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**D E C I S I O N**  
**of 29 April 2002**

**Case Number:** T 0753/97 - 3.3.7

**Application Number:** 90313097.9

**Publication Number:** 0432951

**IPC:** A61K 7/075

**Language of the proceedings:** EN

**Title of invention:**  
Hair treatment composition

**Patentee:**  
UNILEVER PLC, et al

**Opponents:**  
(01) Goldwell GmbH  
(02) Henkel Kommanditgesellschaft auf Aktien  
(03) Rhodia Inc.

**Headword:**

-

**Relevant legal provisions:**  
EPC Art. 84, 54, 56

**Keyword:**  
"Claims: clarity (yes)"  
"Novelty (yes)"  
"Inventive step (yes) - closest prior art - problem and  
solution - non-obvious combination of known features"

**Decisions cited:**  
T 0219/83

**Catchword:**

-



Case Number: T 0753/97 - 3.3.7

**D E C I S I O N**  
**of the Technical Board of Appeal 3.3.7**  
**of 29 April 2002**

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**Decision under appeal:** Decision of the Opposition Division of the  
European Patent Office posted 6 May 1997 revoking  
European patent No. 0 432 951 pursuant to  
Article 102(1) EPC.

**Composition of the Board:**

**Chairman:** R. E. Teschemacher

**Members:** B. J. M. Struif

B. L. ter Laan

## Summary of Facts and Submissions

I. The mention of grant of European patent No. 0 432 951 in respect of European patent application No. 90 313 097.9, filed on 3 December 1990, was published on 20 October 1993. Independent claims 1 and 9 to 12 read as follows:

"1. An aqueous shampoo composition comprising, in addition to water,  
(a) from 2 to 40% by weight of surfactant chosen from anionic, nonionic, or amphoteric surfactants or mixtures thereof;  
(b) from 0.01 to 3% by weight of cationic conditioning polymer which is a cationic derivative of guar gum;  
(c) from 0.01 to 10% by weight of an insoluble, non-volatile silicone, present as emulsified particles with an average particle size of less than 2  $\mu\text{m}$ ."

"9. A method of cosmetically treating hair to deposit insoluble, non-volatile silicone on the hair, which comprises washing the hair with an aqueous shampoo composition comprising  
(a) from 2 to 40% by weight of surfactant chosen from anionic, nonionic, or amphoteric surfactants or mixtures thereof;  
(b) from 0.01 to 3% by weight of cationic conditioning polymer which is a cationic derivative of guar gum;  
(c) from 0.01 to 10% by weight of an insoluble, non-volatile silicone, present as emulsified particles with an average particle size of less than 2  $\mu\text{m}$ ."

"10. The use of a shampoo composition as claimed in any of claim 1 to 8 to wash the hair."

"11. The use of combination of at least 0.01% of a cationic derivative of guar gum and at least 0.1% of an emulsified insoluble, non-volatile silicone, having an average particle size of less than 2  $\mu\text{m}$ , both expressed in terms of the weight of the total composition, for imparting improved conditioning benefit to hair, from a shampoo composition comprising a major proportion of a surfactant."

"12. A method of making an aqueous shampoo composition as claimed in any one of claims 1 to 8 comprising mixing together water, the surfactant, the cationic conditioning polymer and an aqueous emulsion of the silicone, wherein the silicone in the emulsion has an average particle size of less than 2  $\mu\text{m}$ ."

Claims 2 to 8 were dependent on claim 1.

II. Three notices of opposition were filed on the grounds of insufficiency of disclosure under Article 100(b) EPC and lack of novelty and of inventive step under Article 100(a) EPC. *Inter alia* the following documents were relied upon:

D1.2: US-A-4 364 837

D3.3: EP-A-0 138 192

D3.9: Jaguar C-162, Market Status and New Efficacy Studies, August 1990

D3.12: US-A-5 087 443 corresponding to EP-A-0 363 252 (published 11 April 1990)

D3.16: EP-A-0 093 601

D3.17: Rensselaer Polytechnic Institute Bulletin, No. 63, S. Ross: "The Inhibition of Foaming", pages 38 and 39, 1950

III. In a decision posted 6 May 1997, the opposition division revoked the patent. This decision was based on a main request and six alternative sets of claims.

Claims 1 and 9 of the main request differed from claim 1 and 9 as granted in that, after the term "guar gum;" the following feature was inserted:

-"(c) a stability agent selected from shear thinning polymers and ethylene glycol distearate; and".

