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**Datasheet for the decision
of 15 March 2007**

Case Number: T 0704/06 - 3.3.08

Application Number: 01928188.0

Publication Number: 1261729

IPC: C12N 15/82

Language of the proceedings: EN

Title of invention:

A process for generating genetically modified pearl millet through agrobacterium and biolistic transformation

Applicant:

Avestha Gengraine Technologies Pvt. Ltd

Opponent:

-

Headword:

Pearl millet / AVESTHA

Relevant legal provisions:

EPC Art. 56, 111(1), 114(2)

Keyword:

"Main request - late submitted argument admitted -yes"
"Remittal to the first instance - yes"

Decisions cited:

T 0092/92, T 0086/94, T 0432/94

Catchword:

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Case Number: T 0704/06 - 3.3.08

D E C I S I O N
of the Technical Board of Appeal 3.3.08
of 15 March 2007

Appellant: Avestha Gengraine Technologies Pvt. Ltd
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 21 October 2005
refusing European application No. 01928188.0
pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: L. Galligani
Members: F. Davison-Brunel
T. Karamanli

Summary of Facts and Submissions

I. European patent application No. EP-0 192 8188.0 published as WO 01/62890 with the title "A process for generating genetically modified pearl millet through agrobacterium and biolistic transformation" was refused by the examining division pursuant to Article 97(1) EPC.

Claim 1 of the **main request** then on file which is also the main request in appeal proceedings read as follows:

"1. A process for biolistic transformation and regeneration of *Pennisetum glaucum* (Pearl millet) comprising:

(a) initiating embryogenic calli formation from the seeds of *P.glaucam* in an MS media containing 5mg/L of 2,4 D

(b) incubating the said calli in dark for a predetermined period

(c) sub-culturing the calli on an MS media containing 3mg/L of 2.4D,

(d) incubating said sub cultured calli under light for a predetermined period

(e) subjecting the embryogenic calli to biolistic bombardment with plasmid DNA containing pre-identified genes using a biolistic apparatus,

(f) allowing the proliferating calli to grow and differentiate into plantlets

(g) analysing the expression of said pre-identified genes in the regenerated plantlets using known techniques."

Dependent claims 2 to 18 related to further features of the process of claim 1.

- II. The examining division refused the application for lack of inventive step over the teachings in document (1), *infra*, of a transformation method for *P.glaucum*. In its opinion, the problem to be solved could be defined as the provision of an alternative method of transformation and the provided solution, namely the claimed transformation method, only differed from the method described in document (1) by the introduction of trivial modifications in steps (c) and (d). The examining division was also not convinced by the applicant's argument that the claimed method was an improved method insofar as the amount of time necessary to regenerate transformed calli was significantly reduced.
- III. The appellant (applicant) filed an appeal against the decision of the examining division, paid the appeal fee and submitted a statement of grounds of appeal.
- IV. The examining division did not rectify the contested decision and referred the appeal to the board of appeal (Article 109 EPC).
- V. The board sent a communication pursuant to Article 11(1) of the Rules of Procedure of the Boards of Appeal (RPBA) stating its preliminary, non-binding opinion.

- VI. Oral proceedings took place on 15 March 2007.
- VII. The following documents are mentioned in this decision:
- (1) : Lambé, P. et al., Plant Science, Vol. 108, pages 51 to 62, 1995;
 - (4) : Girgi, M. et al., Molecular Breeding, Vol. 10, pages 243 to 252, 2002.
- VIII. The appellant agreed with the examining division's findings that document (1) was the closest prior art as it described a method for the transformation of *P.glaucum*.

In the written part of the proceedings (statement of grounds of appeal, point [II.II]), the problem to be solved was defined as the "*provision of an improved method of transformation and regeneration of P.Glaucam [sic] resistant calli in which the amount of time taken to regenerate resistant calli was significantly reduced*". The solution was identified as being a method which differed from that disclosed in document (1) in steps (c) and (d). These steps and their combination within the claimed method were argued to be non-trivial and non-obvious. It was also remarked (point [II.VI]), in particular, that the skilled person aware that *P.glaucum* was a very difficult organism to work with, would never have tried to depart from the state of the art transformation method.

