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**D E C I S I O N**  
**of 28 June 2006**

**Case Number:** T 0111/04 - 3.2.07

**Application Number:** 96201614.3

**Publication Number:** 0747301

**IPC:** B65D 83/14

**Language of the proceedings:** EN

**Title of invention:**

Aerosol can containing a food product with a special aerosol

**Patentee:**

Friesland Brands B.V.

**Opponent:**

Unilever PLC

**Headword:**

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**Relevant legal provisions:**

EPC Art. 54, 56, 114(2)

**Keyword:**

"Late filed documents - admitted"

"Test report filed in grant proceeding - not automatically  
part of appeal proceedings and not admitted as late filed"

"Novelty - yes"

"Inventive step - no"

**Decisions cited:**

T 0198/88

**Catchword:**

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Case Number: T 0111/04 - 3.2.07

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.07  
of 28 June 2006

**Appellant:** Friesland Brands B.V.  
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**Representative:** Smulders, Theodorus A.H.J.  
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**Respondent:** Unilever PLC  
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**Representative:** Hugot, Alain  
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**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office posted 2 December 2003  
revoking European patent No. 0747301 pursuant  
to Article 102(1) EPC.

**Composition of the Board:**

**Chairman:** P. O'Reilly  
**Members:** H. Hahn  
E. Lachacinski

## Summary of Facts and Submissions

- I. Opposition was filed against European Patent No. 0 747 301 as a whole and based on Article 100(a) EPC (lack of novelty and lack of inventive step) and Article 100(b) EPC (insufficiency of disclosure).

The opposition division decided to revoke the patent.

- II. The appellant (proprietor) filed an appeal against the decision of the opposition division.

- III. The appellant requested that the decision under appeal be set aside and a patent be granted on the basis of claims 1 to 3 according to the first auxiliary request filed on 26 May 2006 (main request) or on the basis of claims 1 to 3 according to the second or third auxiliary requests filed on 26 May 2006 (first and second auxiliary requests).

The respondent requested that the appeal be dismissed.

- IV. Oral proceedings were held before the Board on 28 June 2006

- V. The independent claim of the main request reads as follows:

"1. A viscous, gel-like or paste-like food having a viscosity of at least 20 mPa.s at a shearing rate of less than 400 s<sup>-1</sup>, packed in an aerosol can having an initial pressure of 8-18 atmospheres, the propellant being formed as to at least 15 percent by weight, based on the total propellant, by a gas acceptable from the

viewpoint of food technology, which substantially does not dissolve in the food, wherein the propellant further consists of a gas acceptable from the viewpoint of food technology, which substantially dissolves in the food."

The independent claim of the first auxiliary request reads as follows (amendments when compared to claim 1 of the main request are depicted in bold):

"1. A viscous, gel-like or paste-like food having a viscosity of at least 20 mPa.s at a shearing rate of less than 400 s<sup>-1</sup>, packed in an aerosol can having an initial pressure of 8-18 atmospheres, **which food foams when leaving the can**, the propellant being formed as to at least 15 percent by weight, based on the total propellant, by a gas acceptable from the viewpoint of food technology, which substantially does not dissolve in the food, wherein the propellant further consists of a gas acceptable from the viewpoint of food technology, which substantially dissolves in the food."

The independent claim of the second auxiliary request reads as follows (amendments when compared to claim 1 of the first auxiliary request are depicted in bold or struck through):

"1. A **food being cream** ~~viscous, gel-like or paste-like food~~ having a viscosity of at least 20 mPa.s at a shearing rate of less than 400 s<sup>-1</sup>, packed in an aerosol can having an initial pressure of 8-18 atmospheres, which food foams when leaving the can, the propellant being formed as to at least 15 percent by weight, based on the total propellant, by a gas acceptable from the

viewpoint of food technology, which substantially does not dissolve in the food, wherein the propellant further consists of a gas acceptable from the viewpoint of food technology, which substantially dissolves in the food."

