Internal distribution code:

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

Datasheet for the decision of 27 February 2026

Case Number: T 1330/24 - 3.3.02

Application Number: 17823163.5

Publication Number: 3727279

IPC: A61K8/06, A61K8/73, A61Q19/00, A61K8/81, A61K8/87

Language of the proceedings: EN

Title of invention:
OIL-IN-WATER EMULSIFIED COSMETIC

Patent Proprietor:
LVMH Recherche

Opponent:
Henkel AG & Co. KGaA

Headword:

Relevant legal provisions:
EPC Art. 56
RPBA 2020 Art. 12(6)

Keyword:
Inventive step - main request (no) - no unexpected improvement shown - unsuitable comparative experiments - auxiliary request 4 (yes) - unexpected improvement shown
Objection maintained in first-instance proceedings (yes)

Decisions cited:
T 0197/86, T 1872/08, T 2319/14

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

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

Case Number: T 1330/24 - 3.3.02

D E C I S I O N
of Technical Board of Appeal 3.3.02
of 27 February 2026

Appellant: (Opponent)	Henkel AG & Co. KGaA Henkelstraße 67 40589 Düsseldorf (DE)
Representative:	Henkel AG & Co. KGaA CLI / Patente 40191 Düsseldorf (DE)
Respondent: (Patent Proprietor)	LVMH Recherche 185 avenue de Verdun 45800 Saint Jean de Braye (FR)
Representative:	Cabinet Beau de Loménie 103, rue de Grenelle 75340 Paris Cedex 07 (FR)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted/ electronically transmitted on 9 October 2024 concerning maintenance of the European Patent No. 3727279 in amended form.**

Composition of the Board:

Chairman	M. O. Müller
Members:	M. Kollmannsberger
	M. Blasi

Summary of Facts and Submissions

I. The opponent appealed the opposition division's decision that the patent as amended in the form of the main request lying before it complied with the requirements of the EPC, Article 101(3)(a) EPC.

II. The patent deals with cosmetic oil-in-water emulsions that can accommodate large amounts of oil agents, but are nevertheless stable and do not have a sticky feeling, see paragraph [0002]. The patent was granted with independent claims directed to an emulsion, a process to its preparation by means of high-pressure homogenisation and a method of skin nourishing applying the emulsion to the skin.

III. The patent was opposed for lack of novelty and inventive step, Article 100(a) EPC and Article 54 and Article 56 EPC, respectively. The patent proprietor defended the patent in amended form, based on a claim set of a main request and nine auxiliary requests. In its decision the opposition division found the patent proprietor's main request to comply with the relevant provisions of the EPC. In particular, the opposition division came to the following conclusions:

(a) The claimed emulsions were novel over D4 (Article 54 EPC).
(b) The claimed invention was sufficiently disclosed (Article 83 EPC); a corresponding objection was raised and admitted after the notice of opposition was filed.

(c) The claimed emulsions were not obvious from D5 as closest prior art (Article 56 EPC), even if combined with the teaching of any of D1 to D4.

IV. The following documents are referred to in this decision:

D3: EP 1 013 264 A1

D4: EP 2 647 366 A1

D5: US 2003/0206955 A1

D10: Experimental data, filed 17 May 2023

D15: "Stearic acid", article from Wikipedia

D16: "ACIDE STEARIQUE 95%", Fiche de données de sécurité, Interchimie, France, 20 May 2015

D17: Experimental data, filed 11 June 2025

D19: WO 2018/109216 A1

V. In its statement setting out the grounds of appeal the appellant (opponent) contested each of the conclusions of the opposition division. The subject-matter of the independent claims of the amended patent lacked novelty over D4, the claimed invention was insufficiently disclosed and the claimed emulsions lacked an inventive step over D5 as closest prior art. Moreover, the claimed emulsions also lacked an inventive step over D4 or D3 as closest prior art. The same applied to the claims of all auxiliary requests.

VI. In its reply to the appellant's statement setting out the grounds of appeal the respondent (patent proprietor) defended the decision of the opposition division finding its main request to comply with the

requirements of the EPC. The auxiliary requests filed during the opposition proceedings were maintained.

