

Internal distribution code:

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

**Datasheet for the decision
of 2 May 2022**

Case Number: T 2968/18 - 3.3.10

Application Number: 12700222.8

Publication Number: 2663368

IPC: A61Q5/10, A61K8/31, A61K8/34,
A61K8/39, A61K8/41, A61K8/06

Language of the proceedings: EN

Title of invention:

DYEING OR LIGHTENING PROCESS USING A COMPOSITION RICH IN FATTY
SUBSTANCES COMPRISING AN ALCOHOL HAVING AT LEAST 20 CARBONS,
COMPOSITIONS AND DEVICE

Patent Proprietor:

L'Oréal

Opponent:

Henkel AG & Co. KGaA

Headword:

DYEING OR LIGHTENING PROCESS / L'OREAL

Relevant legal provisions:

EPC Art. 56, 123(2)

Keyword:

Amendments - allowable (yes)

Inventive step - main request (yes)

Decisions cited:

Catchword:



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
Fax +49 (0)89 2399-4465

Case Number: T 2968/18 - 3.3.10

D E C I S I O N
of Technical Board of Appeal 3.3.10
of 2 May 2022

Appellant II: L'Oréal
(Patent Proprietor) 14, rue Royale
75008 Paris (FR)

Representative: L'Oreal
Service D.I.P.I.
9, rue Pierre Dreyfus
92110 Clichy (FR)

Appellant I: Henkel AG & Co. KGaA
(Opponent) Henkelstrasse 67
40589 Düsseldorf (DE)

Representative: LKGLOBAL
Lorenz & Kopf PartG mbB Patentanwälte
Brienner Straße 11
80333 München (DE)

Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
15 October 2018 concerning maintenance of the
European Patent No. 2663368 in amended form.**

Composition of the Board:

Chairman M. Kollmannsberger
Members: J.-C. Schmid
F. Blumer

Summary of Facts and Submissions

I. Appellant I (patent proprietor) and appellant II (opponent) lodged an appeal against the interlocutory decision of the Opposition Division which found that the European patent No. 2 663 368 amended according to the then pending first auxiliary request met the requirements of the EPC.

II. Notice of opposition had been filed by appellant II requesting revocation of the patent-in-suit in its entirety on the grounds of lack of novelty and inventive step (Article 100(a) EPC

Inter alia, the following documents were cited in the opposition proceedings

- (1) JP-A-2007/217291,
- (3) EP-A-2 198 924,
- (4) EP-A-2 065 073,
- (5) EP-A-1 142 557,
- (9) FR-A-2 946 875 and
- (10) Experimental report filed on 10 April 2015.

III. According to the opposition division, the subject-matter of claim 20 of the patent as granted lacked novelty with respect to document (1). The subject-matter of claim 20 of the then pending first auxiliary request was novel over document (1), since the basifying agent of the claimed process was limited to organic amines. The closest prior art to the invention was document (3) or document (9). The technical problem was the provision of an ameliorated hair dyeing system based on a high fatty substance content. The proposed solution was the presence of a fatty alcohol having at

least 20 carbon atoms in its longest hydrocarbon based chain. The comparative data presented in document (10) showed that the problem was solved by the composition of claim 20. The proposed solution was not obvious in the light of documents (4) and (5), since these documents did not relate to compositions based on high content of fatty substances.

IV. With the letter setting out the grounds of Appeal, appellant I submitted a new main request and six auxiliary requests.

Independent claims 1, 18, 19 and 20 of the main request read as follows:

"1. Process for dyeing or lightening human keratin fibres, which consists in extemporaneously mixing at the time of use two compositions (A) and (B) and in applying the mixture to the fibres; the said mixture comprising at least 25% by weight of fatty substances relative to the total weight of the mixture of compositions (A) + (B); with:

* composition (A) being in the form of a direct emulsion comprising:

- at least 30 % by weight of oil(s) (i);
- at least one fatty alcohol having at least 20 carbon atoms in its longest hydrocarbon chain (ii);
- at least one surfactant (iii);
- at least one basifying agent (iv);
- and optionally at least one dye chosen from oxidation dyes and direct dyes, and mixtures thereof (v);

* composition (B) comprising, in a cosmetically acceptable medium, at least one oxidizing agent.

