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**Datasheet for the decision  
of 12 March 2018**

**Case Number:** T 1398/16 - 3.3.04

**Application Number:** 07810352.0

**Publication Number:** 2046962

**IPC:** C12N15/82, A01H5/00

**Language of the proceedings:** EN

**Title of invention:**

DNA encoding ring zinc-finger protein and the use of the DNA  
in vectors and bacteria and in plants

**Applicant:**

Board Of Trustees Of Michigan State University

**Headword:**

Zinc-finger protein/MICHIGAN UNIVERSITY

**Relevant legal provisions:**

EPC Art. 123(2)

**Keyword:**

Amendments - added subject-matter (no)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**  
**Boards of Appeal**  
**Chambres de recours**

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Case Number: T 1398/16 - 3.3.04

**D E C I S I O N**  
**of Technical Board of Appeal 3.3.04**  
**of 12 March 2018**

**Appellant:** Board Of Trustees Of Michigan State University  
(Applicant) 450 Administration Building  
East Lansing, Michigan 48824-1046 (US)

**Representative:** Glawe, Delfs, Moll  
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**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 11 March 2016  
refusing European patent application No.  
07810352.0 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairman** B. Claes  
**Members:** A. Chakravarty  
L. Bühler

## Summary of Facts and Submissions

- I. Appeal lies against the decision of the examining division to refuse European patent application EP 07810352.0, entitled "*DNA encoding ring zinc-finger protein and the use of the DNA in vectors and bacteria and in plants*". The application was filed as an international patent application, published as WO 2008/008396.
- II. The examining division considered a main and two auxiliary requests. It held that no request met the requirements of Article 123(2) EPC.
- III. With the statement of grounds of appeal, the appellant submitted sets of claims of a main request, first and second auxiliary request, all previously filed before the examining division and of a third auxiliary request.
- IV. Claims 1 to 4 of the third auxiliary request read:

"1. A method for altering the phenotype of a plant, comprising:

  - a) providing:
    - i) an expression vector construct comprising a nucleic acid, wherein said nucleic acid is linked to a inducible heterologous promoter, said nucleic acid comprising a sequence of nucleotides, which sequence encodes a polypeptide having conservative amino acid changes and at least 95% amino acid sequence identity to SEQ ID NO:01, wherein said polypeptide comprises:
      - (a) a RING-H2 zinc-finger motif transcription domain that comprises SEQ ID NO:07,
      - (b) a low complexity region, and

(c) a transmembrane domain, and  
ii) plant tissue; and  
b) transfecting the plant tissue with the vector so that the phenotype of a plant derived from said plant tissue is altered,  
wherein said altered phenotype is altered environmental tolerance".

2. The method of claim 1, wherein said altered environmental tolerance is altered abiotic stress.

3. The method of claim 1, wherein said altered environmental tolerance is drought resistance.

4. The method of claim 1, wherein said altered environmental tolerance is salt tolerance".

V. The board issued a communication pursuant to Article 15(1) RPBA in which it informed the appellant of its view that the appeal would be allowable on the basis of the third auxiliary request and that it was minded to remit the case to the examining division for further prosecution.

VI. In reply to the board's communication, the appellant requested that the case be remitted to the examining division for further prosecution on the basis of previously pending third auxiliary request, now the sole and main request.

VII. The board cancelled the oral proceedings and informed the appellant that the procedure would be continued in writing.

VIII. The arguments of the appellant can be summarised as follows:

*Main request - claims 1 to 4*

*Article 123(2) EPC - Amendments*

Claim 1 no longer defined the heterologous promoter as comprising an "*abscisic acid responsive element*". Instead, the heterologous promoter was defined as an "*inducible*" promoter.

Support for the expression "*heterologous inducible promoter*" in the context of a method as claimed of altering the phenotype of a plant by transfecting plant tissue with a vector comprising a nucleic acid encoding a polypeptide, where the nucleic acid is linked to a heterologous inducible promoter, was to be found throughout the application as filed, e.g. on page 35, lines 1-15, page 64, lines 16 to 29 and in Example V.

### **Reasons for the Decision**

*Main request - claims 1 to 4*

*Article 123(2) EPC - Amendments*

1. Claim 1 is amended with respect to that of the main request considered by the examining division in that the expression "*heterologous promoter comprising an abscisic acid responsive element*" is replaced with the expression "*heterologous inducible promoter*".
2. The application as filed contains a disclosure, on page 35, line 1, that "promoters may be *constitutive* or *inducible*." Furthermore on pages 63 and 64, under the heading "*Expression Cassettes*" there is a description of the promoters to be used in expression cassettes,

including the sentence: "*Promoters include but are not limited to constitutive promoters, tissue-, organ-, and developmentally-specific promoters, and **inducible promoters***" (emphasis added by the board).

3. The board is satisfied that the above passages disclose the subject-matter of claim 1 with respect to the type of promoter.
4. As to the basis for the claim apart from the definition of the promoter, the board is satisfied that this is provided by claim 1 of the application as filed, in conjunction with claims 2 and 18, as filed. Thus claim 1 meets the requirements of Article 123(2) EPC.
5. Claims 2 to 4 were not dealt with in the decision under appeal. The board is satisfied that their subject-matter is based on that of claims 8, 19 and 20 of the application as filed.
6. Thus, the subject-matter of the main request meets the requirements of Article 123(2) EPC.

*Remittal - Article 111(1) EPC*

7. In the decision under appeal, the examining division has dealt only the issue of added subject-matter. The appellant has requested remittal to the department of first instance. The board therefore exercises its power under Article 111(1) EPC to remit the case to the examining division 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 examining division for further prosecution on the basis of the set of claims of the main request, filed as the third auxiliary request, together with the statement of grounds of appeal.

The Registrar:

The Chairman:



P. Cremona

B. Claes

Decision electronically authenticated