanism (33);
and a single cover member (70) being operative to enclose said door lock/unlock mechanism (33) and said linking member (31) extending along the plastic mounting panel (P) on far side from the passenger compartment so as to cover the door lock/unlock mechanism (33), said linking member (31) and said linking member guide hole (83)."

V. The appellant's submissions as relevant to the present decision may be summarized as follows:
The locking means are not enclosed only by the single cover member, but also by other parts; e.g. the mounting panel covers also the lock. Furthermore, "single" also meant "singular" which is in contradiction to the embodiment in which the cover member may be formed as an integral part with the plastic mounting panel.
Therefore, a single cover member was not originally disclosed so that the corresponding reference in claim 1 is an infringement of Art. 123(2) EPC.
With respect to clarity, the expression "… in close proximity …" as such is considered as vague and therefore unclear, so that claim 1 also offends against Art. 84 EPC 1973.

With regard to the objection of lack of inventive step in view of D2, the structure of the lock in the door according to the claim under dispute and document D2 is essentially the same. In particular, the lock in D2 is located in a recess of the inner door panel which means, its position is also between the inner and the outer panel. That being the case, the structures of both are functionally similar. Even if the Board were not recognize this feature as being disclosed in D2, it would be obvious for a skilled person to adapt the design of D2 in order to arrange the lock mechanism between the door panels.

With regard to the inventive step objection with respect to document D3, the last feature of claim 1 relating to the cover member merely defines a goal ("… so as to cover …" the lock, linking member and guide

hole) rather than a concrete technical design. The wording of the claim leaves it open whether the goal is achieved or not, so that lock, linking cable or guide hole may be not completely enclosed by the cover member. However, since the cover (Abdeckung 7) in document D3 only covers a part of the lock, this feature is also disclosed in D3. As a result, this means that the sole difference between the vehicle door of D3 and the subject-matter of the claim is the feature that the mounting panel is made of plastic. Nevertheless, the selection of plastic would be obvious for a skilled person.

Document D6 discloses in addition a support element (Tragelement 14), acting as an U-shaped cover, being able to enclose the linking member and the lock. According to D6 is also the purpose of this support element to improve antitheft protection (page 3, lines 1 to 12). A skilled person would therefore be able to combine documents D3 and D6 and to integrate the support arm of document D6 in the vehicle door of D3, thereby arriving at the subject-matter of the contested claim without any inventive step.

VI. The respondent's rebuttal was essentially the following:

Claim 1 as contested is clear according Art. 84 EPC 1973 and has not been amended in a way that it contains added subject-matter. Neither the appellant nor the opposition division has objected to the claim during the opposition proceedings.

Neither D2 nor D3 shows a structure that enables arranging the lock mechanism in the space between the

outer door panel and the inner door panel so that the door lock mechanism is prevented from being subject to direct impact force every time the door is closed. Furthermore, the door structure as shown in D2 is completely different from that claimed and does not allow an unauthorized opening of the vehicle door through the clearance between door and side window; hence, there is no need for a cover member protecting the linking means and the lock mechanism.
Document D3 shows a cover member. However this cover does not protect the linking member (Bowden cable), the guide hole or the locking mechanism from unauthorized access.
Document D6 does not disclose a linking member extending along a mounting panel which is protected by a cover but a cover for the link rods between the outer door handle and the lock mechanism.

## Reasons for the Decision

1. The appeal is admissible.

*Original Disclosure Art. 123(2) EPC, Clarity Art. 84 EPC 1973*

2. The appellant questioned the original disclosure of the feature "single" in a "… single cover member …" (letter of the appellant, 24. July 2009, page 2) and the clarity of the feature "… the linking member guide hole (83) being formed in the plastic mounting panel (p) in close proximity to the door lock/unlock mechanism (33)…"

The Board is of the opinion that claim 1 has not been amended in such a way that it contains subject-matter extending beyond the content of the application as filed, Art. 123(2) EPC. Furthermore, claim 1 is clear, concise and supported by the description, Art. 84 EPC 1973.

2.1 Paragraph [0033] of the application as published discloses a door latch unit cover 70 which is made as one piece. The explicit indication that the cover member as such is a one-piece part, justifies the feature "… single cover element …".

2.2 The appellant objects that the locking means are enclosed not only by the cover member itself but also by other parts, e.g. the mounting panel. Therefore the cover is not the sole element covering the lock, the linking means or the guide hole. As a result, "single" is not disclosed.
Furthermore, "single" could also mean "singular" which is in contradiction to the embodiment in which the cover member may be formed as a part integral with the plastic mounting panel (paragraphs [0013], [0044] and claim 4 as filed). "Single" implies that the cover member is a separate part.

2.3 The Board considers the expression "single" - in the sense of defining a numeral ("one piece") - does not imply a separate cover member. Even if there might be further parts which also enclose the lock, a clear definition of what is meant by a cover member is given in the description: "... The vehicle door is preferably provided with a cover member which covers the door lock/unlock mechanism and a part of the linking member

extending along the plastic mounting panel on the far side from the passenger compartment. The cover member reliably prevents the door lock/unlock mechanism and/or the linking member from an access from the outside of the vehicle with a foul intention to run away with the vehicle ..." (paragraph [0012]). The application discloses only one - single - cover element according to this definition.

