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Datasheet for the decision of 28 April 2026

Case Number: T 1104/23 - 3.2.08

Application Number: 13868501.1

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Title of invention:
SLIDING MEMBER

Patent Proprietor:
Taiho Kogyo Co., Ltd

Opponent:
Federal-Mogul Wiesbaden GmbH

Headword:

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - (no)

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Case Number: T 1104/23 - 3.2.08

D E C I S I O N
of Technical Board of Appeal 3.2.08
of 28 April 2026

Appellant: (Opponent)	Federal-Mogul Wiesbaden GmbH Stielstrasse 11 65201 Wiesbaden (DE)
Representative:	Hoffmann Eitle Patent- und Rechtsanwälte PartmbB Arabellastraße 30 81925 München (DE)
Respondent: (Patent Proprietor)	Taiho Kogyo Co., Ltd 65, Midorigaoka 3-chome Toyota-shi Aichi 471-8502 (JP)
Representative:	Haseltine Lake Kempner LLP Cheapside House 138 Cheapside London EC2V 6BJ (GB)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted/ electronically transmitted on 5 April 2023 concerning maintenance of the European Patent No. 2940327 in amended fo rm.**

Composition of the Board:

Chairwoman	P. Acton
Members:	M. Foulger
	C. Schmidt

Summary of Facts and Submissions

I. With the decision posted on 5 April 2023, the opposition division found amongst others that the subject-matter of claim 1 of auxiliary request 3 involved an inventive step with regard to the combination of the teachings of

D1: WO 2010/076306 A1

and

D3: EP 1 584 828.

II. The opponent filed an appeal against this decision. They requested that the decision under appeal be set aside and that the patent be revoked.

III. The respondent (patent proprietor) requested that the appeal be dismissed, i.e. that the patent be maintained as found allowable by the opposition division (main request and auxiliary request 3 in opposition proceedings), or in alternative on the basis of the "New Auxiliary Request 1", filed with letter dated 22 April 2026, or on the basis of auxiliary request 1 or 2, filed with the reply to the statement setting out the of grounds of appeal dated 22. November 2023.

IV. Claim 1 as found allowable by the opposition division reads as follows:

(1) A sliding member comprising:
(2) a lining layer (17) formed from an alloy having a predetermined shape; and
(3) an overlay layer (19) formed on an inner

circumferential surface of the lining layer (17),
(4) the overlay layer (19) being formed of resin,
(5) the overlay layer (19) sliding with a shaft (23),
(6) the overlay layer (19) including a raised portion (33),
(7) a height of which in a predetermined area that includes each of an edge in an axial direction of the shaft (23) is greater than a maximum height of another area of the overlay layer (19);
(8) wherein a surface of the lining layer (17) is flat along the axial direction;
(9) and in a cross section parallel to the axial direction, the height of the overlay layer (19) gradually increases from a starting point of the raised portion (33) to a top point of the raised portion (33),
(10) and gradually decreases from the top point of the raised portion (33) to the axial edge (35),
(10a) wherein the raised portion (33) is formed under the surface tension of a coating liquid applied onto the lining layer (17) to form the overlay layer (19),

(11) so that the ridge line of the raised portion (33) from the starting point (P) to the axial edge (35) has a shape that consists of a smooth curve;
(12) the top point (37) of the raised portion is between the starting point (P) and the edge (35) of the sliding member in the axial direction, the starting point (P) being an edge of the raised portion (33), the sliding member having width K in the axial direction, with a distance between the starting point (P) and the nearest edge of the sliding member being less than or equal to K/3; and
(13) wherein, in an area (31) of the overlay layer (19) other than the raised portion (33), plural grooves are provided."

Additions over the granted claim underlined.

V. The essential arguments of the parties are summarised below in the "Reasons for the Decision".

Reasons for the Decision

1. Inventive step

D1 discloses the following features of claim 1:

(1) A sliding member ("Gleitelement") comprising:
(2) a lining layer formed from an alloy having a predetermined shape ("Lagermetallschicht"); and
(3) an overlay layer formed on an inner circumferential surface of the lining layer ("Gleitschichtmaterial"),
(4) the overlay layer being formed of resin (see claim 2 "Epoxyharz"),
(5) the overlay layer sliding with a shaft,

The above has not been disputed. The respondent however doubted that features 6 - 12 were known from D1.

The Board considers that the features 6 - 12 are implicitly disclosed in D1 because the claimed shape is an inevitable result of the application of the coating liquid resin to the sliding member. In this respect the Board agrees with the conclusions of the impugned decision paragraphs 14.3 and 15.4. The Board agrees that the raised portions at the edges are not expressly described in D1, these portions are however implicitly present due to the surface tension of the coating liquid.

The subject-matter of claim 1 differs from the sliding

member known from D1 in that:
in an area (31) of the overlay layer (19) other than the raised portion (33), plural grooves are provided. (feature 13)

As put forward by the respondent, this feature has the effect of distributing the oil on the bearing surface.

This is generally known by the skilled person, see paragraph [0014] of D3.

D3 states in the first sentence of paragraph [0029] that "regular grooves are formed over the *entire* surface of the sliding bearing 1". The respondent argued that this statement would teach away from the subject-matter of claim 1 which requires in Feature M13 that the grooves are present "in an area *other than the raised portion*", i.e. not over the whole surface. However, this paragraph continues, in its second sentence, "the uneven configuration may be provided only in a region of the bearing which undergoes a severe load as shown in Figs. 4(e) and (f)".

The Board is therefore persuaded that the skilled person would view the provision of grooves only on a part of the surface as being a normal measure in the art in order to solve the technical problem of providing an improved oil distribution.

In the impugned decision, the opposition division found that starting from D1 as closest prior art the skilled person would not provide grooves as shown in D3. The reasoning given by the opposition division was that "[a]ssuming that the skilled person was using the idea of regular grooves of D3, there can be seen no reason why he should modify the configuration [of D1] in a way

to provide raised portions at the edges, in particular having a greater height than the remaining projections ...." This reasoning is not persuasive because starting from D1 the question should have been whether it was obvious to apply the teaching of D3, i.e. the grooves, to this known sliding member. Starting from D1, the raised portions are already provided and so no motivation to provide them is needed.

The skilled person would therefore not require the exercise of inventive activity to apply this measure to the known bearing and thereby arrive at the subject-matter of claim 1.

2. Auxiliary requests

It is not disputed that the above applies equally to the auxiliary requests. The auxiliary requests are therefore also not allowable.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairwoman:

C. Moser P. Acton

Decision electronically authenticated