Feature "(c)" of the version as granted became feature "(d)". In claim 12 a reference to "the stability agent" was incorporated after the term "conditioning polymer,".

In the first auxiliary request the term "shear thinning polymers" of the main request was replaced by "cross-linked polyacrylates". In the second auxiliary request the particle size was amended to "0.01 to 1  $\mu\text{m}$ ". In the third auxiliary request granted use claim 11 became independent claim 1. In claim 1 of the fourth auxiliary request the feature "and reducing the antifoam action of the silicone" was introduced. In claim 2 of the fifth auxiliary request (numbered 4a), the percentages in feature a) were specified to be "3 to 30". In the claims of the sixth auxiliary request (numbered 5) the term "dry" was added after the term "improved".

The decision under appeal can be summarized as follows:

a) The main, first and second auxiliary requests complied with the requirements of Articles 83 and 84 EPC, and were novel, in particular over D1.2, but not inventive.

b) As to inventive step, D1.2 was considered to be the closest state of the art. It disclosed shampoos having a high foaming quality, good deposition, good grooming properties and a balanced stability. The problem to be solved was to provide a shampoo having a further improved stability. D1.2 did not mention particle sizes, but since D3.3 disclosed silicones having particle sizes below 0.3 µm in order to provide an improved stability to shampoos and hair conditioners, it was obvious to combine these two documents for solving the problem posed.

Furthermore, the opposition division found that the third auxiliary request was not novel and that the fourth, fifth (4a) and the sixth (5) auxiliary requests were not clear (Article 84 EPC).

IV. On 4 July 1997 the patentee (appellant) filed a notice of appeal against the above decision with simultaneous payment of the prescribed fee. The statement of the grounds of appeal was filed on 16 September 1997, by which the appellant submitted a main request corresponding to that on which the decision under appeal was based, and four new auxiliary requests. In a letter dated 27 March 2002, the appellant filed seven further sets of claims as first to seventh auxiliary requests which replaced the previous auxiliary requests on file. Furthermore, an experimental report (Murray declaration) was filed.

V. In the oral proceedings held on 29 April 2002, the appellant withdrew its previous main request and maintained auxiliary requests I to VII filed with letter of 27 March 2002 whereby auxiliary request I became the new main request and auxiliary requests II



to VII became auxiliary requests I to VI.

Claims 1 and 9 of the new main request differed from claims 1 and 9 as granted in that, after the term "guar gum;" the following feature was inserted:

-"(c) a stability agent selected from a cross-linked polyacrylate and ethylene glycol distearate; and".

Granted feature "(c)" became feature "(d)". Granted claim 11 was cancelled so that granted claim 12 became claim 11.

The further auxiliary requests I to VI contained further restrictions.

VI. The arguments of the appellant, given in writing and during the oral proceedings, can be summarized as follows:

a) As to clarity, the objection was late filed. Also the amended term "cross-linked polyacrylate" was clear. The objected term "non-volatile" had been part of the granted claims and therefore was not objectionable. Moreover, it was also used in prior art documents.

b) As regards novelty, the shampoo compositions of D1.2 contained as preferred grooming agent a mixture of silicone and cationic cellulose, but no silicone emulsions having the claimed particle size were disclosed either explicitly or implicitly. There was no experimental evidence on file that in any of the exemplified shampoo compositions of D1.2 the claimed particle size was met. Although some examples used a vinylcarboxy polymer (Carbopol 941), it was not shown

that this was a cross-linked polyacrylate. Therefore, the claimed subject-matter was novel.

c) As to inventive step, D1.2 was considered to be the closest state of the art. It disclosed a shampoo composition containing a high amount of a water-miscible saccharide. The key properties aimed at in D1.2 were the foam viscosity and foam volume but not the conditioning effect. The problem to be solved, in view of D1.2, was to provide shampoo compositions having a balance of foam and conditioning properties while avoiding the use of saccharides. The patent in suit and the Murray declaration showed the surprising conditioning effect of compositions containing small sized silicone particles in combination with cationic guar gum, as claimed. D1.2 itself did not provide an incentive to modify its composition in that direction.

The emulsions in D3.12 were mostly used for the treatment of textile fibers. Example 14 thereof was directed to a hair conditioner but not to a shampoo. The emulsions of D3.3 were not related to shampoos, contained a silicone having a polar group and a specific surfactant which was insoluble in the silicone. D3.17 was not related to shampoo compositions. D3.16 was generally related to the deposition of water-insoluble particles but did not specifically mention silicones.

