

Internal distribution code:

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

**Datasheet for the decision
of 21 February 2017**

Case Number: T 1475/14 - 3.3.09

Application Number: 08151623.9

Publication Number: 2095716

IPC: A23C9/00, A23L1/00, A23L1/2165,
A23L1/40, A23L2/39, B65D85/816,
A23G1/56

Language of the proceedings: EN

Title of invention:
Culinary capsule

Patent Proprietor:
Nestec S.A.

Opponent:
Kraft Foods Group, Inc.

Headword:

Relevant legal provisions:
EPC Art. 56
RPBA Art. 13(1)

Keyword:

Main request - inventive step (no)

Late-filed first auxiliary request - admitted (no)

Decisions cited:

T 1060/04

Catchword:



Beschwerdekammern
Boards of Appeal
Chambres de recours

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 1475/14 - 3.3.09

D E C I S I O N
of Technical Board of Appeal 3.3.09
of 21 February 2017

Appellant: Kraft Foods Group, Inc.
(Opponent) Three Lakes Drives
Northfield, IL 60093 (US)

Representative: Boulton Wade Tennant
Verulam Gardens
70 Gray's Inn Road
London WC1X 8BT (GB)

Respondent: Nestec S.A.
(Patent Proprietor) Avenue Nestlé 55
1800 Vevey (CH)

Representative: Nestec S.A.
CT - IAM - Patents
Av. Nestlé 55
1800 Vevey (CH)

Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 16 May 2014
rejecting the opposition filed against European
patent No. 2095716 pursuant to Article 101(2)
EPC.**

Composition of the Board:

Chairman W. Sieber
Members: J. Jardón Álvarez
D. Prietzel-Funk

Summary of Facts and Submissions

I. This decision concerns the appeal filed by the opponent against the decision of the opposition division to reject the opposition filed against European patent No. 2 095 716.

II. The granted patent contained 27 claims, independent claims 1 and 26 reading as follows:

"1. A capsule usable in a beverage dispensing machine, the capsule comprising a plurality of compacted food articles comprising a dehydrated food powder mixed in a fat-based binding system, wherein a ratio of the dehydrated food powder:fat-based binding system is between 50:50 to 90:10."

"26. A compacted food pellet comprising a dehydrated food powder mixed in a fat-based binding system wherein a ratio of the dehydrated food powder:fat-based binding system is between 50:50 to 90:10, and wherein the fat-based binding system comprises a mixture of fat, flour, starch and gum."

III. The opponent had requested revocation of the patent in its entirety on the grounds of Article 100(a) EPC (lack of novelty and inventive step) and 100(b) EPC.

The documents cited during the opposition proceedings included:

D1: WO 2006/111220 A1;

D3: <http://www.singleservecoffee.com/archives/003004.php>, "Review: Lavazza Espresso Point by Single Serve", 19 September 2005 (4 pages);

D4: US 5 451 421 A;

D7: WO 2006/043106 A2;

D11: GB 1 254 562 A; and

Report "Experimental Data EP 2 095 716 B1" by M. Hirt *et al.*, dated 7 February 2014 (10 pages) and filed in March 2014.

IV. The opposition division's decision can be summarised as follows:

- The patent gave sufficient information to carry out the invention across its entire breadth without undue burden. Consequently the requirements of Article 83 EPC were met.
- The subject-matter of claim 1 was novel over the disclosures of D1 and D11.
- The subject-matter of claim 1 involved an inventive step starting from D7 as the closest prior art. The technical problem to be solved was the provision of ingredients for use in capsules which exhibited homogeneous dissolution behaviour. Said problem had not been addressed by the prior art. Starting from D7 the skilled person had no reason to consult D1 because there was no teaching in D1 relating to the dissolution behaviour of the compacted articles disclosed therein or to their use in dispensing machines.

V. On 2 July 2014 the opponent (in the following: the appellant) lodged an appeal and requested that the

decision under appeal be set aside and that the patent be revoked in its entirety. The statement setting out the grounds of appeal was filed on 24 September 2014.

- VI. By letter dated 22 January 2015, the patent proprietor (in the following: the respondent) filed its reply including auxiliary requests 1 and 2. It requested that the appeal be dismissed (main request); subsidiarily that the patent be maintained on the basis of the claims of one of the two auxiliary requests.
- VII. In a communication dated 21 September 2016, the board indicated the points to be discussed during the oral proceedings.
- VIII. On 20 January 2017 the appellant filed further arguments in support of its request.
- IX. On 21 February 2017 oral proceedings were held before the board. After the board had decided that the main request was not allowable, the respondent filed a new first auxiliary request to replace its first auxiliary request on file and withdrew its second auxiliary request.

