Case Number: T 0457/02 - 3.3.09
Application Number: 94307469.0
Publication Number: 0647408
IPC: A23J 3/16
Language of the proceedings: EN
Title of invention:
Process for producing a protein isolate having an increased level of isoflavone compounds
Patentee:
SOLAE, LLC
Opponent:
Archer-Daniels-Midland Company
Headword:
-
Relevant legal provisions:
EPC Art. 114(2), 54, 111(1)
EPC R. 60(2)
Keyword:
"Admissibility of late-filed document (yes)"
"Main request: novelty (no)"
"Auxiliary request: novelty (yes)"
"Remittal for further prosecution"
Decisions cited:
T 0629/90, T 1002/92
Catchword:
-
DECISION
of the Technical Board of Appeal 3.3.09
of 16 November 2005

Appellant: SOLAE, LLC
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 22 March 2002 revoking European patent No. 0647408 pursuant to Article 102(1) EPC.

Composition of the Board:
Chairman: P. Kitzmantel
Members: J. Jardon Alvarez
M. Günzel
Summary of Facts and Submissions

I. The grant of European patent No. 0 647 408 in respect of European patent application No. 94307469.0 in the name of Protein Technologies International, Inc., which had been filed on 12 October 1994, was announced on 15 December 1999 (Bulletin 1999/50) on the basis of 8 claims. Claim 1 read as follows:

"1. A process for producing an isoflavone enriched vegetable protein isolate comprising:

(a) extracting a vegetable protein material containing isoflavones with an aqueous extractant having a pH above the isoelectric point of the material to produce an aqueous extract of protein and isoflavones

(b) adjusting the pH of the aqueous extract to about the isoelectric point of the protein material in order to precipitate the protein material; and

(c) separating said precipitated protein material and washing said precipitated material with water in an amount by weight which is less than 4 times the weight of the protein material to provide an isoflavone enriched protein isolate."

II. Notice of Opposition requesting revocation of the patent in its entirety on the grounds of Article 100(a) and (c) EPC was filed by Archer-Daniels-Midland Company on 15 September 2000.
The following documents, inter alia, were cited during the opposition proceedings:

D1: EP-A-0 148 600 and

D8: US-4 172 828.

III. By its decision announced orally on 28 February 2002 and issued in writing on 22 March 2002, the Opposition Division revoked the patent for lack of novelty of the subject-matter of Claim 1 over the disclosure of D8. The decision of the Opposition Division was based on a main request filed on 28 February 2002, during the oral proceedings and two auxiliary requests submitted on 18 April 2001. Claim 1 of all the requests was identical to Claim 1 of the patent as granted.

In the opinion of the Opposition Division the subject-matter of Claim 1 of the main request could not be distinguished from the process as claimed in D8, which describes a process including steps (a), (b) and (c) as now claimed (see D8, column 4, lines 9 to 27; column 6, lines 1 to 15). The Opposition Division acknowledged that the process of D8 included the additional steps of cold-induced precipitation and removal of the precipitated curd, but considered that these extra steps were formally included within the scope of Claim 1 of the patent due to the meaning of the term "comprising" in the patent field.

Moreover as Claim 1 of the first and the second auxiliary requests was identical with Claim 1 of the main request, the auxiliary requests also lacked novelty against the disclosure of D8.
IV. On 8 May 2002 the Patent Proprietor (Appellant) lodged an appeal against the decision of the Opposition Division and requested that the decision be set aside and the patent be maintained on the basis of the main request or alternatively on the basis of auxiliary requests 1 or 2. The appeal fee was paid on 7 May 2002.

In the Statement of Grounds of Appeal filed with letter dated 15 July 2002, the Appellant stated that document D8 should be considered as late-filed and should not have been admitted into the opposition proceedings. Further it stated that the subject-matter of Claim 1 must be considered novel with respect to the disclosure of D8.

The Appellant's arguments were filed in writing with the Grounds of Appeal. They may be summarised as follows:

- Document D8 was filed by the Opponent on 28 January 2002, after expiry of the nine month opposition period, without any specific reason for its late submission. It should have been considered as not filed "in due time" and its disclosure was not, _prima facie_, relevant. The Opposition Division should not have admitted D8 into the proceedings

- Concerning novelty, the Appellant argued that the whey according to D8 was not the direct product of an aqueous extraction step as specified in step (a) of the claimed process. The direct product of the aqueous extraction in D8 was submitted to
additional process steps which had materially changed the composition of the direct product.

