

Internal distribution code:

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

**Datasheet for the decision
of 22 September 2022**

Case Number: T 0594/18 - 3.3.09

Application Number: 12710523.7

Publication Number: 2675281

IPC: A23C9/12, A23C9/13, A23C9/156,
A23C9/20, A23C21/00, A23J1/20

Language of the proceedings: EN

Title of invention:
MILK-BASED PRODUCT AND A METHOD FOR ITS PREPARATION

Patent Proprietor:
Valio Ltd

Opponents:
TINE SA
N.V. Nutricia
FrieslandCampina Nederland B.V.
Arla Foods Amba

Headword:
Milk-based product/VALIO

Relevant legal provisions:
EPC Art. 56
RPBA 2020 Art. 13(2)

Keyword:

Main Request and Auxiliary Request 4: inventive step - (No)
Auxiliary requests 1, 2, 3, 5 and 6: admission - (No)

Decisions cited:

Catchword:



Beschwerdekammern
Boards of Appeal
Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 0594/18 - 3.3.09

D E C I S I O N
of Technical Board of Appeal 3.3.09
of 22 September 2022

Appellant: Valio Ltd
(Patent Proprietor) Meijeritie 6
00370 Helsinki (FI)

Representative: Kolster Oy Ab
(Salmisaarenaukio 1)
P.O. Box 204
00181 Helsinki (FI)

Appellant: TINE SA
(Opponent 1) P.O. Box 25
0051 Oslo (NO)

Representative: Onsagers AS
P.O. Box 1813 Vika
0123 Oslo (NO)

Appellant: N.V. Nutricia
(Opponent 2) Eerste Stationsstraat 186
2712 HM Zoetermeer (NL)

Representative: Nederlandsch Octrooibureau
P.O. Box 29720
2502 LS The Hague (NL)

Appellant: FrieslandCampina Nederland B.V.
(Opponent 3) Stationsplein 4
3818 LE Amersfoort (NL)

Representative: FrieslandCampina IP Department
Bronland 20
6708 WH Wageningen (NL)

Appellant: Arla Foods Amba
(Opponent 4) Sønderhøj 14
8260 Viby J (DK)

Representative: Guardian
IP Consulting I/S
Diplomvej, Building 381
2800 Kgs. Lyngby (DK)

Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
5 January 2018 concerning maintenance of the
European Patent No. 2675281 in amended form.**

Composition of the Board:

Chairman A. Haderlein
Members: A. Veronese
E. Kossonakou

Summary of Facts and Submissions

I. Appeals were filed by the patent proprietor and the four opponents against the decision of the opposition division finding that European patent No. 2675281 as amended according to auxiliary request 1 filed during the oral proceedings before the opposition division met the requirements of the EPC. Since all parties are appellants, they will continue to be referred to as the patent proprietor and the opponents.

II. Claim 1 of the first auxiliary request underlying the impugned decision reads:

"A method for producing a whey protein product which comprises

- *subjecting a milk-based raw material to microfiltration to separate an ideal whey as a microfiltration permeate and a casein concentrate as a microfiltration retentate,*
- *subjecting at least a portion of the microfiltration permeate to ultrafiltration to provide an ultrafiltration permeate and a whey protein concentrate as an ultrafiltration retentate,*
- *composing a whey protein product from the ultrafiltration retentate and a casein-containing material so as to provide a ratio of whey protein to casein of 20:80 to 48:52 and a total protein content of at least 20% on dry matter basis, and if desired, from other ingredients."*

III. The documents submitted during the opposition proceedings included:

- D4: DMG Management Inc., Special Report "Emerging Milk Protein Opportunities", 2010, pp. 1-6
- D5: A. Puvanenthiran et al., International Dairy Journal, 2002, Vol. 12, pp. 383-391
- D36: CPKelco Tech Talk, "Whey to go ! Whey cool", 2006, Vol.3(6), pp. 1-6
- D49: T.J. Britz et al., Advanced Dairy Science and Technology, 2008, pp. 55-62
- D53: K. Smith, "Dried Dairy Ingredients", Wisconsin Center for Dairy Research, 2008, pp. 1-59
- D54: M.A. Drake, et al., "Milk Protein From Expression to Food", Academic Press Elsevier, 2009, Chapter 15, pp. 428-448

IV. In its decision the opposition division found, *inter alia*, that the subject-matter of the first auxiliary request involved an inventive step starting from D4 as the closest prior art. D4 disclosed the preparation of protein-based compositions derived directly from milk by filtration methods. The compositions had a satisfactory taste and were suitable for athletes. The underlying problem was the provision of an alternative method for preparing a protein-based product for athletes. The prior art did not provide the incentive to add casein to whey protein to solve this problem. Therefore, the claimed subject-matter involved an inventive step.

