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Aktenzeichen / Case Number / N<sup>o</sup> du recours : T 525/88 - 3.2.1

Anmeldenummer / Filing No / N<sup>o</sup> de la demande : 82 305 171.9

Veröffentlichungs-Nr. / Publication No / N<sup>o</sup> de la publication : 0 105 977

Bezeichnung der Erfindung: Self-adjusting brake device  
Title of invention:  
Titre de l'invention :

Klassifikation / Classification / Classement : F16D 65/54

**ENTSCHEIDUNG / DECISION**  
vom / of / du 15 November 1990

Anmelder / Applicant / Demandeur :

Patentinhaber / Proprietor of the patent /  
Titulaire du brevet :

Deere & Company

Einsprechender / Opponent / Opposant :

Alfred Teves GmbH

Stichwort / Headword / Référence :

EPÜ / EPC / CBE Art. 56, 106, 114(2), 104

Schlagwort / Keyword / Mot clé :

"Inventive step (yes)"  
"Late-filed documents"  
"Abuse of process (no)"  
"Apportionment of costs (no)"

**Leitsatz / Headnote / Sommaire**



Case Number : T 525/88 - 3.2.1

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.1  
of 15 November 1990

**Appellant :**  
(Opponent) Alfred Teves GmbH  
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**Representative :**

**Respondent :**  
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**Representative :**  
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**Decision under appeal :** Decision of Opposition Division of the European Patent Office dated 1 September 1988 rejecting the opposition filed against European patent No. 0 105 977 pursuant to Article 102(2) EPC.

**Composition of the Board :**

**Chairman :** P. Delbecque  
**Members :** P. Alting van Geusau  
M. Schar

## Summary of Facts and Submissions

- I. The mention of grant of European patent No. 0 105 977 in respect of European patent application No. 82 305 171.9 filed on 29 September 1982 was announced in Bulletin 86/49 of 3 December 1986.

The patent specification contains 6 claims with one independent claim which reads as follows:

"1. A self-adjusting brake device comprising a tubular member (50) frictionally restrained in a bore (20) in the fixed part (12) of a brake, a shank (48, or 58) passing through the tubular member and fixed to the movable part (26) of the brake, the shank having a head member (52 or 62) disposed at the end remote from the movable part of the brake, wherein the shank is coupled to the tubular member (50) with lost motion and, on operation of the brake, the shank is drawn with the movable part of the brake and wear is taken up by incremental axial withdrawal of the tubular member from the bore (20), and a compression spring (56) which biases the head member away from the tubular member when the brake is unoperated, characterised in that the tubular member is composed in part of a spring sleeve (50) known per se and in part of the compression spring (56) which is compressed solid when the brake is applied."

- II. Notice of Opposition was filed by the Appellant (Opponent) on 2 September 1987. The Appellant requested revocation of the patent on the grounds of Art. 100(a) EPC in that the claimed subject-matter did not involve an inventive step in particular in view of the prior art disclosed in DE-A-2 436 541 (D2) (Art. 56 EPC).

- III. By decision of 1 September 1988 the Opposition Division rejected the opposition setting out grounds as to why, in their opinion, even a combination of the teachings of FR-A-1 350 690 (D1) considered to represent the nearest prior art and D2 would not lead the skilled man to the subject-matter of Claim 1 of the contested patent.
- IV. On 1 October 1988 an appeal was lodged against this decision and the appropriate fee was paid.

The Statement of Grounds of Appeal was received on 24 December 1988. In the Statement of Grounds the Appellant referred furthermore to documents FR-A-2 370 899 (D3), DE-A-1 475 493 (D4) and FR-A-2 127 135 (D5).

- V. By letter of 8 August 1990 the Board summoned the parties to oral proceedings in accordance with an auxiliary request for oral proceedings filed by the Appellant.

In the oral proceedings it appeared that a request by the Appellant for a translation into the English language had not been received by the Board. The Appellant, however, declared that he agreed to proceed without a translator, thus withdrawing his request.