D3.9 was an internal paper and it was contested that it had been made publicly available before the relevant date.

Therefore, the claimed subject-matter was inventive.

VII. The arguments of the respondents given in writing and at the oral proceedings can be summarized as follows:

a) As to clarity, the amended term "cross-linked polyacrylate" was not clear because the extent of cross-linking was not given. The term "non-volatile" did not indicate under which conditions this property should be met.

b) As regards novelty, D1.2 disclosed all the features of amended claim 1. In particular, the hair grooming agents could be present as colloidal dispersions or emulsions which implied particle sizes below 1  $\mu\text{m}$ , so that the claimed particle size of the silicones was implicitly disclosed. Also "Carbopol 941" was used, which was a cross-linked polyacrylate.

c) As to inventive step, D1.2 was considered to be the closest state of the art. It explicitly disclosed all claimed components except for the particle size of the silicone, to provide stable, good foaming shampoos having a good conditioning effect. Thus, the problem over D1.2 was to provide an alternative shampoo. Since the silicones could be present in colloidal form, the particle size thereof was obvious from D1.2. The use of Carbopols as stabilizing agents was suggested by D1.2 as well. Since claim 1 of the patent in suit did not exclude the presence of saccharides, the appellant's arguments concerning avoiding these saccharides, were not valid. The Murray declaration did not provide any comparison to D1.2 and all experiments in that declaration contained ethylene glycol distearate, so that no conclusion could be drawn regarding the deposition effect if a cross-linked polyacrylate was used.

Furthermore, the claimed particle size of the silicone component for use in hair conditioners or shampoos was suggested by several prior art documents.

D3.12 disclosed silicone emulsions having a particle size lower than 2  $\mu\text{m}$  to provide shampoos having good foaming properties. D3.3 disclosed polar silicone emulsions having a particle size of less than 0.3  $\mu\text{m}$  for use in shampoo compositions to provide an improved emulsion stability. A good antifoam action of small particle size silicones was also known from D3.17. D3.16 disclosed shampoo compositions containing cationic polymers like guar gums to enhance the deposition of water-insoluble particles such as hair conditioning oils.

D3.9 demonstrated the advantages of the cationic guar gum Jaguar C-162 over cationic polysaccharide when silicones were used and suggested the claimed solution.

Furthermore, it had not been shown that the selected stabilizing agent contributed to an inventive step. Therefore, the claimed subject-matter was not inventive.

VIII. The appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of the requests submitted in the letter of 27 March 2002 as auxiliary requests I to VII whereby auxiliary request I became the new main request and auxiliary requests II to VII became auxiliary requests I to VI.

The respondents requested that the appeal be dismissed.

## Reasons for the Decision

1. The appeal is admissible

### *Main request*

### *Amendments*

2. The basis for the amendments can be found in the application as filed, page 10, lines 16-21. The amendments meet the requirements under Article 123(2) and (3) EPC.

### *Clarity*

3. The respondents objected to the clarity of the terms "non-volatile" and "cross-linked polyacrylate" in the claims.

- 3.1 The term "non-volatile" had already been used in the granted claims so that the objection does not arise out of the amendments made. Therefore, it is not open to an objection under Article 84 EPC.

If, however, there were any doubt as to its clarity, the term might be interpreted on the basis of the information contained in the patent specification which provides a detailed description of useful insoluble, non-volatile silicones by specifying the structure and viscosities thereof, so that the skilled person would get the necessary technical information on how this term should be interpreted (page 3, lines 35 to 57).

- 3.2 According to the amended claims, the "cross-linked polyacrylate" serves as a stability agent in the

shampoo composition. It is within the general knowledge of the skilled person that the term "cross-linked polymer" concerns a three-dimensional network. Thus, a "cross-linked polyacrylate" defines a polyacrylate having a three-dimensional network structure which functions as a stabilizing agent in the shampoo. As an example of cross-linked polyacrylates the compound "Carbopol 940" is mentioned in the patent in suit (page 5, lines 44-45) which is an indication of the kind of compound that may be used. Therefore, it is sufficiently clear what is meant by the term "cross-linked polyacrylate".

- 3.3 Hence, the amended claims of the main request meet the requirements under Article 84 EPC.

