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**Datasheet for the decision  
of 26 February 2021**

**Case Number:** T 1850/20 - 3.3.06

**Application Number:** 12809341.6

**Publication Number:** 2780500

**IPC:** D06M11/82, D06M16/00

**Language of the proceedings:** EN

**Title of invention:**  
ANTIMICROBIAL TEXTILES

**Applicant:**  
Yeditepe Universitesi

**Headword:**  
Yeditepe/Antimicrobial

**Relevant legal provisions:**  
EPC Art. 54

**Keyword:**  
Novelty - (no)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**

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**Case Number: T 1850/20 - 3.3.06**

**D E C I S I O N**  
**of Technical Board of Appeal 3.3.06**  
**of 26 February 2021**

**Appellant:**  
(Applicant)

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**Decision under appeal:**

**Decision of the Examining Division of the  
European Patent Office posted on 13 March 2020  
refusing European patent application No.  
12809341.6 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairwoman**

J. Hoppe

**Members:**

S. Arrojo

R. Elsässer

## Summary of Facts and Submissions

- I. The appeal was filed against the decision of the examining division to **refuse European patent application No. 12 809 341.6** for non-compliance with the requirements of Articles 123(2), 84, 54 and 56 EPC.
- II. With its statement of grounds of appeal, the applicant and appellant requested to grant a patent on the basis of the main request filed therewith.
- III. **Claim 1 of the main request** reads as follows:

*"A production method of antimicrobial textiles wherein the steps are followings:*

- preparing a solution by dissolving 5-15 gr sodium borate in 100 mL methanol,*
- mixing the solution in an ultrasonic bath set to 45 °C,*
- placing textiles in this solution and then placing them together into an oven set to 70°C until the methanol within the solution evaporates,*
- fixing the sodium borate onto the fabric after the textile gets dry,*
- obtaining an antimicrobial textile as a final product."*

**Claim 4 of the main request** reads as follows:

*"Antimicrobial textiles produced according to claim 1 used for exhibiting antifungal activity against Aspergillus spp., Alternaria spp., Botrytis spp., Fusarium spp., Paecilomyces lilacinus, Penicillium charlesii, Penicillium expansum, Penicillium vinaceum,*

*Pythium spp., Phytophthora spp., Sclerotinia sclerotiorum."*

- IV. Since the appellant has not requested oral proceedings under Article 116 EPC, the Board is now in a position to issue a written decision.

### **Reasons for the Decision**

1. Main request - Novelty

The request is not allowable under Article 54 EPC for the following reasons:

- 1.1 Document D2 discloses (par. [0002],[0011],[0047], claim 25) a fibrous insulation comprising a fungicide affixed to the fibers, wherein the preferred fungicide is borax (i.e. sodium borate) (par. [0063], claim 29). This fungicide demonstrated effectiveness against *Aspergillus Niger*, *Aspergillus Versicolor*, *Penicillium Funiculosum*, *Chaetomium Globosum* and *Aspergillus Flavus* (par. [0057] and table 1).
- 1.2 The examination division concluded (point 3.4.1. of the decision) that the subject-matter of claim 6 as filed on 11 April 2019 was not novel in view of D2. In particular it was indicated that the reference to the method claim 1 did not establish novelty.
- 1.3 Claim 1 at issue corresponds to claim 1 as filed on 11 April 2019. Claim 4 at issue corresponds to claim 6 as filed on 11 April 2019 with the sole difference that

the product refers back to claim 1 only (claim 6 referred back to claims 1 to 3).

1.4 The appellant argued that, in view of the fact that claim 1 at issue was considered to be novel and inventive, and that the dependence of claim 4 from claim 1 had been clarified, the subject-matter of claim 4 was also novel and inventive. In particular, the applicant referred to point 3.1 of the examining division's decision indicating that "there are neither hints or suggestions in the prior art to apply a composition mixed in an ultrasonic bath at 45°C and comprising borax and methanol at pH 10 to provide antimicrobial textiles".

1.5 The Board does not follow this argumentation for the following reasons:

- A product claim that refers back to a method claim is limited by this only to the extent that specific product features necessarily result from the process steps recited in the method claim (i.e. if and only if the process step necessarily leads to a specific product feature).

- The only technical feature which can be considered to limit the scope of claim 4 as a result of the reference to method claim 1 is the presence of sodium borate fixed onto the textile.

- No further technical limitations of the subject-matter of claim 4 can be derived from the steps of claim 1. In particular, contrary to the appellant's arguments, no clear limitation can be derived from the step of *"mixing the solution in an ultrasonic bath set to 45°C"*, as this step merely intends to improve the

mixing of the borax in the solution and can, in any case, not be clearly linked to any specific product technical feature. The presence of methanol in the solution is also irrelevant because, according to the application ("1st Method" on page 5 of the description as filed), this substance is evaporated from the textile. The additional reference to the pH 10 of the solution in paragraph 3.1 of the examining division's decision is also irrelevant, because this feature was defined in claim 2 as filed on 11 April 2019, and this claim is no longer part of the request on file.

- Consequently, the subject-matter of claim 4 effectively defines a textile comprising sodium borate fungicide in an amount which is effective against the fungi defined therein.

- Since the application clearly indicates (page 10, last paragraph of description as filed) that siding and insulation elements fall within the scope of "textile" and that fungicide properties fall within the concept of "antimicrobial" (claim 4 at issue), it is apparent that document D2 anticipates all the features of claim 4 at issue.

The Board therefore agrees with the conclusion of the examining division (point 3.4.1. of the examining division's decision) and considers that the subject-matter of claim 4 at issue is not novel in view of D2.

2. Since the only request submitted by the applicant is not allowable under Article 54 EPC, the appeal has to be dismissed.

## Order

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairwoman:



A. Pinna

J. Hoppe

Decision electronically authenticated