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**Datasheet for the decision
of 12 January 2023**

Case Number: T 1068/19 - 3.3.10

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Language of the proceedings: EN

Title of invention:
SEPARATED TWO-LAYER HAIR COSMETIC

Patent Proprietor:
Kao Corporation

Opponents:
Revlon Consumer Products Corporation
Henkel AG & Co. KGaA

Headword:

Relevant legal provisions:

Keyword:

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Case Number: T 1068/19 - 3.3.10

D E C I S I O N
of Technical Board of Appeal 3.3.10
of 12 January 2023

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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 27 February
2019 rejecting the opposition filed against
European patent No. 2444055 pursuant to Article
101(2) EPC.**

Composition of the Board:

| | |
|-----------------|-----------------|
| Chair | P. Gryczka |
| Members: | R. Pérez Carlón |
| | L. Basterreix |

Summary of Facts and Submissions

- I. The appellants (opponents 1 and 2) lodged an appeal against the decision of the opposition division rejecting the oppositions against European patent No. 2 444 055.
- II. Two notices of opposition had been filed on the grounds of added subject-matter (Article 100(c) EPC), insufficiency of disclosure (Article 100(b) EPC), and lack of novelty and inventive step (Article 100(a) EPC).
- III. The following documents were filed:
- D1 US 2007/0264218 A1
 - D2/D2a Letters of The Colomer Group addressed to the Spanish authorities and information on Revlon Prof. Active Defense Equave 2 Phase Perfect Blonde Conditioner
 - D3 Wayback Machine, Fiche Produit: Phase Perfect Blonde - Equave 2 (Revlon Professional) dated 9 July 2008
 - D3a Mintel - Hair Care Set, Revlon Equave Hydro Nutritive
 - D10 EP 1 905 421 A1
 - D12 US 2005/0143268 A1
 - D14 DE 197 03 475 A1
 - D15 EP 1 894 944 A1
 - D16 Mintel - Gliss Lait Démêlant Express Detangler - September 2003

The experimental evidence filed includes the following:

- D13 Declaration of Tetsuya Kawai dated 7 April 2014

- D28 Experimental protocol filed with letter dated 4 October 2018
- D28bis Experimental evidence filed with appellant 1's statement of grounds of appeal
- D32 Experimental evidence filed with appellant 1's statement of grounds of appeal
- D33 Declaration of Jordi Salvà dated 8 July 2019
- D34 Extended Experiments E1-10, dated 29 January 2020
- D35 Declaration of Jordi Salvà dated 7 January 2021
- D36 Supplementary Examples dated 16 March 2022
- D37 New Experiments set: NE1 to NE4 dated 18 October 2022
- D38 Declaration of Jordi Salvà dated 18 October 2022

IV. The opposition division concluded that the claimed invention was sufficiently disclosed for it to be carried out by a skilled person. The composition of claim 1 of the patent was novel and document D16 was the closest prior art. The problem underlying the claimed invention was to provide an alternative hair cosmetic composition. The solution, which was characterised by the number-average degree of polymerisation, the particle diameter and the relative amount of the required silicone, by the weight-average molecular weight of the required polyquaternium polymer and by the required ratio between silicone and polyquaternium polymer, would not have been obvious to a skilled person having regard to the prior art and was thus inventive. The opposition division did not admit documents D24 and D25 into the proceedings.

V. The main request of the respondent (patent proprietor) was filed as auxiliary request 1 with a letter dated 27 November 2019. Claim 1 thereof reads as follows:

"A non-aerosol two-layer separate type hair cosmetic composition, comprising components (A) and (B) at a mass ratio of (A)/(B) of from 1 to 5:

(A) a silicone with a number-average degree of polymerization of from 300 to 20,000 having a number-average particle diameter of from 0.05 to 20 μm , selected from the group consisting of dimethicone, dimethiconol, and amino-modified silicone and in an amount of from 0.1 to 6 mass%

(B) a water-soluble cationic polymer with a weight-average molecular weight of from 50,000 to 1,000,000, selected from the group consisting of polyquaternium-6, polyquaternium-7, polyquaternium-16, and polyquaternium-22,

wherein the composition consists of an oil-in-water emulsion layer and an aqueous layer."