*Novelty*

4. D1.2 discloses a freely pourable substantially homogeneous shampoo composition comprising
- (a) about 15 to about 70% by weight of a water-miscible saccharide;
  - (b) about 20 to about 75% by weight water;
  - (c) about 0.1 to about 30% by weight of a at least one nonionic or cationic hair grooming agent silicone; and
  - (d) about 3 to about 60% of an anionic or amphoteric detergent,
- the shampoo composition having a viscosity of about 400 to about 6000 cps at 25° C (claim 1). In a preferred embodiment the saccharide is corn sirup, the hair grooming agent comprises a silicone and the detergent is anionic (claim 49). The hair grooming agent may further comprise cationic guar gum (claim 51). Insoluble hair grooming agents can be present in the shampoo compositions as colloidal dispersions or

emulsions, or as suspensions (column 9, lines 35 to 39). As silicones those of the "Viscasil" series of General Electric Company are mentioned (column 9, line 44 to column 10, line 68 in particular column 10, lines 63 to 68). In addition, thickeners such as "Carbopols" can be incorporated into the shampoo (column 15, lines 27 to 34).

4.1 As regards the examples, there are only three samples in tables I and II wherein four components, namely a detergent, a silicone, a cationic guar gum and Carbopol, are used in combination (example XI, samples 3, 4 and 9). These samples disclose a shampoo composition comprising triethanollauryl sulfate (16.8, 16.8 and 18.0% by weight, respectively), 1.0% by weight of dimethylpolysiloxane (General Electric Comp.), Jaguar C-17 (cationic guar gum; 0.3, 0.5 and 0.3% by weight, respectively), and "Carbopol 941" (0.75, 0.6 and 0.3% by weight, respectively; table I). There is no indication in these samples that they are prepared in any other way than by blending the components, followed by mixing them together until they are homogeneous (column 15, lines 3 to 6). In particular, there is no mention in these samples or in the evidence on file that the silicone is present as emulsified particles having the claimed particle size.

4.2 According to D1.2, the insoluble hair grooming agents can be present in the form of colloidal dispersions, emulsions and as suspensions (column 9, lines 36 to 40). However, even if it is supposed that the colloidal dispersions or emulsions could provide a particle size below 2  $\mu\text{m}$ , this feature is only optional (can be present) and variations in the form of dispersions, suspensions or emulsions outside the claimed particle

size are also within the teaching of D1.2. In this respect it is noted that only in example VI is a colloid mill used to assure the homogeneity of the shampoo, without however indicating a particle size.

Since the most preferred hair grooming agent system is a mixture of silicone and a cationic cellulose (column 11, lines 44 to 47), there is no indication to specifically select the above samples 3, 4 and 9 for any modification from the description. Since furthermore, the use of colloidal dispersions and emulsions is only an optional feature and thus not obligatory for the general teaching of D1.2, it would be arbitrary to combine such selected samples with said selected optional feature to arrive possibly at something within the claimed composition.

4.3 Consequently, D1.2 does not disclose directly and unambiguously all the claimed features in combination so that the claimed subject-matter is novel.

4.4 In the light of this, the question whether Carbopol 941 is a cross-linked polymer, can be left open because, but even if this were the case, the other combined features of the claimed shampoo composition are not disclosed in D1.2.

*Inventive step*

5. The patent in suit concerns a hair treatment composition, in particular, a shampoo composition comprising water, an insoluble silicone, a cationic guar gum and a surfactant.

5.1 Such compositions are described in D1.2, which the



parties and the opposition division regarded as the closest prior art document.

5.2 D1.2 aims at homogeneous shampoo compositions which have a balanced stability and high foam quality and allow the deposit of a large amount of hair grooming agent onto the hair and thus provide good conditioning (column 1, lines 6 to 10 and column 4, lines 31 to 41). The balanced stability refers to the maintenance of the homogeneity. If a shampoo is too stable, the hair grooming agent will not readily deposit on the hair during the washing and rinsing process. On the other hand, shampoos which are insufficiently stable will not remain homogeneous during storage (column 3, lines 62 to 66). The saccharides present in the composition of D1.2 provide superior foam enhancing and shampoo stabilizing properties during storage and shipping (column 15, 20-22) and markedly increase the foam volume and the foam viscosity (column 17, lines 65 to 67, column 19, lines 39 to 41 and column 20, last table).

5.3 Although a high deposition of grooming agent, good conditioning, high foaming quality and a balanced stability is achieved in D1.2, these properties could still be improved. Also, according to the patent in suit, non-volatile silicone oils are useful as conditioning agents but excessive amounts of silicone can dull the hair and build-up of silicone can give a greasy appearance (page 2, lines 16 to 18). Therefore, the problem of the patent in suit may be seen in providing a shampoo composition which has a reduced antifoam action and an improved stability while maintaining a good conditioning effect, in line with page 2, lines 27 to 34 of the patent specification.