V. By letter dated 2 May 2022 the proprietor filed a main request and six auxiliary requests. The fourth auxiliary request corresponds to the request considered allowable by the opposition division.

- VI. Claim 5 of the main request and claim 1 of the fourth auxiliary request are identical to claim 1 of the request found allowable by the opposition division, shown above.
- VII. The first, second, third, fifth and sixth auxiliary requests derive from corresponding requests filed by the proprietor with its statement of grounds of appeal.
- VIII. Claim 1 of the first auxiliary request differs from claim 1 of the main request filed with the proprietor's statement setting out the grounds of appeal in that the ratio of whey protein to casein of "from 25:75 to 45:52" has been amended to "from 25:75 to 30:70".
- IX. Claim 4 of the second and third auxiliary requests as well as claim 1 of the fourth and fifth auxiliary requests are based on claim 6 of the main request filed by the proprietor with its statement of grounds of appeal. They differ from that claim at least in the indication that the "product is a beverage having a protein content of 2.5% to 8% by weight".
- X. The arguments presented by the proprietor which are relevant for the present decision can be summarised as follows:
- the main request and the first, second, third, fifth and sixth auxiliary requests were to be admitted; they were filed in response to the negative opinion expressed by the board in its communication issued in preparation for the oral proceedings; the conclusions drawn in the board's communication differed from those of the opposition

division; the amendments were convergent, simple and did not result in a delay of the proceedings;

- D4 was the closest prior art because it focused, in the same way as the patent, on improving the taste of a beverage comprising whey protein obtained from milk by filtration methods;
- the claimed subject-matter differed from the teaching of D4 in that casein was included in a whey-containing product so as to obtain the claimed protein ratio and the total amount of proteins;
- the tests set out in the patent showed that the taste of whey-containing products was improved by casein; this effect was not mentioned in the prior art;
- the underlying problem was the provision of an improved composition, in particular a beverage, containing a high amount of whey protein;
- none of the cited prior-art documents would have provided the incentive to the skilled person to solve this problem by including casein in whey-containing products, let alone including it in the claimed amounts; thus, the claimed solution involved an inventive step.

XI. The arguments presented by the opponents which are relevant for the present decision can be summarised as follows:

- the main request and the first, second, third, fifth and sixth auxiliary requests should not be admitted; there were no exceptional circumstances

justified by cogent reasons for filing these requests after the notification of the board's communication issued in preparation for the oral proceedings;

- the method defined in claim 5 of the main request did not involve an inventive step starting, *inter alia*, from D4 as the closest prior art;
- D4 taught that whey proteins derived directly from milk by filtration methods had a good taste and could be incorporated into protein-rich foods and beverages, including yoghurts and milks, which contained casein;
- the subject-matter of claim 5 differed from the teaching of D4 in the ratio of whey protein to casein and also in the total amount of protein; these differences were not associated with any technical effect;
- the underlying problem was the provision of an alternative method for preparing a beverage comprising whey protein;
- the claimed solution was obvious, because the claimed ratio of whey protein to casein as well as the claimed total amount of proteins corresponded to those typically present in milk and milk-derived products, as shown in numerous prior-art documents.

Final requests of the parties

XII. The proprietor requested that the decision under appeal be set aside and that the patent be maintained on the basis of the main request or, alternatively, on the

basis of one of the first to sixth auxiliary requests, all requests having been filed with the letter dated 2 May 2022.

XIII. The opponents requested that the decision under appeal be set aside and that the patent be revoked in its entirety.

Reasons for the Decision

Main request and fourth auxiliary request

1. The admission of the main request was contested. However, in view of the following conclusions concerning inventive step, there is no need to discuss this issue.
2. *Inventive step*
 - 2.1 The opposed patent relates to a whey protein product derived from milk and to a method for its manufacture. According to a preferred embodiment the product is a beverage.
 - 2.2 As explained in the patent, it is known that whey proteins are excellent protein sources promoting the increase and maintenance of muscle mass and a large number of products containing whey protein are available. Such products are obtained starting from cheese and cheese-derived products. These products have, however, a foul taste resulting from the proteolytic and oxidative processes occurring during cheese manufacture: paragraphs [0002] and [0005]. The aim of the invention is to provide a whey protein product having a pleasant taste and favourable nutritional properties. In one embodiment the product

looks and tastes like milk, but is more beneficial for athletes: paragraphs [0011] and [0013].