The first auxiliary request was filed as auxiliary request 3 with a letter dated 11 October 2018. The composition of claim 1 of this request has all the features of claim 1 of the main request and, in addition, requires the presence of a component (C) by including the wording:

"further comprising from 0.05 to 5 mass% of an organic carboxylic acid or a salt thereof as component (C)".

Claim 1 of auxiliary request 2, filed as auxiliary request 5 with the reply to the grounds of appeal dated 27 November 2019, has all the features of claim 1 of the first auxiliary request and also requires

"from 1 to 35 mass% of ethanol".

VI. The appellants' arguments were as follows.

The amendment in paragraph 22 of the description could not be considered to be a correction of an obvious error under Rule 139 EPC. It was not apparent whether an error had occurred and, even if it had, it was not evident how to correct it. The amendment added new subject-matter and was thus not allowable.

The claimed invention was not sufficiently disclosed for it to be carried out by a skilled person. Not every composition having components (A) and (B) inevitably formed two layers. Although the patent contained examples of two-layer compositions, the issue was how to carry out the invention over the whole scope of claim 1. The patent did not provide enough information on what other components were required to obtain two layers and no other component was specified in claim 1. The claimed patent did not enable the skilled reader to find two-layer compositions other than those of the examples. It also did not enable a skilled reader to obtain an oil-in-water emulsion layer and an aqueous layer. In addition, the patent did not disclose how to determine the required weight-average molecular weight, for which different methods leading to diverging results existed.

The claimed composition was not novel over that of D1, D2/D2a/D3/D3a, D24 and D25. The decision of the opposition division not to admit D24 and D25 into the proceedings should be reversed due to their relevance.

Experimental evidence D34 and D35 had been filed within the deadline set by the board, was highly relevant and the respondent had had ample time to reply to it. It was furthermore a response to the respondent's

auxiliary requests. It should thus be admitted into the proceedings.

Experimental evidence D37 and D38 was a response to auxiliary requests 3 and 4 being filed by the respondent and should thus be admitted into the proceedings.

The composition of document D16 was the closest prior art. In the absence of any relevant comparison, the problem underlying the claimed invention was the provision of an alternative two-layer hair composition. The claimed solution would have been obvious to a skilled person and was thus not inventive.

The composition of D16 included lactic acid. The arguments with respect to the main request on the issue of inventive step also applied to claim 1 of the first auxiliary request, which required defined proportions of an organic carboxylic acid or a salt thereof.

Ethanol was known to improve phase separation and D10 disclosed the ethanol proportion required by claim 1 of the second auxiliary request. The composition of claim 1 of the second auxiliary request was also not inventive.

Not only D16 but also documents D2/D2a/D3/D3a, D12, D24 and D25 were suitable starting points for examining inventive step.

VII. The respondent's arguments were as follows.

The amendment in the description was allowable under Rule 139 EPC. The amendment related to commercially available products, whose properties were known. Only

the weight-average molecular weight was a feature of component (B) of claim 1 and it was for this reason obvious that the reference to its number-average molecular weight in the application was an error which needed to be corrected and how it should be corrected.

The claimed invention was sufficiently disclosed for it to be carried out by a skilled person. The patent contained examples of two-layer compositions and explained what components were required in addition to (A) and (B).

Filing the experimental reports D34 and D35 constituted an amendment to the appellant's case. They should not be admitted into the proceedings. The amendment to the case brought about by filing experimental evidence D37 and D38 could only be admitted into the proceedings under exceptional circumstances, which appellant 1 had not proven.

The composition of document D16 was the closest prior art. The problem underlying the claimed invention was the provision of an alternative two-layer hair composition comparable to that of D16. The claimed solution was characterised by the properties of components (A) and (B) required by claim 1 and by their proportions. The prior art did not hint at any of them and the claimed solution was thus inventive.

