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**Datasheet for the decision
of 5 December 2007**

Case Number: T 1300/04 - 3.2.01

Application Number: 01119230.9

Publication Number: 1149748

IPC: B60T 13/72

Language of the proceedings: EN

Title of invention:

Braking system for an automotive vehicle

Patentee:

Toyota Jidosha Kabushiki Kaisha, et al

Opponent:

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Headword:

-

Relevant legal provisions:

-

Relevant legal provisions (EPC 1973):

EPC Art. 76

Keyword:

"Requirements of Article 76 fulfilled (yes)"

Decisions cited:

T 1067/97, T 1110/97

Catchword:

-



Case Number: T 1300/04 - 3.2.01

D E C I S I O N
of the Technical Board of Appeal 3.2.01
of 5 December 2007

Appellant:

Toyota Jidosha Kabushiki Kaisha, et al
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Representative:

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Decision under appeal:

Decision of the Examining Division of the
European Patent Office posted 2 June 2004
refusing European application No. 01119230.9
pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: J. Osborne
Members: P. L. P. Weber
S. Hoffmann

Summary of Facts and Submissions

I. This appeal is against the decision of the Examining Division posted on the 2 June 2004 to refuse the European Patent application No. 01119230.9, the requirements of Art. 76(1) EPC not being fulfilled. In particular, the examining division took the view that there was no disclosure in the earlier application as originally filed (application No. 99102698.0) of a braking system without features directed to diagnosing the brake booster.

II. The appellant filed the notice of appeal on the 10 August 2004 and paid the appeal fee on the same day. It filed the statement of the grounds of appeal on the 11 October 2004.

III. Oral proceedings were held on the 5 December 2007.

The appellant requested that the decision under appeal be set aside and that the case be remitted and the Examining procedure continued on the basis of

- claims 1 to 15 filed with letter of 31 October 2003 (main request);
- claim 1 according to annex 1 filed with letter of 2 November 2007 together with claims 2 to 15 filed with letter of 31 October 2003 (first auxiliary request);
- claim 1 according to annex 1 filed with the letter of 2 November 2007.

Description pages 1, 2, 24 and 25 as filed during the oral proceedings.

Pages 26 to 60 as originally filed. Drawings as originally filed (second auxiliary request).

IV. Claim 1 according to the main request reads as follows:

1. A braking system of an automotive vehicle, comprising:
a brake operating member (10);
a booster (12) for boosting a brake operating force (F_p) acting on said brake operating member, said booster including an input rod (24) which receives said brake operating force;
a master cylinder (14) for producing a hydraulic pressure on the basis of an input force received from said booster;
a wheel brake cylinder (60) which is activated by the hydraulic pressure produced by said master cylinder, to brake a wheel (FL, FR) of the automotive vehicle;
a connecting mechanism (26, 250, 252, 258, 284; 26, 250, 252, 284, 310) connecting said brake operating member (10) and said input rod to each other, so as to permit a relative movement between said braking operating member and said input rod in an axial direction of said input rod by a predetermined distance,
wherein the connecting mechanism further includes a connecting member (26, 250, 252) connecting said brake operating member (10) and said input rod (24) to each other, so as to permit said relative movement between said brake operating member and said input rod in the axial direction of said input rod by said predetermined distance; and
a signal generating device (270; 340) generating an output signal relating to said brake operating force depending upon a distance of said relative movement, characterized in that said connecting mechanism (26, 250, 252, 258, 284; 26, 250, 252, 284, 310) includes

a pivotal member (258; 310) connected to said brake operating member such that said pivotal member is pivotable about an axis perpendicular to said axial direction, on the basis of the relative movement between said brake operating member and said input rod, said signal generating device (270, 340) generating said output signal depending upon a pivotal movement of said pivotal member about said axis, and an elastic member (284) for biasing said brake operating member and said input rod away from each other in said axial direction.

