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DECISION
of 10 August 2004

Case Number: T 0083/01 - 3.3.2

Application Number: 95909790.8

Publication Number: 0748165

IPC: A23D 7/00

Language of the proceedings: EN

Title of invention:
Plastic reduced fat spread

Patentee:
UNILEVER N.V., et al

Opponent:
Carlshamn Mejeri Produktion AB

Headword:
Plastic reduced fat spread/UNILEVER

Relevant legal provisions:
EPC Art. 83

Keyword:
"Insufficient disclosure, how to measure a parameter, forming
a feature of the claimed product"

Decisions cited:
-

Catchword:
-

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Case Number: T 0083/01 - 3.3.2

D E C I S I O N
of the Technical Board of Appeal 3.3.2
of 10 August 2004

Appellant: (Opponent)	Carlshamn Mejeri Produktion AB Västra kajen S-374 82 Karlshamn (SE)
Representative:	Wiklund, Ingrid Helena AWAPATENT AB Box 5117 S-200 71 Malmö (SE)
Respondent: (Proprietor of the patent)	UNILEVER N.V. Weena 455 NL-3013 AL Rotterdam (NL)
Representative:	Sikken, Antonius H. J. M. UNILEVER N.V. Patent Division P.O. Box 137 NL-3130 AC Vlaardingen (NL)
Decision under appeal:	Decision of the Opposition Division of the European Patent Office posted 4 December 2000 rejecting the opposition filed against European patent No. 0748165 pursuant to Article 102(2) EPC.

Composition of the Board:

Chairman: U. Oswald
Members: H. Kellner
            M. B. Günzel

Summary of Facts and Submissions

I.   European patent No. 0 748 165 based on application
     No. 95 909 790.8 was granted with 8 claims.

     Claim 1 as granted reads as follows:

     "A plastic fat-continuous 30 - 50% fat spread
     comprising up to 0.3% lecithin, 0.1 - 1.0% saturated
     monoglyceride, 0.06 - 0.2% non-gelling protein, 0.2 -
     8% thickening agent, up to 0.5% NaCl, the fat blend
     having N_{10} = 8 - 40% preferably <35% and in particular
     <30% and N_{20} = 5 - 20% preferably <18% and in particular
     <14% the aqueous phase having a pH value of 4.4 - 4.7
     and a $\bar{D}_{3,3} \leq 7$ µm and e sigma ≤ 2.5."

II. Opposition was filed against the granted patent by the
     appellant. The patent was opposed under Article 100(a)
     EPC for lack of novelty and inventive step and under
     Article 100(b) EPC for insufficiency of disclosure.

     The following documents were cited inter alia during
     the proceedings before the opposition division and the
     board of appeal:

     (6) EP-A-0 422 713

     (7) J. Madsen, "Emulsifiers used in margarine, low-
          calorie spread, shortening, bakery compound and
          filling", DGF and ISF congress, Münster, September
          1986

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(8)   M. Alderliesten, "Mean particle diameters;
      Part II: Standardization of nomenclature", Part.
      Part. Syst. Charact. 8, 1991, 237-241

III.   The opposition division rejected the opposition.

It held that the contested European patent met the
requirements of "Articles 52(1), 54 and 56 EPC" and
disclosed the invention in a manner sufficiently clear
and complete for it to be carried out by a person
skilled in the art.

As to Article 83 EPC, the opposition division expressed
the view that a person skilled in the art was, at the
priority date of the present invention, "aware of the
meaning of volume mean particle diameter $\bar{D}_{3,3}$ and the
mean value e sigma" and was able to measure and
determine the said values whenever appropriate.

IV.   The appellant (opponent) lodged an appeal against said
decision.

V.   On 10 August 2004, oral proceedings took place.

VI.   The submissions of the appellant in written form and
during the oral proceedings can be summarised as
follows:

The subject-matter of the patent did not meet the
provisions of Article 83 EPC, since the definitions of
the claim 1 parameters $\bar{D}_{3,3}$ and "e sigma" were unclear
in a way that made it impossible for the person skilled
in the art to carry out the invention as claimed in a
reproducible way.

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Moreover, the wording "volume weighted mean particle diameter", mentioned in the description of the patent in suit with respect to $\bar{D}_{3,3}$, made it unclear whether this parameter in claim 1 really was meant. According to (8), a "volume weighted mean diameter" would have to be represented by the symbol $\bar{D}_{4,3}$, whereas $\bar{D}_{3,3}$ represented a "volume weighted geometric mean particle diameter".

VII.   The respondent's arguments in written form and during the oral proceedings were as follows:

The claims of the patent as granted met the requirements of Article 83 EPC, since the person skilled in the art knew the parameters $\bar{D}_{3,3}$ and "e sigma" as was shown by document (8) as filed by the patentee and by claim 1 and figures 2 and 3 of document (6) ($\bar{D}_{3,3}$ there written in the form D 3,3).