The composition of D16 included lactic acid, which was a component (C) required by claim 1, but did not disclose its relative amount. As the prior art did not teach the required proportion of component (C), the composition of claim 1 of the first auxiliary request was also inventive.

The composition of claim 1 of the second auxiliary request was novel. The prior art did not disclose a two-layer hair composition comprising ethanol.

The effect of ethanol on the composition of D16 could not have been foreseen. For this reason alone, the composition of claim 1 of the second auxiliary request was inventive.

VIII. The board informed the parties of its preliminary opinion in a communication dated 14 August 2020, stating that it was likely to consider the claimed invention sufficiently disclosed and novel. It was also likely to consider the amendment on paragraph [0021] allowable, D16 to be the closest prior art and the composition of claim 1 of the main request to be inventive.

IX. Oral proceedings before the board of appeal took place on 12 January 2023.

X. The parties' final requests were as follows:

The appellants requested that the decision under appeal be set aside and the patent be revoked.

Appellant 1 further requested that documents D24 and D25, not admitted by the opposition division, D34 and D35, filed on appeal with the letter dated 8 January 2021, and D37 and D38, filed on appeal with the letter dated 8 November 2022, be admitted into the proceedings. Appellant 1 also requested that auxiliary requests 6-7 not be admitted into the proceedings.

The respondent requested that the appeals be dismissed and the patent be maintained with the claims of the

main request filed as auxiliary request 1 with the letter dated 11 October 2018 or, alternatively, that the patent be maintained with the claims of auxiliary request 1 filed as auxiliary request 3 with the letter dated 11 October 2018, or auxiliary request 2 filed as auxiliary request 5 with the reply to the grounds of appeal dated 27 November 2019 or auxiliary requests 3 and 4 filed as auxiliary requests 6 and 7 with the letter dated 16 March 2022.

It also requested that documents D24, D25, D34, D35, D37 and D38 not be admitted into the proceedings. Should the board admit documents D34 and D35 into the proceedings, document 36 (filed by the respondent as Annex A with the letter dated 16 March 2022) should also be admitted into the proceedings.

XI. At the end of the oral proceedings, the decision was announced.

Reasons for the Decision

1. The appeal is admissible.
2. Experimental evidence filed as D34 and D35
 - 2.1 Experimental evidence D34 and D35 was filed by appellant 1 with a letter dated 8 January 2021. It was not disputed that it amended appellant 1's case. Admission of D34 and D35 is subject to the board's discretion pursuant to Article 13(1) RPBA 2020.
 - 2.2 Appellant 1 argued at the oral proceedings before the board that this experimental evidence had been filed within the time limit for reply set by the board in its communication of 14 August 2020, was highly relevant

for assessing inventive step and the respondent had had ample time to respond. D34 and D35 should for these reasons be admitted into the proceedings.

- 2.3 The board's communication did indeed set a time limit for replying in the event of a party considering a reply to be necessary.

However, Article 25(3) RPBA 2020 stipulates that any amendment to a party's case following a board's communication notified after 1 January 2020 is inevitably governed by Article 13(1) RPBA 2020. This is so, regardless of whether it is filed within any time limit set or later.

This argument is thus not convincing.

- 2.4 Appellant 1 also argued that D34 and D35 were a response to the filing by the respondent of auxiliary requests and to the board's communication indicating that an organic acid and ethanol were required for good phase separation.

Experimental evidence D34 and D35 relates to compositions which contain an organic acid and/or ethanol.

An organic acid and ethanol are specified in dependent claims 2 and 3 of the patent as granted. They are components of all the examples of the patent. The need for an organic acid was already a feature of claim 1 of auxiliary requests 2 and 3 pending before the opposition division. An organic acid and ethanol were at the centre of the invention from the start of the opposition proceedings. The argument that this evidence was a response to the respondent's requests taking an

unforeseeable direction or to a new argument raised by the board is thus not convincing.

- 2.5 Article 13(1) RPBA 2020 stipulates that the board has the discretion to admit an amendment to a party's case. This discretion should be exercised according to the state of proceedings and the suitability of the amendments to solve issues raised on appeal.

