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**D E C I S I O N**  
**of 29 April 2004**

**Case Number:** T 0934/02 - 3.2.1  
**Application Number:** 95304228.0  
**Publication Number:** 0695887  
**IPC:** F16D 69/02, C08J 5/04  
**Language of the proceedings:** EN  
**Title of invention:**  
Friction lining materials  
**Patentee:**  
BorgWarner Inc.  
**Opponent:**  
Verband der Reibbelagindustrie e.V  
**Headword:**  
-

**Relevant legal provisions:**

EPC Art. 54, 56, 106, 108 third sentence, 123(2), 123(3)  
EPC R. 57a, 64(b)

**Keyword:**

"Appeal of the patent proprietor based on a new request for amendment (admissible)"  
"Main request rejected in the opposition division decision-formulation attempt, not partial surrender"  
"Inventive step (yes)"

**Decisions cited:**

J xx/87, T 0123/85, T 0105/87, T 0296/87, T 0717/01

**Catchword:**

- I. An appeal of the patent proprietor is to be considered sufficiently substantiated within the meaning of Article 108, third sentence EPC by filing amended claims which deprive the contested decision of its basis, even though it does not state any specific reasons why the contested decision is wrong. It is therefore not necessary and would also be pointless for the purposes of adequately substantiating an appeal, to file grounds in support of a version of a claim that the appellant (patent proprietor) no longer defends in the appeal proceedings. (see point 2 of the reasons).
  
- II. Where a patent proprietor appeals against an interlocutory decision, maintaining a patent in amended form in accordance with an auxiliary request the main request rejected by the opposition division is to be considered as a formulation attempt which does not prevent the patent proprietor from submitting in the appeal proceedings a new main request having a claim 1 broader in scope than that of the rejected main request but narrower than that of the granted version (see point 3 of the reasons).



Case Number: T 0934/02 - 3.2.1

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.1  
of 29 April 2004

**Appellant 01:** BorgWarner Inc.  
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**Appellant 02:** Verband der Reibbelagindustrie e.V.  
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**Representative:** Dallmeyer, Georg, Dipl.-Ing.  
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**Decision under appeal:** Interlocutory decision of the Opposition  
Division of the European Patent Office posted  
16 July 2002 concerning maintenance of European  
patent No. 0695887 in amended form.

**Composition of the Board:**

**Chairman:** S. Crane  
**Members:** M. Ceyte  
G. Weiss

## Summary of Facts and Submissions

- I. The appellant 01 is proprietor of European patent No. 0 695 887 (application No. 95 304 228.0).
- II. The patent was opposed by the appellant 02 on the grounds of lack of novelty and lack of inventive step.

The following state of the art was *inter alia* cited:

D1: US-A-5 290 627 (which corresponds to DE-A-4 211 010)

D6: EP-A-0 352 363.

- III. By its interlocutory decision dated 11 July 2002 the opposition division maintained the European patent in the amended form on the basis of the auxiliary request.

It rejected the main request on the grounds that the subject-matter of claim 1 was not inventive over the combination of D1 and D6.

- IV. On 12 September 2002 the patent proprietor (appellant 01) lodged on appeal against the decision and paid the prescribed appeal fee.

The statement of grounds of appeal was filed on 25 November 2002.

- V. On 24 September 2002 the opponent (appellant 02) lodged an appeal against the decision and paid the prescribed appeal fee.

The statement of grounds of appeal was filed on 18 November 2002.

VI. Oral proceedings before the Board were held on 29 April 2004.

The appellant 01 (patent proprietor) requested that the decision under appeal be set aside and that the European patent be maintained on the basis of one of the sets of documents according to the main request (called hereafter "new main request") and first to fourth auxiliary request submitted with letter dated 29 March 2004.

The appellant 02 (opponent) requested that the decision under appeal be set aside and that the European patent be revoked.