VI. The documents cited in the present decision are the following:

- D6: JP-A-03061450 and translation into English
- D7: Aerosols: Science and Technology, 1961, Interscience Publishers, H.R. Shepherd (Ed.), pages 409 to 411 (appellant) and 1, 414, 422 and 428 (respondent)
- D8: The Science and Technology of Aerosol Packaging, John Wiley & Sons, John J. Sciarra and Leonard Stoller, pages 430 to 433, 448 and 449.
- D9: US-A-3 622 354
- D10: US-A-2 723 200

VII. The arguments of the appellant may be summarised as follows:

- (i) The appellant considers that D6 to D10 should be admitted into the proceedings.

The appellant also considers that the test report filed with letter of 26 June 2000 during the grant proceedings is not late filed or if late filed should be admitted into the appeal proceedings. Since the test report was in the grant proceedings it is automatically in the opposition proceeding and subsequent appeal proceedings. The report is relevant since it shows how the combination of

soluble and insoluble gases produces a product with a more stable foam structure.

- (ii) Claim 1 of the main request is based on claims 1 and 4 as granted with the dependent claims being appropriately amended and renumbered. The amendments are allowable.

Claim 1 of the main request is novel as none of the prior art documents discloses all the features of this claim.

Claim 1 of the main request involves an inventive step. D10 is the closest prior art document and claim 1 is distinguished over the disclosure of the document by specifying a combination of soluble and insoluble gases. This feature solves the problem of how to combine foaming with a complete evacuation of the can. Neither D8 nor D10 suggests a combination of soluble and insoluble gases as propellant. D10 teaches away from the use of soluble gases since it teaches the use of an insoluble gas.

- (iii) The amendment to claim 1 of the first auxiliary request is based on page 6, lines 4 to 13 of the application as filed which discloses that foam is formed. The amendment is allowable.

Claim 1 of the first auxiliary request involves an inventive step. The new feature should be seen as a functional feature defining the function of the combination of soluble and insoluble gases. Neither D8 nor D10 suggests using a combination of

soluble and insoluble gases as propellant in order to produce a foamed product.

- (iv) The amendment to claim 1 of the second auxiliary request is based on page 8, lines 4 to 5 of the application as filed which discloses the use of cream. The amendment is allowable.

Claim 1 of the second auxiliary request involves an inventive step. The limitation to cream takes the claim further away from the prior art. Both D8 and D10 disclose the use of a soluble gas as propellant for cream. There is nothing to suggest the inclusion of an insoluble gas.

VIII. The arguments of the respondent may be summarised as follows:

- (i) The respondent considers that D6 to D10 should be admitted into the proceedings.

The respondent considers that the test report filed with letter of 26 June 2000 during the grant proceedings is late filed and should not be admitted into the appeal proceedings. The respondent received the document for the first time with the letter of the appellant of 26 May 2006. Documents present in the grant proceedings are not automatically part of subsequent proceedings. The document is also not relevant since it concerns only one point in a broad range and hence cannot be evidence for a surprising effect over the whole range.

- (ii) No objections are raised against the amendments to the claims of the main request.

Also the subject-matter of the claims of the requests is considered to be novel.

The subject-matter of claim 1 of the main request does not involve an inventive step. D10 is the closest prior art document. The document does not disclose the combination of a soluble gas and an insoluble gas as a propellant. The problem to be solved by this feature is to provide a product which foams to a limited extent. Already from D10 the skilled person receives the information that soluble gases cause foaming whereas insoluble gases do not. This is explained even better in D8 in the passage bridging pages 432 and 433 which also explains how the types of gases, i.e. soluble and insoluble, control foaming. Although it is not explicitly stated, the skilled person would immediately understand that a combination of soluble and insoluble gases will cause foaming to a limited extent and hence solve the problem.

- (iii) No objections are raised against the amendments to the claims of the first auxiliary request

The subject-matter of claim 1 of the first auxiliary request does not involve an inventive step. In fact the amendment merely states a result that was inherently contained in the features of claim 1 of the main request. There is therefore no effective change in the content of the claim.



- (iv) No objections are raised against the amendments to the claims of the second auxiliary request

The subject-matter of claim 1 of the second auxiliary request does not involve an inventive step. Cream is already mentioned in D10 so that a limitation thereto does not involve an inventive step.

