DECISION
of 27 April 2006

Case Number: T 0751/03 - 3.3.02
Application Number: 95114587.9
Publication Number: 0763341
IPC: A47L 13/17
Language of the proceedings: EN

Title of invention:
Wet wipes with low viscosity silicone emulsion systems

Patentee:
THE PROCTER & GAMBLE COMPANY

Opponent:
-

Headword:
Wet wipes with low viscosity emulsion-systems/THE PROCTER & GAMBLE

Relevant legal provisions:
EPC Art. 84

Keyword:
"The requirements of Article 84 EPC not met: It is not possible to determine whether the conditions set by the term "delivered viscosity" are fulfilled"

Decisions cited:
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Catchword:
-
Case Number: T 0751/03 - 3.3.02

DECISION
of the Technical Board of Appeal 3.3.02
of 27 April 2006

Appellant: THE PROCTER & GAMBLE COMPANY
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 17 January 2003 refusing European application No. 95114587.9 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: U. Oswald
Members: M. C. Ortega Plaza
P. Mühlen
Summary of Facts and Submissions

I. European patent application EP-A-0 763 341 based on European application No. 95 114 587.9 was filed with 10 claims. Claim 1 read as follows:

"1. Wet wipes comprising a wipe substrate and an emulsion composition, said emulsion composition being storage stable and having a delivered viscosity of no more than 500 mPa s, said composition comprising water and

- a silicone based phase in the range of 1% to 20% by weight of said emulsion composition,

- a polymeric emulsifying composition in the range of 0.02% to 2% by weight of said emulsion composition,

- a stability composition, said stability composition comprising phenoxyethanol as a stability compound."

(correction of obvious typing error in the text of claim 1 in parenthesis in [italics])

II. The following documents, inter alia, were cited during the proceedings:

(1) EP-A-0 576 327
(2) US-A-5 043 155
(2a) EP-A-0 328 355
(A1) Noveon "Pemulen® Polymeric Emulsifiers" "Emulsion Viscosity and Stability" (two pages)
(A2) Noveon "Pemulen® TR-1 Polymer Emulsifier" "Product Specifications" (one page)
III. The appeal lies from a decision of the examining division refusing the patent application under Article 97(1) EPC pursuant to the requirements of Article 56 EPC.

The examining division considered that the subject-matter claimed (set of claims as originally filed) was novel over the prior art. In the examining division's opinion, although in the emulsions disclosed in document (1) the polysiloxane itself fulfilled the function as emulsifier, the presence of a polymeric emulsifier in amounts of 0.02-2% by wt. was not disclosed. As regards inventive step, the examining division considered document (1) to represent the closest prior art. The problem to be solved was defined as the provision of alternative wet wipes on the basis of polysiloxane emulsions containing preservatives. The solution was found obvious in the light of document (2).

IV. The appellant (applicant) lodged an appeal against said decision and supported it with arguments.

V. A communication from the board was sent as an annex to the summons to oral proceedings in which the board conveyed its preliminary opinion that there were major problems concerning the requirements of Articles 84 and 83 EPC, in particular in respect of the feature "delivered viscosity", appearing in claim 1.
VI. As a response thereto, the appellant filed by fax on 25 April 2006 a letter accompanied by some additional documents, namely A1 to A4.

VII. Oral proceedings took place on 27 April 2006.

VIII. The appellant's arguments may be summarised as follows:

The term "delivered viscosity" employed in claim 1 to characterise the emulsion composition had to be understood in the light of the description. This term was designed by the appellant for the present case. However, it was clearly defined in the description (paragraph bridging pages 3 and 4). There were two stages involved; the first stage related to the storage profile test where the composition undergoes a defined daily temperature profile over 30 days in order to provide stress conditions for the stress condition assessment and the second to the measurement of the viscosity which took place after the first stage, under the ordinary conditions for this kind of emulsion. The point of performing the first stage was not to end up at a certain temperature but to reproduce the storage conditions under which the wet wipes were to be stored. After the storage test of the first stage, one ended up with the kind of material comparable to that the customer would get in the wet wipes. The point was to imitate the conditions in which these emulsions were settled in real wipes. This first aspect "may be divorced" from the conditions for measuring viscosity.