Claim 1 according to the new main request reads as follows:

"1. A fibrous base material for use in a non-asbestos friction material, comprising a plurality of fibrillated aramid fibers having a freeness of 150 to 450 on the Canadian Standard Freeness Index, cellulose fibers, and a silica filler material, wherein the filler material is held onto the surface of the fibrous base material by the fibrillated aramid fibers; the fibrous base material, comprising in percent, by weight, based on the weight of the fibrous base material, 15 to 25%, by weight, fibrillated aramid fibers; 5 to 30%, by weight, cellulose fibers; and 45 to 70%, by weight, silica filler material."

In support of its requests the appellant 02 (opponent) made essentially the following submissions:

- (i) The provisions of Rule 64(b) EPC require that the notice of appeal contains a statement identifying the extent to which amendment or cancellation of the decision is requested. It is not the case here, since the notice of appeal filed by the appellant 01 (patent proprietor) merely states that the interlocutory decision is "appealed against to the extent that it is contrary to the interests of the appellant".

In the statement of grounds it is requested to maintain the patent on the basis of a new main request with a claim 1 of considerably altered scope which now claims a fibrous base material for use in a non-asbestos friction material. The previous main request which was rejected by the opposition division was not concerned with a fibrous base material but with a non-asbestos friction material comprising a fibrous material impregnated with 35 to 65% by weight pick up of resin.

However, the purpose of the appeal procedure *inter partes* is mainly to give the losing party the possibility of challenging the decision of the opposition division on its merit. A patent proprietor who has lost before the opposition division thus has the right to have the rejected requests reconsidered by the Board of Appeal.

To file an appeal not for reversing the decision on one of the requests actually considered by the opposition division, but only on the basis of an entirely different new main request raising issues never considered by the opposition division is not in accordance with the above main purpose.

A new main request with a claim 1 of considerably altered scope may be considered as admissible only if for the patent proprietor such a new request represents the last chance to obtain any patent for the particular subject-matter. In the present case it is difficult to see why this new main request should represent the last chance, given that the scope of protection of claim 1 has been considerably extended.

- (ii) Under Rule 57a EPC amendments during opposition proceedings are admissible only if they are required in order to meet a ground for opposition. The mere change of the scope of protection and the mere removal of the feature "impregnated with 35% to 65% by weight pick up resin" cannot be said to meet a ground for opposition. The admissibility of amendments to claim 1 of the new main request cannot therefore be based on Rule 57a EPC. Accordingly, the new main request should not be admitted into the proceedings.

(iii) The new main request of the patent proprietor is concerned with a fibrous base material containing silica filler material. According to the original disclosure, the fibrous base material contains "at least one type of filler material". The deletion of the above quoted feature in claim 1 of the new main request contravenes Article 123(2) EPC.

The application as filed only discloses 45% to 70% of a variety of filler materials considered in combination, not 45 to 70% silica filler alone as claimed in claim 1 of the new main request. Thus claim 1 does not meet in this respect the requirements of Article 123(2) EPC.

(iv) D6 discloses

- a fibrous base material for use in a non-asbestos friction material
- the fibrous material comprising a plurality of fibrillated aramid fibres having a freeness of 425 on the Canadian Standard Freeness index (page 8, Table 1, example 4c)
- cellulose fibres (page 6, line 2) and
- a filler material held onto the surface of the fibrous base material by the fibrillated aramid fibres
- the fibrous base material comprising in per cent by weight, based on the weight of the friction material



- 15% by weight ... fibrillated fibres (claim 8)
- 5 to 25% by weight cellulose fibres (page 6, Table "first system") and
- 0-40% by weight ... filler material (page 6, Table "first system").

In this citation (page 6, lines 49 to 50) a percentage of the fibrillated fibres may be combined with aramid fibres. According to the patent under appeal (see claim 8 as granted) silica filler is equivalent to other filler materials such as "carbon particles" used in D6 and D1 teaches the use of silica filler in a comparable friction material.

