

**Internal distribution code:**

- (A)  Publication in OJ  
(B)  To Chairmen and Members  
(C)  To Chairmen  
(D)  No distribution

**Datasheet for the decision  
of 7 March 2013**

**Case Number:** T 2516/10 - 3.3.09

**Application Number:** 98939488.7

**Publication Number:** 1009243

**IPC:** A23C 19/032, C12M 1/26,  
A23C 9/123, A23C 9/12

**Language of the proceedings:** EN

**Title of invention:**  
Dairy starter culture delivery system and use hereof

**Patent Proprietor:**  
Chr. Hansen A/S

**Opponent:**  
DuPont Nutrition BioSciences ApS

**Headword:**  
-

**Relevant legal provisions:**  
EPC Art. 54, 83, 84, 111, 123

**Keyword:**  
"Substantial procedural violation - no"  
"Main and first auxiliary request: added subject-matter - yes"  
"Second auxiliary request: novelty - no"  
"Third auxiliary request: added subject-matter - no, clarity -  
yes, sufficiency - yes, novelty - yes"  
"Remittal for further prosecution"

**Decisions cited:**  
-

**Catchword:**  
-



Case Number: T 2516/10 - 3.3.09

**DECISION**  
of the Technical Board of Appeal 3.3.09  
of 7 March 2013

**Appellant:** Chr. Hansen A/S  
(Patent Proprietor) Bøge Allé 10-12  
P.O. Box 407  
DK-2970 Hørsholm (DK)

**Representative:** Grünecker, Kinkeldey  
Stockmair & Schwanhäusser  
Leopoldstrasse 4  
D-80802 München (DE)

**Respondent:** DuPont Nutrition BioSciences ApS  
(Opponent) Langebrogade 1  
P.O. Box 17  
DK-1001 Copenhagen K (DK)

**Representative:** Alcock, David  
D Young & Co LLP  
120 Holborn  
London EC1N 2DY (GB)

**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office posted 7 October 2010  
revoking European patent No. 1009243 pursuant  
to Article 101(3) (b) EPC.

**Composition of the Board:**

**Chairman:** W. Sieber  
**Members:** J. Jardón Álvarez  
K. Garnett

## Summary of Facts and Submissions

I. This decision concerns the appeal filed by the proprietor of European patent No. 1 009 243, Chr. Hansen A/S, against the decision of the opposition division to revoke the patent.

II. The patent was granted with 32 claims, claims 1, 19 and 22 reading as follows:

"1. A method of preparing a dairy product in a dairy plant, the method comprising the steps of

(i) supplying to the dairy plant a microbial dairy starter culture as a culture concentrate in a sealed enclosing packaging (1) which is provided with outlet means (2) for connecting the packaging directly to the dairy process line (6),

(ii) combining the microbial starter culture with an aqueous medium to obtain an aqueous suspension of the microbial starter culture, said combining being preceded or succeeded by a step comprising connecting the outlet means of the packaging to the dairy process line,

(iii) combining said starter culture suspension with milk in the dairy process line (6), and

(iv) optionally keeping the thus inoculated milk under starter culture fermenting conditions

to obtain the dairy product."

"19. A delivery system for inoculation of a dairy starter culture into a dairy plant process line (6), the system comprising a sealed enclosing packaging (1),

said packaging (1) containing a concentrate of a starter culture and/or a milk clotting enzyme, said packaging (1) is provided with outlet means (2) for connecting it to the dairy process line (6), said outlet means (2) permitting the connection of the packaging (1) to the dairy process line (6) to obtain delivery of the starter culture into the process line (6), and said packaging (1) being connected to a suspension container (10)."

"22. A delivery system for inoculation of a dairy starter culture into a dairy plant process line (6), the system comprising a sealed enclosing packaging (1), said packaging (1) containing a concentrate of a starter culture and/or a milk clotting enzyme, said packaging (1) is provided with inlet means and outlet means (2) for connecting the packaging (1) to the dairy process line (6), said inlet means permitting that an aqueous medium is introduced substantially aseptically into the packaging (1) and the outlet means (2) permitting the connection of the packaging to the dairy process line (6) to obtain delivery of the starter culture into the process line (6)."

Claims 2 to 18, 20, 21 and 23 to 32 were dependent claims.

III. The opponent Danisco A/S, now DuPont Nutrition BioSciences ApS, had requested revocation of the patent in its entirety on the grounds of Article 100(a) (lack of novelty and lack of inventive step), Article 100(b) and Article 100(c) EPC.

The documents cited during the opposition proceedings included:

D1: J.E. Lewis, "Cheese starters: Development and application of the Lewis system", 1987, pages 96 to 217;

D2: US-4 941 517 A; and

D3: H. de Roissart & F. M. Luquet, Coordonnateurs, "Bactéries Lactiques", Lorica, 1994, pages 539, 552, 553, 581 and 582.

IV. With its decision announced orally on 11 February 2010 and issued in writing on 7 October 2010, the opposition division revoked the patent. The decision was based on the patent as granted (main request) and on an auxiliary request filed during the oral proceedings to replace the previous auxiliary request filed with letter of 11 December 2009.

The opposition division did not allow the main request because the subject-matter of claims 1 and 19 was considered to extend beyond the content of the application as filed.

The opposition division held that the auxiliary request fulfilled the requirements of Articles 83 and 123 EPC. However, it revoked the patent because the subject-matter of claims 1 and 18 was considered to lack novelty over the disclosure of D1. The opposition division also held that neither D2 nor D3 anticipated the subject-matter of the claims of the auxiliary request.

