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**Datasheet for the decision  
of 12 August 2008**

**Case Number:** T 0626/05 - 3.3.09

**Application Number:** 00931044.2

**Publication Number:** 1182935

**IPC:** A23C 3/00

**Language of the proceedings:** EN

**Title of invention:**  
Method and plant for treating milk

**Patentee:**  
APV PASILAC A/S

**Opponent:**  
Friesland Brands B.V.

**Headword:**  
-

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

**Relevant legal provisions (EPC 1973):**  
-

**Keyword:**  
"Independent claim 14: Novelty (no)"

**Decisions cited:**  
G 0009/91

**Catchword:**  
-



Case Number: T 0626/05 - 3.3.09

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.09  
of 12 August 2008

**Appellant:** APV PASILAC A/S  
(Patent Proprietor) Europaplads 2  
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**Representative:** Friese, Martin  
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**Respondent:** Friesland Brands B.V.  
(Opponent) Blankenstein 142  
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**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office orally announced  
13 January 2005 and posted 17 March 2005  
revoking European patent No. 1182935 pursuant  
to Article 102(1) EPC.

**Composition of the Board:**

**Chairman:** P. Kitzmantel  
**Members:** W. Ehrenreich  
K. Garnett

## Summary of Facts and Submissions

I. Mention of the grant of European patent No. 1 182 935 in respect of European patent application No. 00 931 044.2 filed on 31 May 2000 as International application PCT/DK00/00297 (published as WO-A 00/74495) in the name of APV Pasilac A/S was announced on 16 April 2003 (Bulletin 2003/16).

II. The patent entitled "*Method and plant for treating milk*" was granted with twenty two Claims. Claim 1 and dependent Claims 2 to 13 were directed to a plant for treating a low fat milk, and independent Claims 14, 16 and 17 pertained to various methods for treating milk. Claim 15 was dependent on Claim 14 and Claims 18 to 22 were either directly or indirectly dependent on one or more of Claims 14, 16 and 17.

Claim 14 reads as follows:

"14. Method of treating low-fat milk, such as skim milk, so as to obtain milk with a reduced content of spores and bacteria and a substantially unchanged content of milk proteins, where the milk is subjected to microfiltration causing a separation into a spore- and bacteria-containing retentate and a permeate with a reduced content of spores and bacteria **characterised in that** the permeate resulting from the microfiltration is subjected to an additional microfiltration."

III. Notice of opposition against the patent was filed by

*Friesland Brands B.V.*

on 16 January 2004.

The opposition was based on Article 100(a) EPC. In the notice of opposition and the subsequent written proceedings the Opponent exclusively provided arguments as to lack of inventive step of the subject-matter of Claims 1, 14, 16 and 17 vis à vis various combinations of cited prior art documents.

In the oral proceedings before the Opposition Division which took place on 13 January 2005 the Opponent raised for the first time the objection that the subject-matter of Claims 1, 14, 16 and 17 lacked novelty over the disclosure in the document:

D6 EP-A 0 194 286.

It does not appear from the minutes (cf. point 2) that the admissibility of this fresh opposition ground was contested by the Proprietor.

IV. With its decision orally announced on 13 January 2005 and issued in writing on 17 March 2005 the Opposition Division revoked the patent for lack of inventive step.

In its decision, the Opposition Division provided arguments as to why the subject-matter of Claims 1, 14, 16 and 17 was novel over D6 (reasons, point 2).

As to the novelty of the method claimed in Claim 14 the Opposition Division argued that D6 dealt with a method for treating milk via microfiltration to obtain a

retentate and a permeate, wherein the resulting permeate could be recirculated to the single microfiltration unit in admixture with fresh skim milk. This mixture could, however, not be considered as "the permeate" as specified as the essential feature in the characterising part of Claim 14. Furthermore, the expression "an additional microfiltration" in Claim 14 meant that a further microfiltration unit had to be passed by the permeate.

The Opposition Division, however, saw no inventive step in relation to the subject-matter of Claims 1, 14, 16 and 17 because it was obvious in its view to avoid bacterial contamination in case of membrane breakdowns by applying to the process of D5 the known principle of cascade microfiltration.

V. Notice of appeal was filed by the Patent Proprietor (hereinafter: the Appellant) on 12 May 2005. The Statement of the Grounds of Appeal was submitted on 27 July 2005.

The Appellant defended the patent in the form as granted and submitted two sets of claims as bases for auxiliary requests 1 and 2. In section III of the grounds of appeal the Appellant pointed out that the subject-matter of all independent Claims 1, 14, 16 and 17 was to be regarded as being novel, especially over the disclosure in document D6. No further detailed arguments in respect of novelty were provided.