2.3 According to the patent the drawbacks of the prior-art products can be avoided by incorporating casein into whey protein products obtained directly from milk by filtration techniques. The method for manufacturing these products includes a combination of micro-filtration and ultrafiltration steps: paragraphs [0012] and [0030].

2.4 Claim 5 of the main request provides a method in which a whey protein fraction is prepared by subjecting a milk-based raw material to specific filtration steps, followed by "composing" a whey protein product from the whey protein fraction and a casein-containing material, in order to obtain a product comprising the claimed whey protein to casein ratio and total protein content.

The closest prior art

2.5 The proprietor considered that, as decided by the opposition division, D4 was the closest prior art. D4 discloses whey proteins derived directly from milk by filtration methods as "new-generation dairy ingredients that hold great potential for foods and beverages formulated with high concentrations of proteins". The products comprising these whey proteins are said to have an acceptable taste because the whey has not undergone the cheesemaking process. They are also suitable for athletes, for example in the form of sports drinks: see page 1, left-hand column, paragraphs 1, 2 and 5; page 2, right-hand column, last two paragraphs; page 3, left-hand column, last three paragraphs. Furthermore, D4 teaches that these whey proteins can be used as protein enhancers in mild-

flavoured food products, such as yoghurts and milks: page 3, right-hand column, first paragraph, "Expanding functional foods". The method for preparing whey proteins described in D4 is identical to that defined in claim 5: the permeate obtained by micro-filtration of milk is subjected to ultrafiltration, in order to produce a retentate comprising concentrated whey protein (see figure on page 5 in the section "Whey proteins derived directly from milk").

- 2.6 The board concurs with the proprietor that, since D4 aims to achieve the same purpose as the claimed invention, namely the manufacture of products comprising whey protein obtained from milk by filtration techniques which are devoid of the unpleasant taste formed during cheesemaking processes, D4 is a suitable starting point for assessing inventive step. Thus, it agrees to consider D4 as the closest prior art.

Distinguishing features

- 2.7 The proprietor did not dispute the opinion that milks and yoghurt contain casein. When whey proteins are used as protein enhancers in yoghurts and milks - according to the teaching of D4 - a whey protein product obtained by the same filtration steps as those indicated in claim 5 is "composed" with a casein-containing material, in order to afford a product comprising whey protein and casein. Accordingly, D4 discloses a method for preparing that product, including the filtration and the "composing" step of claim 5.
- 2.8 The method of claim 5 differs from that disclosed in D4 in that, in the final product:

- the ratio of whey protein to casein is between 20:80 to 48:52, and
- the total protein content is at least 20% on a dry matter basis.

Technical effect

- 2.9 The proprietor submitted that the effect of the aforementioned features is an improvement in the organoleptic properties of the product, especially its taste. It argued, in particular, that the inclusion of casein prevents the foul taste observed in products comprising whey proteins obtained as a by-product of cheese manufacture.
- 2.10 These arguments are not persuasive, because they ignore the fact that the products of D4 already contain casein. Furthermore, they do not take into account that the whey proteins defined in claim 5 are, like those of D4, obtained directly from milk by filtration. As stressed by the opponents, D4 as well as D53, page 26, right-hand column, and D54, page 436, teach that these whey proteins have a bland, clean and dairy taste and do not have the off-tastes induced by the cheesemaking process. Therefore, if the products are obtained directly from milk by the filtration steps of claim 5, casein cannot have the effect of removing these off-tastes.
- 2.11 Notwithstanding the fact that D4 already teaches the combination of the whey protein product disclosed therein with casein, there is also no evidence that the addition of casein - let alone its addition in an amount which affords the claimed whey protein to casein ratio and total amount of protein - induces any other

type of taste improvement. The tests described in the patent were only conducted with compositions containing both casein and whey protein obtained by filtration. No comparison is shown with compositions comprising whey protein alone. Furthermore, the organoleptic properties of all tested compositions were "very good". No taste imperfections were observed in any of them, regardless of whether they contained a ratio of whey protein to casein within (examples 4 to 6) or outside of the claimed range (examples 3 and 7).