Finally, the opposition division rejected the objection of the patent proprietor that he had not been given a chance to react to the decision on novelty, in contravention of Article 113(1) EPC. The objection had been raised during the oral proceedings when the opposition division did not allow the patent proprietor to file further requests after the announcement of its conclusion on novelty of the auxiliary request.

V. On 17 December 2010 the patent proprietor (in the following: the appellant) filed an appeal and on the same day paid the prescribed fee. The statement setting out the grounds of appeal was filed on 17 February 2011 together with a main and three auxiliary requests (auxiliary requests 1 to 3). The appellant also requested reimbursement of the appeal fee. In its view, the opposition division made several procedural mistakes during the oral proceedings which led to the violation of the appellant's right to be heard.

VI. By letter dated 30 June 2011 the opponent (in the following: the respondent) filed its reply to the appeal. The respondent disputed all the arguments submitted by the appellant and requested that the decision of the opposition division be upheld in so far as it related to the revocation of the patent. It also filed the following further document:

D17: F. M. Luquet & G. Corrieu, Coordonnateurs,  
"Bactéries lactiques et probiotiques", Lavoisier,  
2005, page 44, and an English translation thereof,  
D17a.

VII. On 12 October 2012 the board dispatched a summons to attend oral proceedings. In a communication dated 23 November 2012, the board indicated the points to be discussed during the oral proceedings. The board also expressed its preliminary view that the requirements of sufficiency of disclosure were met and that no substantial procedural violation had occurred during the opposition proceedings.

VIII. A response was filed by the appellant by letter dated 7 February 2013 together with five new requests (auxiliary requests 4 to 8) and the following document:

D18: E.B. Hansen, "Commercial bacterial starter cultures for fermented foods of the future"; International Journal of Food Microbiology, 78, 2002, pages 119-131.

IX. Oral proceedings before the board were held on 7 March 2013. During the oral proceedings the appellant withdrew its auxiliary request 1, so that auxiliary request 2 filed with the statement setting out the grounds of appeal became its first auxiliary request, filed a new auxiliary request 3, which became its second auxiliary request, and made auxiliary request 8 its third auxiliary request.

X. The requests relevant for this decision are the following:

**Main request** (patent as granted)

The claims of the granted patent are set out in point II above.

**First auxiliary request** (Auxiliary request 2 filed on 17 February 2011):

Claim 18 of the first auxiliary request is based on claim 19 of the main request (see point II above), with the introduction at the end of the claim of the wording "wherein the suspension container is provided with means for engaging the enclosing packaging with the suspension container and outlet means for connecting the suspension container to other units of the process line".

**Second auxiliary request** (Auxiliary request 3 filed on 7 March 2013 during oral proceedings):

Claim 18 of the second auxiliary request is the same as claim 22 of the main request (see point II above).

**Third auxiliary request** (Auxiliary request 8 filed with letter dated 7 February 2013):

Independent claims 1 and 4 of the third auxiliary request read as follows:

"1. A method of preparing a dairy product in a dairy plant, the method comprising the steps of

(i) supplying to the dairy plant a microbial dairy starter culture as a culture concentrate in a sealed enclosing packaging (1) which is provided with outlet means (2) for connecting the packaging (1) directly to a suspension container (10), said suspension container (10) is provided with means for engaging the packaging



(1) with the suspension container (10) and outlet means for connecting the suspension container to other units of the process line (6),

(ii) introducing the starter culture into the suspension container (10) by connecting, under essentially aseptic conditions, the outlet means (2) of the packaging to the engaging means of the suspension container and combining the thus introduced starter culture with an aqueous medium to obtain a suspension of the culture therein,

(iii) introducing said starter culture suspension into the process line, the introduction being performed, under essentially aseptic conditions, through the connection between the outlet means of the suspension container and one or more process line units whereby the starter culture suspension is combined with the milk

(iv) optionally keeping the thus inoculated milk under starter culture fermenting conditions to obtain the dairy product,

wherein the aqueous medium is tap water, distilled water, deionised water or an aqueous solution containing a salt and the aqueous medium may further comprise buffering agents or microbial nutrients."

"4. A method of preparing a dairy product in a dairy plant, the method comprising the steps of

(i) supplying to the dairy plant a microbial dairy starter culture as a culture concentrate in a sealed

enclosing packaging (1) which is provided with inlet means and outlet means (2) for connecting the packaging directly to the process line (6),

(ii) introducing, under essentially aseptic conditions, an aqueous medium into the packaging (1) through the inlet means to obtain an aqueous suspension of the culture therein,

(iii) introducing said starter culture suspension into the dairy process line (6) containing milk, the introduction being performed by connecting, under essentially aseptic conditions, the outlet means (2) of the packaging (1) to the dairy process line (6) whereby the starter culture suspension is combined with the milk, and

(iv) optionally keeping the thus inoculated milk under starter culture fermenting conditions to obtain the dairy product,

wherein the aqueous medium is tap water, distilled water, deionised water or an aqueous solution containing a salt and the aqueous medium may further comprise buffering agents or microbial nutrients."

Claims 2, 3 and 5 to 17 are dependent claims.

XI. The arguments presented by the appellant may be summarised as follows:

- The opposition division's refusal to allow further auxiliary requests during the oral proceedings in response to fresh novelty attacks was an unfair

treatment of the patent proprietor which amounted to a serious procedural violation, in particular in view of the previous announcement during the oral proceedings that further requests would be admitted.