Therefore the subject-matter of claim 1 of the new main request is rendered obvious by the combination of D1 and D6.

- VII. The appellant 01 (patent proprietor) argued that the new main request was formally admissible and did not contravene Article 123(2) EPC. It also submitted the reasons for which the subject-matter of claim 1 of this new main request was inventive over the combination of D1 and D6.

### **Reasons for the Decision**

1. The appeal of the appellant 02 (opponent) meets the requirements of Articles 106 to 108 and Rule 64 EPC and is therefore admissible.

2. *Admissibility of the appeal of the patent proprietor*

Together with its statement of grounds of appeal the patent proprietor filed a main new request, whose claim 1 is concerned with a fibrous base material for use in a non-asbestos friction material.

The previous main request rejected by the opposition division was not concerned with a fibrous base material but with a non-asbestos friction material comprising a fibrous material impregnated with 35% to 65% by weight pick up of resin. The statement of grounds of appeal does not deal with the main request rejected by the opposition division and thus does not state any specific reasons why the interlocutory decision was wrong. However, the statement of grounds sets out in detail the reasons for which the subject-matter of claim 1 according to the appended new main request should be considered as inventive over the combination of D1 and D6.

The appellant 02 (opponent) submits in essence that the appeal of the patent proprietor is not admissible since it is based on new amended claims which are not within the scope of the main request rejected in the opposition division's decision. The purpose of an appeal is namely to reverse the decision on the rejected request not to examine an entirely different new main request raising issues never considered by the opposition division.

The Board is unable to follow such reasoning.

The issue of admissibility has namely to be considered in the light of Articles 106 to 108 and Rule 64 EPC. There is nothing in these provisions supporting the idea that the task of a Board should be strictly limited to considering the claims contained in the requests rejected by the opposition division.

Furthermore, in accordance with the established jurisprudence of the Boards, an appeal is to be considered sufficiently substantiated to satisfy the requirements of Article 108, third sentence EPC even if it does not give the reasons why the decision is contested, provided the two following criteria are met

- (i) The subject of the proceedings has changed eg due to the filing of a new set of amended claims together with the statement of grounds and
- (ii) The reasons for the decision are no longer relevant in view of the change in the subject of the proceedings, (cf in particular J xx/87 dated 17 August 1987, OJ EPO 1988, 323, point 1.4 and T 105/87 dated 25 February 1988, not published in OJ EPO).

More precisely, decision T 717/01 which refers to the above cases states the following (point 2 of the reasons): An appeal of the patent proprietor is to be considered sufficiently substantiated within the meaning of Article 108, third sentence, even though it does not state any specific reasons why the contested decision is wrong, if

- (i) there is a change in the subject of the proceedings due to the filing of new claims together with the statement of grounds
- (ii) the statement of grounds sets out in detail why the raised grounds for opposition do not prejudice the maintenance of the patent as amended on the basis of these new claims.

In particular, the present Board sees no reason why the appellant 01 (patent proprietor) in its appeal should be obliged to deal with the reasoning in the opposition division's decision when such reasoning no longer applies in view of the amended claims. An appeal may be substantiated by filing amended claims which deprive the contested decision of its basis. It is therefore not necessary, and would also be pointless, for the purposes of adequately substantiating an appeal, to file grounds in support of a version of a claim that the appellant (patent proprietor) no longer defends in the appeal proceedings.

It is not contested that the statement of grounds gives in detail the reasons why the subject-matter of claim 1 according to the new main request should be considered as novel over D1 or D6 as well as inventive over the combination of these two citations.

Accordingly, the appeal of the appellant 01 (patent proprietor) meets the requirements of Article 108, third sentence. Since it meets the further admissibility criteria set out in Articles 106 to 108 and in Rule 64 EPC, the appeal of the patent proprietor is admissible.

3. *Admissibility of the new main request*

3.1 The fibrous base material claimed in claim 1 as granted comprised:

(i) A plurality of fibrillated aramid fibres, having a freeness of about 150 to 650 on the Canadian Freeness Index;

(ii) Cellulose fibres; and

(iii) At least one type of filler material.