VII. Oral proceedings were held on 27 February 2026. In a previous communication under Article 15(1) RPBA the board had informed the parties of its preliminary view that claim 1 of the amended patent according to the respondent's main request lacked an inventive step over D5; the same held for claim 1 of auxiliary requests 1-3, 8 and 9.

VIII. During oral proceedings the parties were heard on inventive step of the subject-matter of claim 1 of the respondent's main request and of claim 1 of auxiliary request 4. With respect to the set of claims of auxiliary request 4 the appellant did not maintain any objections other than lack of inventive step.

IX. The independent composition claims of the two relevant requests read as follows:

Claim 1 of the main request:
"*An oil-in-water emulsified cosmetic comprising:*
(A) an aqueous medium;
(B) an anionic surfactant;
(C) an oil agent;
(D) an amphiphilic polymer, selected from the group consisting of hydrophobic group-modified hydrophilic urethane polymers, (meth)acrylic polymers having a side chain including a hydrophilic group and a hydrophobic group, and hydrophobic group-modified hydrophilic polysaccharides; and
(E) a charge neutralizer,

wherein the cosmetic has a viscosity of 10,000 mPa·s or higher at 25°C, and
wherein the oil agent content ratio is 20 mass% or greater based on the total mass of the oil-in-water emulsified cosmetic."

Claim 1 of auxiliary request 4 (amendments with respect to claim 1 of the main request indicated by ~~strikethrough~~):
"*An oil-in-water emulsified cosmetic comprising:*
(A) an aqueous medium;
(B) an anionic surfactant;
(C) an oil agent;
(D) an amphiphilic polymer, selected from the group consisting of hydrophobic group-modified hydrophilic urethane polymers~~,(meth)acrylic polymers having a side chain including a hydrophilic group and a hydrophobic group,~~ and hydrophobic group-modified hydrophilic polysaccharides; and
(E) a charge neutralizer,
wherein the cosmetic has a viscosity of 10,000 mPa·s or higher at 25°C, and
wherein the oil agent content ratio is 20 mass% or greater based on the total mass of the oil-in-water emulsified cosmetic."

X. The final requests by the parties were the following:

The appellant (opponent) requested that the appealed decision be set aside and the patent be revoked.

The respondent (patent proprietor) requested that the appeal be dismissed, or alternatively, that the patent be maintained in amended form based on the claim sets of any of the auxiliary requests 1 to 9 as refiled

together with the reply to the grounds of appeal. Furthermore, the respondent requested document D15 not to be admitted to appeal proceedings.

XI. The decision was announced at the end of the oral proceedings.

Reasons for the Decision

Main request - version held allowable by the opposition division

1. Inventive step (Article 56 EPC)

1.1 The patent addresses the problem of providing oil-in-water emulsions that can accommodate large amounts of oil agent without losing their stability, and without getting sticky, see paragraph [0006]. According to the patent this problem is solved by incorporating particular amphiphilic polymers (D) into the formulation, see paragraphs [0013] and [0014]. The patent proposes three types of such amphiphilic polymers, namely suitably substituted urethanes, (meth)acrylates and polysaccharides, see paragraph [0034]. A particular advantage of such formulations is that they remain stable even upon the addition of electrolytes such as the "charge neutralizer" (E), see paragraph [0016].

1.2 Closest prior art

1.2.1 The opposition division started from D5 as closest prior art, see point 5.3 of the decision's reasoning.

The appellant also raised objections starting from D3 and D4, however, in view of the board's conclusion on inventive step over D5 these objections do not need to be addressed for the claims of the main request.

1.2.2 D5 deals with thickening systems for a cosmetic nanoemulsion. The focus of D5 is the problem of transparency, which may be compromised when the oil level becomes too high, see paragraph [0011]. D5 proposes the use of certain anionic polymers, in particular methacrylates, as stabilisers. Some of these polymers are included in the second definition of the amphiphilic polymers (D) of claim 1, "*(meth)acrylic polymers having a side chain including a hydrophilic group and a hydrophobic group*". Such a nanoemulsion is disclosed in example 1 of D5.