- D18 should be admitted into the proceedings as it had been filed in direct reaction to the communication of the board indicating that the scope of the product claims was "very broad".
  
- Claim 1 as granted resulted from the unification of the methods disclosed in claims 2 and 5 of the application as filed. The amendment did not violate Article 123(2) EPC, both alternatives now embraced by the claim being further supported by the disclosure in the paragraphs bridging pages 5/6 and 6/7, respectively, of the application as filed. The delivery system of claim 19 corresponded to the alternative of the method of claim 1 wherein the connecting of the suspension container preceded the combining of the microbial starter culture with an aqueous medium. The skilled person would understand that the only technically reasonable interpretation of claim 19 was that the sealed enclosed packaging was connected to the suspension container, which in turn was connectable to other units of the process line, *i.e.* it had to have an outlet means for connecting to other units of the process line. Claim 19 was thus also supported by the application as filed.

- Claim 18 of the first auxiliary request now recited features disclosed on page 6, lines 1 to 4 of the description as originally filed and thus fulfilled also the requirements of Article 123(2) EPC.
  
- The subject-matter of claim 18 of the second auxiliary request was not disclosed in any of D1 to D3. The subject-matter of the claim was limited to a delivery system containing "a concentrate of a starter culture and/or a milk clotting enzyme" and therefore excluded the bulk starters disclosed in D1 and D2. Furthermore, D3 did not disclose a packaging provided with inlet means permitting the introduction of an aqueous medium substantially aseptically into the packaging and outlet means to deliver the starter culture into the process line. The term "concentrate" used in the claim had a well established meaning in the field, excluding the cultures used for the preparation of bulk starters, as disclosed for instance in D18, a document originating from the respondent.
  
- The subject-matter of claims 1 and 4 of the third auxiliary request was supported, respectively, by claims 2 and 5 of the application as filed. The definition of the aqueous medium found explicit support on page 5, lines 26-29 of the description. The crossing out of some alternatives was not an infringement of Article 123(2) EPC.
  
- Concerning the further amendments to claims 1 and 4, the appellant agreed with the finding in the appealed decision that these amendments were

supported by the application as filed and that they did not extend the scope of the claim. The subject-matter of the claims was also clear and in any case the clarity issues raised by the respondent were already present in the granted claims and could not be objected to at this stage of the proceedings.

- The patent fulfilled the requirements of Article 83 EPC and the subject-matter of the claims of the third auxiliary request was novel.

XII. The arguments presented by the respondent may be summarised as follows:

- D18 should not be admitted into the proceedings because it had been filed too late, had been published after the filing date of the patent and was not relevant.
- The subject-matter of claim 1 of the main request extended beyond the content of the application as filed (Article 123(2) EPC). The feature added to claim 1, namely "said combining being preceded or succeeded by a step comprising connecting the outlet means of the packaging to the dairy process line" allowed for new embodiments being encompassed specifically by claim 1 despite their being neither disclosed nor envisaged in the application as filed. The methods disclosed on pages 5/6 and 6/7 included further features not present in amended claim 1, the claim being thus an intermediate generalization of the disclosure of the application as filed. Similar arguments

applied for claim 19 of the main request and for claim 18 of the first auxiliary request, wherein the appellant had picked out a single feature of a list of interlinked features.

- The subject-matter of claim 18 of the second auxiliary request was anticipated by the disclosure of each of D1, D2 and D3.
  
- The claims of the third auxiliary request contravened at least the requirements of Articles 123(2), (3), 54, 83 and 84 EPC for the following reasons:
  - The definition of the aqueous medium in claims 1 and 4 was not supported by the application as filed. To arrive at the amended claims it was necessary to make a multiple selection, resulting in a teaching not derivable from the application as filed, contrary to Article 123(2) EPC. Furthermore step (i) of claim 1 and step (iii) of claims 1 and 4 did not fulfil the requirements of Article 123(2) and (3) EPC.
  
  - Claims 1 and 4 contravened Article 84 EPC at least because the reference to "the process line" (emphasis added by the respondent) lacked any antecedent; also the wording "to obtain the dairy product" was now optional and the wording "directly to a suspension container" was unclear.
  
  - The patent did not comply with Article 83 EPC, essentially because the claims were not enabled across their entire scope. In particular, the

meaning of the term "aqueous medium" was very broad and the method embraced the preparation of dairy products at any temperature.

- The subject-matter of claim 1 of the third auxiliary request lacked novelty in view of any of the documents D1, D2 or D3 and the subject-matter of claim 4 was known from at least D3. The respondent argued that milk contained salt and was an aqueous solution, and consequently the subject-matter of claims 1 and 4 of the third auxiliary request also embraced the use of milk as an aqueous medium.

XIII. The appellant requested:

- (1) That the decision under appeal be set aside and that the patent be maintained as granted (main request), alternatively, that the patent be maintained in amended form with the claims according to auxiliary request 2 filed with the statement setting out the grounds of appeal dated 17 February 2011 (first auxiliary request), auxiliary request 3 filed during the oral proceedings on 7 March 2013 (second auxiliary request) or auxiliary request 8 filed with letter dated 7 February 2013 (third auxiliary request);
- (2) Alternatively, that in the event that the board came to the conclusion that the claims of its third auxiliary request satisfied the requirements of Articles 123(2)/100(c), 123(3), 84, 83 and 54 EPC, the case be remitted to the opposition division for consideration of inventive step; and

(3) Reimbursement of the appeal fee.

