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**Datasheet for the decision
of 7 July 2026**

Case Number: T 1228/24 - 3.3.05

Application Number: 18306897.2

Publication Number: 3674371

IPC: C09C1/46, C09C1/56, C08K3/22,
C08K7/06, F16D69/00, C01B32/20,
F16D13/60, F16D69/02

Language of the proceedings: EN

Title of invention:

FRICITION MATERIAL COMPRISING GRAPHITE, METHODS OF MAKING
FRICITION MATERIALS, AND THEIR USES

Patent Proprietor:

IMERTECH SAS

Opponent:

VRI-Verband der Reibbelagindustrie e.V.

Headword:

Friction material/Imertech

Relevant legal provisions:

EPC Art. 113(1), 54, 56
EPC R. 103

Keyword:

Right to be heard - substantial procedural violation (no)
Reimbursement of appeal fee - (no)
Novelty - (yes)
Inventive step - main request (no) - auxiliary request (yes)

Decisions cited:

T 0939/92, T 1349/19, T 1518/20

Catchword:



Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 1228/24 - 3.3.05

D E C I S I O N
of Technical Board of Appeal 3.3.05
of 7 July 2026

Appellant: VRI-Verband der Reibbelagindustrie e.V.
(Opponent) Robert-Perthel-Str. 49
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Representative: Ipsilon Luxembourg
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Respondent: IMERTECH SAS
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Decision under appeal: **Decision of the Opposition Division of the European Patent Office posted/electronically transmitted on 29 July 2024 rejecting the opposition filed against European patent No. 3674371 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chair R. Winkelhofer
Members: G. Glod
T. Burkhardt

Summary of Facts and Submissions

I. The opponent's (appellant's) appeal concerns the opposition division's decision rejecting the opposition against European patent EP 3 674 371 B1.

II. The following documents cited in the impugned decision are of relevance here.

D1: WO 2017/125592 A1

D2: WO 2018/046767 A1

D3: US 6,432,583 B1

D4: US 2017/0200950 A1

D5: Experimental evidence

III. Claim 1 of the patent as granted reads as follows.

"1. Friction material, the friction material comprising graphite having a c/2 of 0.3358 nm or less, such as 0.3357 nm or less, or 0.3356 nm or less, and a spring-back of 65% or more."

Claim 1 of the 5th auxiliary request includes the following feature at the end of claim 1.

"1.[...]; wherein the graphite has a degree of graphitisation of 95.3% or more, such as 96% or more, such as 97% or more; and comprising from 0.1 wt.-% to 30 wt.-% of the graphite, based on the total weight of the friction material."

Claims 2 to 18 of auxiliary request 5 directly or indirectly refer to claim 1.

IV. In their communication pursuant to Article 15(1) RPBA, the board was of the preliminary opinion that claim 1 of the patent as granted lacked an inventive step over D1. Auxiliary request 5 was considered allowable. In reply thereto, the respondent (patent proprietor) conditionally withdrew their request for oral proceedings and made a further submission on 29 April 2026, stating therein that the request for oral proceedings would only be maintained if the board were to find the main request or the 5th auxiliary request allowable. The appellant also conditionally withdrew their request for oral proceedings. The oral proceedings were cancelled, with the decision rendered in writing (Article 12(8) RPBA).

V. The appellant's arguments are reflected in the Reasons given below. No arguments were presented against the 5th auxiliary request.

The respondent argued, in essence, that D1 was concerned with the field of batteries and that it did not disclose a friction material. Application of the composition of D1 in a friction pad did not automatically designate the composition as a friction material. The function of a composition was distinct from its application. A skilled person starting from D1 could not arrive at the invention without unguided and undue experimentation.

VI. The appellant (opponent) requests that the decision under appeal be set aside and amended such that the patent be revoked. In addition, reimbursement of the appeal fee is requested.

The respondent (patent proprietor) requests that the appeal be dismissed (main request), or alternatively

that the patent be maintained in amended form on the basis of one of the 5th, 6th, 8th or 9th auxiliary requests, submitted before the opposition division and re-submitted with the reply to the appeal.

Reasons for the Decision

1. Article 113(1) and Rule 103(1)(a) EPC

The appellant argues that the opposition division did not address paragraph [0012] of D1 in their decision, although it was part of the discussion during opposition proceedings. This amounted to a substantial procedural violation justifying reimbursement of the appeal fee.

This is not persuasive.

The opposition division explicitly acknowledged that D1 disclosed a graphite having a spring-back as high as 70%, and referred to paragraph [0047]. The key point was that there is no explicit combination of a c/2 distance of 0.3358 nm or less and a spring-back of 65% or more, as further conclusively (and correctly) argued by the opposition division (point II.2.1.3 of the impugned decision).

The fact that a certain passage (paragraph [0012] in D1) has not been cited in the decision is not of relevance, since said passage does not alter the conclusion drawn. In addition, it does not contain further relevant information. The opposition division has conclusively reasoned as to why the claimed *combination* was not directly and unambiguously

disclosed in D1, thereby fulfilling the requirements of Article 113(1) EPC in combination with Rule 111(2) EPC.