1.2.3 The differences of the composition of claim 1 with respect to example 1 of D5 are two, namely

(i) the oil content of at least 20% (in example 1 of D5 the oil components add up to 15% only)

(ii) the viscosity of at least 10.000 mPa·s (the cream of examples 1 of D5 has a viscosity of 3.840 mPa·s).

1.2.4 All this was undisputed.

1.3 Objective technical problem solved

1.3.1 The patent or the application as filed, respectively, does not disclose any particular technical effect which would be achieved by the distinguishing technical features. The experiments summarised in table 1 investigate the role of the amphiphilic polymer (D), the ones in table 2 the role of the charge neutraliser

(E). These are not distinguishing features over D5. Table 3 shows the influence of the oil content, but the comparative composition has no oil phase at all. Table 4 investigates the influence of the preparation process, i. e. the high-pressure homogenisation.

1.3.2 For establishing a technical effect of the distinguishing features versus D5 the respondent relies on the data in D10.

In D10 a composition according to the claims, having an oil content of 22% (the sum of the amounts of petrolatum, squalene and triglyceryl-2-ethyl hexanoate) and a viscosity of 128.300 mPa·s (both oil content and viscosity being according to claim 1), is compared with a corresponding composition having an oil content of 11% (i.e. below the lower limit in claim 1) which did not form a stable emulsion (see footnote for example B). It is stated that the composition according to the claims is more stable, has a better skin nourishing effect, improves skin penetration and is less sticky.

Although the comparative composition is not the one of the closest prior art, i. e. example 1 of D5, the opposition division recognised that the comparison made in D10 showed an improvement of stability and cosmetic properties which could be related to the oil content of the compositions, see point 5.4 of the decision's reasoning.

1.3.3 The appellant contested this conclusion. The appellant argued that the comparative composition (example B in D10) was not according to D5, but rather according to D3. D3 however stated that in order to achieve stable emulsions additional ingredients were needed which are not included in comparative example B of D10.

1.3.4 The respondent stressed that the tests in D10 showed that the distinguishing feature of the claim compared to example 1 of D5, i. e. the oil content, had a favourable effect on cosmetic properties. Thus, such an effect should be recognised for the compositions according to claim 1.

The respondent argued that the case law of the Boards of Appeal did not require a comparison with a composition reproducing exactly the closest prior art. For showing an effect of a distinguishing feature it was permissible, in fact it was even sometimes necessary, that compositions disclosed in the closest prior art were modified so that they differed from the tested compositions representing the claimed invention only in the distinguishing feature(s) of the claim. The respondent pointed to various decisions of the Boards of Appeal establishing this principle, in particular to T 1872/08, T 197/86 (headnote) and to T 2319/14.

The respondent argued further that an exact reproduction of composition 1 of D5 was not possible, since the polymer used as thickener in example 1 of D5 was no longer commercially available.

1.3.5 In the board's view the comparative experiments carried out in D10 cannot establish any improvements in cosmetic properties for the compositions according to claim 1 compared to the compositions of D5.

The board agrees to the principles developed in the case law cited by the respondent. In particular, the board agrees with the headnote of decision T 197/86, which reads:

"*In the case where comparative tests are chosen to demonstrate an inventive step with an improved effect over a claimed area, the nature of the comparison with the closest state of the art must be such that the effect is convincingly shown to have its origin in the distinguishing feature of the invention. For this purpose it may be necessary to modify the elements of comparison so that they differ only by such a distinguishing feature (...)*".

Decisions T 1872/08 and T 2319/14 contain a similar reasoning and apply this principle to the factual situations of the respective cases.

However, the circumstances of the present case are different.

The compositions disclosed in D5 are stable (nano)emulsions; the composition of example 1 of D5 is a cream with a viscosity of 3.840 mPa·s. In contrast, comparative composition B in D10 is not a stable emulsion, and no viscosity could be measured, as apparent from the note below the table.