XIV. The respondent requested that the appeal be dismissed, alternatively that in the event that the board came to the conclusion that the claims of the appellant's third auxiliary request satisfied the requirements of Articles 123(2)/100(c), 123(3), 84, 83 and 54 EPC, the case be remitted to the opposition division for consideration of inventive step.

### **Reasons for the Decision**

1. The appeal is admissible.

2. *Admissibility of D18*

2.1 Document D18, a scientific paper from Bio Science Danisco A/S, was filed by the appellant one month before the oral proceedings in order to demonstrate that the skilled person was well aware of the fact that "a starter culture concentrate" as addressed in the claims of the patent in suit was to be distinguished from other starter cultures.

2.2 The respondent requested its non-admittance into the proceedings because it had been filed very late, it had been published after the filing date of the patent and because its disclosure did not represent general common knowledge.

2.3 The paragraph in D18 relied on by the appellant reads:



"The manufactures of fermented foods have the choice of either acquiring a starter culture in a ready to use highly concentrated form or to make a propagation of the culture in the factory. The choice between the two types of process will be influenced by a number of factors..." (emphasis by the board).

This paragraph contains no definition of the term "concentrate of a starter culture" used in the claims of the patent. D18 therefore does not support the argument of the appellant that the claimed "concentrate of a starter culture" excludes the use of starter cultures which are to be propagated. The board accordingly concludes that D18 is not so relevant as to justify its admission into the proceedings at this late stage.

- 2.4 Under these circumstances, the board exercised its discretionary power conferred by Article 114(2) EPC to disregard this document.

MAIN REQUEST (patent as granted)

3. *Amendments (Article 100(c) EPC)*

3.1 Claim 1

- 3.1.1 During examination proceedings, steps (i) and (ii) of claim 1 were amended. In granted claim 1 these steps read as follows (added text underlined):

"(i) ~~providing~~ supplying to the dairy plant a microbial dairy starter culture as a culture concentrate in a sealed ~~enclosure~~ enclosing packaging (1) which is

provided with outlet means (2) for connecting the ~~enclosure~~ packaging directly to the dairy process line (6),

(ii) combining the microbial starter culture with an aqueous medium to obtain an aqueous suspension of the microbial starter culture, said combining being preceded or succeeded by a step comprising connecting outlet means of the packaging to the dairy process line."

3.1.2 There is undisputedly no explicit support for the amendment made to step (ii) in the application as filed. The appellant maintains, however, that this feature is implicitly supported by two embodiments disclosed in the application as filed. These two embodiments are disclosed in claim 2 as filed and the paragraph bridging pages 5/6 (embodiment 1), and in claim 5 as filed and the paragraph bridging pages 6/7 (embodiment 2), respectively. In its view amended claim 1 merely unifies these embodiments in a single claim.

3.1.3 The board disagrees with the appellant for the following reasons:

It is correct that embodiment 1 as disclosed in the application as filed requires that the starter culture be combined with an aqueous medium in the suspension container part of the apparatus. In other words, the packaging is first connected to the process line and then combined with the aqueous emulsion (combining preceded by connecting). Embodiment 2 as disclosed in the application as filed requires that the starter

culture be combined with aqueous medium in the packaging (combining succeeded by connecting). However, it is to be noted, and it is critical, that both embodiment 1 and embodiment 2 in all disclosures in the application as filed require that the packaging be connected to the process line **under aseptic conditions**. This feature has however been omitted in claim 1 as granted. There is no support in the application as filed for omitting this feature from embodiments 1 and 2.

Furthermore, as pointed out by the respondent, embodiment 1 requires, and provides a basis only for "introducing the starter culture into the suspension container by connecting, under essentially aseptic conditions, the outlet means of the enclosure to the engaging means of the suspension container and combining the thus introduced starter culture with an aqueous medium to obtain a suspension of the culture therein" (e.g. claim 2 as filed). Perfectly logically, until the packaging has been connected to the suspension container, the combining with the aqueous medium **in the suspension container** cannot go ahead. However, claim 1 as granted encompasses connecting the packaging to the dairy process line, then subsequently introducing aqueous medium into the packaging to prepare the aqueous suspension and then introducing the aqueous suspension into the dairy process line. This embodiment is now encompassed specifically by claim 1 as granted despite it being neither disclosed nor envisaged in the application as filed.

3.1.4 For these reasons the subject-matter of claim 1 of the main request extends beyond the content of the

application as filed, contrary to the requirements of Article 100(c) EPC.

3.2 Claim 19

3.2.1 Claim 19 was also amended during the examination proceedings. In its granted form it reads as follows (added text underlined):

"A delivery system for inoculation of a dairy starter culture into a dairy plant process line (6), the system comprising a sealed ~~enclosure~~ enclosing packaging (1), said packaging (1) containing a concentrate of a starter culture and/or a milk clotting enzyme, said ~~enclosure~~ packaging (1) is provided with outlet means (2) for connecting ~~the enclosure~~ it to the dairy process line (6), said outlet means (2) permitting the connection of the ~~enclosure~~ packaging (1) to the dairy process line (6) to obtain delivery of the starter culture into the process line (6), and said packaging (1) being connected to a suspension container (10)."

3.2.2 According to the appealed decision and the respondent, the last amendment made to the claim, namely the feature that the "packaging (1) being [is] connected to a suspension container (10)", represents an undisclosed intermediate generalization between original claim 19 and the embodiments illustrated in the application as filed. Since, however, the claim fails for another reason (see below), there is no need to further elaborate on this issue.