2.4 The appellant considers the expression "… in close proximity …" as vague and therefore unclear.

2.5 However, the Board does not share this opinion for the following reason:
According to column 11, line 5 the handle linking cable 31 passes through a cable guide hole in the rear part of the mounting panel; the cable guide hole is near the aperture of the inner door panel, column 14, lines 28 to 33. These passages define "close proximity" in a clear and concise manner.

*Inventive Step*

The appellant objected to a lack of inventive step according to Art. 56 EPC 1973. Its arguments are based on the combination of:

- D2 and the general knowledge of a skilled person,
- D3 and the general knowledge of a skilled person and
- D3 and D6.

3. The subject-matter of independent claim 1 is not obvious in the light of document D2.

The Board is of the opinion that document D2 is not an appropriate starting point for the purpose of the evaluation of inventive step.

3.1 In the state of the art, two essentially different ways of locating a door lock are known (reference is made to the documents as cited in the Search Report):

- Either the lock is placed in the space between the outer and inner door panel in the wet area of the door which gives a high pull-out strength to the lock, but requires an expensive moisture-resistant design. Measures to protect the lock against malevolent access through the clearance between door (outer door panel) and side window have to be taken as well.
- Or the lock is positioned in the dry area, mounted on the inner door panel with respective advantages and drawbacks.

Document D2 discloses a door lock which is mounted on the inner door panel in a recess whereas the lock of the contested patent is mounted between the two door panels. The boundary conditions on design engineering are completely different in these two cases due to the differences in the structure.
Therefore, the Board regards the feature "… the door lock/unlock mechanism (33) being mounted … in a space between said outer door panel (D2) and said inner door panel (D1) …" (corresponding to feature 10 according to the appellant's feature analysis filed with the notice of appeal) as the principal difference between the subject-matter of the contested claim and document D2. D2 teaches that the lock should be brought from the wet area to the dry area on the inner door panel, column 1,

lines 51 to 64. The Board cannot identify any reason why a person skilled in the art should re-modify this feature in order to bring the lock back into the wet area. Instead, the teaching of D2 leads the skilled person away from an approach in which the lock is positioned inbetween the door panels.

3.2 The appellant argues that the structure of the lock according to the subject-matter of the claim under dispute and document D2 is the same:
The lock in D2 is located in a recess (Prägung 20) of the inner door panel. Thus the lock is embedded in the inner door panel, which means that its position is between the inner and the outer panel (D2, column 4, lines 2 to 12). Thus, the structures of both are functionally similar. Even if the Board did not see feature 10 as being disclosed in D2, it would be obvious for a skilled person to adapt the design of D2 in order to arrange the lock mechanism between the door panels.

3.3 The arguments of the appellant cannot be followed.
The lock in D2 is mounted on the compartment side of the inner door panel, column 2, lines 12 et seq. The fact that the inner door panel has a recess in the area of the lock fixing does not mean that the lock is mounted between the door panels. It is instead still fixed on the compartment side of the inner door panel.

The Board is of the opinion that the similarity in some aspects of the claimed and prior art structures can only be deduced with hindsight knowledge of the invention; the person skilled in the art would not have

any motivation to change the structural door design as shown in document D2 in the direction claimed.
The crucial question is not whether a skilled person could have modified the door lock of D2, but whether there is any teaching in the prior art that would have prompted the skilled person to adapt D2 in the way suggested (T 2/83, OJ 6/1984, 265). The appellant's arguments leave open why the skilled person would have taken document D2 as starting point and would have performed the modifications necessary to arrive at the claimed subject-matter.

3.4 Since it is not obvious for a person skilled in the art - with the knowledge of D2 - to mount the lock mechanism in the space between the inner and the outer door panel, the question as to whether other features of the claim are also disclosed in D2 is irrelevant.

4. The subject-matter of independent claim 1 is not obvious with regard to document D3.

4.1 Document D3 discloses the following features of claim 1:

A vehicle door comprising

1. an outer door panel disposed on a far side from a passenger compartment of a vehicle (ref. to fig. 1 Türaussenblech),
2. an inner door panel formed with an aperture and disposed on a near side to the passenger compartment (fig. 1),
3. a mounting panel to which functional devices of the vehicle door and door parts are mounted and which is

installed to the inner door panel to cover up the aperture of the inner door panel (Modulträger, 1),

4. a door lock/unlock mechanism being operative to lock and unlock the vehicle door (Schloss, 4, fig. 2 and 3),
5. and a linking member connected to said door lock/unlock mechanism through which said door lock/unlock mechanism is operated (Tragarm 2, figs. 1 to 4)
6. a linking member guide hole formed in the mounting panel (fig. 1, "… Durchbruch im Modulträger 1 … ", page 7, line 29 and fig. 5 );
7. said linking member passes through said linking member guide hole from near the aperture of the inner door panel and extends along the mounting panel partly on said far side from the passenger compartment and partly on said near side to the passenger compartment, (fig. 1: bowden cable 8 passes on both sides of the mounting panel);
8. a single cover member (Abdeckung 7);
9. wherein [ … ]
10. the door lock/unlock mechanism being mounted to the rear part of the … mounting panel on said far side from the passenger compartment in a space between said outer door panel and said inner door panel (it is the purpose of D3 to integrate the lock module between the panels, page 4, lines 15 to 22; however it is not directly mounted but via the linking means);
11. the linking member guide hole being formed in the … mounting panel in close proximity to the door lock/unlock mechanism (the guide hole of D3 could be seen also in close proximity since the hole is also in the rear area).