Hence, the first stage related to "heat-up and cool-down" conditions and the temperature which mattered for the viscosity was that of the second stage.
Although the skilled person was not taught by the application at which temperature to measure the viscosity, he would know that he should perform the measurement at 25°C by following the method mentioned at the end of page 7.

In order to know which temperature was the ordinary temperature for the measurement, the practical skilled person would first have looked to see what emulsifier he was taught to use, and as claim 1 gives a broad definition, he would then have referred to the description on page 5, where Pemulen TR-1 and TR-2 were specified among the emulsifying agents. As further stated on page 5 of the description (lines 33 and 34), other emulsifiers included those disclosed in document (2a), which is a "Family document" of document (2). Carbopol resins are among those disclosed in document (2a). The product specifications A2 and A3 in respect of Pemulen TR-1 and TR-2 and A4 in respect of Carbopol resins taught the skilled person that the ordinary temperature at which to measure viscosity for emulsions using these emulsifiers was 25°C.

This further general information shown in documents A2 to A4 represented cumulative evidence that 25°C was the temperature at which the skilled person would measure the viscosity of the emulsions containing these emulsifiers. In fact, it should be considered that the application as filed implicitly disclosed that the second stage corresponded to viscosity being measured at 25°C.

Although documents A1 to A3 were late-published documents, document A4 was published fairly soon before
the filing date of the application in suit and documents A2 and A3 corroborated the temperature appropriate for the measurement.

Additionally, the skilled person would know whether or not an emulsion satisfied the viscosity requirement in claim 1. Claim 1 related to a wet wipe which contained a wipe substrate and an emulsion. The manufacturer, since it started with a wipe substrate and an emulsion composition, would know how the viscosity of the emulsion composition would have to be measured. Moreover, the wet wipes were by definition wet, and therefore there would always be some emulsion free in the package.

For analogous reasons to those previously stated, the skilled person would also be able to reproduce the claimed invention in the light of the contents of the description, since he would be in a position to choose the appropriate components and prepare the emulsion compositions to be tested following the test disclosed on page 3.

IX. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 10 as originally filed.

Reasons for the Decision

1. The appeal is admissible.
2. **Main and sole request**

2.1 Claim 1 relates to wet wipes comprising a wipe substrate and an emulsion composition. The emulsion composition is characterised as "being storage stable" and "having a delivered viscosity of no more than 500 mPa s". The essential components of the emulsion composition, apart from water, are defined broadly as "silicone based phase", "polymeric emulsifying composition" and "stability composition comprising phenoxyethanol".

It is undeniable that the feature "having a delivered viscosity of no more than 500 mPa s" sets a condition to be fulfilled by the emulsion composition contained in the wet wipes. Therefore it has to be investigated whether or not this feature renders the claimed subject-matter unclear.

The appellant has acknowledged that the concept "delivered viscosity" does not correspond to a standard expression in the field of emulsion compositions for wet wipes, but it was developed within the context of the application in suit. Therefore, this particular feature, "delivered viscosity", relates to a "new" nomenclature reflecting internal technical knowledge on the part of the applicant and does not belong to the common general knowledge in the technical field concerned. Since this "new" term has been used to define the subject-matter claimed, it has to be assessed whether it is defined in the description in a clear and complete manner.
The description states: "The term "delivered viscosity" according to the present invention refers to the emulsifying composition as a liquid. In order to measure delivered viscosity it is necessary to measure the viscosity of a sample of the emulsifying composition after undergoing a test storage profile. According to the test storage profile the emulsion is stored for 30 days undergoing a daily temperature profile of 12 hours at 0°C and 12 hours at 40°C. Obviously any actual storage conditions of wet wipes differ greatly from the test storage profile for delivered viscosity measurement but it has been found that this profile provides a stress condition assessment of the emulsion stability in terms of separating of the hydrophilic and hydrophobic compound. Therefore an emulsion which does not separate during a test according to the test storage profile satisfies the objectives of the present invention." (Paragraph bridging pages 3 and 4, emphasis added)