The parties discussed various reasons why that may be the case. One possible reason may be that in the experiments in D10 a different, non-ionic polymer is used to thicken the compositions compared to the anionic polymer of example 1 of D5. Also the other ingredients do not match the composition of example 1 of D5; the appellant's argument that according to D3 associative thickeners as the one used in D10 may need an additional thickener for the water phase in order to provide stable emulsions (see D3 paragraph [0099] to [0101]) may also have merit. The board acknowledges that the exact composition of example 1 in D5 could not

be reproduced because of the commercial unavailability of the thickening polymer. However, D5 discloses in paragraph [0054] other possible thickening polymers that could have been used, including polymers that are mentioned in paragraph [0045] of the patent (Aculyn 22 or Aculyn 28); Aculyn 28 is even specifically used in example 8 of the patent. Regarding the other ingredients no reason to depart from the teaching of D5 is apparent anyway.

Be that as it may, a composition representing D5 in a comparative test should conserve at least the essential properties that are disclosed in D5 for such compositions. D5 discloses emulsions, whereas comparative composition B used in D10 is not an emulsion. This composition is not representative for the teaching of D5. Although the claims differ from example 1 in D5 as well as from composition B in D10 only in the distinguishing features, i.e. the amount of oil being present and the viscosity, no meaningful conclusions on improvements over D5 can be drawn from experiments using comparative composition B of D10 as a representative for D5.

While it is correct that for a meaningful comparison the example compositions of the closest prior art may be modified in order to only differ by the distinguishing feature(s), they may not be modified in such a way as to lose essential properties reported in the closest prior art so that they become unsuitable for the purpose they are originally designed for.

1.3.6 Thus, starting from D5 the objective technical problem solved cannot be formulated as improving the compositions disclosed in D5 in a certain way.

The objective technical problem solved must therefore be formulated as in the patent itself, paragraph [0006], namely as the provision of cosmetic compositions being able to accommodate large amounts of oil agents while maintaining stability without stickiness.

1.3.7 The claimed solution to this problem are the emulsions according to claim 1 which are characterised by the oil content of at least 20% and the viscosity of at least 10.000 mPa·s.

1.4 Obviousness of the claimed solution

1.4.1 Regarding the content of the oily phase D5 discloses that compositions according to this document may contain from 2 to 40%, particularly from 4 to 30%, and preferably from 4 to 20% of oily phase, see paragraph [0163].

Regarding the viscosity D5 discloses that the addition of the polymers disclosed therein, which are polymers encompassed by feature (D) of claim 1, may lead to stable milks and creams having viscosities from 50 to 15.000 mPa·s.

Thus, the values defined in claim 1 both for the oil phase as well as for the viscosity are overlapping with the teaching of D5. Part of the compositions claimed in claim 1 are inside the teaching of D5.

1.4.2 The respondent argued that even if the values defined in claim 1 are encompassed by the teaching of D5 the skilled person would not have arrived at the claimed compositions. Such a conclusion would be based on hindsight. No preferred ranges in D5 overlapped with

the claim and the example compositions of D5 showed lower contents in oily phase as well as a lower viscosity than required in claim 1. The opposition division followed these arguments, see point 5.5 of the decision under appeal.

1.4.3 The board does not agree.

Regarding the content of oily phase, all of the generic ranges disclosed in D5 overlap with the definition in the claim. Even the most preferred range, 4 to 20% of oily phase, shares the value of 20% with the claim. Regarding the viscosity there are no preferred ranges disclosed in D5, so the claim overlaps with the only generic disclosure.

It is correct that the example compositions in D5 do not attain the values claimed for the content of oily phase and for the viscosity. However, this does not mean that the skilled person would have considered values falling within the claimed ranges to be somehow undesired, as argued by the respondent. On the contrary, the skilled person would have learnt that the compositions used in D5 allow to incorporate a large amount of oil phase, paragraph [0163], and that they may have elevated viscosities, paragraph [0034]. There is no reason why the skilled person would have expected the favourable cosmetic properties obtained in example 1 of D5 to be compromised when turning to higher contents of oily phases and higher viscosities following the general teaching of D5.