The claims of the main request are the granted claims (see point II above).

Claim 1 of the first auxiliary request reads as follows:

"1. A capsule usable in a beverage dispensing machine, the capsule comprising a plurality of compacted food articles comprising a dehydrated food powder mixed in a fat-based binding system, wherein a ratio of the dehydrated food powder:fat-based binding system is

between 50:50 to 90:10, wherein the capsule is designed to be extracted by injection of a fluid under pressure in an extraction device; and wherein the food articles have a surface to volume ratio of 0.9 to 3.5mm."

X. The appellant's arguments can be summarised as follows:

- The invention was insufficiently disclosed; the subject-matter of claim 1 lacked novelty over D1 and D11.
- The subject-matter of claims 1 and 26 lacked inventive step. As regards claim 1 in particular, its subject-matter lacked inventive step over a combination of D3 (closest prior art) and D4.
- The first auxiliary request should not be admitted into the proceedings because it had been filed too late. It would be difficult for the appellant to evaluate the relevance of the new feature added to the claim in the oral proceedings.

XI. The respondent's relevant arguments can be summarised as follows:

- The respondent agreed with the findings in the appealed decision that the invention was sufficiently disclosed and the subject-matter of claim 1 was novel over D1 and D11.
- The subject-matter of claim 1 involved an inventive step starting from D3 as the closest prior art. The technical problem to be solved by claim 1 was to provide a capsule usable in a beverage dispensing machine which could deliver a creamy thick food product in a homogeneous way without causing

blockage during dispensing. There was no indication of the use of compacted food articles in D4, the food granules therein disclosed being porous and therefore not compact. Moreover D4 addressed a completely different technical problem and the skilled person had no reason to link D3 with D4.

- The first auxiliary request should be admitted into the proceedings as it had been filed as a reaction to the board's finding that the main request was not allowable. The feature added to the claim aimed to overcome the inventive step objection. Moreover, the new feature had been taken from granted claim 2 and so the respondent should have been prepared to discuss it.

XII. The appellant requested that the decision under appeal be set aside and that the patent be revoked.

The respondent requested that the appeal be dismissed (main request), or alternatively that the patent be maintained in amended form according to the claims of the first auxiliary request submitted on 21 February 2017 during the oral proceedings.

Reasons for the Decision

MAIN REQUEST

1. Preliminary remark

1.1 The appellant argued that the patent was insufficiently disclosed, that the subject-matter of claim 1 lacked novelty over D1 and D11 and that the subject-matter of claims 1 and 26 lacked inventive step.

1.2 During the oral proceedings these issues were discussed and the board decided that the invention was sufficiently disclosed and that the subject-matter of claim 1 was novel over D1 and D11.

There is, however, no need to elaborate on these findings since, as set out below, the main request was not allowed for lack of inventive step.

2. *Inventive step*

2.1 The patent relates to capsules comprising food ingredients which upon reconstitution with hot liquid in a dispensing system can provide food products such as hot soups, sauces, mashed potatoes, etc. (see paragraph [0001] of the specification).

2.2 Claim 1 is directed to a capsule usable in a beverage dispensing machine, the capsule comprising a plurality of compacted food articles comprising a dehydrated food powder mixed in a fat-based binding system, in a ratio of between 50:50 and 90:10.

2.3 Closest prior art

2.3.1 The Knorr Consommé acknowledged in paragraph [0004] of the patent specification and discussed in D3 was considered by both parties to be the closest prior art embodiment. D3 describes the "Lavazza Espresso Point Machine", a single-serve coffee system using pre-packaged cartridges ("capsules"). Apart from making single-serve coffee, espresso, tea and hot chocolate, it also discloses the preparation of the Knorr Consommé, a clear vegetable soup that is said to taste like chicken broth (see page 3, first paragraph). D3

says nothing about the ingredients used and whether or not they are in compacted form.

2.4 Problem to be solved and its solution

2.4.1 According to the respondent the capsules used in D3 contain a powder and the resulting beverage has low viscosity. These capsules would not be appropriate for the preparation of creamy thick foods as blockage during dispensing would occur.