V. Claim 1 according to the first and second auxiliary requests reads as follows:

1. A braking system of an automotive vehicle, comprising:
a brake operating member (10);
a booster (12) for boosting a brake operating force (F_p) acting on said brake operating member, said booster including an input rod (24) which receives said brake operating force;
a master cylinder (14) for producing a hydraulic pressure on the basis of an input force received from said booster;
a wheel brake cylinder (60) which is activated by the hydraulic pressure produced by said master cylinder, to brake a wheel (FL, FR) of the automotive vehicle;
a connecting mechanism (26, 250, 252, 258, 284; 26, 250, 252, 284, 310) connecting said brake operating member (10) and said input rod to each other, so as to permit a relative movement between said braking operating member and said input rod in an axial direction of said input rod by a predetermined distance,

wherein the connecting mechanism further includes a connecting member (26, 250, 252) connecting said brake operating member (10) and said input rod (24) to each other, so as to permit said relative movement between said brake operating member and said input rod in the axial direction of said input rod by said predetermined distance; and

a signal generating device (270; 340) generating an output signal relating to said brake operating force depending upon a distance of said relative movement, characterized in that said connecting mechanism (26, 250, 252, 258, 284; 26, 250, 252, 284, 310) includes a pivotal member (258; 310) connected to said brake operating member such that said pivotal member is pivotable about an axis perpendicular to said axial direction, on the basis of the relative movement between said brake operating member and said input rod, and

an elastic member (284) for biasing said brake operating member and said input rod away from each other in said axial direction.

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

In relation to claim 1 according to the main request paragraphs [0065], [0067] (numbering according to published divisional application) provide a literal basis for a braking system without features directed towards diagnosis of the brake booster. The man skilled in the art will recognise that the same mechanism as the one claimed is used in mode (10) or in figure 8 and the corresponding part of the description and he would recognise that this same mechanism should work in the

same way. In paragraphs [0030], [0117], [0120] for instance there is no reference to the booster diagnosis system and only the technical effect of the connecting mechanism and the signal generating device is explained. The man skilled in the art would recognise that the teaching on how to generate the signal is independent of the booster diagnosis. Furthermore in paragraph [0114] it is clearly disclosed that the signal is generated in dependence upon pivotal movement of the pivotal member.

The same applies to the features of the dependent claims. The man skilled in the art would recognise that these features are in no way linked to the booster diagnosing system and that their teaching is separate from that of the diagnosing system.

Reasons for the Decision

1. The appeal complies with the requirements of Articles 106 to 108 and Rule 64 EPC. It is therefore admissible.
2. The originally filed descriptions of the earlier application and of the divisional application being identical in their content, in the following the board will refer to the published version of the divisional (EP-A-1 149 748), the numbering of the paragraphs being more detailed.

3. *Main request*

3.1 Claim 1 according to the main request almost exactly takes over the wording of paragraphs [0065] and [0067] describing so called modes (34) and (35).

Only the feature "said signal generating device generating said output signal depending upon a pivotal movement of said pivotal member about said axis" has been added in the characterising portion.

3.2 In these above mentioned paragraphs it is disclosed that:

- a connecting mechanism is present connecting the brake operating member and the input rod to each other, so as to permit a relative movement between the brake operating member and the input rod in an axial direction of the input rod by a predetermined distance
- the signal generating device generates an output signal relating to the brake operating force depending upon a distance of the relative movement,
- a pivotal member is connected to the brake operating member such that the pivotal movement is pivotal about an axis perpendicular to the axial direction of the input rod, on the basis of the relative movement between the brake operating member and the input rod.

In paragraph [0066] it is further mentioned that the relative movement of the brake operating member and the input rod of the booster is directly or indirectly utilized by the signal generating device.

These paragraphs do not directly and unambiguously disclose that the output signal of the signal

generating device is "necessarily" depending upon the movement of the pivotal member.

- 3.3 The appellant alleged that figure 8 and the corresponding part of the description would disclose a mechanism according to claim 1 (main request) since the embodiment shown there would clearly fall under the wording of claim 1 and there the signal generating device clearly generates the output signal depending upon a pivotal movement of the pivotal member.

The board cannot accept this line of argument. While it is accepted that the embodiment shown in figure 8 falls under the wording of claim 1 and that the feature of the signal generating device generating an output signal depending on a pivotal movement of the pivotal member is present, this results from a particular combination of features disclosed in the embodiment. In fact it constitutes one possible embodiment of the brake system according to claim 1 and clearly incorporates far more detailed features.

For instance the signal generating device is of a specific type (with a plunger or movable member 274) as explained in the description in paragraph [0112], the position of the signal generating device along the pivotal member is defined in the drawing as well as in paragraph [0112] as being near the free end portion of the lever 258, the elastic member 284 is positioned just opposite the signal generating device, the relative movement between the pedal member or brake operating member and the input rod is obtained by a constructional design shown in figure 9 and described for instance in paragraphs [0119] and [0120] of the

description, just to mention some of the most immediately apparent specific features.

