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**Datasheet for the decision
of 9 November 2021**

Case Number: T 0438/18 - 3.3.07

Application Number: 11794185.6

Publication Number: 2651382

IPC: A45D7/06, A61K8/31, A61K8/37,
A61K8/92, A61Q5/04

Language of the proceedings: EN

Title of invention:

METHOD FOR PERMANENT RESHAPING AND IN PARTICULAR FOR
STRAIGHTENING, COMPRISING A STAGE OF STRAIGHTENING KERATINOUS
FIBRES EMPLOYING A COMPOSITION COMPRISING AT LEAST 40% BY
WEIGHT OF NON-SILICONE FATTY SUBSTANCES

Patent Proprietor:

L'Oréal

Opponents:

Henkel AG & Co. KGaA
Kao Germany GmbH

Headword:

Straightening keratinous fibres / L'OREAL

Relevant legal provisions:

EPC Art. 100(a), 54, 56, 123(2)

Keyword:

Novelty - main request, auxiliary requests 1 to 2 (no) -
auxiliary request 3 (yes)
Inventive step - auxiliary requests 3 to 9 (no)
Amendments - auxiliary request 3 (allowable)

Decisions cited:

T 0420/14



Beschwerdekammern

Boards of Appeal

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Case Number: T 0438/18 - 3.3.07

D E C I S I O N
of Technical Board of Appeal 3.3.07
of 9 November 2021

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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
4 December 2017 concerning maintenance of the
European Patent No. 2651382 in amended form.**

Composition of the Board:

Chairman A. Usuelli
Members: J. Lécaillon
 A. Jimenez

Summary of Facts and Submissions

I. European patent 2 651 382 (hereinafter "the patent") was granted on the basis of 15 claims. The independent claims of the patent as granted read as follows:

"1. Method for the permanent reshaping of keratinous fibres, in particular human keratinous fibres, such as the hair, comprising:

a) a stage of application, to the keratinous fibres, of a cosmetic composition comprising one or more non-silicone fatty substances in a content of greater than or equal to 40% by weight, with respect to the total weight of the said composition, and

b) a stage of heating the keratinous fibres at a temperature varying from 60 to 250°C using an iron, after application of the said cosmetic composition."

"15. Kit comprising a cosmetic composition comprising one or more non-silicone fatty substances in a content of greater than or equal to 40% by weight and an iron which provides a temperature varying from 60 to 250°C."

II. Two oppositions were filed against the patent on the grounds that its subject-matter lacked novelty and inventive step.

III. In the interlocutory decision posted on 4 December 2017, the opposition division decided that, auxiliary request 3 then on file met the requirements of the EPC.

IV. The decision of the opposition division cited inter alia the following documents:

D3: EP 1 970 099 A2

D11: Z.D.Draelos, "Cosmetic Dermatology Products and Procedures", chapter 32, 02.2010

D12: US 4 180 561 A

D17: Machine translation of JP2010-189309

D25: Experimental report I

D26: Experimental report II

V. The opposition division decided in particular as follows:

(a) The subject-matter of claim 1 of the main request was anticipated by *inter alia* D3. In particular the combination of claims 1, 17 and 22 of D3 disclosed methods for straightening or relaxing hair wherein an oil, including non-silicon oils, was applied to the hair before the hair was smoothed using a flat/hot iron at a temperature of at least 100°C.

(b) The subject-matter of claims 1 of auxiliary requests 1 and 2 was also not novel over D3.

(c) Auxiliary request 3 met the requirements of Articles 123(2) and (3), 54 and 56 EPC. Regarding the issue of novelty, D3 did not specifically disclose mineral oils containing at least 40% of C6-C16 alkanes. Finally starting from either D12 or D17 as closest prior art, none of the cited prior art documents suggested to carry out the presently claimed method to achieve a longer lasting straightening effect after shampooing.

VI. Opponent 2 as well as the patent proprietor lodged appeals against the above decision of the opposition division.

VII. With its statement setting out the grounds of appeal, the appellant - patent proprietor defended its case on the basis of the patent as granted as the main request, and on the basis of the claims of the auxiliary requests 1-3 as filed in the first instance proceedings on 10 February 2016 and 21 April 2017, respectively. With its reply to the statement of the grounds of the appellant - opponent 2, the appellant - patent proprietor submitted further auxiliary requests 4-9.

The content of the claims upon which the present decision is based can be illustrated as follows:

Claim 1 of auxiliary request 1 differed from claim 1 of the main request in that the method was amended to a "Method for the permanent straightening or relaxing of the keratinous fibres" (emphasis added) and the iron was specified as being "a straightening iron".

Claim 1 of auxiliary request 2 differed from claim 1 of auxiliary request 1 in that the temperature range was amended to "100 to 250°C" (emphasis added).