4.2 The subject-matter of claim 1 differs from the vehicle door as disclosed in D3 in the following features:

– the mounting panel being made of plastic (feature 9);

– the single cover member being operative to enclose said door lock/unlock mechanism and said linking member extending along the plastic mounting panel on far side from the passenger compartment so as to cover the door lock/unlock mechanism, said linking member (31) and said linking member guide hole (feature 12).

The problem to be solved can be regarded as to provide a vehicle door with improved antitheft protection, A2 publication, paragraph [0005].

A cover operative to protect the lock and the handle linking cable being in the inner space between the door plates by enclosing the lock and the respective part of the linking cable has not been suggested in the prior art. Furthermore, the subject-matter according to the features of claim 1 provides the option that the cover is fixable to the mounting panel which would decrease the mounting effort in total.

4.3 The appellant considers that the cover-member feature 12 merely defines a goal ("… so as to cover …" the lock, linking means and guide hole) rather than a concrete technical design. In its view "… so as to …" may also mean that lock and linking cable is not completely enclosed by the cover member. However, this is the situation of D3 in which the cover (Abdeckung, 7) only covers a part of the lock. Therefore, document D3 also

discloses feature 12; thus the sole difference between the vehicle door of D3 and the contested patent is feature 9, namely that the mounting panel is made of plastic. However, the selection of plastic among different materials would be obvious for a skilled person.

4.4 The Board agrees that the choice of plastic material cannot contribute to inventive step, but this is not the only distinction over the prior art according to D3. The wording of feature 12 is clear: according to the first part of feature 12, the cover has to enclose the lock/unlock mechanism and the part of the linking means which extends along the mounting panel on the far side from the passenger compartment.
Document D3 does not divulge a single cover which encloses a lock and a linking cable. In fact, the support arm (Tragarm 2) undertakes the task of a cover with respect to the linking Bowden cable. Cover 7 does not cover or enclose the lock but the connection between the outside actuation part (Außenbetätigungsteil 5) and the lock, page 7, lines 17 et seq.
Therefore, the situation in document D3 is completely different and not comparable with the claimed invention.

5. The combination of documents D3 and D6 also does not render the subject-matter of independent claims 1 obvious.

5.1 The Board is convinced that what is disclosed in document D6 cannot be combined with the teachings of document D3 to render the subject-matter of claim 1

obvious. The support element (D6: Tragelement 14) covers - similar to document D3 - the connection between the outside door handle and the lock (Verbindungsstange 18, 21: page 3, lines 1 to 12, fig. 4, page 7, lines 1 to 12). These connections between the outside door handle (Außenhandgriff 8) and the key cylinder (Schießzylinder 25) cannot be compared with the linking member according to the invention which is defined in feature 7 as in close relation to the mounting panel: the "… linking member passes through said linking member guide hole … and extends along the mounting panel partly on said far side … and partly on said near side …".
The Board considers that there are substantial differences in the technical design of the linking members in document D6 and those required by the contested claim, so that a skilled person would not be able to adapt the supporting element of D6 so as to constitute a cover according to claim 1 without inventive activity.

5.2 The appellant argues that document D6 discloses a support element, acting as an U-shaped cover which is able to enclose the linking member and the lock. The purpose of this support element would also be to improve antitheft protection; consequently a skilled person would be able to combine these documents and to integrate the support arm of document D6 in the vehicle door of D3, thereby achieving the feature combination of the contested claim without any inventive step.

5.3 The Board does not share this opinion.
From the combination of documents D3 and D6 the skilled person would derive that the cover (7) of D3 could be

improved in order to link the lock (4) and the outer door handle (5) together with a support element (Tragelement 14 of D6). However, the linking member - which corresponds to the Bowden cable in the support arm (Tragarm 2) - would not be integrated. The Board cannot identify any reason why a skilled person should do it: the Bowden cable is already sufficiently protected with the support arm.

6. Independent process claim 6 for assembling a vehicle door is worded in an analogous manner to claim 1 and the appellant did not attempt to advance any arguments with respect to this claim going beyond those advanced against claim 1.
Consequently for the reasons stated above the subject-matter of independent claim 6 is also not obvious in view of documents D2, D3 and the combination of D3 and D6.

## Order

## For these reasons it is decided that:

The appeal is dismissed

The Registrar: The Chairman:

A. Vottner S. Crane