- VI. In the Grounds of Appeal and during the oral proceedings the Appellant put forward the following arguments in order to support his request for revocation of the patent.

When compared to the disclosure in D3 the subject-matter of Claim 1 of the patent in suit comprises additionally that the tubular member is composed in part of a spring sleeve known per se and in part of the compression spring which is compressed solid when the brake is applied. No combinatory interaction is seen in the application of

these features. The use of a spring sleeve in a self-adjusting brake device is already known from D2 and D4 and therefore no inventive activity is necessary to apply this teaching.

With respect to the feature that the spring is compressed "solid" the question arises whether this feature adds to the solution of the object of the patent; considering the functioning of the self adjusting brake device according to Claim 1 it is not considered clear on what the clearance of the brake pads depends. In particular, no definition is contained in Claim 1 of the respective spring pressures of the spring and spring sleeve so that possibilities are included that the spring sleeve is moved by the force of the spring rather than by application of the brake only. In this respect attention is drawn to the construction according to Figs. 5 and 6 of GB-A-1 062 248 which shows a compression spring in series with a stack of elastic rings gripping on a fixed rod. The position of the members of the released brake is determined, through an intermediate spacer sleeve, by the position of the rings on the rod. The elastic rings have a similar function as the spring sleeve in the patent in suit.

A spring which is used as a return spring and at the same time as a coupling member is in itself known from the arrangement disclosed in D5 which, further, does not apply a stop for limiting movement of the brake members. The corresponding feature of Claim 1 cannot be considered therefore to add inventive subject-matter either.

VII. The Respondent's counter-arguments put forward in writing and during the oral proceedings can be summarised as follows:

Having regard to the decision of the Board of Appeal T 220/83 (OJ EPO 1986, 249) which states the requirements an appeal must satisfy for it to be regarded as a valid appeal, the allowability of the present appeal is considered questionable. In particular, the Appellant did not state the legal or factual reasons why the contested decision should be set aside so as to ensure that the appeal may be assessed objectively as required in the last part of paragraph 4 of the decision mentioned above.

The Appellant's Grounds of Appeal further rely on documents (D3, D4 and D5) which are cited for the first time in the appeal procedure. As can be derived from the Board of Appeal's decision T 416/87 (OJ EPO 1990, 415), the appeal procedure is not intended to provide an opportunity for a second opposition to be filed outside the normal opposition term.

Since, for this reason, the present appeal is considered an abuse of process, an apportionment of cost is requested.

As regards the Appellant's argument that there is no combined effect from the use of the spring sleeve with a compression spring which is compressed solid when the brake is applied, the claim makes it quite clear that these two elements co-operate to form the tubular member. Further, the feature relating to "a compression spring which is compressed solid when the brake is applied" is, at least in the English authentic text, entirely clear. According to this feature, when the brake is applied and the spring is compressed the latter becomes a solid body which acts as an extension of the spring sleeve forming with it the tubular member which is withdrawn from the bore of the head member of the shank to compensate for

wear. Such a function is clearly different from the meaning the Appellant reads into Claim 1.

The fact that the compression spring forms part of the tubular member results in a very considerable constructional simplification neither disclosed nor hinted at in the prior art.

Concerning the newly cited documents which are no more relevant than the documents already cited in the proceedings, the Board should exercise its discretion under Art. 114(2) EPC and refuse to admit them.

The Respondent requested rejection of the appeal.

#### Reasons for the Decision

##### 1. Admissibility of the Appeal

- 1.1 As regards the Respondent's doubts whether the appeal indeed states the legal or factual reasons why the contested decision should be set aside (Art. 106 EPC), as well as the extent to which cancellation of the decision is requested (Rule 64(b) EPC), the Board is of the opinion that these requirements are met by the present appeal for the following reasons:

Although, as was also put forward by the Respondent, the Grounds of Appeal refer to 3 documents not mentioned in the contested decision the main issue e.g. an alleged lack of inventive step is based on document D2, referred to by the Opposition Division in their decision. It therefore can be considered a valid counter-argument representing reasons why the contested decision should be set aside. It is further considered clear from the first requests in the

appeal (request for setting aside the decision and revocation of the patent) that the decision is appealed to in its entirety.

