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**Datasheet for the decision
of 1 March 2012**

Case Number: T 1042/10 - 3.2.08
Application Number: 04254993.1
Publication Number: 1521009
IPC: F16D 69/02, C04B 35/83
Language of the proceedings: EN

Title of invention:

Friction material containing partially carbonized carbon fibers

Applicant:

BorgWarner, Inc.

Headword:

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Relevant legal provisions:

EPC Art. 123(2)

Relevant legal provisions (EPC 1973):

EPC Art. 84

Keyword:

"Added subject-matter (no, after amendment)"
"Clarity (yes, after amendment)"

Decisions cited:

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Catchword:

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Case Number: T 1042/10 - 3.2.08

D E C I S I O N
of the Technical Board of Appeal 3.2.08
of 1 March 2012

Appellant: BorgWarner, Inc.
(Applicant) 3850 Hamlin Road
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Representative: Hedges, Martin Nicholas
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 30 November 2009
refusing European patent application
No. 04254993.1 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman: T. Kriner
Members: M. Alvazzi Delfrate
U. Tronser

Summary of Facts and Submissions

- I. By decision posted on 30 November 2009 the examining division refused European patent application No. 04 254 993.1 on the grounds of Articles 84 and 123(2) EPC.
- II. The appellant (applicant) lodged an appeal against this decision on 25 January 2010, paying the appeal fee on the same day. The statement setting out the grounds of appeal was filed on 29 March 2010.
- III. The appellant requested that the appealed decision be set aside and that a patent be granted on the basis of the main request or, in the alternative, of the auxiliary request, both filed with letter dated 14 December 2011.
- IV. Claim 1 of the main request reads as follows:
- "A wet use friction material (10) comprising a fibrous base material (12) impregnated with at least one curable resin, the fibrous base material (12) comprising a porous primary layer and one secondary layer, the secondary layer comprising partially carbonised carbon fibres on at least one surface of the primary layer, the partially carbonised fibres covering 3% to 90% of the surface area of the primary layer, wherein the secondary layer comprises 10% to 30%, by weight, of partially carbonised fibres, based on the weight of the fibrous base material (12), wherein the partially carbonised carbon fibres are 65 to 90% carbonised, and wherein the porous primary layer comprises a plurality of less fibrillated aramid fibres

having a freeness of at least 300 on the Canadian Standard Freeness (CFS) index, and optionally one or more of the following: cotton fibres, carbon fibres, carbon particles, and, at least one filler material."

The text of the auxiliary request is not relevant to the present decision.

Reasons for the Decision

1. The appeal is admissible.
2. Article 123(2) EPC
 - 2.1 Claim 1 is based on claim 6 of the application as originally filed, amended in the following way:
 - (a) the friction material is specified to be a wet use friction material;
 - (b) the partially carbonised fibres cover (rather than comprise) 3 to 90% of the surface area of the primary layer;
 - (c) the secondary layer comprises 10 to 30%, by weight, of partially carbonised fibres, based on the weight of the fibrous base material (12), wherein the partially carbonised carbon fibres are 65 to 90% carbonised;
 - (d) the porous primary layer (rather than the fibrous base material) comprises a plurality of less

fibrillated aramid fibres and the optional components;

- (e) the terms "substantially" and "about" in connection with numerical ranges have been deleted.

The above amendments (a) to (e) do not extend the subject-matter of the application beyond the content of the application as filed, for the following reasons:

- (a) The feature that the friction material is a wet use friction material is disclosed for instance in paragraph [0016] of the application as originally filed.
- (b) The feature that the partially carbonised fibres cover 3 to 90% of the surface area of the primary layer simply clarifies the wording of claim 6 of the application as originally filed, without changing this meaning. It is also disclosed in paragraph [0050].
- (c) A content of 10 to 30% of partially carbonised fibers for a two-layer friction material is disclosed in paragraph [0025] of the application as originally filed, which also discloses carbonisation of 65 to 90%. Although this paragraph does not explicitly define the basis on which the content of the fibers is measured, this is made clear by claims 23 and 26, relating to processes for the production of two-layer materials and specifying that the range 10 to 30% is based on the weight of the fibrous base material.

- (d) Original claim 6 discloses that the fibrous base material comprises a plurality of less fibrillated aramid fibers having a freeness of at least about 300 on the Canadian Standard Freeness (CSF) index, and optionally one or more of the following: cotton fibers, carbon fibers, carbon particles, and at least one filler material, and paragraph [0025] discloses that these materials are specifically comprised in the primary layer.

- (e) The deletion of the terms "substantially" and "about" merely clarifies the significance of the numerical ranges which were already disclosed in the application as originally filed.

2.2 Present claims 2 to 6 are based on claims 7 to 13 of the application as originally filed.

Claim 7 is based on claim 23 of the application as originally filed, amended to make the wording consistent with present claim 1.

Claims 8 to 10 are based on claims 24, 25 and 6 of the application as originally filed.

Claim 11 is based on claim 11 and paragraph [0025] of the application as originally filed.

3. Article 84 EPC 1973

3.1 As the claims no longer contain the terms "substantially" or "about" in connection with numerical ranges, they do not lack clarity in this regard.

- 3.2 Nor do the issues mentioned under the heading "5 FURTHER DEFICIENCIES" of the decision under appeal cause the claims to lack clarity.

It is clear from the present wording of the claims that the fibrous base material comprises a porous primary layer and one secondary layer. Therefore, in the present case, the fact that the description sometimes uses different wordings to refer to the same layer does not render the claims unclear.

The reference to a "predetermined temperature" and a "predetermined period of time" in claim 7 does not render said claim unclear either, but rather not limited in those respects.

4. Since the appealed decision was based solely on the grounds of Articles 123(2) EPC and Article 84 EPC 1973 and did not deal with the issues of novelty and inventive step, the board finds it appropriate to remit the case to the department of 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 department of first instance for further prosecution on the basis of the claims filed as main request with letter dated 14 December 2011.

The Registrar:

The Chairman:

V. Commare

T. Kriner