A reading of the above passage shows that the information about the term "delivered viscosity" is sparsely given, since the only apparent information is that "it refers to the emulsifying composition as a liquid" (presumably, as separated from the wipe substrate), and that it is necessary to measure the viscosity of the composition "after undergoing a test storage profile".

Therefore, even when taking the view that a feature is clear when it is possible to determine whether the conditions it requires are fulfilled, the skilled person in the present case faces a lack of information about how to determine whether or not an emulsion
composition fulfils the requirement of "having a delivered viscosity of no more than 500 mPa s", since in relation to this "new" term the only clear instruction is that viscosity has to be measured after the composition undergoes a test storage profile. It is not disclosed, however, whether the measurement takes place immediately after undergoing the test storage profile (or after a rest period), and at what temperature. Having regard to the fact that the test storage profile puts the emulsion composition to a temperature test from 0°C to 40°C, the information lacking is of essential importance to the skilled person trying to determine whether the condition set in the claim is fulfilled.

Although the board is satisfied that methods for measuring viscosity of an emulsion comprising a commercially available polymeric emulsifier belonged to the common general knowledge at the filing date of the application in suit, the question which remains unanswered is how would the skilled person, in the absence of information in the application as filed, be able to link his common general knowledge about emulsifiers with the requirements to be fulfilled by emulsion compositions suitable for wet wipes or, more specifically, with the measurement of the "delivered viscosity" of such emulsion compositions.

The only example in the description of the application in suit does not help further, since it discloses the preparation of an emulsion composition comprising a mixture of cyclomethicone and dimethiconol (Dow Corning fluid DC 1401) as the silicone based base, and Pemulen TR2 as the emulsifying agent of the "polymeric
emulsifying composition". After disclosing the method of preparation, the text reads: "This emulsion resulted in a viscosity of 126 mPa s (as measured with a Brookfield viscosimeter using an "A" type spindle with a speed of 12 rpm) and a pH of 5.5)." (page 7)

Apart from the fact that there is no indication of the temperature at which the measurement takes place and that viscosity depends on temperature, the viscosity and, consequently, the viscosity measurement mentioned at the end of page 7 do not correspond to the determination of the "delivered viscosity" of the emulsion composition, since the required previous test storage profile has not been performed.

Hence, the example also leaves unanswered how and at what temperature the "delivered viscosity" has to be measured.

Therefore, in view of the above analysis, the board concludes that claim 1 does not meet the requirements of Article 84 EPC.

2.2 The appellant's submissions concern, on the one hand, the argument that the storage test profile and the measurement of the "delivered" viscosity are "divorced" from each other and, on the other, that a certain composition having a viscosity of no more than 500 mPa s at 25°C after undergoing the storage test profile would be stable in the temperature range and under the conditions of storage and use of the wet wipes.
Unfortunately, this information is not reflected in the application as originally filed and cannot be supplied by the common general knowledge at the filing date.

Additionally, the argument that the skilled person would look for standard methods concerning the viscosity of emulsions made with some of the specific emulsifiers mentioned in the description does not take into account that the term "delivered viscosity" was developed for the present application. Hence, there is a missing link between the standard methods for commercialised Carbopol® (A4) and the presently broadly-defined claimed subject-matter. Moreover, the claim does not identify the nature of either the polymeric emulsifying composition or of the silicone based phase, both of which play an essential role in the viscosity value obtained.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

A. Townend U. Oswald

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