2.4.2 Therefore the respondent defined the technical problem to be solved in view of D3 as the provision of a capsule usable in a beverage dispensing machine which can deliver a creamy thick food product to a consumer in a homogeneous way without causing blockage during dispensing.

2.4.3 The question as to whether or not this problem has been credibly solved by the capsules as defined in claim 1 was disputed during the proceedings and constitutes one of the key issues in the present decision.

- On the one hand the appellant argued that the problem had not been solved across the extremely broad scope of claim 1, in particular not for all types of beverage preparation machine, all designs of beverage capsule and all combinations of beverage ingredients and compacted food articles.
- On the other hand the respondent argued that the problem had been credibly solved, and relied in this context on figures 1 and 2 of the patent comparing the dissolution of powders and pellets and on the experimental report filed in March 2014. It accepted that the claims were broad but argued

that they defined the core of the invention, namely the use of a compacted food article and of a fat-based binding system in a given amount.

2.4.4 The board agrees with the appellant that claim 1 is indeed very broad, in particular with respect to the characteristics of the food article. Moreover, it is evident from the experimental report filed by the respondent in March 2014 and from the patent itself that the dissolution behaviour of the compacted food articles used is essential for achieving the desired result, a parameter which is not indicated in claim 1.

2.4.5 In this regard, it is stated on page 10 of the report under CONCLUSION that:

"It has been demonstrated, that powder and compacted articles show different dissolution characteristics and **that the surface to volume ratio is an essential parameter to steer the dissolution Kinetics of a particle**. For the use in a capsule a favourable dissolution behaviour is between a too quick dissolution on the one hand and a too slow dissolution on the other hand." (emphasis by the board)

The relevance of the surface-to-volume ratio is also emphasised in the patent specification where it is indicated that too high a ratio results in a non-homogeneous distribution of the product during dispensing and too low a ratio would lead to the product remaining in the capsule after dispensing (see paragraphs [0033] and [0034] of the specification).

2.4.6 It follows from the above that the problem as defined by the respondent (see point 2.4.2 above) has not been credibly solved by the means claimed, at least because

an essential parameter that ensures the favourable dissolution behaviour of the compacted food article is not included in the claim.

2.5 Reformulation of the problem and its solution

2.5.1 As a consequence, the problem has to be reformulated in a less ambitious manner, that is to say without considering the advantages obtained when working with an optimal surface-to-volume ratio of the compacted food article. Hence, the objective technical problem has to be seen in the provision of an alternative soup or sauce ingredient in a capsule, which can be used in a beverage dispensing machine.

2.5.2 It is not disputed that this less ambitious problem is solved by the means claimed.

2.6 Obviousness

2.6.1 It remains to be decided whether the solution proposed to solve the above problem, i.e. the capsules according to claim 1, is obvious in view of the cited prior art.

2.6.2 When looking for alternative food products for a capsule, the skilled person would turn to D4.

D4 relates to a method for granulating a food, for instance a raw material for food or a food composition such as curry (or curry roux), stew, soup, sauce, a variety of seasonings and a variety of spices (see column 1, lines 5 to 9). The method of preparing the granular food comprises the steps of (i) mixing a food material to be granulated with oil and fat under heating, (ii) cooling the mixture, (iii) subjecting the cooled mixture to granulation through extrusion to form

a granulated product, and (iv) rapidly cooling the granulated product to a temperature sufficient to solidify said oil and fat (claim 1).

- 2.6.3 In examples 1 and 2 of D4 a granular cream stew and a granular curry roux are prepared using a fat-based binding system comprising wheat flour, hardened palm oil and cornstarch. The dehydrated food-powder-to-fat-binder ratio in example 2 is 53:47 and thus within the range of claim 1.

In both examples an extrusion granulator is used, namely an egg pelleter, available from Fuji Powdal Co., Ltd.; pore diameter of the screen: 1.2 mm (see column 5, lines 36 to 38 and 67 to 68).

- 2.6.4 The granular cream stew and curry roux have excellent taste, texture and appearance; the obtained granules have appropriate strength and excellent solubility in (hot) water (cf. column 5, lines 45 to 48 for example 1 and column 6, lines 8 to 11 for example 2).