5.4 According to the patent in suit, this problem is solved by a shampoo composition which contains the silicone in the form of emulsified particles with an average particle size of less than 2  $\mu\text{m}$ , in combination with a cationic guar gum.

5.5 As shown by example 4 of the patent in suit, a shampoo containing cationic guar gum in addition to a silicone having a particle size of 0.4  $\mu\text{m}$  provides a higher foam volume than a shampoo containing a silicone having a particle size of 4  $\mu\text{m}$  and hence has a reduced antifoam action. This is contrary to the general teaching in D1.2 wherein the addition of silicone to shampoo compositions provides a depressed foam volume if no saccharide is present (column 17, lines 61 to 64 and column 19, lines 10 to 12 in connection with the corresponding tables).

5.5.1 According to example 5 of the patent in suit, a shampoo composition containing silicones having an average particle size of 0.4  $\mu\text{m}$  has a storage stability of more than 6 months, whilst a shampoo composition containing larger silicone particles (3  $\mu\text{m}$ ) separates into two phases during this time.

5.6 According to example 3 of the patent in suit, hair treated with the claimed composition is easier to comb than hair that had been washed by a control shampoo without silicone or cationic polymers. Furthermore, the claimed combination provides a markedly improved conditioning effect compared to a shampoo containing a combination of a silicone emulsion and a cationic cellulose (table on page 7).

5.7 In the Murray declaration shampoo compositions were

tested. The results show that large silicone particles (10  $\mu\text{m}$ ) are deposited onto the hair at a high deposition rate in the presence or absence of cationic guar or cationic cellulose. This is in line with the teaching of D1.2 that a large amount of hair grooming agent can be deposited onto the hair (column 4, lines 40-41). Although the deposition rate for large particle size silicones is high and is more or less independent of the presence or type of the cationic additive used, the picture with small particle size silicones is completely different. In this respect, a sufficient deposition rate of the small particle size silicone (0.5  $\mu\text{m}$ ) is only achieved in the presence of a cationic guar gum. The claimed composition provides a deposition rate of 308 ppm compared with a shampoo without any polymer (47 ppm) or a shampoo containing cationic cellulose (27 ppm) (page 3, table).

- 5.7.1 The respondents argued that the compositions used in the tests of the Murray declaration contained ethylene glycol distearate, so that no conclusion could be drawn as to the deposition effect if a cross-linked polyacrylate had been used as the stabilizing agent.
- 5.7.2 As however argued by the respondents themselves, the stabilizing agent (feature c)) does not contribute to an inventive step.

This argument has not been contested by the appellant and indeed this feature had been incorporated into the independent claims only to provide a distinction over a document under Article 54(3) EPC.

Furthermore, since both substances are used for the same purpose, namely to further enhance stability, a

similar stabilizing effect of both substances is plausible, for lack of proof to the contrary. Consequently, the respondents' argument must fail.

5.8 In view of the above, the board comes to the conclusion that the claimed shampoo compositions provide an effective solution of the above-defined technical problem regarding the aspects of reduced anti-foam action and high storage stability on the one hand and the sufficient deposition (or conditioning effect) on the other hand.

6. It remains to be decided whether the claimed subject-matter is obvious having regard to the documents on file.

6.1 The general teaching of D1.2 is to use a water-miscible saccharide in a homogeneous, free-pourable, stable shampoo composition containing a nonionic and/or cationic hair grooming agent and an anionic or cationic detergent to provide a shampoo which possesses high foam quality and deposits a large amount of hair grooming agent on the hair. According to D1.2, the good stabilization and foam quality are obtained by using certain saccharides (column 5, lines 30 to 41). This teaching provides no incentive to use small particle size silicones and, in particular, to reduce the particle size of the silicone to below 2  $\mu\text{m}$ . The option in D1.2 that the insoluble hair grooming agent can be present as a colloidal dispersion or emulsion does not suggest that this measure would contribute to an increased stability or reduced anti-foam action, nor does it indicate, how this would influence the conditioning effect.