1.4.4 Thus, in view of the teaching of D5 the compositions defined in claim 1 containing "*(meth)acrylic polymers having a side chain including a hydrophilic group and a hydrophobic group*" as amphiphilic polymer (D) are an

obvious solution to the objective technical problem defined above.

1.5 Under Article 101(3) EPC the patent cannot be maintained as amended in the form of the appellant's main request since the compositions defined in claim 1 of this request lack an inventive step within the meaning of Article 56 EPC.

Auxiliary requests 1 to 3

2. Independent claim 1 of auxiliary request 1 defines the oil as being liquid. Independent claim 1 of auxiliary request 2 defines that the cosmetic is obtainable by high-pressure emulsification. Independent claim 1 of auxiliary request 3 combines these two features.

These two features are likewise disclosed in D5. Example 1 uses liquid oils and is prepared using a high-pressure homogeniser. Suitable pressures up to 180 MPa are mentioned in paragraph [0170].

Thus, the amendments in auxiliary requests 1 to 3 do not change the considerations concerning inventive step compared to the main request. The patent cannot be maintained in amended form based on these claim requests for the same reasons as for the main request.

This was already stated in the board's communication under Article 15(1) RPBA, and after issuance of this communication the respondent did not make any further submissions regarding these requests.

Auxiliary request 4

3. Claim 1 of auxiliary request 4 corresponds to claim 1 of the main request in which the (meth)acrylic polymers are deleted from the list of amphiphilic polymers (D). Thus, the claims of auxiliary request 4 are restricted to urethanes and polysaccharides as amphiphilic polymers (D).

4. Inventive step when starting from D5

4.1 The appellant submitted that the subject-matter of claim 1 of auxiliary request 4 lacked an inventive step over D5 for the same reasons as that of claim 1 of the main request. The deletion of acrylic polymers from the claim did not distinguish claim 1 of this request any further from D5, since the disclosure of D5 was not limited to acrylic polymers.

4.2 In particular, the appellant submitted that D5 not only disclosed acrylic thickener polymers, but also "*hydrophobic group-modified hydrophilic urethane polymers*", covered by the first definition of feature (D) in claim 1 of auxiliary request 4.

The polymer used in example 1 of D5 is an aqueous dispersion of a terpolymer of methacrylic acid / methyl acrylate / dimethyl-m-isopropenylbenzylisocyanate of ethoxylated behenyl alcohol comprising 40 EO. In the appellant's view this polymer is a urethane polymer according to the first definition of feature (D) of claim 1, since the isocyanate groups react with water to form a urethane. In this respect it was also referred to paragraph [0053] of D5 and to the generic disclosure of urethanes in D5, e. g. in claim 10. The

structural formula of Viscophobe^{TM} 1000, which was the commercial name of the thickening polymer used in example 1 of D5, was depicted in its relevant parts on page 12 of D19. Formula (IV) there disclosed a urethane group. Thus, the polymer used in example 1 of D5 was a urethane polymer according to claim 1 of auxiliary request 4.

4.3 Regarding the reference to the general description of D5 the appellant's arguments are unconvincing.

The reaction of isocyanates with water leads to carbamic acids followed by decarboxylation which results in amines. These amines can then react with remaining isocyanate groups at most to form urea groups, but not urethanes.

4.4 The appellant's arguments based on example 1 of D5 are likewise unconvincing.

It was undisputed that the structural formula (IV) disclosed in D19 is part of the thickening polymer used in example 1 of D5. This formula corresponds to one of the monomers of a terpolymer comprising monomers (a), (b) and (c) described as polymer (3), see page 12 lines 3-11 of D19.

However, this polymer is not a "*hydrophobic group-modified hydrophilic urethane polymer*" in the sense of claim 1.

This terpolymer is a vinylic polymer made from acrylic monomers (a) and (b) and a styrene derivative (c) of formula (IV) as a third monomer. It is correct that the styrene derivative contains a urethane group in the hydrophobic/hydrophilic side chain at the phenyl ring.