- 2.12 For these reasons, it is concluded that the distinguishing technical features are not associated with any particular technical effect.

Obviousness of the claimed solution

- 2.13 In view of the above conclusions the underlying problem can be formulated as the provision of an alternative method for manufacturing a product comprising casein and whey protein obtained from milk by filtration methods.
- 2.14 As noted by the opponents, the claimed ratio of whey protein to casein, namely between 20:80 to 48:52, and the claimed total protein content, namely at least 20% on dry matter basis, correspond to those typically found in milk and milk-derived products. This was not disputed by the proprietor, which essentially relied on an improvement over D4. It is also confirmed, for example, on page 55 of D49, which discloses typical dairy milks containing a whey protein to casein ratio of 20:80 to 25:75 and a total protein amount calculated on dry matter basis of 26.92%, i.e. falling within the claimed ranges: see the calculations on page 8 of opponent 1's statement of grounds of appeal. Milk-

derived beverages comprising the claimed ratio and total amount of protein calculated on dry matter basis are disclosed on page 4 of D36 (30:70 and 40:60, and 24%): see the calculations on page 3 of opponent 2's letter dated 4 October 2018. Others are disclosed in table 1 of D5 (26:74 and 33:67 ratio and 35% total protein): see the calculations on page 15 of opponent 4's statement of grounds of appeal.

- 2.15 Accordingly, it is concluded that, starting from the teaching of D4, the skilled person confronted with the underlying problem would have considered composing casein and whey protein in amounts which provide a composition having the claimed ratio between these proteins and the claimed total amount of proteins calculated on dry matter basis. In this manner, the skilled person would have arrived at the claimed method without the need for any inventive activity.
- 2.16 For the reasons set out above, it is concluded that the subject-matter of claim 5 of the main request does not involve an inventive step. The same applies to claim 1 of the fourth auxiliary request, which is identical.

First, second, third, fifth and sixth auxiliary requests

3. *Admission*

- 3.1 The first, second, third, fifth and sixth auxiliary requests were filed after the notification of the board's preliminary opinion issued in preparation for the oral proceedings.
- 3.2 Claim 1 of the first auxiliary request differs from claim 1 of the main request filed with the proprietor's statement setting out the grounds of appeal in that the

ratio of whey protein to casein of "from 25:75 to 45:52" has been amended to "from 25:75 to 30:70".

- 3.3 Claim 4 of the second and third auxiliary requests and claim 1 of the fifth and sixth auxiliary requests are based on claim 6 of the main request filed by the proprietor with its statement of grounds of appeal. They differ from that claim 6 at least in that they specify that the "product is a beverage having a protein content of 2.5% to 8% by weight".
- 3.4 The proprietor stated that these auxiliary requests were filed as a reaction to the negative preliminary opinion expressed by the board in its communication issued in preparation for the oral proceedings. This opinion diverged from the earlier findings of the opposition division. The amendments were convergent and simple to understand; dealing with them would not have delayed the appeal proceedings.
- 3.5 These arguments are not persuasive. According to Article 13(2) RPBA 2020, any amendment to a party's appeal case made after the notification of a summons to oral proceedings shall, in principle, not be taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned. Exceptional circumstances may arise from unforeseen developments in the appeal proceedings: for example, if new objections are raised by the board or another party. However, a normal course of events does not usually justify late submissions: see the Case Law of the Boards of Appeal, 10th edition, 2020, Section V.A.4.5.4.
- 3.6 The proprietor has not disputed the fact that the negative opinion expressed by the board was based on

objections already raised during the proceedings before the opposition division and maintained in the earlier stages of the appeal proceedings. It is true that the board's opinion differed from earlier conclusions of the opposition division. However, it lies in the very nature of appeal proceedings that a board might reach a different conclusion from the department of first instance on an issue in dispute. This cannot be regarded as surprising for the proprietor from an objective point of view. Consequently, the board's opinion has not caused any unforeseen development in the appeal proceedings. No exceptional circumstances justified with cogent reasons can therefore be identified: see the Case Law of the Boards of Appeal, 10th edition, 2020, Sections V.A.4.5.6c and V.A.4.5.6h. Moreover, the amendments do not result in a reduced number of contentious issues, but, in fact, result in new issues to be discussed.

- 3.7 For these reasons it is concluded that the first, second, third, fifth and sixth auxiliary requests are not admitted into the appeal proceedings.

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. Schalow

A. Haderlein

Decision electronically authenticated