- 6.2 None of the other cited documents provides the suggestion to reduce the silicone particle size for solving the problem posed.
- 6.2.1 D3.3 relates to polar polyorganosiloxane emulsions having small particle sizes of less than 0.3  $\mu\text{m}$  which are used for many different purposes in cases where superior emulsion stability is desired, *inter alia* in shampoos, hair rinses and conditioners (page 22, lines 3 to 19). Only example 24 illustrates various silicone microemulsions incorporated into shampoos based on sodium lauryl ether sulfate, providing a high storage stability. However, D3.3 mentions shampoos and conditioners separately and does not concern conditioning shampoos. Therefore it does not provide any suggestion regarding the behaviour of small particle size silicones in shampoo compositions also containing cationic grooming agents.
- 6.2.2 D3.9 is an internal paper of Meyhall about Jaguar C-162, dated August 1990. There is however no evidence on file whether and, if so, when this internal paper had been made available to the public. The onus of proof in this respect lies with the opponents (T 219/83, OJ EPO 1986, 211) which they failed to discharge.
- 6.2.3 D3.12 relates to a silicone water/emulsion comprising an organopolysiloxane containing a specific diester functional group and an effective quantity, for forming an emulsion of at least one emulsifier (claim 1). This emulsion can be prepared by using a conventional colloid mill (column 6, lines 9-41). One aspect of D3.12 describes an aqueous emulsion for the treatment of hair or of the skin in cosmetics based on a

diorganopolysiloxane containing a diester functional group and a quaternary ammonium halide, which can be prepared by diluting a mixed melt of this combination in water or in water heated to a temperature of 70 to 100°C, while stirring (column 7, lines 8 to 14 and 21 to 27). These aqueous emulsions are stable with time (column 7, lines 42 to 44) and can be employed as a shampoo, as conditioning compositions, as rinsing products etc (column 7, line 65-66). Example 14 refers to a hair conditioner containing a cationic guar gum whilst example 17 relates to a shampoo not containing cationic guar gum and providing good foaming properties. However, the particle size present in both emulsions is not given nor have the respondents provided any evidence that the claimed silicone particle size is met.

Hence, there is no hint in D3.12 that a cationic guar gum in combination with a small particle size silicone may be useful for a shampoo composition in order to provide higher stability and foaming without sacrificing the conditioning effect. It follows that there is no incentive in D3.12 to modify the shampoo compositions of D1.2 in the direction as claimed.

- 6.2.4 D3.16 concerns washing compositions, including shampoos for washing a surface, to deposit thereon substantially water-insoluble particles, comprising an anionic surfactant, the particulate substance and a water-soluble cationic non-cellulosic polymer for enhancing the deposition of the particulate substance onto the surface (claim 1). The water-insoluble particle may have a particle size of 0.2 to 50 µm and can include a water-insoluble oil having hair conditioning attributes, such oil being emulsified in the

composition with the aid of suitable emulsifying agents (page 9, lines 2 to 6). The preferred cationic polymer is cationic guar gum (page 4, lines 14 to 19 and page 5, last paragraph) which enhances the deposition of a hair conditioning oil during the treatment of hair switches (experiment 12, page 23, lines 24 to 26). However, D3.16 neither mentions a silicone oil nor any critical particle size thereof. Thus, there is no hint for the skilled person that such small size silicone particles may be suitable to solve the above-defined problem. Therefore, no incentive is present to modify the shampoo compositions of D1.2 in this direction.

6.2.5 D3.17 relates to the inhibition of foaming. It discloses that the silicone agent used for that purpose is most effective when the silicone is emulsified in an aqueous medium before it is added to a latex. It was found that the size of the dispersed droplets is important and that they should not be smaller than two microns (page 39 last full paragraph). However, D3.17 bears no relation to hair compositions (page 38, second full paragraph), let alone to the above defined problem regarding the properties of conditioning shampoos.

6.2.6 Consequently, none of the other cited prior art documents suggests a modification of the shampoo compositions of D1.2 in the direction as claimed.

7. Hence, the solution of the technical problem according to claim 1 does not arise in an obvious way from the cited documents, so that the subject-matter of claim 1 involves an inventive step.

8. The same considerations apply to independent claims 9 and 11, which comprise the same technical features as

claim 1.

9. It follows from the above that the main request meets the requirements of the EPC.

## **Order**

### **For these reasons it is decided that:**

1. The decision under appeal is set aside.
2. The case is remitted to the department of the first instance with the order to maintain the patent on the basis of the set of claims 1 to 11 submitted in the letter dated 27 March 2002 as auxiliary request I (new main request) and a description yet to be adapted.

The Registrar:

The Chairman:

C. Eickhoff

R. Teschemacher