However, the presence of urethane groups in the side chain of the polymer does not make this terpolymer a urethane polymer. Urethane polymers, as understood by the skilled person, contain urethane groups in the repeating unit and are essentially made by condensation polymerisation of diols and diisocyanates. That claim 1 defines a "urethane polymer", not a "polyurethane", does not change that; these terms are equivalent for the skilled person.

4.5 In contrast to the appellant's arguments the disclosure of D5 is in fact limited to acrylic polymers as thickening agents. Thus, the omission of the acrylic polymers from claim 1 of auxiliary request 4 compared to claim 1 of the main request does distinguish the claim further from the disclosure of D5. The remaining polymers mentioned in feature (D) of claim 1, "*hydrophobic group-modified hydrophilic urethane polymers*" and "*hydrophobic group-modified hydrophilic polysaccharides*", are not disclosed as thickening polymers in D5.

4.6 With respect to D5 as a starting point the appellant did not submit any argument why the skilled person would have arrived at emulsions according to claim 1 of auxiliary request 4 other than in the same way as it had arrived at claim 1 of the main request. However, the inventive step reasoning for claim 1 of the main request is not applicable to claim 1 of auxiliary request 4, since there is an additional distinguishing feature, namely the nature of the thickening polymers (D). Thus, the appellant's inventive step objection starting from D5 cannot succeed.

5. Inventive step when starting from D3 and D4: Admittance of the objections

5.1 These objections were raised in the appellant's statement setting out the grounds of appeal, page 23 to 27.

5.2 The respondent requested these objections not to be admitted to appeal proceedings. The respondent argued that these objections, while having been raised in the written phase of the opposition proceedings, were then no longer maintained, since during oral proceedings the appellant agreed that D5 represented the closest prior art to the claimed invention. Under Article 12(6) RPBA these objections should thus not be admitted.

5.3 The appellant submitted that these objections had never been abandoned. The discussion in the oral proceedings was moreover limited to the claims of the main request; at least with respect to the auxiliary requests not even an implicit abandonment could have taken place.

5.4 Under Article 12(6) RPBA the board shall not admit objections which were no longer maintained in the proceedings leading to the decision under appeal, unless the circumstances of the appeal case justify their admittance.

5.4.1 It is correct that the minutes of the oral proceedings before the opposition division state that both parties referred to D5 as closest prior art, see point 3.2 there. After the opposition division gave its conclusion on inventive step over D5 as closest prior art no other objections were discussed anymore.

5.4.2 However, this cannot be interpreted as an abandonment of the inventive step objections starting from D3 or D4 in the circumstances of the present appeal case, at least for the following reasons:

Firstly, the discussion in the oral proceedings before the opposition division was only on the claims of the main request. Even if one followed the respondent's argument that the objection starting from D3 or D4 was no longer maintained, this could at most hold for the claims of the main request. With respect to the auxiliary requests no implicit abandonment can have occurred, since these requests were not discussed at all.

Secondly, the decision on inventive step was based on the opposition division's recognition of improved cosmetic properties deduced from the comparative experiments in D10. In such a context it may have been meaningless to present the further inventive step objections during oral proceedings. Since the board does not follow the opposition division's assessment such objections may now be situated in a different context. Thus, the inventive step objections starting from D3 or D4 also are admitted based on the circumstances of the appeal case, in accordance with Article 12(6) RPBA.

5.5 Thus, these objections are part of the appeal proceedings.

6. Inventive step when starting from D4

6.1 D4 deals with cosmetic compositions containing elevated amounts of oils (1 to 98%, see paragraph [0041]) but

should nevertheless have a non-sticky feeling, see paragraphs [0005] and [0006]. To achieve this, D4 proposes to use amphiphilic siliconated polysaccharides, the structural formula of which is set out in paragraph [0007]. These compounds are "*hydrophobic group-modified polysaccharides*" according to the second definition of feature (D) in claim 1 of auxiliary request 4. The appellant referred to the O/W cream of example 25 of D1 as the embodiment coming closest to the claimed invention.