The individual diameters of the globules of the aqueous phase could be derived from pictures such as figures 5 and 6 on page 5 of document (7) allowing the individual numbers n_i of globules having the same diameter D_i to be counted. This information was enough to use the mathematical formula for $\bar{D}_{3,3}$ set out in (8) at the top of the left-hand column on page 239.

In practice, machines were present in the laboratories and production halls of persons skilled in the art for producing emulsions like the subject-matter of the patent in suit that were able to measure $\bar{D}_{3,3}$.

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As final request the appellant (opponent) requested that the decision under appeal be set aside and that the European patent No. 0 748 165 be revoked.

As final request the respondent (patentee) requested that the appeal be dismissed and that the patent be maintained.

Reasons for the Decision

1.   The appeal is admissible.

2.   The person skilled in the art, wanting to carry out the invention as defined by the claimed product, must be able to measure the so called $\bar{D}_{3,3}$ parameter. Either he has to be able to do this using his common knowledge, or there is enabling information in the description of the patent in suit.

In this respect, the skilled person in the field of producing emulsions, such as edible spreads, knows that $\bar{D}_{3,3}$ is a mean particle diameter. He is familiar with special literature about the importance of mean particle diameters and about their mathematical definition (eg (8), "Part. Part. Syst. Charact.").

Accordingly, in (6) the respondent itself (owner of the patent in suit and applicant for (6)) offers the information that "keepability (of an edible spread) is known to be influenced by the water droplet distribution and water phase contents" (see page 2, lines 11 to 15) and that the mean diameter of the water

drop size is defined as D 3,3 ($\bar{D}_{3,3}$) having to be below 2.5μ (see claim 1 of (6)).

Additionally, the teaching of (7) is that low diameters of the water droplets in margarine contribute to stability contra micro-organisms (see page 4, right-hand column, paragraphs 2 to 4, with reference to figures 5 and 6).

Finally document (8) (especially at top of the left-hand column on page 239) shows that $\bar{D}_{3,3}$ represents a clear and unambiguous definition of a mean diameter.

In the light of these prior art documents, the skilled person has no reason to doubt whether there would be any other definition of a mean diameter to be applied in the patent under appeal. He knows $\bar{D}_{3,3}$ to be the volume-weighted geometric mean diameter (see (8), top of the left-hand column on page 239, line 3, below the formula) and will take this definition as the one to be applied, since it is the only definition to be found in the claims. In these circumstances, this will hold even if, in the description, lines 32 and 33 on page 2, in connection with the mean diameter parameter a wording such as "volume-weighted mean particle diameter" is to be found which, according to (8), refers to the symbol $\bar{D}_{4,3}$ (see table 2).

But none of this helps the skilled person to <u>measure</u> $\bar{D}_{3,3}$. First, there is no further information in the description and, second, not even (8), the only document which the respondent submitted as evidence of the state of the art with respect to mean particle diameters, shows how this measurement could be done.

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While there are some vague hints about measuring $\bar{D}_{4,3}$ by
sieving or sedimentation methods (see (8), page 239,
right-hand column, point 4(i)), there is no information
at all about $\bar{D}_{3,3}$, and sieving or sedimentation is not
possible with aqueous globules in a plastic
fat-continuous spread.

Accordingly, not knowing how to measure $\bar{D}_{3,3}$, the
skilled person is unable to carry out the invention
claimed in the patent in suit and the board can only
conclude that the requirements of Article 83 EPC are
not fulfilled.

3.   The arguments of the respondent cannot hold:

Pictures of particles distributed in a matrix, as shown
in (7), are well known to the person skilled in the
art. But the method of analysing them for calculating
mean particle diameters, as the respondent submitted
during the oral proceedings, is not even mentioned in
(8), the paper submitted by the respondent as special
state of the art with respect to mean particle
diameters. The skilled person does for instance not
know how to prepare the claimed fat-continuous spread
for to be able to take such pictures of it in a
statistically relevant way and he does not know how to
define the individual diameter of a globule, because
most of the globules have no perfectly round shape.

If there is a machine capable of achieving the
measurement of $\bar{D}_{3,3}$, the information on how to measure
the diameter of a globule is represented by the
algorithms as used, and in the absence of knowledge of

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the type of machine and the programs it uses, there is still no information on how to carry out the teaching of current claim 1.

On the other hand, the respondent submitted that the assessment of the patentability of the current claims did not depend on the skilled person's knowledge of how to measure $\bar{D}_{3,3}$, since the opposition division had defined document (6) as the closest prior art and since in (6) the parameter $\bar{D}_{3,3}$ was set out in claim 1 just as in the current claim of the patent in suit. Thus, there should be no problem comparing the teachings of these documents because this comparison was independent of the definition or measurement of $\bar{D}_{3,3}$.

This, however, is only true with respect to the assessment of novelty and inventive step. The requirement of sufficient disclosure must be met, regardless of whether the teaching of a patent is novel or inventive, and since in (6) likewise there is no information to be found about the measurement of $\bar{D}_{3,3}$, current claim 1 still does not fulfil this requirement.

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:

A. Townend   U. Oswald

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