Decision of 4 July 2006

Case Number: T 0549/05 - 3.3.08
Application Number: 98919000.4
Publication Number: 0923641
IPC: C12N 9/26
Language of the proceedings: EN

Title of invention:
A process for preparing beta-fructofuranosidase and use in the synthesis of fructooligosaccharides

Applicant:
Usina Da Barra S/A. Aç car E Alcool

Opponent:
-

Headword:
Aspergillus niger/DA BARRA

Relevant legal provisions:
EPC Art. 83
EPC R. 28

Keyword:
"Main and auxiliary requests - sufficiency of disclosure (no)"

Decisions cited:
G 0002/93

Catchword:
-
Case Number: T 0549/05 - 3.3.08

DECISION of the Technical Board of Appeal 3.3.08 of 4 July 2006

Appellant: Usina Da Barra S/A. Aç car E Alcool Fazenda Pau D Alho BR-17340-000 Barra Bonita, SP (BR)

Representative: Held, Stephan Meissner, Bolte & Partner GbR Postfach 86 03 29 D-81630 München (DE)

Decision under appeal: Decision of the Examining Division of the European Patent Office posted 22 November 2004 refusing European application No. 98919000.4 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: T. J. H. Mennessier
Members: P. Julià C. Heath
Summary of Facts and Submissions

I. European patent application no. 98 919 000.4 published under the International Publication No. WO 98/42828 with the title: "A process for preparing beta-fructofuranosidase and use in the synthesis of fructooligosaccharides" was refused by the examining division.

II. The reasons given for the refusal were that the main request (claims as originally filed) did not fulfil the requirements of Articles 54, 56 and 83 EPC and that the first and second auxiliary requests did not meet the conditions of Article 83 EPC.

III. The applicant (appellant) filed a notice of appeal against this decision, paid the appeal fee and submitted a statement setting out the grounds of appeal. With this statement, the appellant filed an auxiliary request and maintained, as its main request, the main request filed with letter dated 20 August 2004 which corresponded to the claims as originally filed. The appellant's arguments only concerned novelty and inventive step. No submissions were made relating to sufficiency of disclosure under Article 83 EPC. Oral proceedings were requested in the event that the board did not intend to grant appellant's main request.

IV. The appealed decision was not rectified by the examining division and the case was remitted to the board of appeal (Article 109(2) EPC).

V. The board sent a communication pursuant to Article 11(1) of the Rules of Procedure of the Boards of Appeal.
expressing its preliminary and non-binding opinions and indicating in particular that subject-matter related to Aspergillus niger 489 did not appear to fulfil the requirements of Article 83 EPC.

VI. The appellant made no substantive reply to the board's communication and, with letter dated 29 June 2006, withdrew its request for oral proceedings.

VII. On 3 July 2006, the appellant was informed that the oral proceedings were due to take place as scheduled and that the decision would be announced at the end of the proceedings.

VIII. Oral proceedings took place on 4 July 2006 in the absence of the appellant.

IX. Claims 1 and 7 of the main request (claims as originally filed) read as follows:

"1. A process for preparing beta-fructofuranosidase enzyme, characterized in that it comprises the steps of:
a) inoculating the spores of the fungus Aspergillus niger in an adequate liquid or semi-solid culture medium;
b) cultivating the already inoculated fungus, in order to promote its growth with the formation of mycelium and the production of the beta-fructofuranosidase enzyme; and
c) separating the beta-fructofuranosidase enzyme from the mycelium and from the culture medium."
"7. Process, as in claim 1, characterized in that the fungus *Aspergillus niger* which is cultivated is the one called 489, or a mutation or variation thereof."

X. Claim 1 of the auxiliary request read as claim 1 of the main request except for the added reference to the specific strain *Aspergillus niger* 489 in step (a) of the claimed process for preparing the beta-fructofuranosidase enzyme.

XI. The appellant requested in writing that the decision under appeal be set aside and that a patent be granted on the basis of the main request which was filed with letter dated 20 August 2004 and corresponds to the claims as originally filed or the auxiliary request filed with the statement setting out the grounds of appeal.

**Reasons for the Decision**

**Main request and auxiliary request**

**Article 83 EPC and Rule 28 EPC**

1. Article 83 EPC requires an application to "disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art". For inventions involving the use of or concerning biological material which is not available to the public and which cannot be described in the European patent application in such a manner as to enable the invention to be carried out by a person skilled in the art, Rule 28 EPC sets out the conditions to be fulfilled by a deposit of this biological material so that the invention can be regarded as being disclosed.
as prescribed in Article 83 EPC. In particular, "a sample of the biological material has ... (to be) deposited with a recognised depositary institution not later than the date filing of the application" (Rule 28(a) EPC).

2. In the decision G 2/93 of the Enlarged Board of Appeal (OJ EPO, 1995, 275) it was stated that the provisions of Rule 28 EPC "set out a reliable framework for determining which indications are necessary in a European patent application and under which conditions the public may have access to a culture deposit" and that "the primary function of a culture deposit is to complete an otherwise insufficient written disclosure. The culture deposit constitutes then an essential part of the disclosure." (cf. points 8 and 9 of the Reasons for the Decision).

3. Both appellant's main and auxiliary requests comprise subject-matter related to the specific fungus strain Aspergillus niger 489, namely claim 7 of the main request and the auxiliary request as a whole (cf. points IX and X supra). The specific strain Aspergillus niger 489 and the beta-fructofuranosidase derived therefrom are essential parts of the present invention (cf. inter alia page 4, lines 14 to 22 and page 7, lines 14 to 17 of the application as published).

4. According to the application, the strain Aspergillus niger 489 has been "isolated from soils of sugar cane regions of Brazil" and found to produce "higher enzymatic activity in a culture medium" (cf. page 4, lines 14 to 22 of the published application). This fungus "has been selected from a bank of microorganisms
with more than 2,000 different strains of the Biochemistry Laboratory of FEA UNICAMP (Food Engineering School of the University of Campinas, São Paulo, Brazil), for it showed high efficiency in the production of the beta-fructofuranosidase enzyme and the consequent transfer of sucrose in a fructooligosaccharide (about 60% of conversion), and it was submitted to a genetic mutation process with the drug N-nitrous-nitroguanidine and ultraviolet radiation for productivity increase." (cf. page 4, lines 23 to 35).

5. There is, however, no further disclosure in the application of details of the method and criteria used for selecting and isolating the strain Aspergillus niger 489. Nor is any information given in the application sufficient to enable the skilled person to obtain, without undue burden, the very same specific strain Aspergillus niger 489. Thus, in the absence of a deposit of this specific strain under the conditions set out in Rule 28 EPC, sufficiency of disclosure as required by Article 83 EPC cannot be acknowledged.

6. There is no evidence on file showing that a deposit of Aspergillus niger 489 has ever been made and that samples of this deposit were available to the public in the conditions set out in Rule 28 EPC. No arguments have been provided by the appellant with respect to the insufficiency of the disclosure under Article 83 EPC and Rule 28 EPC (cf. points III and VI supra).

7. Thus, it is concluded that neither the main request nor the auxiliary request fulfil the requirements of Article 83 EPC.
Order

For these reasons it is decided that:

The appeal is dismissed

The Registrar:    The Chairman:

A. Wolinksi     T. J. H. Mennessier