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Datasheet for the decision of 10 March 2015

Case Number: T 1900/12 - 3.3.09

Application Number: 05103294.4

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IPC: A23L1/29, A23L1/308, A61K31/732, A23L1/30, A61P3/04, A61P3/10

Language of the proceedings: EN

Title of invention:
Matrix-forming composition containing pectin

Patent Proprietor:
N.V. Nutricia

Opponent:
Fresenius Kabi Deutschland GmbH

Headword:

Relevant legal provisions:
EPC Art. 76(1)

Keyword:
"All requests: Extension beyond the content of the earlier application as filed (yes)"

Decisions cited:

Catchword:

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Case Number: T 1900/12 - 3.3.09

D E C I S I O N
of Technical Board of Appeal 3.3.09
of 10 March 2015

Appellant: (Opponent)	Fresenius Kabi Deutschland GmbH Else-Kröner-Stasse 1 61352 Bad-Homburg v.d.H. (DE)
Representative:	Fresenius Kabi Deutschland GmbH Patent Department Else-Kröner-Straße 1 61352 Bad Homburg (DE)
Respondent: (Patent Proprietor)	N.V. Nutricia P.O. Box 1 2700 MA Zoetermeer (NL)
Representative:	Nederlandsch Octrooibureau P.O. Box 29720 2502 LS The Hague (NL)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 13 July 2012 rejecting the opposition filed against European patent No. 1588629 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman	W. Sieber
Members:	J. Jardón Álvarez
	E. Kossonakou

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. 1 588 629 granted to N.V. Nutricia.

II. The granted patent originated from a divisional application of the earlier European patent application No. 02793590.7 and contained 8 claims, independent claims 1, 7 and 8 reading as follows:

"1. A liquid edible composition comprising

a. at least 0.65 and less than 5 wt% pectin having a degree of methoxylation between 2 and 50 and
b. indigestible oligosaccharide having a degree of polymerisation exceeding 2 and below 60 and
c. at least 5 mg calcium per 100 ml not exceeding 400 mg calcium per 100 ml,
d. wherein the weight ratio oligosaccharides to pectin exceeds 0.25."

"7. Use of a composition according to any one of claims 1 - 6 for the manufacture of a composition for the treatment and/or prevention of diabetes type II."

"8. Use of a composition according to any one of claims 1 - 6 for the manufacture of a composition for the prophylactic or curative treatment of overweight in a mammal."

Claims 2 to 5 were dependent claims.

III. The opponent, Fresenius Kabi Deutschland GmbH, had requested revocation of the patent in its entirety on

the grounds that the claimed subject-matter was neither novel nor inventive (Article 100(a) EPC), that the patent did not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 100(b) EPC), and that the patent contained subject-matter which extended beyond the content of the earlier application as originally filed (Article 100(c) EPC).

The documents cited during the opposition proceedings included:

D1: JP 04/023,968 A and its English translation;

D4: JP 2000-189109 and its English translation;

D11: W0 03/053165 A1, the parent application;

D18: B.R. Thakur *et al.*, "Chemistry and Uses of Pectin -A Review", Critical Reviews in Food Science and Nutrition, 37(1), 1997, pages 47 to 73; and

D19: B.R. Sharma *et al.*, "An Overview on Pectins", Times Food Processing Journal, June-July 2006, pages 44 to 51.

IV. In its decision announced orally on 20 June 2012 and issued in writing on 13 July 2012 the opposition division rejected the opposition because:

- the subject-matter of the patent did not extend beyond the content of the parent application as filed. Although the requirement that the viscosity of the composition increased to a certain extent at a pH below 5 had been deleted, this requirement

was still achieved as a result of the remaining technical features of the composition of claim 1;

- the skilled person would have no difficulty to formulate the claimed compositions taking into account the information in the patent specification; and

- the claimed subject-matter was novel over the disclosure of D4 and involved an inventive step starting from either D1 or D4 as the closest prior-art document.

V. On 16 August 2012 the opponent (in the following: the appellant) filed an appeal together with the statement setting out the grounds of appeal, and paid the prescribed fee. The appellant requested that the appealed decision be set aside, the patent be revoked in its entirety and the appeal fee be refunded in view of a substantial procedural violation.

VI. In its reply filed on 11 June 2013 the patent proprietor (in the following: the respondent) disputed the arguments submitted by the appellant and requested that the appeal be dismissed (main request); alternatively, that the patent be maintained in amended form on the basis of one of the sets of claims according to auxiliary requests 1 and 2 filed therewith.