- 2.6.5 The board agrees with the appellant that the granular food product of D4 represents a compacted food article within the meaning of claim 1. Although D4 does not explicitly mention that the granular food product is compacted, the board notes that the method in examples 1 and 2 comprises extrusion of the fat and powdered food ingredient mixture in "an extrusion granulator (egg pelleter)". The fact that an extrusion granulator was used in D4 implies that the product has been compacted at least to some degree.

- 2.6.6 The respondent argued that food granules, such as those prepared in D4, would not qualify as compacted food articles, because food granules were typically very

porous, so that it could be expected that the disclosed granules of D4 would have a density below 1 g/cm³.

2.6.7 This argument is, however, not convincing. The patent itself describes in paragraph [0027] that "The compaction can be achieved by pressing or **extruding the mixture**" (emphasis by the board). Furthermore, the food articles to be used in a capsule may be, *inter alia*, in the form of an egg (see paragraph [0029]). This is exactly what is done in D4 with the egg pelleter. In addition, the extrusion device in D4 is explicitly said to be for making pellets ("egg pelleter"), which are, as pointed out by the appellant, "a small compressed mass of substance" (Oxford English Dictionary). Lastly, there is no evidence on file that the granules of D4 would have a density below 1 g/cm³; this is a mere assumption on the part of the appellant. Summing up, the method used in D4 provides a compacted food article as required in claim 1. In this context, the subject-matter of claim 1 does not differ from D4.

2.6.8 The experimental report filed in March 2014 can also not justify the presence of an inventive step. It is true that the specific compacted pellets of samples 1 and 2 show an improved dissolution behaviour, but the subject-matter of claim 1 is not at all limited to the use of such pellets. The scope of claim 1 is much broader and includes, as set out above, the use of the (compacted) granular food according to D4.

2.6.9 Under these circumstances, the board considers that the skilled person would use the granular food compositions of D4 when aiming to provide an alternative to the Knorr Consommé prepared in D3 using the Lavazza Espresso Point Machine. The skilled person would indeed have reason to adopt the compositions of D4, because

they have good texture, appearance and excellent solubility in hot water (see above point 2.6.4).

2.7 For these reasons, the subject-matter of claim 1 of the main request lacks inventive step and the main request is not allowable.

2.8 During the oral proceedings the board also decided that the subject-matter of claim 26 of the main request lacked inventive step when starting from D4 the as the closest prior art. As the main request is not allowable because the subject-matter of claim 1 is not inventive, there is no need to elaborate on this issue.

FIRST AUXILIARY REQUEST

3. *Admission*

3.1 The respondent filed this request during the oral proceedings, after the board had decided that the main request was not allowable, and thus late, i.e. at the very last moment.

It justified the late filing as a reaction to the board's finding that the main request lacked inventive step. It argued that the amendment made, namely the addition of the feature that:

"the food articles have a surface to volume ratio of 0.9 to 3.5mm"

had been taken from granted claim 2 and so the appellant should have been prepared to discuss this feature at any time.

3.2 The appellant objected to the admission of this request into the proceedings essentially because it would be difficult for it to evaluate whether the new feature distinguished the claimed subject-matter from D4, in particular whether the granular foods of D4 would have a surface-to-volume ratio as now required by claim 1. It had doubts whether it would be possible to deal with it properly especially in the time frame of the oral proceedings.

3.3 Firstly, the board notes that the objections of lack of inventive step which led to the filing of the new auxiliary request in the oral proceedings had already been presented by the appellant with its statement setting out the grounds of appeal. The filing of the new auxiliary request can therefore not be considered as a reaction to something discussed for the first time at the oral proceedings. Secondly, although originating from a dependent claim, the amendment takes the subject-matter of the claim in a new direction that has never been the focus before. The appellant can certainly not be expected to prepare for each and every possible reaction the respondent might present. Neither the opponent appellant nor the board have to be prepared to assess the allowability and patentability of the subject-matter of either amended independent claims as granted or a combination of an independent claim with one dependent on it, at any time during the proceedings (see decision T 1060/04 of 29 November 2007, point 4.3 of the Reasons). The board acknowledges in this case that, as pointed out by the appellant, it would be difficult to establish whether the granulated products of D4 had the now required surface-to-volume ratio or not. In fact, the respondent could and should have filed this request earlier in the proceedings to enable a proper discussion.

3.4 Consequently, the board exercised its discretion not to admit the new first auxiliary request into the proceedings (Article 13(1) RPBA).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:



M. Cañueto Carbajo

W. Sieber

Decision electronically authenticated