3.2.3 As discussed during the oral proceedings the delivery system as claimed in original claim 19 only required

that the packaging was provided with outlet means for connecting to the dairy process line.

Thus, the delivery system shown in figures 3 and 4 of the application as filed illustrates the connection between the packaging (1) and the process line (6) via the outlet means (2) (see also figure (a) below). On the other hand, the delivery system of amended claim 19 requires that the packaging (1) is provided with outlet means (2) permitting the connection to the dairy process line (6), and that that packaging (1) is connected to a suspension container (10) (see figure (b)).

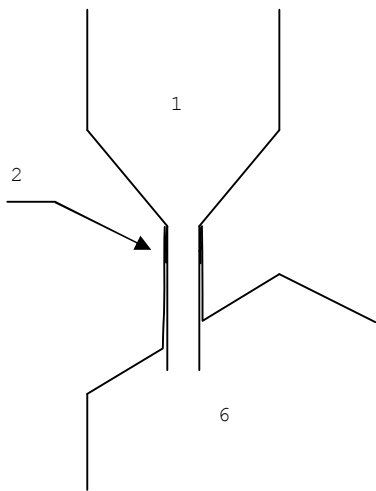


Figure (a)

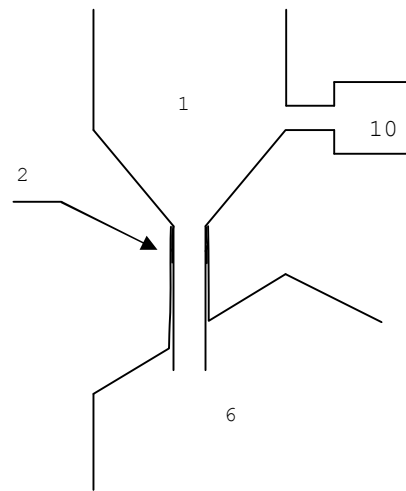


Figure (b)

3.2.4 There is, however, no support for this amendment in the application as filed. A suspension container (10) is only mentioned in the last paragraph of page 5 of the description, referring to figure 5. Assuming that the missing number (10) in figure 5 is the non-numbered tank to which the packaging (1) is connected, in this embodiment the packaging (1) is only connected to the suspension container (10), but not via a further

connection to the process line (6) as required by the amended claim. This paragraph cannot therefore provide a basis for the amendment to the claim.

3.2.5 The board can also not accept the argument of the appellant that the skilled person would automatically exclude a delivery system as shown in figure (b) above from the scope of the claim, since such a delivery system is technically not reasonable. For example, the embodiment of figure (b) could provide the concentrate starter in the packaging (1), which is then mixed in the suspension container (10) with water and then could be introduced into the process line (6) through the packaging (1). Such an embodiment may be rather complicated, but in the end it is an embodiment similar to the embodiment of claim 22, wherein the aqueous suspension of the culture is formed in the packaging.

3.2.6 For these reasons the subject-matter of claim 19 as amended during the examination proceedings embraces embodiments not covered by the application as filed and therefore does not satisfy the requirements of Article 100(c) EPC.

#### 4. *Novelty (Article 54 EPC)*

##### 4.1 Claim 22

4.1.1 Claim 22 is directed to a delivery system for inoculation of a dairy starter culture into a dairy process line (6) comprising:

(a) a sealed enclosing packaging (1),

- (b) said packaging (1) containing a concentrate of a starter culture and/or a milk clotting enzyme,
- (c) said packaging (1) is provided with inlet means and outlet means (2) for connecting the packaging to the dairy process line (6),
- (c1) said inlet means permitting that an aqueous medium is introduced substantially aseptically into the packaging (1) and
- (c2) the outlet means (2) permitting the connection of the packaging to the dairy process line (6) to obtain delivery of the starter culture into the dairy process line (6).

4.1.2 In short, claim 22 is directed to a sealed packaging, containing a concentrate of a starter culture, provided with inlet means for introducing aseptically an aqueous medium, and outlet means for connection with the process line. Claim 22 does not specify that the inlet and outlet means are separate entities. Hence the claim embraces a packaging having at least one port into it (an inlet/outlet).

4.1.3 The novelty of this claim was contested by the respondent in view of the disclosures of *inter alia* document D1.

4.1.4 Document D1 describes the "Lewis inoculation system". This system essentially comprises aseptically preparing working cultures in milk from mother cultures and whereby the working cultures are provided in intermediate feeder bottles which can then be used for inoculation. In particular, D1 discloses an apparatus for inoculating a dairy starter culture into a dairy plant process line (see title "Cheese Starters").

The detailed description on pages 96 to 101 teaches the following: All cultures, including the mother cultures, are contained in a container made of pliable, translucent low density polyethylene (page 96, fourth paragraph). The container is sealed using, for example, a standard-sized bung (page 96, paragraph 5) resulting in a sealed packaging (feature (a)) containing the mother culture (feature (b)). A double ended needle assembly is then prepared (page 98, point (3); see also Fig. 25(a)) which allows the delivery of the culture into the next incubation step as shown in Fig. 25(b). In fact the concentrate container is connected (via the needle assembly) to a feeder working culture bottle. The needle assembly can therefore be considered to be an outlet suitable for connecting it to a dairy process line to obtain delivery of the starter culture into the process line (feature (c2) of claim 22).