D34 and D35 were intended to prove that the components required by claim 1 do not inevitably lead to a two-layer composition. This is, however, conceded by the respondent (see point 10.1 below).

In addition, the issue of whether the components required by claim 1 formed a two-phase composition was raised at the start of the opposition proceedings. The opposition division decided on precisely that point. D34 and D35 thus do not serve to solve issues raised on appeal, as stipulated by Article 13(1) RPBA 2020.

- 2.6 The experimental evidence filed as D34 and D35 is thus not admitted into the proceedings.

3. Experimental evidence D36

The respondent requested that D36 be admitted into the proceedings only if D34 and D35 filed by the appellant were admitted. As the board did not admit D34 and D35 into the proceedings, the respondent's request with respect to D36 is irrelevant.

4. Experimental evidence D37 and D38

- 4.1 Appellant 1 filed this evidence on 8 November 2022 after the board summoned the parties to oral

proceedings. Admission into the proceedings thus falls under Article 13(2) RPBA 2020 and requires exceptional circumstances.

4.2 According to appellant 1, D37 and D38 were filed in response to the filing by the respondent of D36 and of auxiliary requests 3 and 4 (filed as auxiliary requests 6 and 7). D37 and D38 should therefore be admitted into the proceedings.

4.3 However since the board did not admit D36 into the proceedings and did not need to consider auxiliary requests 3 and 4, as the patent is to be maintained with the claims of auxiliary request 2, the reasons relied on by appellant 1 for admitting D37 and D38 into the proceedings are not valid.

4.4 As there were no exceptional circumstances that could justify their filing, D37 and D38 are not admitted into the proceedings pursuant to Article 13(2) RPBA 2020.

5. Main request - inventive step

Claim 1 of the main request relates to a two-layer separate type hair cosmetic composition. It consists of an oil-in-water emulsion layer and an aqueous layer. The composition comprises components (A) and (B) in a relative mass ratio of from 1 to 5.

Silicone component (A) is a dimethicone, dimethiconol or amino-modified silicone. It has a number-average degree of polymerisation of from 300 to 20,000. It further has a number-average particle diameter of from 0.05 to 20 μm . Claim 1 requires component (A) to be present in an amount of from 0.1 to 6 mass%.

Polymer component (B) is selected from polyquaternium-6, polyquaternium-7, polyquaternium-16 and polyquaternium-22 and is required to have a weight-average molecular weight of from 50,000 to 1,000,000.

5.1 Closest prior art

The parties agreed with the opposition division that document D16 was a suitable starting point for examining inventive step. D16 discloses the commercial product "Gliss Lait Démêlant Express Detangler".

Like claim 1, document D16 discloses a two-phase separate hair cosmetic composition (see "Produktbeschreibung" and picture). It was not disputed at the oral proceedings before the board that the phases of the product of D16 are an oil-in-water phase and an aqueous phase.

The composition disclosed in D16 contains dimethiconol and polyquaternium-16. D16 is however silent on the particulars of these components and their proportions.

5.2 Technical problem underlying the invention

The respondent defined the technical problem underlying the claimed invention as providing an alternative two-layer separate type hair composition having, like that of D16, good phase separation, temporal stability and low turbidity of the aqueous phase.

5.3 Solution

The solution to this technical problem is the claimed composition, characterised in that:

- the silicone (A) has a defined number-average degree of polymerisation and number-average particle diameter
- the polyquaternium used has a defined weight-average molecular weight
- the amount of component (A) is of from 0.1 to 6 mass%
- the relative mass ratio (A) / (B) is from 1 to 5.

5.4 Success

The appellants argued that not every embodiment of claim 1 solved the problem formulated by the appellant, which should thus be reformulated as the mere provision of an alternative.

In the following, it will be examined whether the subject-matter of claim 1 is inventive, on the assumption that the technical problem as defined by the respondent has been credibly solved by the features of claim 1. Since the board's conclusion is negative even under this assumption, there is no need to further elaborate on this point.