"18. Device comprising two compartments containing:

in a compartment (A), a composition in the form of a direct emulsion, comprising:

- at least 30 % by weight of oil(s) (i);
- at least one fatty alcohol containing at least 20 carbon atoms in its longest hydrocarbon chain (ii);
- at least one surfactant (iii);
- at least one basifying agent (iv);
- and optionally at least one dye chosen from oxidation dyes and direct dyes, and mixtures thereof (v);

in a compartment (B), a composition comprising at least one oxidizing agent;

compositions (A) and (B) being as defined in any one of Claims 1 to 17;

it being understood that the mixture of the compositions in compartments (A) and (B) comprises at least 25% by weight of fatty substances."

" 19. Composition in direct emulsion form for dyeing or lightening human keratin fibres, comprising:

- at least 30% by weight of oil(s) (i)
- at least one fatty alcohol containing at least 20 carbon atoms in its longest hydrocarbon-based chain (ii);
- at least one surfactant (iii)
- at least one basifying agent (iv),
- and optionally at least one dye chosen from oxidation dyes and direct mixtures thereof (v);

ingredients (i) to (v) being defined in any one of Claims 1 à 14.

"20. Composition for dyeing or lightening human keratin fibres, comprising:

- at least 25% by weight of fatty substance;
- at least one oil (i)

- at least one fatty alcohol containing at least 20 carbon atoms in its longest hydrocarbon-based chain (ii)
 - at least one surfactant (iii)
 - at least one basifying agent (iv) which is chosen from alkali metal carbonates or bicarbonates such as sodium or potassium carbonate or bicarbonate, sodium hydroxide and potassium hydroxide, organic amines or mixtures thereof
 - optionally at least one dye chosen from oxidation dyes and direct dyes, and mixtures thereof (v)
 - at least one oxidizing agent (vi)
- ingredients (i) to (vi) being defined in any one of Claims 1 to 14.”

- V. According to appellant I, the subject-matter of claim 20 of the main request was novel with respect to document (1) on account of specification of the basifying agent.
- VI. Appellant II did not contest the novelty of the subject-matter of claim 20 of the main request with respect to document (1). However, according to appellant II, claim 20 of the main request infringed Article 123(2) EPC. The ready-to-use composition of claim 20 of the main request lacked an inventive step on the basis of documents (3) or (9) in combination with documents (4) or (5). Accordingly, the process for dyeing or lightening human keratin fibres of claim 1, the device of claim 18 and the composition of claim 19 of the main request also lacked an inventive step in relation to those documents.
- VII. Appellant I (Proprietor of the patent) requested that the decision under appeal be set aside and the patent be maintained on the basis of the main request or any

one of auxiliary requests 1 to 6, all requests as filed with the statement setting out the grounds of appeal dated 19 February 2019.

Appellant II (opponent) requested that the decision be set aside and the patent be revoked.

VIII. At the end of the oral proceedings held on 2 May 2022, the decision of the Board was announced.

Reasons for the Decision

1. The appeal is admissible.

Main request: claim 20

2. *Modifications*

2.1 Claim 20 of the main request is derived from claim 20 of the patent as granted, identical to claim 20 of the application as filed, wherein at least one basifying agent (iv) is chosen from alkali metal carbonates or bicarbonates such as sodium or potassium carbonate or bicarbonate, sodium hydroxide and potassium hydroxide, organic amines or mixtures thereof according to claims 13 and 14 of the patent as granted, identical to 13 and 14 of the application as filed.