At oral proceedings, this line of arguments was completely abandoned. The problem to be solved was

defined as providing an alternative method of production of transgenic *P.glaucum*. It was pointed out that the significant difference between the now claimed method and that described in document (1) was in step (a) which required that embryogenic callus formation be initiated from seeds rather than from shoot apices as described in document (1) (page 52, right-hand column). Document (4) (an expert's document) was mentioned as providing the information that prior to the priority date, the regeneration of *P. glaucum* plants had been achieved from different tissues, yet, seeds had never been used to generate embryogenic calli. For these reasons, it was argued that the claimed method was totally unexpected. Furthermore, the method was said to have distinctive advantages such as limiting the extent to which the seeds needed to be manipulated i.e. it was quicker to perform and more efficient than the method disclosed in the prior art. Therefore, inventive step could be acknowledged.

- IX. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request filed on 21 February 2006 with the statement of grounds of appeal.

Reasons for the decision

1. The only issue which the board is required to assess is that of inventive step.
2. At oral proceedings, it was argued for the first time that the non-obviousness of the method of claim 1 for the transformation of *P.glaucum* (Section I, supra) lay

in step (a) of this method, i.e. in the initiation of embryogenic callus formation from seeds rather than from shoot apices as described in document (1) identified as the closest prior art. Up till then, the discussion on inventive step had always focussed on the differences between steps (c) and (d) of the claimed method and the corresponding steps in the method disclosed in the prior art document. In its first communication dated 13 February 2004, the examining division already provided a - negative - analysis of inventive step on the basis of steps (c) and (d) and the appellant's reply was confined to answering the objections without drawing attention to step (a). In fact, the appellant left the application to be refused on the basis of the analysis of steps (c) and (d), failed to refer to step (a) in its statement of grounds of appeal, and even did not take the opportunity to draw the board's attention to step (a) after receiving the communication under Article 11(1) RPBA which gave the preliminary opinion that steps (c) and (d) of the claimed method may not be a suitable basis for the acknowledgment of inventive step. This overview of the situation leaves absolutely no doubt that the appellant's argument which is the only one remaining as regards inventive step is at the same time new and late-filed.

3. In accordance with the case law, Article 114(2) EPC does not provide a legal basis for disregarding **late-filed** arguments on the grounds that they were presented for the first time at the oral proceedings (cf. T 92/92 of 21 September 1993). It is the very purpose of appeal proceedings, particularly oral proceedings, to provide an opportunity for a losing party to throw new light on

relevant aspects of matters which have been decided to its detriment (cf. T 86/94 of 8 July 1997). The appellant is not bound to the line of arguments he used in the statement of grounds for the whole appeal proceedings (cf. T 432/94 of 19 June 1997). Thus the new argument is not rejected for being late-filed.

4. Of course, this argument amounts to an entirely new approach with regard to inventive step. At the oral proceedings, a constructive exchange of views took place with the technical experts accompanying the representative, who pointed out the advantages associated with initiating embryogenic callus formation from seeds (a process step avoiding delicate manipulations and resulting in a gain of time for the overall transformation process). Yet, it was not clear whether or not such a course of action would have been obvious to the skilled person. In this respect, the appellant made reference to the post-published document (4), introductory part, giving a quick summary of prior art methods for regeneration of pearl millet plants. In the board's judgement, the information to be derived therefrom is too scanty to be useful for the assessment of inventive step.

5. The board is not willing to issue a positive decision on less than solid grounds, nor is it willing to refuse an application which may contain patentable subject-matter. Thus exercising its discretion under Article 111(1) EPC, it remits the case to the examining division for further prosecution taking into consideration the situation created by the appellant's new argument.

Order

For these reasons, it is decided that:

1. The decision under appeal is set aside;
2. The case is remitted to the first instance for further prosecution.

The Registrar

The Chairman

A. Wolinski

L. Galligani