VI. The Opponent (hereinafter: the Respondent) in its submission dated 19 December 2005 maintained its objections as to lack of novelty and lack of inventive

step and raised further objections under Article 123(2) and Rule 80 EPC with respect of the amendments made in the claims according to auxiliary requests 1 and 2.

VII. In the oral proceedings held on 12 August 2008 the Appellant withdrew auxiliary requests 1 and 2 and merely referred to its written submissions as regards the issue of novelty.

VIII. As to the objection of lack of novelty of the subject-matter of granted Claim 14, over D6, the Respondent argued as follows:

A plant separating whole milk into a skim milk fraction 7 and a cream fraction and subjecting the skim milk to a microfiltration in a microfilter 11 causing separation into a retentate and a permeate, was depicted in the figure of D6. In addition, the passage in column 4, lines 15 to 20 taught that the permeate outlet of the microfilter is connected to a pipe 12 which includes a second pump 13 and which defines a return flow or recirculation path enabling permeate to be combined with the skim milk fraction after the latter has passed through the heat exchanger. D6 therefore disclosed that the permeate is subjected to an additional microfiltration step in accordance with Claim 14.

The Opposition Division's argument that the permeate which resulted from the first microfiltration step and which was subjected to a further microfiltration step in accordance with Claim 14 was different from a mixture of permeate and skim milk was not, in the Respondent's view, reflected by the language of the

claim. Rather, the wording "*that the permeate resulting from the microfiltration is subjected to an additional microfiltration*" was open-ended and did not exclude that something could be added to the permeate nor that the additional microfiltration step could be carried out in the same microfiltration unit.

- IX. The Appellant requested that the decision under appeal be set aside and the patent be maintained as granted.
- X. The Respondent requested that the appeal be dismissed.

### **Reasons for the Decision**

- 1. The appeal is admissible.
- 2. The objection under Article 100(a) EPC that the claimed subject-matter lacked novelty over D6 was raised by the Opponent in the first instance opposition proceedings after the opposition period. Nevertheless, novelty was considered and discussed by the parties in the oral proceedings before the Opposition Division (minutes/reasons for the decision, points 2.) which corroborates the *prima facie* relevance of this fresh opposition ground. Its introduction into the opposition proceedings therefore complies with the decision G 9/91 (Reasons 16).  
Therefore, the opposition ground of lack of novelty is already in the opposition proceedings and may also be considered in the appeal proceedings.

3. *Novelty of the subject-matter of Claim 14 over D6*

The method for treating a low fat (skim) milk according to Claim 14 is characterised by the following two essential process steps:

- the milk is subjected to microfiltration causing a separation into a (spore- and bacteria-containing) retentate and a permeate (with reduced content of spores and bacteria);
- the permeate resulting from the first step is subjected to an additional microfiltration.

The formulation that "*the permeate ... is subjected to an additional microfiltration*" gives no indication whether or not the permeate is subjected to any intermediate step, for instance by mixing it with other milk fractions or by temperature treatment, before the additional microfiltration takes place.

Such a "neutral" formulation thus has to be understood in the sense that further intermediate steps are not excluded from the claimed method.

The Board therefore disagrees with the Opposition Division's view that the term "the permeate" excluded its admixture to another skim milk fraction.

The plant depicted in the figure of D6 discloses in combination with the text passages in column 3, line 54 to column 4, line 48 a method of producing milk with low bacterial content.

In one section of the plant, which includes the heat exchanger 8, the microfilter 11, the circulation path 9, the pump 10, the pipe 12 and the pump 13, the following process steps are performed:



- skim milk 7 is conducted to the heat exchanger 8 and then fed via the pump 10 through a circulation path 9 to the microfilter 11 (column 4, lines 1 to 7). This circulation path defines the first microfiltration step of the skim milk.
  
- According to column 4, lines 15 to 20 "*[t]he permeate outlet of the microfilter is connected to a pipe 12 which includes a second pump 13 and which defines a return flow or recirculation path enabling permeate to be combined with the skim milk fraction after the latter has passed through the heat exchanger 8*". This circulation defines the reintroduction of the permeate resulting from the microfilter 11 into the first circulation path wherein the permeate is mixed with further skim milk 7 and then again fed into the microfilter 11. The permeate resulting from the previous step is therefore subjected to an additional microfiltration.

For the above reasons, D6 anticipates all process steps set out in Claim 14.

The Appellant's single request is therefore not allowable because of lack of novelty of the subject-matter of Claim 14.

**Order**

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

The appeal is dismissed.

The Registrar

The Chairman

G. Nachtigall

P. Kitzmantel