5.5 It thus remains to be decided whether the proposed solution to the objective problem defined above would have been obvious to a skilled person in view of the prior art.

5.5.1 Document D16 discloses a bi-phase marketed product "claimed to detangle hair in three seconds with no need for rinsing, leaving hair light, manageable and invigorated from root to ends" (Produktbeschreibung). The product of D16 arguably has a combination of properties satisfying consumer needs.

A skilled person would thus attempt to obtain this product by following the information in D16. To do this, a skilled person would need to decide on the type and proportions of the components, as D16 does not provide the exact details.

- 5.5.2 In order to reproduce D16, a skilled person would have tested different, preferably commercially available dimethiconols and polyquaternium-16 polymers.

Arriving at the optimum type of dimethiconol and polyquaternium-16 does not go beyond the skills of a person in the art aiming at reproducing D16. By testing different commercially available dimethiconols and polyquaternium-16, the skilled person would inevitably have selected those required by claim 1, since they would have led to the best results by the patent's own argument. As acknowledged in paragraphs [0017] and [0021] of the patent, a number of compounds commercially available before its filing date have the characteristics required by claim 1.

The skilled person, trying to put the teaching of D16 into practice, would also have to find the optimum proportion of dimethiconol. Dimethiconol is not only required for the phase separation; it is a beneficial ingredient in hair care compositions. The skilled person would thus have tested whether D16 contained an amount of dimethiconol usual in the art, for example such as the amounts disclosed in D14 and D11 which also relate to hair treatment compositions. Example 4 of D14 contains 4% of a (different) silicone, example 10 of D11 discloses a conditioning shampoo with 2% of silicone. These values are close to the amount used in the examples given in the patent (1.8%), and within the boundaries set by claim 1 (0.1 to 6 mass%). In their

attempts to obtain the composition disclosed in D16, a skilled person would thus have used a relative amount of component (A) as required by claim 1.

It was not disputed that the labels of cosmetic compositions list their components by their proportions, in decreasing order. Dimethiconol and polyquaternium-16 are adjacent and in this order on D16's label. This indicates that either there is more dimethiconol than polyquaternium-16 or the amount of both components is the same. A skilled person would thus test embodiments with the same amount of both or with slightly more dimethiconol than polyquaternium-16. By doing so, the skilled person would have arrived at the mass ratio of 1 to 5 required by claim 1.

Thus, a skilled person, trying to reproduce D16, would have arrived at a composition according to claim 1 by mere routine work. The claimed composition is, therefore, not inventive (Article 56 EPC).

- 5.6 The respondent argued that the prior art did not recognise the role of the molecular weight of the polyquaternium component, the degree of polymerisation or particle diameter of dimethiconol, let alone the relative amounts of these components. For that reason, the prior art did not hint at the claimed composition.

However, the skilled person had good reason to reproduce D16, which is a commercial product. D16's label includes only a limited amount of information. However, this information is enough for a skilled person to arrive at the claimed invention by mere routine work. The issue is not whether the prior art teaches the required properties and relative amounts, but whether the skilled person would have arrived at a

composition containing a component with these properties in the amounts required.

- 5.7 The respondent also argued that not every dimethiconol and polyquaternium-16 inevitably had the properties required by claim 1. For this reason, a skilled person would not inevitably have arrived at the claimed composition.

However, the issue is whether a skilled person would have arrived precisely at those required by claim 1 by routine work. As the respondent itself argued, dimethiconol and polyquaternium-16 having the properties required by claim 1 led to the best results. A skilled person would thus inevitably have arrived at the claimed composition by testing those components commercially available. This argument is thus not convincing.

- 5.8 The respondent also argued that D14 did not relate to the type of two-phase composition required by claim 1.

However, these documents exemplified the relative amount of components usual in the art. A skilled person seeking to reproduce D16 would have taken these usual amounts as starting point and proceeded to optimise them, as reasoned above.

6. First auxiliary request - inventive step

- 6.1 The composition of claim 1 of the first auxiliary request requires from 0.05 to 5 mass% of an organic carboxylic acid or a salt thereof as component (C).