### **Reasons for the Decision**

#### 1. *Late filed documents*

- 1.1 With the grounds of appeal the appellant filed a new document D7. With their response to the appeal grounds the respondent filed documents D6 to D10. D6 (including its translation) was a Japanese document which was named and referred to in a submission of the respondent during the opposition proceedings without however a copy thereof having been filed before the oral proceedings before the opposition division. D7 of the respondent is a different part of the textbook referred to by the appellant as D7.

The parties agreed that all these documents could be admitted into the proceedings. The Board had already in the annex to the summons to oral proceeding indicated its provisional view that the documents should be admitted. The Board therefore admitted these documents into the proceedings because of their relevance.

- 1.2 With their submission of 26 May 2006 the appellant filed a copy of their letter of 26 June 2000 with the

examining division together with a copy of a test report which had been submitted with that earlier letter. The test report gives the results of a comparative test that had been carried out by the appellant. The test report had been filed during the grant proceedings but had not been mentioned during the opposition proceedings.

The first matter to be decided is whether, on the basis of the filing during the grant proceedings, the document should be considered to be already in the proceedings. In accordance with the case law of the Boards of Appeal a prior art document which was part of the grant proceedings is not automatically part of subsequent opposition and appeal proceedings (see for instance T 198/88, OJ 1991, 254). The Board agrees with the case law and considers that this applies also to evidence filed during the grant proceedings. The grant proceedings is a closed proceedings so that there is no automatic presumption that anything filed in those proceedings are part of a subsequent separate opposition proceedings and appeal proceeding resulting from that opposition proceedings.

- 1.3 Having established that the document is late filed the next step is consider its admittance into the appeal proceedings as a late filed document. The document is a report of a comparative test and it was filed one month before the oral proceedings before the Board. One normal method of rebuttal of such evidence is for the other party to first check the evidence by repeating the tests itself or to file other test results. Clearly, carrying out such tests may require the organisation of personnel and means, which are not normally instantly

available. In the opinion of the Board it is unreasonable to expect the other party to be able to defend its position against comparative tests in the available period of one month. The Board therefore considers that the test report is not admissible even without reference to the relevance of the test results. In this respect Article 10b(3) of the Rules of Procedure of the Boards of Appeal also applies.

The Board would further note that the test report would also not appear to be relevant since it concerns only one point at 20% of the gas which substantially does not dissolve in the food, whereas the independent claims of all requests specify a range of at least 15%. An effect demonstrated to occur at a single point cannot support an inventive step for the whole range. The test report is therefore not relevant even without taking the further step of considering whether the test has shown that there actually is an effect at that point in the range.

- 1.4 The Board therefore decided not to admit the test report into the proceedings.

*Main request*

2. *Admissibility of the amendments*

Claim 1 of the main request is a combination of claims 1 and 4 as granted with consequent deleting of a dependent claim and renumbering of the dependent claims. The respondent raised no objections to the amendments and the Board is also satisfied that no objections to the amendments arise.

3. *Novelty*

The respondent did not raise any ground of lack of novelty and the Board is also of the opinion that the subject-matter of claim 1 is novel in the sense of Article 54 EPC since the nearest prior art document, which is D10, does not disclose all the features of the claim as is discussed below with respect to inventive step.

4. *Inventive step*

4.1 The parties both considered that the closest prior art is represented by D10. The Board agrees with the parties in this respect.

4.2 The parties were of the opinion that claim 1 is distinguished over the disclosure of D10 by the feature that the propellant further consists of a gas acceptable from the viewpoint of food technology, which substantially dissolves in the food. The Board agrees with the parties on this point.

4.3 D10 is directed to an aerosol can for viscous products such as mustard, mayonnaise and others. The document points out that the previously used propellant gases of carbon dioxide and nitrous oxide have been used for aeration or fluffing of cream and dissolve in the cream to produce the aeration or fluffing. The document further points out that an interaction between the propellant gas and the foodstuffs to which the document is directed is not particularly desired.

According to the respondent the problem to be solved with respect to D10 is to provide a can suitable for use with a product which needs to be foamed only to a certain extent. The Board agrees that this is the objective problem to be solved by the distinguishing features of claim 1.