On the contrary, Claim 1 required that the precipitation step (b) be carried out on specifically the aqueous extract that was produced by extraction step (a) (the direct product of aqueous extraction). The wording of Claim 1 excluded the possibility of additional steps between steps (a) and (b).

V. The Respondent (Opponent) presented its counterstatement in a written submission dated 4 February 2003. The Respondent's arguments can be summarized as follows:

- Document D8 could not have been provided earlier than one month prior to the date of oral proceedings because it was extremely difficult to search for novelty destroying prior art for the process of the opposed patent. The Opposition Division correctly exerted its discretionary power admitting D8 into the proceedings as it was immediately recognized as very pertinent.

- Document D8 was novelty destroying for the claimed subject-matter because the wording of the claims did not exclude additional steps between steps (a) and (b).

- Additionally, contrary to the finding in the decision of the Opposition Division, document D1 was also novelty destroying because the range defined as being "less than 4 times the weight of
the protein material" should be interpreted as including the value zero, that is to say, the scope of Claim 1 embraced the use of no water in the washing step (c).

VI. On 1 August 2005 the Board dispatched the summons to attend oral proceedings on 16 November 2005 and, with the annexed communication pursuant to Article 11(1) of the Rules of Procedure of the Boards of Appeal, drew the attention of the parties to the points to be discussed during the oral proceedings.

VII. With letter dated 18 August 2005 the Respondent (Opponent) withdrew the opposition.

VIII. With letter dated 19 October 2005, the Appellant filed an amended auxiliary request and asked the Board to continue the proceedings in writing. This newly filed auxiliary request replaced the previous auxiliary requests 1 and 2.

The only difference between the main and the auxiliary requests was the inclusion in subsection (b) of Claim 1 of the words "of (a)" after "aqueous extract". Amended Claim 1 of the auxiliary request read as follows:

"1. A process for producing an isoflavone enriched vegetable protein isolate comprising:

(a) extracting a vegetable protein material containing isoflavones with an aqueous extractant having a pH above the isoelectric point of the material to produce an aqueous extract of protein and isoflavones
(b) adjusting the pH of the aqueous extract of (a) to about the isoelectric point of the protein material in order to precipitate the protein material; and

(c) separating said precipitated protein material and washing said precipitated material with water in an amount by weight which is less than 4 times the weight of the protein material to provide an isoflavone enriched protein isolate."

IX. The Appellant requested that the decision be set aside and that the patent be maintained on the basis of the main request filed on 28 February 2002 or on the basis of the auxiliary request filed on 19 October 2005.

**Reasons for the Decision**

1. The appeal is admissible.

2. The competence of the Board for reviewing the first instance's decision of revocation of the patent in suit is not affected by the Opponent's withdrawal of the opposition (cf. T 629/90, OJ EPO 1992, 654).

3. **Admissibility of D8**

   3.1 Document D8 was filed by the Respondent on 28 January 2002, that is to say after the end of the nine month opposition period and within the period stipulated by the communication of the Opposition Division according to Rule 71a(1) EPC.
3.2 The admissibility of facts and evidence filed at a late stage in the opposition proceedings is a matter of discretion for the Opposition Division (Article 114(2) EPC).

According to the established case law of the Boards of Appeal, a decisive criterion for admitting documents not filed in due time during opposition proceedings is their prima facie relevance (cf. T 1002/92, OJ 1995, 605, point 3.3).

3.3 In the present case the Opposition Division considered document D8 as highly relevant, since its disclosure appeared to be novelty destroying for the subject-matter of Claim 1 of the patent in suit. Its admission into the opposition proceedings in accordance with Article 114(1) EPC is then justified.

3.4 Although the filing of new evidence shortly before the oral proceedings should be avoided as much as possible, the Opposition Division correctly exercised its discretion having regard to the admissance of D8, taking account of the specific facts of the case under consideration. The content of D8 could be understood and assessed by a skilled person in the time remaining before the oral proceedings.

3.5 Thus, the Board agrees with the finding in the attacked decision that D8 should be admitted into the proceedings.
4. **Novelty (Article 54 EPC)**

4.1 Document D8 discloses a method for processing soy protein from defatted soybean flakes including the steps of extracting the soybean flakes with an aqueous extractant (column 4, lines 9 to 21; see also drawing, step 10); precipitating the whey material (20) by reducing (adjusting) the pH to about 4.5 (column 5, line 66 to column 6, line 5 and drawing, step 36) and separating the resulting curd precipitate and washing it with three times its weight of water (column 6, lines 5 to 16 and drawing step 40). These three steps correspond to steps (a) to (c) of Claim 1 of the patent.