- 6.2 The composition of document D16 contains lactic acid and sodium benzoate. Sodium benzoate is a known

stabiliser generally used in small amounts, which is in line with its position on the label of D16. Most of component (C) in the composition of D16 is thus in the form of lactic acid.

6.3 The composition of claim 1 of the first auxiliary request differs from that of D16 by the same features as claim 1 of the main request and, in addition, by the proportion of organic carboxylic acid, which D16 does not disclose.

6.4 However, and for the same reasons explained for the main request, the skilled person would have attempted to reproduce the composition of D16 and optimise the components used and their relative amounts, starting by using amounts of those components common in the art. By doing so, the skilled person would inevitably have arrived at a composition falling within the boundaries set by claim 1. The amount of carboxylic acid required by claim 1 is by no means uncommon; see examples 1 and 2 of D15 which relates to two-phase cleaning compositions which could be used on hair [0131]. The composition of claim 1 of auxiliary request 1 is thus not inventive (Article 56 EPC) and this request is not allowable.

7. Auxiliary request 2

Claim 1 of auxiliary request 2 results from the combination of claims 1 to 3 and the most preferred (A)/(B) ratio in paragraph [0022] of the application as originally filed. No objection under Article 123(2) or (3) EPC was raised by the appellants and none is apparent to the board.

Claim 1 of auxiliary request 2 requires the claimed

composition to include a defined amount of ethanol.

8. Auxiliary request 2 - novelty

8.1 In the context of claim 1 of the patent as granted, appellant 1 argued that the claimed composition was not novel over those disclosed in D1, D2/D2a/D3/D3a, D24 and D25. No objection was raised by appellant 1 against the composition of claim 1 of auxiliary request 2 either in writing or at the oral proceedings.

8.2 Neither example 14 of D1 nor D2/D2a/D3/D3a disclose a composition comprising ethanol. Thus, the claimed composition is novel, regardless of whether D2/D2a/D3/D3a is public prior art for the claimed invention, which was a contentious point between the parties.

8.3 The board informed the parties in a communication in preparation for oral proceedings that it saw no fault in the opposition division's exercise of discretion. It was thus not likely to admit D24 and D25 into the proceedings. It noted, for completeness, that neither D24 nor D25 disclosed a two-layer composition.

No further arguments in this respect were subsequently provided, either in writing or at the oral proceedings before the board. The board sees no reason to depart from its preliminary view: D24 and D25 are thus not part of these appeal proceedings.

8.4 The composition of claim 1 of the second auxiliary request is thus novel (Article 54 EPC).

9. Auxiliary request 2 - Inventive step

As with respect to the composition of claim 1 of the

higher ranking requests, document D16 is the closest prior art. The composition disclosed in document D16 does not contain any ethanol.

9.1 Technical problem underlying the invention

The respondent defined the technical problem underlying the claimed invention as providing an alternative two-layer separate type hair composition having, like that of the prior art, good phase separation, temporal stability and low turbidity of the aqueous phase.

9.2 Solution

The solution to this technical problem is the claimed composition, characterised in that:

- the silicone (A) has a defined number-average degree of polymerisation and number-average particle diameter
- the polyquaternium used has a defined weight-average molecular weight
- the amount of component (A) is of from 0.1 to 6 mass%
- the relative mass ratio (A) / (B) is from 1 to 5
- the amount of organic carboxylic acid or its salts is of 0.05 to 5 mass%
- it contains ethanol, in an amount of from 1 to 25 mass%.

9.3 Success

It was undisputed that the examples of the patent and those filed as D13 show compositions according to the claimed invention having the properties sought.

The appellants nevertheless argued that not every embodiment of claim 1 solved the problem formulated by the respondent.

There is however no evidence which could prove the contrary. Experimental evidence D28bis, D32 and D33 relate to compositions lacking acid and ethanol and most of them do not form two layers. None of them is according to claim 1.

The board is thus of the view that the problem of providing compositions comparable to that disclosed in D16 is credibly solved by the features of claim 1.