Therefore, the decision's reasoning is not in any way inadequate. There is no substantial procedural violation which would justify reimbursement of the appeal fee (cf. Case Law of the Boards of Appeal - 11th edition (2026), V.A.11.6).

Main request (patent as granted)

2. Article 100(a) EPC in combination with Article 54 EPC

The appellant argues that D1 was prejudicial to the novelty of claim 1.

This is not convincing.

Claim 1 relates to a friction material, which is only defined by the presence of a specific graphite. Claim 1 does not contain any further features relating to the properties of the friction material or to the amount of the specified graphite to be used in the friction material. Any graphite having the required spring-back and c/2 distance falls within the scope of claim 1.

D1 discloses a mixture of two different graphites, one having a lower spring-back and the other one having a higher spring-back such as from about 20% to about 70% (paragraph [0012] and claim 2). This material has a c/2 distance of between about 0.3353 and 0.3370 nm, or between about 0.3354 and 0.3365 nm (paragraph [0023] and claim 5). D1 also discloses that the composition as defined in D1 can be part of a friction pad (paragraph [0061] and claim 40). Graphites D and K in table 2a on page 27 of D1, as further referred to by the appellant,

have a spring-back of 60%. There is no direct and unambiguous disclosure of a graphite having a $c/2$ of 0.3358 nm or less, and a spring-back of 65% or more *in combination*. Arriving at such a product requires firstly choosing the higher end point of the spring-back and the lower end point of the $c/2$ distance, which does not qualify as direct and unambiguous disclosure.

3. Article 100(a) EPC in combination with Article 56 EPC
- 3.1 D1 is also a suitable starting point for the question of inventive step. It discloses graphites D and K (table 2a on page 27) both having a $c/2$ distance of 0.3357 and a spring-back of 60%. It is evident from the disclosure of D1 (paragraph [0061] and claim 40) that this graphite is suitable as friction material. Furthermore, as agreed with the appellant, graphite is known to be a friction modifier regardless of application.
- 3.2 The problem to be solved is that of reconciling the essentially contradictory properties of graphitisation and spring-back of graphite for effective use in a friction material (paragraph [0034] of the patent).
- 3.3 It is proposed to solve the problem by a friction material according to claim 1, characterised by a spring-back of 65% or more.
- 3.4 However, there is an absence of evidence that the posed problem has not already been solved by graphites D and K of D1. In addition, there are no data that support the conclusion that an improvement over graphites D and K of D1 is obtained.

The respondent submitted D5 in that respect.

However, D5 does not show that the problem has been solved over the whole range claimed. In particular, the comparative graphites used in D5 have a spring-back of only 6.7% and 19.4%, respectively, which is far below 60%, as present in graphites D and K of D1. In addition, the graphites of D5 were tested in a very specific composition with numerous ingredients (table B on page 2 of D5), while claim 1 of the patent as granted does not contain any specification apart from the graphite.

Therefore, the problem to be solved needs to be redefined in less ambitious terms and can be seen as the provision of an alternative material comprising graphite.

The respondent's argument that the problem to be solved was that of finding an alternative friction material is not convincing. The claim does not further define the friction material, but rather only relates to the graphite, which is known by the skilled person to have an impact on friction. In any case, D1 shows that the compositions disclosed therein can be used as part of a friction pad.

- 3.5 The solution is obvious since D1 teaches that the high spring-back material can have a spring-back of up to 70% (page 12, line 15). It is true that many alternatives are possible, but making a mere arbitrary choice from the possible solutions cannot be regarded as involving an inventive step (T 939/92, Reasons 2.5.3). The choice of such an alternative is straightforward, since D1 explicitly teaches a value of 70%. Some of the preferred compositions are exemplified, but the skilled person will understand

that alternatives, even if numerous, have to stay within the teaching of D1. There is no need for undue and guided experimentation in this case.

Moreover, if the problem to be solved is the provision of an alternative, there is no need for a pointer towards the solution (T 1518/20, Reasons 1.5.4).

The situation in case T 1349/19 as cited by the respondent is different and thus not comparable. In that case, six distinguishing features were identified (Reasons 1.5), while only one distinguishing feature is present in the case in hand.

To conclude, the requirements of Article 56 EPC are not met and the main request must fail.

5th Auxiliary request

4. The appellant has not provided any arguments why this request should not be allowable. Notably, the arguments as to the main request with respect to Article 56 EPC do not apply any more, since the friction material now needs to contain 0.1 wt.-% to 30 wt.-% of the defined graphite, implying the presence of other materials. Even if the degree of graphitisation were not seen as a further distinguishing feature over examples D and K of D1 in view of the formula presented in paragraph [0087] of the patent, there is no teaching in any of the prior art documents to add a graphite having a c/2 of 0.3358nm or less and a spring-back of 65% or more to a friction material in an amount of 0.1 wt.-% to 30 wt.-%.

Similar reasoning applies when starting from D2 or D3 or D4 as the closest prior art.

Claims 2 to 18 directly or indirectly incorporate the subject-matter of claim 1.

The requirements of Articles 54 and 56 EPC are fulfilled. The 5th auxiliary request is allowable.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division with the order to maintain the patent on the basis of the 5th auxiliary request and the description to be adapted.

The Registrar:

The Chair:



C. Vodz

R. Winkelhofer

Decision electronically authenticated