Claim 3 as granted specified the proportions of the components (i) to (iii), and, in particular, specified that the filler should be present in an amount of 45 to 70% by weight.

Claim 5 as granted specified that the fibrillated aramid fibres, have a freeness of about 150 to 450 on the Canadian Freeness Index.

Claim 8 as granted specified that the filler material is *inter alia*, silica filler.

Claim 1 of the new main request is a combination of granted claims 1, 3, 5 and 8 (insofar as claim 8 related to the silica filler).

Claim 1 of the previous main request rejected by the opposition division claims a non-asbestos friction material comprising a fibrous material as defined in claim 1 of new main request and impregnated with 35% to

65% by weight pick up of resin. There is no doubt that claim 1 of the main request is broader in scope than the claim 1 of the main request rejected by the opposition, but narrower defined than granted claim 1.

3.2 In accordance with the established jurisprudence of the Boards, the EPC makes no provision for a patent proprietor to surrender his patent in opposition proceedings. This means that (even where there has been an express declaration of surrender, which is not the case) he cannot surrender his patent either wholly or in part. The patent proprietor can only request that it be amended and, in principle, can withdraw or amend such a request at any time provided no abuse of procedural law is involved or unless in that particular case a prohibition on *reformatio in peius* applies. Accordingly a new version of the claim is to be regarded as a formulation attempt and not as a renunciation of more extensive protection (see i.a. T 123/85 OJ EPO 1989, 336, points 3.1.1 and 3.1.2 of the reasons and T 296/87 OJ EPO 1990, 196, point 2 of the reasons). In other words even the patent proprietor which has defended his patent only to a limited extent in opposition proceedings is not *a priori* prohibited from returning during the appeal proceedings to a broader version, including the granted version, of its patent, since intervening limitations of the patent do not imply any renunciation of parts of the patent but are rather to be regarded merely as attempts to word the patent so as to delimit it against objections.

3.3 Given that in accordance with this established case law such a formulation attempt does not prevent the patent proprietor from returning to the granted version of the

patent in the course of the proceedings, it must be considered *a fortiori* that the patent proprietor has the right to submit a new version of the claims which is more restricted in scope than the granted version, insofar as his doing so does not amount to a misuse of the proceedings.

This means in the present case, that the patent proprietor has the right (i) to amend the main request rejected by the opposition division which is to be regarded as a formulation attempt and (ii) to seek to defend the patent in amended form on the basis of the new main request having a claim 1 which is broader in scope than that of the rejected main request but narrower than that of the granted version.

The Board is unable to follow the opponent's submissions that the amended version of the claims according to the new main request is not allowable under Rule 57a EPC. According to these provisions, amendments to the claims are permitted in opposition proceedings, provided that they are occasioned by grounds specified in Article 100 EPC even if the respective ground has not been invoked by the opponent. As already outlined, claim 1 of the new main request is a combination of granted claims 1, 3, 5 and 8. It cannot be denied that this more restricted version was filed in response to the objection of lack of patentability raised by the opponent in order to overcome this objection. This new main request was submitted together with the statement of the grounds of appeal (and slightly amended by letter dated 29 March 2004) and thus cannot be disregarded as not submitted in due time.

3.4 As outlined on the above analysis, the previous main request rejected by the opposition division is to be considered as a formulation attempt to overcome the ground of lack of patentability, which does not prevent the patent proprietor from submitting another version of the claims which is more restricted than the granted version provided no abuse of procedure is involved. It is therefore immaterial that as alleged by the opponent this new main request differs "considerably" in scope from the previous main request. In this context it is however observed that the essence of the invention claimed in the previous main request lies in the fibrous base material contained in the claimed non-asbestos friction material and that such fibrous base material is now claimed as such in claim 1 of the new main request. In the present case, therefore, there can in any case be no question of the subject-matter of the claims involved being entirely different.