2.2 According to appellant II, the basifying agent in the composition of claim 20 as originally filed was defined as in any one of originally filed claims 1 to 16. However, claims 13 and 14, from which the amended definition of the basifying agent was taken, related to the presence of said basifying agent in composition (A) only. Thus, the disclosure of the basifying agent in

original claim 20 was therefore restricted to the presence of the basifying agent in solution A. This feature was not included in the ready-to-use composition of claim 20 of the main request. Therefore, the subject-matter claim 20 of the main request was not directly and unambiguously derivable from the application as filed.

- 2.3 However, specifying that the basifying agent is defined as in claims 13 or 14 means that the structure of the basifying agent is defined as in claims 13 or 14, irrespective of its use envisaged by these claims. Hence, this argument of Appellant II must be rejected.

Consequently, claim 20 of the main request meets the requirements of Article 123(2) EPC.

3. *Inventive step*

3.1 *Closest prior art*

- 3.1.1 Document (9) discloses oil-rich compositions for lightening and/or colouring human keratin fibres comprising, in a cosmetically acceptable medium: a) at least 25% by weight of one or more fatty substances b) an alkaline agent consisting of ammonia and optionally one or more organic or inorganic bases, the ratio of the molar quantity of ammonia present in the ammonia to the total molar quantity of the organic or inorganic bases other than ammonia being greater than or equal to 0.65 c) one or more surfactants d) one or more oxidizing agents e) from 30 to 70% water; f) and optionally one or more colouring agents (see claim 1).

The fatty substance may be chosen among fatty alcohols (see claim 2). The fatty alcohols suitable for the

implementation of the invention are more particularly selected from saturated or unsaturated, linear or branched alcohols containing from 6 to 30 carbon atoms, preferably from 8 to 30 carbon atoms. Examples include cetyl alcohol, stearyl alcohol and mixtures thereof (cetyl stearyl alcohol), octyldodecanol, 2-butyloctanol, 2-hexyldecanol, 2-undecylpentadecanol, oleic alcohol or linoleic alcohol (see page 5, lines 6 to 12).

The ready-for-use compositions disclosed in examples 1 and 2 of document (9) comprise octyldodecanol, cetyl and stearyl alcohols (Naftol 1618F). Cetyl and stearyl alcohols are linear alcohols having 16 and 18 carbon atoms in their longest hydrocarbon chain. Organic amines, e. g. monoethanolamine, are used as basifying agents.

- 3.1.2 Document (3) discloses oil-rich dye compositions obtained by mixing a direct emulsion (A) comprising one or more fatty substances that are liquid at room temperature and at atmospheric pressure, other than the fatty acids, in an amount of greater than 25% by weight, the fatty substance(s) being chosen from fatty alcohols, fatty acid esters, fatty alcohol esters, mineral oils containing more than 16 carbon atoms, non-silicone-based plant, animal or synthetic oils; one or more surfactants; one or more alkaline agents chosen from organic amines, salts of organic amines, one or more coloured or colouring species, and an amount of water greater than 5% and less than 50% by weight, of the total weight of the emulsion, with a composition (B) comprising one or more oxidizing agents (see claims 1 and 5).

According to paragraph [0027], the fatty alcohols are non-oxyalkylated. They may be saturated or unsaturated, linear or branched, and contain 6 to 30 carbon atoms, such as cetyl alcohol, stearyl alcohol and a mixture thereof (cetylstearyl alcohol), octyldodecanol, 2-butyl octanol, 2-hexyldecanol, 2-undecylpentadecanol, oleyl alcohol, and linoleyl alcohol.

- 3.2 The subject-matter of claim 20 of the main request differs from the compositions disclosed in documents (3) and (9) in that at least one fatty alcohol must be selected from fatty alcohols having at least 20 carbon atoms in its longest hydrocarbon chain.

The Board considers that both documents (3) and (9) may represent the closest prior art to the invention, and, hence takes these documents as the starting point in the assessment of inventive step.

- 3.3 *Technical problem underlying the invention*

Starting either from document (3) or from document (9) appellant I defined the technical problem to be solved as the provision of an improved process for dyeing or lightening keratin fibres using an oil-rich composition in terms of selectivity and intensity of the coloration.