6.2 Distinguishing features

6.2.1 D4 does not mention any viscosity values for the compositions disclosed therein, neither in the general description, nor for specific example compositions. The appellant originally argued that the description of example 25 as an "*O/W cream*" implied a viscosity of at least 10.000 mPa·s. However, no proof was submitted to this respect and during oral proceedings the appellant conceded that the viscosity of at least 10.000 mPa·s defined for the compositions of claim 1 distinguishes the claim over the disclosure of D4.

6.2.2 Claim 1 requires the presence of an anionic surfactant (B) and of a "charge neutralizer" (E). It was common ground that in example 25 of D1, stearic acid, after reaction with sodium hydroxide to form sodium stearate, corresponded to the anionic surfactant required by feature (B) of the claim.

6.2.3 It was disputed whether feature (E), the "charge neutralizer", was a further distinguishing feature of the claim vs. example 25 or not.

The appellant provided two lines of arguments. In its view:

(i) the sodium stearate acted simultaneously as an anionic surfactant and as a charge neutraliser

(ii) alternatively, sodium hydroxide acted as "charge neutralizer", or a residual amount of stearic acid could be read on this feature. Stearic acid had a residual solubility of around 0.003g/100ml, as shown in the Wikipedia article D15.

The respondent argued that (i) the claim required two distinct components (B) and (E) and that (ii) stearic acid was no charge neutraliser in the sense of the claim since it was insoluble in water, as evidenced by D16 (page 4).

D15 had been filed by the appellant with the statement of grounds of appeal. The respondent had requested D15 not to be admitted into appeal proceedings; however, since anyway the board's finding with respect to the disputed feature (E) is in favour of the respondent, see below, this request does not need to be addressed in this decision. D15 was considered on substance by the board, in accordance with Article 12(4) RPBA.

6.2.4 In the board's view claim 1 requires two distinct components (B) and (E) in the claim. Any anionic surfactant (B) is a ionic compound and can thus also act as a charge neutraliser. If the claim allowed one and the same compound to read simultaneously on components (B) and (E), component (E) in the claim would be superfluous and meaningless. Reading the claim in such a way does not correspond to a technically

meaningful claim construction. The appellant's argument (i) is unconvincing.

6.2.5 In the board's view example 25 of D4 does not contain a "charge neutralizer" (E) according to claim 1. Sodium hydroxide is added as a component of the composition during its preparation, but is not a component of the final composition anymore. It is consumed by the reaction with stearic acid to form sodium stearate. Thus, sodium hydroxide cannot be read on feature (E) of claim 1. Stearic acid remains a component also of the final composition since it is added in stoichiometric excess with respect to sodium hydroxide. However, as apparent from documents D15 and D16, its solubility in water is negligible. The appellant referred to D15 and stressed that stearic acid was water soluble, albeit to a limited extent of 0,034 g/l. The respondent cited D16 where a solubility in water of 0,05 g/l is given, and the material is labelled as insoluble in water. The board notes that the numerical results in D15 and D16 do not contradict each other and point, if at all, to a negligible water solubility. Considering a practically water insoluble material as a charge neutraliser (E) in the compositions defined by the claim may be justified from an academic point of view, on account of the residual water solubility, but does not correspond to a technically meaningful reading of the claim. In order to fulfil its role as a "charge neutralizer", a term used literally in claim 1, a component needs to have reasonable water solubility.

6.2.6 Thus, claim 1 differs from the O/W emulsion disclosed in example 25 of D4 in two features, the viscosity of at least 10.000 mPa·s, and the presence of a charge neutraliser (E).

6.3 Objective technical problem

6.3.1 The respondent referred to table 2 of the patent and to the experimental results compiled in D17. Both of these sets of comparative experiments showed that the addition of charge neutralisers had a positive effect on various cosmetically relevant properties of the compositions, such as stickiness, as well as on their stability. In the experiments of D17 the use of various different charge neutralisers (citric acid, sodium phosphate, disodium phosphate, sodium hydrogensulfite) showed that this effect was independent of their nature; the comparative composition in this case used stearic acid/NaOH as anionic surfactant system in the same way as the composition of example 25 of D4

6.3.2 During oral proceedings before the board, the appellant submitted that even if one considered the presence of a charge neutraliser as a distinguishing feature over example 25 of D4 this feature did not lead to any improvement of claimed compositions compared to the ones disclosed in D4. During oral proceedings the appellant argued in particular that while the composition of example 25 of D4 used an amphiphilic polysaccharide thickener, neither of the comparative tests referred to by the respondent were carried out using such a thickening polymer.