1.2 Thus the appeal complies wholly with Art. 106 to 108 and Rule 64 EPC, and is, therefore, admissible (J 22/86, OJ EPO 1987, 280).

## 2. Novelty

2.1 The nearest prior art is considered to be disclosed in FR-A-1 350 690 (D1) also mentioned in the patent as a prior art disclosing the combination of features of the pre-characterising part of Claim 1.

Since none of the cited documents comes any closer to the subject-matter of Claim 1 the self-adjusting brake device defined in this claim is deemed novel in the sense of Art. 54 EPC.

2.2 It is noted that in the Grounds of Appeal the Appellant referred to FR-A-2 370 899 (D3) in Fig. 3 as a prior art containing all the features of the pre-characterising portion of Claim 1.

However, although the disclosed arrangement (in Fig. 3) is similar to the arrangement disclosed in D1, the tubular member (44) is shown frictionally restrained in clamping means 48 rather than in the bore in the fixed part of the brake as defined in the pre-characterising part of Claim 1. Since furthermore the arrangement shown in Fig. 3 does not contain any of the characterising features of Claim 1 under discussion, D3 lies further away from the claimed subject-matter than D1.



3. Inventive step

3.1 In accordance with the normal procedure followed by the Board in determining whether claimed subject-matter involves an inventive step it has first to be determined which problem or problems presented by the closest prior art are solved by provision of the features of the claimed matter which do not form part of that art.

3.2 The characterising features of Claim 1 relate to the facts

(a) that the tubular member is composed in part of a spring sleeve known per se and in part of the compression spring and

(b) that the compression spring is compressed solid when the brake is applied.

When compared to the known self-adjusting brake device disclosed in D1 those features lead to a simpler construction, in particular as regards the number of parts of the self-adjusting brake device itself and the adaptations to be made to the brake parts for receiving the self-adjusting brake device.

Proceeding on the basis of the above referenced prior art it is therefore the object of the invention set out in Claim 1 to provide a self-adjusting brake device which is extremely simple in construction (see also column 1, lines 23-25 of the description of the patent in suit).

3.3 No contribution to an inventive step can be seen in the appreciation of the problem since, in the Board's opinion, the skilled person is always seeking the most simple construction mainly for reasons of the lower production costs.

3.4 The Board notes that, as regards the characterising feature (b) the Appellant also questioned the interpretation of this feature. In particular he expressed doubt as to the exact functioning of the claimed device since no information was contained in the claim with respect to the relation between the force necessary to move the spring sleeve and the force the spring exercises before being compressed solid. Considering this relation, he was of the opinion that the arrangement of the spring sleeve and the spring disclosed in D2 or an arrangement such as referred to in the oral proceedings could give self-adjusting action without the spring being compressed totally.

Considering these arguments, the Board observes that although the difference in interpretation or the alleged resulting lack of clarity of a claim is not a ground for opposition, the above arguments are used as part of the argumentation that the subject-matter of Claim 1 lacks an inventive step for the reason that feature (b) is not different from what is practised in the prior art.

However, even taking into account the above argumentation the Board cannot see any difficulty arising from the wording of Claim 1.

In the claim it is clearly stated that the compression spring is compressed solid when the brake is applied. This means that the compression spring becomes an extension of fixed length to the spring sleeve when the brake is applied. From the further features of Claim 1 it is also clear that the lost motion between the shank and the spring sleeve is determined by the difference in length of the spring in its compressed (solid) and its extended state. The logical consequence of the compression spring being compressed solid is further that the spring force

itself cannot be sufficient for axial movement of the spring sleeve before being compressed solid.