- 3.4 *Solution*

The solution is the composition for dyeing or lightening keratin fibres of claim 20 of the main request characterised in that at least one fatty alcohol contains at least 20 carbon atoms in its longest hydrocarbon chain.

3.5 *Success*

- 3.5.1 Appellant I *inter alia* referred to the experimental report filed with on 10 April 2015 (document (10)) in order to show that the problem underlying the patent-in-suit has been solved by the claimed subject-matter.

In this experimental report, it is shown that the replacement of octyl-2-dodecanol by behenic alcohol in a dye composition comprising more than 25% fatty substance (vaseline oil, fatty alcohols, fatty ester), an oil (vaseline), a basifying agent (monoethalonolamine) and surfactants (oleth 10, deceth-5), which reflects the closest prior art documents (3) and (9), leads to an improvement of the intensity and homogeneity of the coloration.

Thus, this experimental report makes credible that the selection of a fatty alcohol having at least 20 carbon atom in its longest hydrocarbon chain among the fatty alcohols generically disclosed in document (3) or document (9) leads to improved intensity and selectivity of hair colorations achieved by the claimed compositions compared with the prior art compositions.

- 3.5.2 According to appellant II, octyl-2-dodecanol had 12 carbons in its longest hydrocarbon chain and was a branched alcohol. There were therefore two structural differences with respect to behenic alcohol, which was a linear fatty alcohol having more than 20 carbon atoms. To be relevant linear fatty alcohols with more than 20 C-atoms should have been compared with linear fatty alcohol having less than 20 C-atoms. The experimental report of document (10) did not compare the claimed compositions with those reflecting the closest prior art, and therefore was irrelevant.

3.5.3 However, document (3) merely mentions that the composition prepared in the example contains fatty alcohol (see paragraph [0195]). According to paragraph [0027], fatty alcohols may be linear or branched and include octyldodecanol. Furthermore, the compositions disclosed in examples 1 and 2 of document (9) specifically comprise octyldodecanol. Thus, the Board is satisfied that a dye composition comprising octyl-2-dodecanol which is a fatty alcohol having 20 carbon atoms, may represent the closest prior art dye composition.

3.5.4 With respect to appellant II's argument that there are two differences between the fatty alcohol used in the comparison, namely the chain branching and the length of longest carbon chain, the Board notes that for fatty alcohols having the same number of carbon atoms, these two differences are dependent from each other, since the length of the longest chain of a fatty alcohol can only be changed by modifying the branching of the chain.

Furthermore, appellant II did not demonstrate that the use of a linear alcohol instead of a branched fatty alcohol could explain the significant improvement of the intensity and homogeneity of the coloration, nor filed evidence for its assertion that this improvement could only be due to the fatty alcohol used in the experimental report of document (10) being linear. As there is no apparent technical reason why this should be the case, and in the absence of any supporting evidence, appellant II has not discharged its burden of proof. Thus, the Board remains convinced that the improved effect on the intensity and selectivity of the hair colorations shown in the experimental report is

due to the increase of the length of the longest hydrocarbon carbon chain of the fatty alcohol present in the dyeing composition.

- 3.5.5 During oral proceedings before the Board, appellant II further contested the validity of the comparison pointing out that an essential component of the claimed composition (oil) was replaced by another essential component (fatty alcohol).

However, the proposed solution is characterized by the presence of fatty alcohol having at least 20 carbon atoms in its longest hydrocarbon chain. It does not matter whether the fatty alcohol is an oil or not. This argument is therefore not relevant and must be rejected.

- 3.5.6 The Board is satisfied that the length of longest hydrocarbon chain of the fatty alcohol directly contributes to the improvement of selectivity and homogeneity of the coloration already in view of the experimental report of document (10). Accordingly, it is superfluous to address the experimental report filed with the letter dated 16 July 2019 (document (11)), the relevance of which was contested by appellant II.

