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**Datasheet for the decision
of 9 June 2023**

Case Number: T 0807/21 - 3.3.05

Application Number: 07712115.0

Publication Number: 2125650

IPC: C03C13/06, E04B1/80, E04C2/16

Language of the proceedings: EN

Title of invention:
MINERAL FIBRE BOARD

Applicant:
Knauf Insulation

Headword:
MINERAL FIBRE BOARD/Knauf

Relevant legal provisions:
EPC Art. 83
RPBA 2020 Art. 13(2)

Keyword:
Sufficiency of disclosure - undue burden (no)
Amendment after summons - exceptional circumstances (yes)

Decisions cited:
T 2393/16, T 1989/17, T 0419/12

Catchword:



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Case Number: T 0807/21 - 3.3.05

D E C I S I O N
of Technical Board of Appeal 3.3.05
of 9 June 2023

Appellant: Knauf Insulation
(Applicant) Rue de Maestricht 95
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Representative: Guy Farmer
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 30 October 2020
refusing European patent application No.
07712115.0 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman E. Bendl
Members: J. Roider
P. Guntz

Summary of Facts and Submissions

I. The appeal lies from the decision of the examining division to refuse the application because it did not comply with the requirements of Article 83 EPC.

II. Claim 1 of the main request, which formed the basis of the impugned decision and is also the main request in the appeal proceedings, reads as follows:

1. A mineral fibre insulating board having a density in the range 100-200 kg/m³ comprising mineral fibres and an organic, formaldehyde free binder based on a reducing sugar and having:

*a) an Ordinary Compression Strength of at least 60 kPa;
and*

*b) a Weathered Compression Strength of at least 25 kPa;
and*

c) a change in thickness of less than 6% after autoclave.

Dependent claims 2-9 are directed to particular embodiments of the invention. Claim 10 is directed to the use of the product according to claims 1-9. Claim 11 is directed to a manufacturing method comprising all of the features of the subject-matter of claim 1.

III. In the appeal proceedings, the board raised in its preliminary opinion an objection under Article 123(2) EPC concerning a dependent claim. In reaction thereto, the appellant submitted amended sets of claims in which the contested claim was deleted.

- IV. The key arguments of the appellant (applicant) concerning sufficiency of disclosure can be summarised as follows:

An example of the invention is disclosed. The idea underlying the invention was simple and easy to understand, and therefore the skilled person would have had no difficulty in producing a mineral fibre insulation board within essentially the entire scope of the claims.

- V. The appellant requested that the decision under appeal be set aside and that the case be remitted to the examining division for further prosecution on the basis of the main request or, in the alternative, on the basis of auxiliary request 1 or auxiliary request 2; all requests were submitted with its letter of 19 May 2023.

Reasons for the Decision

1. Admission of the main request

The main request was filed after the notification of the summons to oral proceedings, and therefore the requirements of Article 13(2) RPBA 2020 apply. However, in the communication under Article 15(1) RPBA 2020, new objections under Article 123(2) EPC were raised, which were overcome by the submission of the new main request.

The raising of new objections in the communication under Article 15(1) RPBA 2020 qualifies as exceptional

circumstances within the meaning of Article 13(2) RPBA 2020, and the main request overcomes the objections raised and does not introduce any new problems. The board has thus decided to admit the main request into the proceedings (see, e.g., T 2393/16, point 2, and T 1989/17, point 2).

2. Sufficiency of disclosure, Article 83 EPC

2.1 The application contains a single example. However, this is not, as such, a reason to deny the sufficiency of disclosure.

Moreover, the mere fact that the subject-matter of claim 1 essentially requires that the mineral fibre insulation board has a number of specified material properties and the fact that the manufacturing method according to claim 12 does not contain steps which would inevitably provide these properties do not automatically lead to the conclusion that the invention was not sufficiently disclosed.

The properties of the constituents of the mineral fibre insulation board, such as the diameter of the mineral fibres and therefore the strength thereof, are not limited. Apart from the requirement that the product *comprises* (but is not limited to) a formaldehyde-free binder based on a reducing sugar, the binder system and the amount applied when manufacturing the mineral fibre insulation board are not limited. The absence of such restrictions increases the degree of freedom of the skilled person to adjust the constituents of the mineral fibre insulation board. Since the effect provided by different properties of the constituents of the mineral fibre insulation board, such as the fibre diameter or the binder composition and quantity, is

immediately apparent, if a particular material property does not fulfil the requirements of the claim the skilled person can simply adjust the constituents in a straightforward manner.

The example gives guidance to the skilled person as to how a mineral fibre insulation board can be produced and tested for the desired material properties. It is not convincing that a skilled person would fail to reproduce the claims across the entire scope thereof merely because of the numerous possibilities when selecting the properties of the constituents of the mineral fibre insulation board.

2.2 According to page 1, lines 25-28, of the application at issue, it had previously not been thought possible to provide a formaldehyde-free binder system that would be usable on an industrial scale. The examining division argues in view of [T 419/12](#) that this statement related to a prejudice for which a patent must provide guidance, enabling the skilled person to identify the features which allow such a prejudice to be overcome.

However, neither the subject-matter of claim 1 nor any other claim is restricted to a product produced using a manufacturing process on an industrial scale. Moreover, [T 419/12](#) concerns a case where the prejudice is confirmed by examples in the prior art. In the present case, there is no such example available.

2.3 Although not necessarily reflected in the subject-matter of claim 1, because the presence of a phenol-formaldehyde binder is not excluded, the idea underlying the present application is to use known formaldehyde-free binders based on a reducing sugar in the production of mineral fibre insulation boards,

instead of phenol-formaldehyde binders.

This general idea is simple and can be easily understood by the skilled person. It is obvious that a different binder system may need other curing conditions. However, the present application is not directed to a novel binder system; rather, it discloses the use of a specific type of known binder system in a mineral fibre insulation board, and therefore it has to be concluded that the skilled person is able to select the curing conditions appropriately.

2.4 These reasons also apply to claims 2-11.

2.5 The main request thus fulfils the requirements of Article 83 EPC.

3. Amendments, Article 123(2) EPC; and clarity, Article 84 EPC

The board is satisfied that the claims are clear and have a basis in the original application.

In particular, the amendments have the following basis in the application as originally filed:

Claims 1 and 12: "based on a reducing sugar": page 2, line 10, as originally filed.

4. Since the main request on file is considered to meet the requirements of Articles 83, 84 and 123(2) EPC, a discussion of the auxiliary requests is not considered necessary.

Order

For these reasons it is decided that:

The decision under appeal is set aside and the case is remitted to the examining division for further prosecution.

The Registrar:

The Chairman:



C. Vodz

E. Bendl

Decision electronically authenticated