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

Claim 1 of auxiliary request 1 reads:

"1. A liquid edible composition comprising

a. at least 0.65 and less than 5 wt% pectin having a degree of methoxylation between 2 and 50 and
b. indigestible oligosaccharide having a degree of polymerisation exceeding 2 and below 60 and
c. at least 5 mg calcium per 100 ml not exceeding 400 mg calcium per 100 ml,
d. wherein the weight ratio oligosaccharides to pectin exceeds 0.25

wherein the calcium is provided by a calcium salt selected from the group consisting of coated calcium salt, calcium carbonate, calcium phosphate and mixtures thereof."

Claim 1 of auxiliary request 2 reads:

"1. A liquid edible composition comprising
a. at least 0.65 and less than 5 wt% pectin having a degree of methoxylation between 2 and 50 and
b. indigestible oligosaccharide having a degree of polymerisation exceeding 2 and below 60 and
c. calcium in a concentration exceeding 10 mM and not exceeding 400 mg calcium per 100 ml,
d. wherein the weight ratio oligosaccharides to pectin exceeds 0.25

wherein the calcium is provided by a calcium salt selected from the group consisting of coated calcium salt, calcium carbonate, calcium phosphate and mixtures thereof."

VIII. On 12 August 2014 the board dispatched a summons to oral proceedings. In a communication dated 24 September 2014 the board indicated *inter alia* that in its preliminary view the reimbursement of the appeal fee was not justified and that the subject-matter of claim 1 of all requests appeared to extend beyond the

content of the earlier application as filed (Articles 76(1)/100(c) EPC).

IX. On 10 March 2015 oral proceedings were held before the board. During the oral proceedings the appellant withdrew its request for reimbursement of the appeal fee.

X. The arguments of the appellant, insofar as they are relevant for the present decision, may be summarised as follows:

- The subject-matter of claim 1 resulted from a combination of features which was present neither in the divisional application nor in the parent application as filed (D11). The deletion of the feature relating to the pH-dependent viscosity change in the composition would only be allowable if this change was inevitable for all compositions falling within the scope of the claim. However, this was not the case because it was not conceivable in view of the corroborating evidence (e. g. D18) that such pH-dependent viscosity increase would apply to all combinations of calcium sources, ratios, pH values, types of pectins and temperatures falling within the broad wording of claim 1.

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

- The opposition division had correctly decided that the subject-matter of claim 1 of the main request did not include added subject-matter. The core of the invention as disclosed in the parent application was the use of a composition

comprising pectin, calcium and oligosaccharide. As explained in the parent application such compositions formed a rigid matrix when at an acidic pH. All compositions falling within the scope of claim 1 formed a viscous matrix at a pH as present in the stomach of a human, e.g. pH 3. This increase in viscosity was an implicit limitation of the compositions of claim 1 so that its deletion did not result in added subject-matter. The embodiments suggested by the appellant as being still liquid at acidic pH were therefore embodiments not covered by the claim and could not cast doubt on the above finding. The same reasoning applied to the auxiliary requests.

XII. The appellant requested that the decision under appeal be set aside and that European patent N° 1 588 629 be revoked.

XIII. The respondent requested that the appeal be dismissed (main request), alternatively, that the patent be maintained in amended form on the basis of one of the sets of claims filed as auxiliary requests 1 and 2 on 11 June 2013 with the reply to the grounds of appeal.

Reasons for the Decision

1. The appeal is admissible.

ALL REQUESTS

2. Amendments (Articles 76(1)/100(c) EPC)

2.1 The patent in suit is based on a divisional application of the earlier European patent application

No 02793590.7 (filed on 20 December 2002 as an international application and published as WO 03/053165 A1, document D11 in the proceedings). In respect of Articles 76(1)/100(c) EPC it is thus necessary that the subject-matter of the patent in suit does not extend beyond the content of the parent application as filed. The question to be decided in this context is whether the skilled person could derive the amendment directly and unambiguously, using common general knowledge, from the parent application as filed, either explicitly or implicitly.

2.2 D11 relates in general terms to a composition, which is liquid at around neutral pH and forms a viscous matrix at low pH, the composition comprising pectin, calcium and oligosaccharides. The composition is suitable for use in a method of treating or preventing overweight or obesity (see page 1, lines 6 to 9).

In its broadest aspect (claim 1), D11 is directed to a liquid edible composition with a pH of more than 6, a viscosity below 600 mPas at a shear rate of $100s^{-1}$ and 20°C, and a viscosity of at least 125% of the aforementioned viscosity at a pH below 5 and a temperature of 37 °C, the composition comprising:

a. at least 0.05 wt% of pectin having a degree of methoxylation between 2 and 50 and/or alginate;
b. at least 5 mg calcium per 100 ml; and
c. at least 0.1 wt% indigestible oligosaccharide having a degree of polymerisation between 2 and 60.