- 3.5.7 To conclude, the Board holds that it is credible that the use of the oil-rich composition of claim 20 of the main request successfully solves the problem of providing an improved process for dyeing or lightening keratin fibres in terms of selectivity and intensity of the coloration

3.6 *Obviousness*

It remains to be decided whether or not the proposed solution to the problem underlying the patent-in-suit is obvious in view of the cited prior art, i.e. whether it is obvious that the presence of fatty alcohols having more than 20 carbon atoms in their longest hydrocarbon chain in oil-rich dye compositions improves the intensity and homogeneity of the coloration.

- 3.6.1 According to appellant II, the proposed solution was obvious from the teaching of documents (4) or (5) which proposed compositions comprising fatty alcohols having at least 20 carbon atoms, such as behenic alcohol, in order to improve the dyeing properties of hair dyes. The skilled person would combine documents (3) or (9) with documents (4) or (5), since all these documents had the same objectives and concerned hair dyeing compositions leading to homogeneous colourings of high intensity. Thus, the skilled person would arrive at the subject-matter of claim 20 of the main request without exercising any inventive skill.
- 3.6.2 However, documents (4) and (5) are not concerned with dye compositions having high content of fatty substances. Hence, the skilled person seeking to improve the oil-rich dye compositions of document (3) or (9) would not have turned to documents (4) or (5) to find a solution.
- 3.6.3 According to appellant II, even if document (4) did not relate to an oil-rich dye composition, the skilled person would nevertheless have been prompted by the comparative experiment of document (4) to try fatty alcohols having more than 20 carbon atoms in their longest hydrocarbon chain in order to improve the coloration of oil-rich dye compositions.

However, even if the skilled person would have turned to document (4) to find a solution to the technical problem defined above, and accordingly would have considered the comparative experiments disclosed in this document, the Board notes that the skilled person would in any case not have arrived at the claimed solution for the following reasons.

The comparative experiments disclosed in paragraph [0098] of document (4) reveals that, in a dye composition comprising between 0.1 and 1 wt. % of cetyl hydroxyethylcellulose, the replacement of stearyl alcohol (C₁₈ alcohol) by a mixture of fatty alcohols (Nafol® 20-22) comprising behenic alcohol, arachidic alcohol and lignoceric alcohol improves the selectivity and the intensity of the coloration (compare the intensity L* and selectivity ΔE of the colorations achieved by compositions A and B). However, this coloration improvement is not retained for composition C also comprising Nafol® 20-22, but not the required concentration of the cellulose derivative (see claim 1 of document (4)). Therefore, the skilled person would not have deduced from the results of the comparative experiments presented in paragraph [0098] of document (4) that Nafol® 20-22 in dye compositions improves their colouring properties.

Furthermore, document (4) teaches that the fatty alcohols having more than 20 carbon atoms present in dye compositions may be linear or branched (see paragraph [0053]). Therefore, document (4) does not point to the proposed solution of using a fatty alcohol containing at least 20 carbon atoms in its longest hydrocarbon chain to improve the colouring properties.

3.6.4 To summarise, documents (3) or (9) alone, or in combination with documents (4) or (5), do not render the subject-matter of claim 20 obvious. Hence, the Board concludes that the subject-matter of claim 20 involves an inventive step.

Claims 1, 18 and 19 of the main request

4. According to appellant II, the subject-matter of these claims lacked an inventive step, since the ready-to-use compositions of claim 20 lacked an inventive step.

However, since the ready-to-use compositions of claim 20 involve an inventive step, this inventive step objection is moot.

5. Since the main request is considered to be allowable, it is not necessary to decide on the lower-ranking auxiliary requests.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is maintained in amended form on the basis of the main request filed with the statement setting out the grounds of appeal dated 19 February 2019 and a description yet to be adapted.

The Registrar:

The Chairman:



B. ter Heijden

M. Kollmannsberger

Decision electronically authenticated