4. *Article 123 EPC*

As already stated, claim 1 of the new main request is a combination of granted claims 1, 3, 5 and 8 (insofar as granted claim 8 related to silica filler). Article 123(3) EPC is not violated since the protection conferred is more restricted than in the version granted.

The modification of the feature "at least one type of filler material" in claim 1 as filed into "silica filler material" is supported by claim 9 as filed which specifies that the filler is selected from the group comprising silica filler, carbon particles and glass



bead, especially when considered in combination with the preferred embodiments disclosed, in all of which a silica material is the only filler present. On this basis it is apparent that the requirement of claim 3 as filed that there be about 45 to about 70% by weight of filler material extends to the situation where a silica material is the only filler, thus supporting the feature of present claim that the fibrous base material comprises "45 to 70%, by weight, silica filler material".

It follows that amended claim 1 of the new main request meets the requirements of Article 123(2) EPC.

5. *Inventive step*

5.1 The invention the subject of the European patent is concerned with a fibrous base material for use in a non-asbestos friction material and with a composite friction material comprising the above fibrous base material impregnated with a phenolic or phenolic-based resin.

It is stated that the friction material is especially useful in continuous slip clutch applications in which low vibrations or "shudder" are produced. One factor affecting the shudder resistance of the continuous slip torque is said to be the property of the friction material used in this continuous slip application, see paragraph [004] of the patent specification. In order for friction materials to be useful in such applications, the friction material must have a wide variety of characteristics: In particular it must possess good shear strength when permeated with brake

fluid or transmission oil during use. The fluids absorbed into the friction material must be capable of being squeezed or released from the friction material quickly under the pressures applied during the continuous clutch operation (see paragraph [0006] of the patent specification).

Dealing with the question which of the two citations D1 and D6 is more closely related to the subject-matter of the patent under appeal, it must be borne in mind that D6 is concerned with the addition of fibrillated acrylic fibres to non-asbestos type friction materials for the purpose of improving the structural integrity of preforms used in the manufacture of friction elements (page 1 first paragraph). In contrast, D1 discloses friction material utilized for wet brake or clutches operating in oil.

Since the object of the invention is also a non-asbestos friction material for use when permeated with brake fluid or transmission oil, the Board concludes that D1 represents the closest prior art.

- 5.2 The fibrous material for use in a non-asbestos friction material disclosed in this citation comprises the following components: 5-70 wt% of fibrillated ramie fibres, 0-65 wt% of cotton pulp, 3-10 wt% of friction dust, 1-10 wt% of rouge, 1-10 wt% of graphite, 1-10 wt% of rubber latex, 10-30 wt% of diatomaceous earth (which is a silica filler) and 0-30 wt% of aramid fibres (see claim 1).

This citation thus does not disclose the provision of an amount of silica filler above 45%. Nor can it be

seen as disclosing, within the very broad ranges defined, the specific combination of 15 to 25 wt% of fibrillated aramid fibres and 5 to 30 wt% of cellulose fibres. Indeed, in the only particular example of D1 which actually comprises aramid fibres these are present only to 5 wt%, whereas the total amount of cellulose fibres is 55 wt%.

The patent proprietor has annexed to its statement of grounds experimental evidence which compares the materials according to the invention (examples III and IV in the European patent, noted as F-1 and F-2) to a conventional formulation as described in D1 noted as C-1 and C-2. C-1 has the formulation of 57,5% cotton, 5% aramid fibre and 37,5% silica which is the type of low silica filler formulation disclosed in D1. C-2 has the formulation of 30% cotton 25% aramid fibre, 25% silica and 25% graphite particles. As it is apparent from these tests, the materials of the present invention have better anti-shudder properties than the conventional materials C-1 and C-2.

Thus, starting from the closest prior document D1 the problem to be solved may be seen in providing a formulation for a fibrous base material which improves the anti-shudder characteristics of the friction material comprising such fibrous-base material, when used in transmissions having continuous slipping torque converter clutches.