- 9.4 It thus remains to be decided whether the proposed solution to the objective problem defined above would have been obvious to the skilled person in view of the prior art.

The reasoning with respect to inventive step of claim 1 of the main request and auxiliary request 1 relied on the skilled person trying to obtain the composition of D16 by routine work.

However, D16 is totally silent about the possibility of adding ethanol to the two-layer compositions. A skilled person would not consider adding to it any component not included on its label, let alone ethanol, since such additions could possibly damage the phase system.

Ethanol is disclosed in D14 as part of a two-phase composition (page 5, first paragraph). The composition of D14, however, does not include an oil-in-water component. The effect of ethanol on the properties of the type of composition required by claim 1 could not

be anticipated.

A skilled person attempting to obtain compositions comparable to that disclosed in D16 would not have considered adding ethanol, as it could disrupt the balance of properties achieved by D16. For this reason alone, the claimed solution would not have been obvious to a skilled person and is thus inventive (Article 56 EPC).

9.5 The appellants argued that alcohols were known to improve phase separation. However, alcohols arguably also disrupt the oil-in-water emulsion of D16. The effect of ethanol on the composition of D16 could simply not be foreseen.

9.6 Appellant 1 argued in writing (point 8 of the statement of grounds of appeal, second section) that D10 disclosed the required amount of ethanol.

D10, however, relates to a two-part hair dye, i.e. a composition which is to be mixed upon use [0070]. D10 does not disclose a two-layer composition. This argument is thus not convincing.

9.7 Appellant 1 argued that D2/D2a/D3/D3a, D12, D24 and D25 were also suitable starting points for examining inventive step.

The board informed the parties in its communication that it was likely to conclude that prior use relying on evidence D2/D2a/D3/D3a did not constitute public prior art. No further arguments were provided by the appellant and the board sees no reason to depart from its preliminary view. For completeness, the board notes that neither of these pieces of evidence discloses a

composition comprising ethanol. Even if the prior use were to be considered proven, the reasoning with respect to inventive step stated in the preceding points would also apply.

D12 relates to a composition having two phases, one of which is a thickened gel (see claim 8). D12 does not disclose a two-layer composition and thus does not come closer than D16 to the claimed invention.

D24 and D25 are not part of the appeal proceedings (see point 8.3 above). Even if they were, neither of them discloses a two-layer composition.

Thus, none of the other documents relied upon by appellant 1 comes closer than D16 to the claimed invention. The board's conclusion that the claimed composition is inventive over that of D16 is inevitably the same when starting from more remote prior art.

10. Auxiliary request 2 - sufficiency of disclosure

10.1 The respondent did not dispute that a composition comprising (A), (B), (C) and ethanol would not necessarily form two layers. The formation of two layers was not the inevitable consequence of having the components required by claim 1. It was an additional feature.

10.2 The issue is whether a skilled person, taking into account the teaching of the patent in suit and common general knowledge, would find enough information to reliably obtain embodiments within the ambit of claim 1, i.e. compositions having the components required by claim 1 and forming two phases, one of which is an oil-in-water phase and the second being

aqueous.

- 10.3 Even if not every composition comprising (A), (B), (C) and ethanol forms two phases of the required type, the patent provides comprehensive information on what other components need to be present.

The patent discloses the need for an organic solvent, preferably benzyl alcohol, 2-benzyloxyethanol, propylene carbonate and polypropylene glycol [0029] in the amounts in paragraph [0032]. The compositions should further comprise a surfactant which stabilises the system [0034], a modified silicone of the formula (6) [0044] and a polyol [0050]. All these components are included in the examples in the patent. In addition, the claimed compositions should have a defined pH [0051] and viscosity [0052].

Seeking good layer separation, a skilled person would find in the patent which components need to be included and in what relative amounts. Following that teaching, the skilled person could reliably obtain further embodiments of the claimed two-layer composition. The claimed invention is thus sufficiently disclosed.

- 10.4 The appellants argued that all the examples in the patent contained (A) and (B) and the same additional ingredients. A skilled person would thus find no information on what other compositions could also form two layers.