The board accepts that the skilled man would recognise that the specific embodiment shown in figure 8 and described in the corresponding parts of the description falls under the wording of modes (34),(35). However, it considers that there is no direct and unambiguous disclosure of a combination of these modes with generally a signal generating device of any kind which in any kind of way outputs a signal depending upon the position of the pivotal member and this without any other of the additional features of the embodiment according to figure 8.

- 3.4 The appellant further alleged that, in particular given the detailed description of the functioning of the embodiment of figure 8 in the description of the application in paragraph [0114], the skilled man would recognise an independent teaching in the way the signal generating device operates in dependence upon the movement of the pivotal member.

The board can also not share this opinion since as already pointed out above, the embodiment described is far more specific than the one claimed in claim 1. The board sees no reason as to why the man skilled in the art would see an independent teaching specifically for the way the signal generating device is operated without for instance considering the way the relative movement between the brake pedal or brake operating member and the input rod is obtained which is clearly linked to the way the signal is obtained. In addition the kind of signal generating device used is very

specific as explained further above, so that even if the skilled man would recognise a separate teaching in the signal generating device shown in figure 8 this teaching would not be so general as the one of claim 1.

3.5 For these reasons the combination of features claimed in claim 1 constitutes a so-called intermediate generalisation. In accordance with consistent case law such intermediate generalisations of a more detailed disclosure are not admissible, see T 1067/97 and T 1110/97 (both not published in OJ EPO). Accordingly claim 1 according to the main request does not fulfil the requirements of Article 76(1) EPC because its subject-matter extends beyond the content of the earlier application as filed.

4. *First auxiliary request.*

4.1 Claim 1 according to the first auxiliary request does not comprise the feature of "said signal generating device generating said output signal depending upon a pivotal movement of said pivotal member about said axis" which was contained in claim 1 according to the main request.

The wording of present claim 1 exactly corresponding to that of paragraphs [0065] and [0067], claim 1 according to the first auxiliary request has originally been disclosed in the earlier application as filed.

The examining division in the contested decision held that the system according to paragraphs [0065] and [0067] (modes 34 and 35) was originally disclosed in the earlier application as being used only for the

purpose of diagnosing the booster. In accordance with that finding claim 1 according to the present second auxiliary request would not fulfil the requirement of Article 76(1) EPC. The board disagrees. Although the remainder of the teaching of the earlier application as originally filed is directed to a system which diagnoses the booster, the paragraphs [0065] and [0067] are a direct and unambiguous disclosure of a system having no booster diagnosis function.

- 4.2 The application documents according to the first auxiliary request however comprise sub-claims 2 to 15 and an introductory part of the description partly adapted to them.

In the opinion of the board as set out above in respect of the main request, the paragraphs [0065] and [0067] constitute a first, general disclosure of a braking system. A second disclosure of an embodiment of such a braking system in connection with a booster diagnosing system is in figure 8 and the corresponding parts of the description. As explained above this particular embodiment is however far more detailed than the general system specified in claim 1.

There is no disclosure of the general braking system not directed towards booster diagnosis but in combination with any detailed features.

It follows that there is no basis in the originally filed documents of the earlier application for sub-claims directed to whatever combination of a specific detail of the specific embodiment of figure 8 with the general teaching of claim 1.

The same applies for the introductory part of the description.

4.3 Consequently the set of documents according to the first auxiliary request contravenes Article 76(1) EPC, the multitude of intermediate feature combinations extending beyond the content of the earlier application as filed.

5. *Second auxiliary request.*

In this request the sole claim 1 is identical to that according to the first auxiliary request which, as set out above, does not per se offend the provision of Article 76(1) EPC. The introductory part of the description has been limited to an acknowledgement of state of the art documents and the reciting of the wording of claim 1. The rest of the description and the drawings corresponds to the earlier application as originally filed.

The application documents according to the second auxiliary request thus fulfil the requirements of Article 76(1) EPC.

6. It is to be noted in this respect, that fulfilling the requirements of Article 76(1) EPC does not mean that the application documents are in order for grant. It is during the examination phase that the examining division will have to check the documents for the other requirements. The requirements of Article 76(1) EPC being fulfilled only means that the application documents do not contain subject-matter which extends beyond the content of the earlier application as filed,

so that the application can be deemed to have been filed on the date of filing of the earlier application and can have the benefit of any priority right.

For the purpose of further examination the divisional application is thus to be treated as any other application.

7. The other requirements for grant not having been examined and the appellant having requested the remittal to the first instance for further prosecution, the board uses its discretionary power under Article 111(1) EPC and remits the case to the first instance for further prosecution.

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 for further prosecution.

The Registrar:

The Chairman:

A. Vottner

J. Osborne