This problem is in essence solved by the claimed fibrous base material having 15 to 25% in weight fibrillated aramid fibres having a freeness of 150 to

450 on the Canadian Standard Freeness Index with 45% to 70% in weight of silica filler.

5.3 D6 in the table on page 6 refers to a "first system" which may have the following components:

Inorganic fibers:	20-70 wt%
Cellulose fibers:	5-25 wt%
Carbon material:	0-40 wt%
Thermosetting organic binder:	10-60 wt%

The components mentioned above are said to be discussed in greater detail in US-A-4 125 495 "which patent is hereby incorporated by reference for the purpose of such additional description" (page 6, lines 17, 18). In this US citation it is specified that the inorganic fibres may be asbestos fibres, glass fibres, rock wool, fibrous talc and mixtures thereof (column 3, lines 46 to 48)

According to the invention disclosed in D6, the fibrillated acrylonitrile fibres may replace, in whole or in part, the fibres of this first system. The addition of these fibres is stated to improve the flexural strength, stiffness and structural integrity of the preforms used in the manufacture of friction elements. A percentage of the fibrillated acrylonitrile fibres may be combined with aramid fibres.

D6 does not however contain any specific disclosure of a fibrous base material comprising both cellulose fibres and fibrillated acrylonitrile fibres, let alone a specific disclosure of a fibrous base material comprising both cellulose fibres and fibrillated aramid

fibres. To argue, as does the opponent, that on the basis of the general indications in D6 there is a disclosure not only of these two types of fibres required by present claim, but also in the proportions defined there, is purely fanciful. Furthermore D6 does not teach the use of a silica filler material. Instead it merely teaches the use of carbonaceous material (coke particles, graphite particles and carbon black) as filler.

Thus there is nothing in D6 which could encourage the person skilled in the art to modify the fibrous base material formulations proposed in D1 by combining cellulose and aramid fibres in the weight ranges defined together with a high proportion of silica filler from 45 to 70 wt% in order to improve the anti-shudder characteristics of the friction materials manufactured from the fibrous base material.

- 5.4 As already indicated above D1 represents in the Board's opinion the most appropriate starting point for evaluating inventive step. The opponent, however, preferred to launch its attack starting from D6, arguing that the only distinction of the claimed subject-matter over this prior art was the use of a silica filler instead of a carbonaceous filler material. This approach is doomed to failure in the first place since, as explained above, D6 does not disclose the claimed combination of cellulose fibres and aramid fibres. Furthermore, the experimental evidence adduced in comparison with C-1 and C-2 shows that the selection of a silica filler is required for improving the anti-shudder properties of friction materials. The selection

of 25 wt% of a carbon filler with 25 wt% of silica filler is not so effective.

Accordingly, contrary to the opponent's submission, the incorporation of a silica filler cannot be considered as equivalent to that of a carbonaceous filler such as carbon particles. As stated by the patent proprietor, silica filler in particular diatomaceous earth has a microporous surface structure which is different from the surface structure of carbon particles. They have different properties such as oil adsorption capability, particle hardness, surface area, particle density and more importantly particle chemistry. Therefore diatomaceous earth provides a friction material having different characteristics than a friction material with carbon particles.

5.5 Accordingly the subject-matter of claim 1 involves an inventive step (Article 56 EPC).

6. Dependent claims 2 to 4 which relate to particular embodiments of the fibrous base material claimed on claim 1 are likewise allowable. The same applies to claims 5 to 7 for a non-asbestos friction material comprising the claimed fibrous base material.

The opposition grounds thus do not prejudice the maintenance of the European patent as amended.

## 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 with the order to maintain the patent on the basis of the following documents:
  - claims 1 to 7 and amended description according to the main request filed with letter of 29 May 2004
  - drawings as granted.

The Registrar:

The Chairman:

S. Fabiani

S. Crane