2.3 Claim 1 of all requests of the patent in suit is directed to a liquid edible composition with the same components (albeit not in the same amounts), wherein the feature requiring the formation of a viscous matrix

at a low pH, namely that the viscosity of the composition increases to a certain extent at a pH below 5 and a temperature of 37°C, has been deleted.

2.4 Through the deletion of this feature the subject-matter of claim 1 of all requests now includes compositions which are liquid at around neutral pH and remain liquid at a pH below 5. While these compositions fall within the scope of present claim 1 they were not covered by claim 1 of the parent application, so that the subject-matter of claim 1 of all requests extends beyond the subject-matter of claim 1 of D11.

2.5 The remaining parts of D11 do not support the omission of an increase in viscosity either, and this is in particular so for the passage relied upon by the respondent on page 3, lines 28 to 30 of D11, which states:

"The present invention provides a composition which comprises pectin and/or alginate, calcium and oligosaccharide. The present composition is liquid (at around neutral pH) and exhibits increased viscosity at an acidic pH due to the formation of a viscous matrix."

The term "The present composition" makes it clear that this passage has to be read in the context of D11 as a whole. In fact, a liquid composition which is considered to be one aspect of the invention (other aspects being a method of treatment or prevention of overweight or obesity in mammals) is disclosed on page 8 of D11 (equivalent to claim 1 of D11). This composition requires a specific increase in viscosity at a pH below 5 and a temperature of 37°C.

Indeed the gist of the invention of D11 is that the compositions therein used form a viscous matrix to provide a feeling of satiety and to reduce or eliminate the desire for further food intake (see, for instance, the last full paragraph of page 6). But as set out above, D11 requires the increase in viscosity not just in qualitative terms; it requires the composition to have a rather specific increase in viscosity.

2.6 The respondent did not dispute that there is no explicit disclosure for the present claims in D11 but maintained that there was an implicit disclosure. The respondent argued essentially that the core of the invention of D11 was the use of a composition comprising pectin, calcium and oligosaccharide mentioned in the above cited passage on page 3, lines 28/29, and that such a composition would be liquid at around neutral pH and automatically form a viscous matrix when ingested. The formation of such a matrix was the consequence of the use of the specific pectin derivatives and the amounts of calcium as defined in the claim. Compositions other than those forming a gel would not be within the scope of the claim.

2.7 The board cannot accept this argument. Apart from the fact that the passage relied upon by the respondent has to be read in the context of D11 as a whole (point 2.5 above), the appellant pointed out that there are a number of factors which influence the gelation of pectin. In addition to the pH, the gelation of pectin is influenced by the presence of other solutes in the composition, the source of calcium, the molecular size of the pectin, its degree of methoxylation, the number and arrangement of side chains, and the charge density on the molecule (see D18, Abstract). The subject-matter

of claim 1 is by no means limited to embodiments that would inherently exhibit a pH-dependent change in viscosity.

2.7.1 Thus, no pH-dependent increase in viscosity is observed with certain types of pectin. The presence of methyl groups in low methoxylated pectins prevents the formation of junction zones in the interjunction segments of molecules, making them more flexible. Side chains are said to prevent aggregation (cf. D18, page 54, right column, lines 1 to 5 from the bottom). The presence of acetyl groups is also known as to prevent gel formation of low methoxy pectins with calcium ions (see D19, page 47, second paragraph).

2.7.2 The appellant also convincingly showed that the same considerations apply to the other factors that influence the gelation of the pectin, such as the source of calcium, the ratio of calcium to pectin, etc. Such compositions thus remain liquid independently of their pH value.

2.7.3 The board cannot accept the respondent's argument that modified pectins which are known not to gel at a low pH in the presence of calcium ions or that the other compositions which remain liquid at an acidic pH are outside the scope of the claim. On the contrary, by the deletion of the feature relating to the pH-dependent change in viscosity (which can be considered as a further functional definition of the compositions) these compositions are within the scope of the claim.

2.8 In summary, through the deletion of the functional limitation included in the compositions of D11 that they had an increased viscosity at an acidic pH, the subject-matter of claim 1 of all requests encompasses

edible compositions which remain liquid at an acidic pH. Since these compositions were not disclosed in the parent application, the subject-matter of claim 1 of all requests extends beyond the content of the parent application as filed (Articles 76(1)/100(c) EPC).

2.9 Therefore, none of the requests is allowable.

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