D10 explains in column 2, lines 26 to 37 that the use of an insoluble gas avoids foaming whilst the use of a soluble gas produces foaming. The situation is further succinctly summarised in D8 in the passage bridging pages 432 and 433 wherein it is explained that the type of dispensing must be considered when the propellant system is selected. It is indicated that soluble propellants tend to produce foamed products whereas nitrogen (which is insoluble) produces non-aerated products. It is thus clear to the skilled person that soluble propellants produce foaming, insoluble propellants do not produce foaming, and mixtures of soluble and insoluble propellants produce an intermediate amount of foaming.

The skilled person therefore wishing to solve the objective problem would realise that a mixture of soluble and insoluble propellants will provide the solution. Claim 1 specifies that there must be at least 15% insoluble gas. However, there is no evidence of any special effect achieved within the broad range of 15 to nearly 100%. Indeed the range is so broad that any such special effect would probably have to be considered to be a mere bonus effect.

The appellant argued that the problem to be solved was to produce foaming as well as a complete evacuation of

the can. This problem was solved by the provision of both a soluble and an insoluble gas. The presence of the insoluble gas ensures that there is always propellant in the can even when there is little product left in the can. The Board first notes that there is no evidence that this problem existed or that the features of the claim solve this problem. It should again be emphasised that the broad ranges specified in the claim which include that there may be just a small amount of soluble gas or just 15% of insoluble gas and it is required that the problem be shown to be solved throughout this range. This has not been demonstrated so that the Board cannot accept this argument.

The appellant further argued that there was no indication in D10 to combine a soluble with an insoluble gas. The basis in D10 on which it was indicated that an insoluble gas should be used was the foodstuffs which were to be provided in the can. The foodstuffs were ones for which foaming was not desirable which was the reason for rejecting soluble gases in favour of an insoluble gas. There is thus no general teaching in D10 of a prejudice against a mixture of gases. The appellant argued similarly against D8. D8 however, as already explained, states the effects of soluble and insoluble gases and indicates that the type of dispensing desired must be considered when selecting the propellant system. There is thus no prejudice disclosed in D8 against the use of a mixture of soluble and insoluble gases.

- 4.4 Therefore, the subject-matter of claim 1 of the main request does not involve an inventive step in the sense of Article 56 EPC.

*First auxiliary request*

5. *Admissibility of the amendments*

Claim 1 of the first auxiliary request adds the feature that the food foams when leaving the can. The respondent raised no objections to the amendments and the Board is also satisfied that no objections to the amendments arise.

6. *Inventive step*

6.1 The added feature is a functional feature whose effect is to define further the quantity of soluble gas contained in the can. Claim 1 of the main request contains no information regarding the amount of soluble gas in the can other than that there is some gas. The amendment made to claim 1 of the first auxiliary request ensures that the quantity of soluble gas is at least sufficient to provide some foaming.

Since the Board considered that already in a can according to claim 1 of the main request there would be some, even if minimal, foaming the extra feature of claim 1 of the first auxiliary request changes nothing regarding the conclusions reached with respect of inventive step for the main request.

6.2 Therefore, the subject-matter of claim 1 of the first auxiliary request does not involve an inventive step in the sense of Article 56 EPC.

*Second auxiliary request*

7. Admissibility of the amendments

Claim 1 of the second auxiliary request limits claim 1 to cream. The respondent raised no objections to the amendments and the Board is also satisfied that no objections to the amendments arise.

8. *Inventive step*

8.1 In both D8 and D10 it is mentioned that soluble gases have been used to propel cream. This is understandable since it is generally desirable to provide cream in a foamed or aerated state. However, as explained in connection with the main request if it is desired that the product be less aerated then the skilled person would understand that this would mean putting less soluble gas in the can. Nevertheless, since a certain pressure in the can is needed for a complete evacuation of the can it is necessary to compensate with gas which is insoluble. In accordance with claim 1 this amount of insoluble gas may be as little as 15%. There is no evidence of a prejudice against introducing this amount of insoluble gas into cream. The question is purely that of how foamy it is desired that the cream should be.

8.2 Therefore, the subject-matter of claim 1 of the second auxiliary request does not involve an inventive step in the sense of Article 56 EPC.



**Order**

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

The appeal is dismissed.

The Registrar:

The Chairman:

G. Nachtigall

P. O'Reilly