6.3.3 In the board's view the comparative experiments carried out in table 2 of the patent and in D17 show that the presence of a charge neutraliser as a distinguishing feature improves the performance of the compositions compared to D4, as argued by the respondent.

The appellant's argument with respect to the thickening polymer is unconvincing. It is correct that the

comparative tests were carried out using an amphiphilic polyurethane instead of the amphiphilic polysaccharide used in example 25 of D4. However, as shown in table 1 of the patent, the performances of amphiphilic polyurethanes (examples 1-4) and amphiphilic polysaccharides (example 5) are largely identical as regards the cosmetic properties of the compositions containing them. There is thus no apparent reason why the effect proven for compositions containing amphiphilic polyurethanes may not be transferred to compositions containing amphiphilic polysaccharides. The board stresses that this is a different situation than for the comparative tests carried out in D10 set out above for the main request. There, the modifications made to the composition representing the closest prior art in the comparative tests resulted in a breakdown of the emulsion, meaning that it was no longer representative of the closest prior art.

6.3.4 Thus, starting from D4, more specifically from example 25 of D4, the objective technical problem was the provision of cosmetic compositions showing improved cosmetic properties, such as reduced stickiness, and enhanced stability.

6.3.5 The claimed solution to this problem are the emulsions according to claim 1 which are characterised by the presence of a charge neutraliser and by their viscosity of at least 10.000 mPa·s.

6.4 Obviousness of the claimed solution

The appellant did not point to any disclosure showing the use of charge neutralisers to lead to improved properties of cosmetic compositions. The skilled person had no information from the prior art that the addition

of a charge neutraliser to the cosmetic compositions known from D4 may lead to improvements, such as reduced stickiness, and enhanced stability. Thus, starting from D4 the skilled person would not have found the claimed solution of the objective technical problem and, hence, the claimed solution was not obvious.

7. Inventive step when starting from D3

7.1 During the written appeal phase, the appellant submitted that the claimed compositions were likewise obvious when using D3 as a starting point. In particular, claim 1 differed from examples 13 to 15 of D3 only in the increased fraction of the oil phase, which was more than 20% per weight in the claim as opposed to 12,5% per weight in the three cited example compositions in D3. However, an increase of the oil phase fraction would have been obvious for a skilled person, as an alternative as well as when aiming at improved cosmetic properties, since D3 itself taught oil contents up to 40% by weight, and from D5 it was clear that higher fractions of the oil phase lead to beneficial properties.

7.2 However, this objection is unconvincing already because claim 1 differs from the cited three example compositions of D3 in more than just the amount of oil present.

The compositions in examples 13 to 15 of D3 do not contain a charge neutraliser corresponding to feature (E) of the claim. The appellant did not point to any ingredient which could fulfil this role. The only ionisable components present in the compositions are triethanolamine and stearic acid. However,

triethanolamine is consumed in the formation of the anionic surfactant, triethanolammonium stearate, which corresponds to feature (B) of the claim. Any residual stearic acid is not a charge neutraliser according to the claim, as outlined above.

7.3 The appellant did not submit any arguments why, starting from D3, the addition of a charge neutraliser would have been obvious for the skilled person. In the absence of any such arguments the appellant's objection cannot succeed.

8. During oral proceedings the appellant stated that it did not maintain any objections with respect to the claims of auxiliary request 4 other than those under inventive step, Article 56 EPC. These objections have been addressed above and found unconvincing. Thus, the claims of auxiliary request 4 fulfil the requirements of the EPC, Article 101(3)(a) EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the opposition division with the order to maintain the patent in amended form with claims 1 to 7 of auxiliary request 4 filed with the reply to the grounds of appeal, and a description to be possibly adapted thereto.

The Registrar: The Chairman:

U. Bultmann M. O. Müller

Decision electronically authenticated