4.1.5 The appellant saw two differences between the disclosure of D1 and the subject-matter of claim 22 as follows:

- (i) The starter culture used in D1 was not a concentrate of a starter culture as required by claim 22 because it could not be directly used for the inoculation into the milk; and
- (ii) The delivery system of D1 did not have separate inlet and outlet means as required by claim 22.

4.1.6 The board finds these arguments unconvincing for the following reasons:



- Concerning (i), the board notes that the wording "concentrate of a starter culture" used in the claim embraces both "cultures which can be added directly to milk without any intermediate propagation" and "cultures propagated at the dairy plant" because both are encompassed by the broad wording "concentrate".

According to EPO practice, when interpreting a claim the skilled person should rule out interpretations which are illogical or which do not make technical sense. However, the exclusion of technically illogical interpretations does not mean that a broad term such as "concentrate" should be interpreted narrowly to mean "highly concentrated" or so as to exclude starter cultures propagated at the dairy plant (bulk starters). This feature can therefore not be seen as a distinguishing feature of the claimed delivery system.

- Concerning (ii), it cannot realistically be disputed that the wording of the claim embraces two possibilities, namely that the inlet and outlet means are the same entity and that they are separate entities. In fact, in none of the figures of the patent, representing the preferred embodiments of the invention, is a delivery system having separate outlet and inlet means exemplified, indicating that it was the intention of the applicant, when drafting the application, to include such possibility. It is not possible now to interpret the claim as requiring the presence of separate entities, only to ensure that a known

delivery system is not covered by the claim. With regard to D1 this means that the outlet means (the needle assembly) can be at the same time the inlet means (feature (c1) of claim 22). Therefore, this feature can also not justify the novelty of the subject-matter of claim 22.

4.1.7 In view of the above, the arrangement displayed in figure 25(a) and figure 25(b) of D1 is a disclosure of a delivery system fulfilling all the requirements of claim 22. Consequently, the subject-matter of claim 22 lacks novelty (Article 54 EPC).

5. In summary, the main request is not allowable because

- the subject-matter of granted claims 1 and 19 extends beyond the application as filed, and
- the subject-matter of claim 22 lacks novelty over D1.

FIRST AUXILIARY REQUEST (claims of auxiliary request 2 filed on 17 February 2011)

6. *Amendments*

6.1 Claim 18 of the first auxiliary request is based on claim 19 of the main request wherein it is further indicated that the "suspension container is provided with means for engaging the enclosing packaging with the suspension container and outlet means for connecting the suspension container to other units of the process line."

- 6.2 This amendment does not overcome the above Article 100(c) EPC objections in relation to claim 19 of the main request, in particular that the claim allows the connection of the packaging (1) to the process line (6) and the suspension container (10) as shown in figure (b) in point 3.2.3. This finding was not disputed by the appellant.
7. Under these circumstances, the reasoning in relation to claim 19 of the main request applies *mutatis mutandis* to the subject-matter of claim 18 of the first auxiliary request with the consequence that the first auxiliary request is not allowable (Article 100(c) EPC).

SECOND AUXILIARY REQUEST (claims of auxiliary request 3 filed on 7 March 2013 during oral proceedings)

8. *Novelty*
- 8.1 Claim 18 of the second auxiliary request is identical to claim 22 of the main request, which was found by the board to be lacking novelty (see point 4 above).
9. The second auxiliary request is thus not allowable because the subject-matter of claim 18 is not novel (Article 54 EPC).

THIRD AUXILIARY REQUEST (claims of auxiliary request 8 filed with letter dated 7 February 2013)

10. *Amendments*

10.1 As compared to the claims as granted, all claims relating to a delivery system (granted claims 19 to 32) have been deleted in the third auxiliary request.

In addition, the following amendments have been made:

- Claim 1 has been combined with claims 2 and 5, respectively, to form new independent claims 1 and 4;
- Claims 1 and 4 have been further limited to recite that:  
  
"the aqueous medium is tap water, distilled water, deionised water or an aqueous solution containing a salt and the aqueous medium may further comprise buffering agents or microbial nutrients".
- The remaining dependent claims have been renumbered accordingly.

10.2 Independent claims 1 and 4 are supported by claims 2 and 5 as filed. Further, the amendment concerning the "aqueous medium" is to be found on page 5, lines 26-30 of the application as filed.

10.3 The respondent raised several objections against these amendments under Article 123 EPC.

10.3.1 In particular, the respondent raised an objection under Article 123(2) EPC in relation to the feature in claims 1 and 4:

"wherein the aqueous medium is tap water, distilled water, deionised water or an aqueous solution containing a salt ... ".

The board cannot accept the respondent's argument that the definition of the aqueous medium in claims 1 and 4 provides a new technical teaching because several selections had been made. In fact, the description as filed included only one list of possibilities from which some examples (milk, suspensions of milk solids and whey) were deleted. The deletion of single members from a list does not extend the subject-matter beyond the content of the application as filed and this amendment thus fulfils the requirements of Article 123(2) EPC.

10.3.2 The respondent also argued that the feature in claim 1:

"outlet means (2) for connecting the packaging (1) directly to a suspension container (10), said suspension container (10) is provided with means for engaging the packaging (1) with the suspension container (10) ... " (emphasis added)

gave rise to objections under Articles 123(2) and (3) EPC.