However, the patent does contain information on what conditions are required in order to arrive at two-layer compositions. It is unsurprising that the compositions provided in the patent are very similar, as they are intended to show the effect arising from components (A)

and (B). Regarding the issue of sufficiency of disclosure, all the information in the patent is of relevance, not just the information in the examples. In addition, two-layer hair cosmetic compositions were not just prior art but also commercially available.

- 10.5 The appellants also argued that the claimed composition did not include all the features essential to obtain a two-phase composition, such as the presence of polyols and the required pH.

This is, however, not an issue which can be addressed under sufficiency of disclosure. If the appellants could identify from the information in the description the need for polyols and a defined pH as essential for the invention, the disclosure in the patent is sufficient, not the opposite.

- 10.6 The board does not agree with the appellants' argument that the requirement of sufficiency of disclosure would only be fulfilled if the skilled person were inevitably to obtain two-phase compositions by mixing the components required by claim 1. The feature requiring the composition to have two-phases is a further limitation of the claim.

The appellants successfully argued in the context of inventive step that optimisation of the composition of D16 was within the skills of the person of the art and only required routine work. However, and for the very same reason, the skilled person could also put into practice the information provided in the patent by routine work.

- 10.7 Appellant 1 also argued in writing that the patent did not disclose how to determine the required weight-

average molecular weight of component (B). Different methods existed which led to different results. For this reason too, the claimed invention was not sufficiently disclosed.

The board informed the parties in its communication that it was likely to conclude that this was not an issue under sufficiency of disclosure. The appellants did not further elaborate on this issue at the oral proceedings.

The board thus sees no reason to depart from its preliminary view. It was undisputed that there are methods to measure a weight-average molecular weight that a skilled person would have known. Discrepancies in the results provided by different methods could arguably have a bearing on the clarity of the claim, but do not render its subject-matter insufficiently disclosed. In addition, the patent makes reference to a number of commercially available components and indicates their weight-average molecular weight. A skilled reader would thus know which method for measuring this type of molecular weight should be used.

This argument thus fails to convince the board.

- 10.8 The claimed invention is sufficiently disclosed for it to be carried out by a person skilled in the art.
- 11. Amendments to paragraph [0021] of the patent description
 - 11.1 This paragraph provides a list of commercial products suitable as component (B) of the claimed invention. The feature "number-average degree of polymerisation" was replaced by "weight-average molecular weight" and

considered an allowable correction under Rule 139 EPC by the opposition division.

11.2 Appellant 1 argued in writing that it was not apparent that an error had occurred and, even if it were, the amendment was not the sole possible correction, as number-average, Z-average and weight-average molecular weight could have been meant. For these reasons, Rule 139 EPC did not apply.

11.3 The amendment at issue relates to four commercial products. Two of them are also disclosed in Table 1 of the application as originally filed in combination with their weight-average molecular weight. For them, the amendment is supported as required by Article 123(2) EPC. The other two, namely Marquart 740 and 295, can only be found in the amended paragraph.

Paragraph [0021] as originally filed disclosed products suitable for the claimed invention, including trade names and providers. Claim 1 as originally filed - unamended in the patent as granted - and paragraph [0020] as originally filed required component (B) to have a defined weight-average molecular weight. No other passage of the application as filed refers to the number-average degree of polymerisation of component (B); this type of average is only associated with component (A).

The skilled reader would thus recognise the inconsistency between the properties provided and that required by claim 1. As the sole relevant feature of component (B) beyond its chemical nature is its weight-average molecular weight, the correction is thus allowable pursuant to Rule 139 EPC.

12. Remittal

The description of the patent as granted contains subject-matter not encompassed by the claims of auxiliary request 2 (see for example [0022]) and may require amendment (Article 84 EPC). The board decided to make use of its discretion to remit the case to the opposition division for the description to be adapted (Article 111(1) 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 with the claims of auxiliary request 2, filed as auxiliary request 5 on 27 November 2019, and a description to be adapted.

The Registrar:

The Chair:



C. Rodríguez Rodríguez

P. Gryczka

Decision electronically authenticated