The process of D8 further includes between the extracting step (a) and the precipitation of the protein (b), three additional steps, namely the clarification of the extracted protein material (drawing, 12), its cooling (14) and its separation in a curd and a whey (16) (see column 4, line 21 to column 5, line 26).

4.2 The Opposition Division considered that D8 was novelty-destroying for the subject-matter of Claim 1 because the use of the term "comprising" did not exclude the possibility of additional steps between steps (a) and (b) of the claim.

4.3 The Board agrees with the interpretation of the term "comprising" by the Opposition Division. As correctly stated in the Guidelines for Examination in the European Patent Office, Part C, Chapter III, 4.13, in
patent claims the term "comprising" is interpreted as "including", "containing" or "comprehending" and consequently does not exclude the presence of additional steps.

In the present case, it is clear from the whole disclosure of the patent that the Appellant when drafting the claims used the term "comprising" in order to allow the method of Claim 1 to embrace further process steps as it is evident from, for instance, Claim 8 which relates to the process of Claim 1 including the further step of dewatering the product of step (c). There is no reason to interpret Claim 1 as allowing further steps to be carried out after step (c) but excluding other possible steps e.g. before step (a) or between steps (a) and (b).

4.4 It has been further argued by the Appellant that the use of the wording "the aqueous extract" (emphasis added) implies that the aqueous extract must be the one obtained in step (a), thus excluding any additional treatment between steps (a) and (b).

This argumentation cannot be followed by the Board because it does not take account of the fact that the possible presence of intermediate steps, like for instance a cooling step as in D8 between steps (a) and (b), would still allow reference to "the aqueous extract".

Moreover, the Appellant has chosen the wording "said precipitated protein" in step (c) to ensure that the precipitated protein of step (b) is the one to be used
in step (c), while in step (b) it chose the article "the" allowing a different interpretation.

4.5 For these reasons the Board considers that the wording of Claim 1 embraces the process as disclosed in D8. The subject-matter of Claim 1 therefore lacks novelty (Article 54 EPC).

Auxiliary Request

5. Novelty (Article 54 EPC)

5.1 Claim 1 according to the auxiliary request corresponds to Claim 1 of the main request wherein step (b) has been amended to read:

(b) adjusting the pH of the aqueous extract of (a) to about the isoelectric point of the protein material in order to precipitate the protein material; and (emphasis by the Board).

5.2 The amended wording of step (b) requires adjusting the pH of the aqueous extract of step (a), that is to say, as obtained in step (a) and thus excludes any further possible process steps between steps (a) and (b).

5.3 Consequently, the process of D8 which includes three additional steps between the extraction and the precipitation steps is now clearly excluded from the scope of Claim 1 which is therefore novel (Article 54 EPC).

5.4 The novelty of the claimed subject-matter was also disputed having regard to the disclosure of D1.
The Board agrees with the finding in the attacked decision that the claimed subject-matter is novel over the disclosure of D1. The wording "washing ... with water" (cf. step (c)) clearly indicates that water must be present and rules out the possibility of "washing without water".

5.5 For these reasons the subject-matter of Claim 1 is novel over the available prior art (Article 54 EPC).

6. Remittal (Article 111(1) EPC)

6.1 The Opposition Division decided that the subject-matter of Claim 1 of the main request as filed was not patentable on the grounds of lack of novelty. The decision under appeal does not deal with the issue of inventive step (Article 56 EPC). The issue of inventive step was a ground for opposition since the beginning of the proceedings and in relation to this issue a considerable amount of further documents was filed by both parties shortly before the oral proceedings and admitted into the proceedings by the Opposition Division.

Although the opposition has been withdrawn at the appeal stage, it is considered necessary to continue the opposition proceedings in order to assess the relevance of the evidence with regard to the issue of inventive step (Rule 60(2) EPC). Since this issue has not yet been examined by the Opposition Division, the case is to be remitted to them for this purpose (Article 111(1) EPC).
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the Opposition Division for further prosecution on the basis of Claims 1 to 8 of the auxiliary request filed 19 October 2005.

The Registrar: G. Röhn

The Chairman: P. Kitzmantel