However, the fact that in claim 1 the packaging (1) is directly connected to the suspension container (10) does not contravene Article 123(2) EPC. This amendment

merely indicates the point at which the packaging is connected to the dairy process line (6), that is to say, the suspension container (10). A basis for the amendment is to be found in claim 2 of the application as filed, in combination with the disclosure on page 15, lines 30-34 of the specification as filed and the corresponding figure 5. Especially from figure 5 it is evident that the packaging (1) is directly connected to the suspension container (10).

Claim 1 as granted required that the connection from the packaging was directly to "the dairy process line". According to the respondent this requirement is no longer present in the amended claim. However, claim 1 of the third auxiliary requires that the packaging (1) "is provided with outlet means (2) for connecting the packaging (1) directly to a suspension container (10)", and the suspension container (10) itself is provided with "outlet means for connecting the suspension container to other units of the process line (6)" (emphasis added). The skilled person would immediately understand that the suspension container is part of the process line, so that the packaging is still directly connected to the process line. Hence the amendment does not extend the protection conferred by the granted patent.

10.3.3 According to the respondent step (iii) of claims 1 and 4 of the third auxiliary request requires that the starter culture is combined with milk after being passed into the process line. However, where the combination with milk takes place is not stated. In contrast claim 1 as granted required in step (iii) "combining said starter culture with milk in the dairy

process line". It was argued that this new technical teaching contravened Article 123(2) EPC as it is a teaching not present in the application as filed and also contravened Article 123(3) as the amended claim now encompassed embodiments not encompassed in the granted claims.

However, step (iii) of claims 1 and 4 is identical to step (iii) of granted claims 2 and 5, respectively (claims 1 and 4 as filed). It requires "...introducing said starter culture suspension into the process line ... whereby the starter culture is combined with the milk". This wording does not embrace a combination of starter culture suspension and milk outside the process line. Therefore claims 1 and 4 fulfil the requirements of Article 123(2) and (3) EPC.

10.3.4 In summary, the amendments made to the claims satisfy the requirements of Articles 123(2) and (3) EPC.

10.4 The respondent also raised objections under Article 84 EPC against the wording:

- "the process line" (emphasis added) in step (i) of claims 1 and 4 as lacking an antecedent;
- "to obtain the dairy product" in step (iv) of claims 1 and 4 as being now optional; and
- [the packaging (1) being connected] "directly to a suspension container (10)" (emphasis added) in claim 1.

10.4.1 The board sees the subject-matter of both claims 1 and 4 as fulfilling the requirements of clarity.

Even if it is correct that there is no antecedent for the process line in step (i), the skilled person would automatically understand the meaning of the wording "the process line" from the previous reference in the claim to a dairy plant.

Similar considerations apply to the wording "to obtain the dairy product". The introduction to the claim already indicates that the claimed method is "a method of preparing a dairy product" and consequently the method has to result in a dairy product. The skilled person when reading the claims would understand that the obtaining of a dairy product is obligatory in the method of claims 1 and 4. Apart from that, it appears that the wording "to obtain the dairy product" has been erroneously placed at the end of the optional step (iv) when retyping the claims of this request. In granted claim 1 this wording was placed in a separate paragraph.

Finally, the wording relating to the 'direct' connexion of the packaging to a suspension container was already present in the granted claims (cf. claim 2) and it cannot be objected to under Article 84 EPC at this stage of the proceedings.

10.4.2 For these reasons the amendments made to the claims satisfy also the requirements of Article 84 EPC.



11. *Sufficiency of disclosure*

11.1 The patent relates to the preparation of a dairy product using a microbial dairy starter. The invention is said to be based on the finding that a starter culture in a frozen, dried or liquid state can maintain its viability and fermenting activity for a considerable period of time after it has been suspended in an aqueous medium (see paragraph [0023]). The specification includes several working examples testing the stability of starter cultures in aqueous suspensions. Moreover, there is no experimental evidence on file showing that an embodiment covered by the claims cannot be carried out by the skilled person.

11.2 The objections of the respondent in relation to sufficiency of disclosure appear to be based on the use of broad terms for defining the scope of the claims. These objections concern the question whether the claims define clearly the subject-matter for which protection is sought, that is to say, in relation to Article 84 EPC, which is not in itself a ground for opposition.

11.3 For these reasons the board is satisfied that the requirements of sufficiency of disclosure are satisfied.

12. *Novelty*

12.1 The respondent contested the novelty of the subject-matter of claims 1 and 4 in view of the disclosure of documents D1, D2 and D3.

12.2 The subject-matter of claims 1 and 4 has been limited to specify that the starter culture is combined with an aqueous medium, the aqueous medium being tap water, distilled water, deionised water or an aqueous solution containing a salt. By this limitation the use of milk as an aqueous medium is no longer within the scope of the claims.

12.3 Document D1 discloses the propagation of a starter culture in milk and cannot anticipate the subject-matter of claims 1 and 4. The board cannot accept the argument of the respondent that the subject-matter of claims 1 and 4 still encompasses the use of milk because milk contains salt and is an aqueous solution. Milk is an emulsion of fat in water and does not fall within the definition of the aqueous medium used in claims 1 and 4.

12.4 The same considerations apply to the disclosure of documents D2 and D3, neither of them describing a method as now claimed wherein the starter culture is combined with an aqueous medium as defined in the claims.

12.5 For these reasons the subject-matter of independent claims 1 and 4, and for the same token the subject-matter of dependent claims 2, 3 and 5 to 17, is novel.

13. *Remittal*

13.1 The board thus decides that the subject-matter of claims 1 to 17 of the third auxiliary request fulfils the requirements of Articles 54, 83, 84, 123(2) and 123(3) EPC.