The Appellant's explanations with respect to D2 cannot be followed either: in D2 the compression spring is clearly not compressed solid before the stop disc 18 reaches the head of bushing 15.

As regards an interpretation following a possible construction as referred to in the oral proceedings the Board sees no corresponding features relating to a tubular member composed in part of a spring sleeve and in part of a compression spring as defined in Claim 1 under discussion. Therefore the Board considers the Appellant's interpretation of Claim 1 as not being in agreement with the actual meaning the skilled man would read into the device defined in this claim.

- 3.5 The skilled person seeking a solution to the problem had at his disposal from the cited prior art a great number of different arrangements providing a self-adjusting function of the brake. However none of the cited references discloses the combination of features (a) and (b) referred to above, nor can they, in the Board's opinion, be considered to give a lead to these features in the claimed arrangement.

Document D2 relied upon by the Appellant discloses the use of a spring sleeve for adjustment of the brake pad but since restriction of the lost motion is achieved with a separate bushing and stop ring 17 this known arrangement cannot be regarded as giving a teaching to a combination of sleeve and spring to form the tubular member defined in Claim 1 under consideration. The Board agrees with the findings of the Opposition Division that the distinguishing features of Claim 1 have an essential

influence on the operational functioning of the device and cannot be arrived at by mere workshop modifications of the arrangement known from D2.

3.6 Concerning the late filed documents D3, D4 and D5 the Board, after having examined these documents, finds them to be not relevant in the sense of leading the Board to a different decision: i.e. none of these documents discloses the combination of features (a) and (b) referred to above and thus cannot give a lead to the proposed solution of the underlying problem of the present invention. Therefore, making use of its power conferred to it by Art. 114(2) EPC, the Board decided to disregard these documents (see T 156/84, OJ EPO 1988, 372, point 3.8). Due to all this, there is no reason to refer the case back to the first instance (T 416/87, OJ EPO 1990, 415, point 9).

3.7 In view of the foregoing consideration that no lead to the subject-matter of Claim 1 of the patent in suit can be derived from the cited documents, the self-adjusting brake device according to this claim is considered to imply an inventive activity (Art. 56 EPC and Art. 100(a) EPC).

4. It follows that Claim 1 is acceptable under Arts. 54 and 56 EPC. The same applies to the dependent Claims 2 to 6 which concern particular embodiments of the invention (Rule 29(3) EPC).

5. **Request for apportionment of costs**

5.1 The Respondent requests an apportionment of costs on the grounds that he suffered a substantial increase in his legal costs due to the fact that the appeal is an abuse of process because it is inadmissible, almost entirely without merit and supported by late filed documents, and also that oral proceedings were not necessary.

The Respondent's allegations are unfounded. The appeal is admissible (see point 1 above). It contests the patentability on the grounds mentioned in the opposition (inventive step; Art. 56 EPC) by essentially referring to document D2 cited in the contested decision. The late filed documents were found to be of no relevance (see point 3 above) as was alleged by the Respondent in the normal course of responding to the Statement of Grounds of the Appellant. These circumstances are different to the ones dealt with in T 416/87 (OJ EPO 1990, 415) referred to by the Respondent. Furthermore each party is entitled to request oral proceedings (Art. 116(1) EPC). In the present case they even served to reach an important clarification of the conflicting views regarding the interpretation of Claim 1 in the light of the cited documents.

- 5.2 Under these circumstances no undue increase of costs can be seen nor can an abuse of process be attributed to the Appellant. Therefore no reason of equity can be found to make an exception to the principle that each party has to bear the costs he has incurred for the appeal proceedings (Art. 104 and Rule 66 EPC).

**Order**

**For these reasons, it is decided that:**

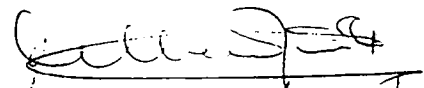
1. The appeal is dismissed.
2. The request for an apportionment of costs for the appeal procedure is rejected.

The Registrar:



S. Fabiani

The Chairman:



P. Delbecque

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