13.2 Taken account of the fact that the opposition division has not yet taken a decision on inventive step and that both the appellant and the respondent requested remittal of the case to the opposition division for further consideration, the board considers it appropriate to exercise its discretion under Article 111(1) EPC to remit the case to the opposition division for further prosecution on the basis of claims 1 to 17 of the third auxiliary request.

14. *Reimbursement of the appeal fee*

14.1 The opposition division, having allowed the respondent to make novelty attacks for the first time in the oral proceedings based on D2 and D3 (in addition to the existing novelty attack based on D1), later simply announced that the subject-matter lacked novelty, without saying on what basis, and then announced the decision to revoke the patent.

Although in the reasons of the decision it is clear that novelty of claim 1 was denied on the basis of D1, but not D2 or D3, this (so it would seem) was not known to the appellant at the oral proceedings.

14.2 In view of this way of proceeding the appellant maintains that the opposition division made several procedural mistakes during the oral proceedings making the reimbursement of the appeal fee equitable. In particular the opposition division:

- did not make a decision on the admissibility of the late filed objections under Article 54 EPC on

the basis of D2 and D3 although they were raised for the first time during the oral proceedings;

- refused to allow new auxiliary requests in response to the new novelty objections made by the respondent; and
- did not allow further auxiliary requests although the division had announced that further new requests would be considered.

14.3 In order to decide whether a substantial procedural violation has been committed making it equitable to reimburse the appeal fee it is necessary (a) to identify some relevant procedural rule, (b) determine whether there was a substantial violation of it, (c) determine whether it caused or contributed to a decision prejudicial to the appellant making reimbursement of the appeal fee equitable.

14.4 The appellant has not identified which procedural rule or rules are said to have been violated. So far as concerns the right to be heard, according to Article 113(1) EPC the decisions of the European Patent Office may only be based on grounds or evidence on which the parties concerned have had an (adequate) opportunity to present their comments. Thus, what needs to be determined in this respect is whether the appellant's right to be heard according to Article 113(1) EPC has been safeguarded, *i.e.*, whether the decision is based on grounds or evidence on which the appellant had an adequate opportunity to present its comments.

14.5 In the board's view no substantial procedural violation occurred during the opposition proceedings which caused or contributed to a decision prejudicial to the appellant, making it equitable to reimburse the appeal fee, for the following reasons:

14.5.1 The novelty objections based on D2 and D3

It was within the discretion of the opposition division to admit new submissions at the oral proceedings, including new attacks on novelty based on documents filed originally for the purposes of inventive step.

As to D2, there is no indication in the minutes or the decision itself that the appellant in fact made any objection to the attack based on D2. No request to correct the minutes in this respect was made by the appellant.

As to D3, the appellant clearly did make an objection to this attack but the objection was heard (see point 6.3 of the minutes of the oral proceedings and points 1.2 and 5.3 of the reasons for the decision), following which the opposition division clearly decided to allow the objection to be made (see the same passages from the minutes and the decision). At point 1.2 of the reasons for the decision it is explained why the opposition division allowed this objection to be made. Following this decision, the appellant was given the opportunity to have a break in the proceedings to further consider the document (and D2), but which the appellant declined (see point 6.3 of the minutes and point 5.4 of the reasons for the decision).

The substantive issues arising out of the novelty attack based on documents D2 and D3 were discussed with the parties in the oral proceedings. This is not disputed by the appellant.

Finally, and conclusively, the opposition division denied the novelty of the new auxiliary request 1 in view of D1, not in view of the new attacks based on D2 and D3, both of which the opposition division expressly found not to be novelty-destroying (see point 14.1 above). The decision of the opposition division to hear argument on the attacks based on D2 and D3 therefore did not cause or contribute to the adverse decision on novelty.

In conclusion, (a) the appellant was heard on the only objection of which there is evidence, namely concerning D3, (b) the opposition division reached a decision on this objection, (c) gave reasons for its decision on this objection and (d) in the event D2 and D3 played no role in the decision on novelty.

#### 14.5.2 The refusal to allow further auxiliary requests in response to the novelty attacks

It is not necessary to go into precisely what indications the opposition division may have given in this respect. Whatever the position may have been, the fact remains that it is within the discretion of the opposition division to admit new requests into the oral proceedings. A party is not entitled to know in advance the opposition division's opinion of the issues and, so far as concerns the filing of auxiliary requests, must

decide for itself how to organise its case on the basis of the issues in the proceedings. Generally, the exercise of such a discretion will only amount to a procedural violation if, for example, the right to be heard was in some way denied or fairness requires that a party should have had the opportunity to react in an appropriate way to a new procedural situation.

However, the non-allowance of further requests did not in the present case amount to a substantial procedural violation. Even if the appellant did not know at the oral proceedings whether or not the reason for the finding of lack of novelty was based on D2 and/or D3, it was in fact based on D1, as appears from the reasons for the decision. This novelty attack was filed by the respondent with its notice of opposition and the appellant had had enough time to file an amended request before the oral proceedings against the event that the opposition division might come to the conclusion that the claimed subject-matter lacked novelty over D1.

- 14.6 As a consequence, the request for reimbursement of the appeal fee is rejected.

**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 consideration of inventive step on the basis of the claims of auxiliary request 8 filed with the appellant's letter dated 7 February 2013.
3. The request for reimbursement of the appeal fee is refused.

The Registrar

The Chairman

M. Cañueto Carbajo

W. Sieber