Claim 1 of auxiliary request 3 differed from claim 1 of auxiliary request 1 in that the non-silicone fatty substances were defined as "being:

- liquid at ambient temperature and a atmospheric pressure and chosen from C₆-C₁₆ alkanes which are linear or branched, fatty alcohols, fatty acid and/or fatty alcohol esters, fatty acids and their mixtures, or
- non liquid at ambient temperature and at atmospheric pressure".

Claim 1 of auxiliary request 4 differed from claim 1 of auxiliary request 1 in that the non-silicone fatty substances were defined as "being liquid at ambient temperature and a atmospheric pressure and chosen from C₆-C₁₆ alkanes which are linear or branched, fatty alcohols, fatty acid and/or fatty alcohol esters, fatty acids and their mixtures".

Claim 1 of auxiliary request 5 differed from claim 1 of auxiliary request 4 in that the temperature range was amended to "100 to 250°C" (emphasis added).

Claim 1 of auxiliary request 6 differed from claim 1 of auxiliary request 1 in that the non-silicone fatty substances were defined as "being chosen from liquid petrolatum, isoparaffins, isododecane, undecane, tridecane, avocado oil, olive oil, camellia oil, apricot kernel oil, 1,3-propanediol dicaprylate and their mixtures".

Claim 1 of auxiliary request 7 differed from claim 1 of auxiliary request 6 in that the temperature range was amended to "100 to 250°C" (emphasis added).

Claim 1 of auxiliary request 8 differed from claim 1 of auxiliary request 1 in that the non-silicone fatty substances were defined as "being liquid at ambient temperature and at atmospheric pressure and chosen from oils of vegetable origin and esters of C₄-C₂₂ di- or tricarboxylic acids and of C₁-C₂₂ alcohols".

Claim 1 of auxiliary request 9 differed from claim 1 of auxiliary request 1 in that the non-silicone fatty substances were defined as "being chosen from avocado oil, olive oil, camellia oil, apricot kernel oil, 1,3-propanediol dicaprylate and their mixtures".

- VIII. Oral proceedings were held before the Board on 9 November 2021. They were not attended by the respondent - opponent 1 who had informed the Board accordingly.
- IX. The appellant - patent proprietor requested that the decision under appeal be set aside and the patent be maintained as granted (main request), or that the patent be maintained on the basis of one of the auxiliary requests 1-9, wherein:
- auxiliary requests 1-2 were filed with the statement setting out the grounds of appeal and correspond to the auxiliary requests 1-2 filed on 10 February 2016 and 21 April 2017, respectively,
 - auxiliary request 3 corresponds to the auxiliary request 3 found to meet the requirements of the EPC by the opposition division, and
 - auxiliary requests 4-9 were filed with the reply to the statement setting out the grounds of appeal.
- X. The appellant - opponent 2 requested that the decision under appeal be set aside and the patent be revoked.
- XI. The respondent - opponent 1 requested in writing that the main request be dismissed and that auxiliary requests 1-2 not be admitted into the appeal proceedings.
- XII. The arguments of the appellant - patent proprietor, as far as relevant for the present decision, can be summarised as follows:
- (a) The subject-matter of claims 1 of the main request as well as auxiliary requests 1-2 was novel over D3. Selections from two not intertwined lists had

to performed within claims 1 and 17 of D3 to arrive at subject-matter falling under the present claims. Moreover, D3 did not provide any pointer towards the required selection of features.

- (b) Auxiliary request 3 fulfilled the requirements of Article 123(2) EPC, because the amended features were disclosed as preferred embodiments in the original claims and description.
- (c) Auxiliary request 3 met the requirements of Article 54 EPC. In particular, the disclosure of claim 17 of D3 was merely generic and did not disclose the specific amended features.
- (d) The subject-matter of claim 1 of auxiliary request 3 was inventive starting from either D12 or D17. The respective distinguishing features *versus* said documents led to a longer lasting straightening effect as revealed by the comparative data provided in D25 and D26. The comparative tests fulfilled the criteria defined in established Case Law and did thus convincingly support the presence of said effect. None of the cited prior art documents suggested to modify the methods of D12 or D17 so as to arrive at the present solution with the aim of improving the duration of the straightening effect.
- (e) Auxiliary requests 4-9 met the requirements of Article 56 EPC for the same reasons as auxiliary request 3.

XIII. The arguments of the appellant - opponent 2 and/or the respondent - opponent 1, as far as relevant for the present decision, can be summarised as follows:

- (a) The subject-matter of claims 1 of the main request as well as auxiliary requests 1-2 was anticipated by D3. Claims 1, 17 and 22 encompassed said subject-matter and D3 further provided a pointer to the selection of the novelty destroying features.
- (b) Auxiliary requests 1-2 were to be excluded from the appeal proceedings, because their filing had not been appropriately substantiated.
- (c) Claim 1 of auxiliary request 3 infringed Article 123(2) EPC. Two arbitrary selections were performed and the original application did not disclose the corresponding features in combination.
- (d) The subject-matter of claim 1 of auxiliary requests 3 was not novel over D3, because the amended features were already disclosed in D3. Claim 17 of D3 discloses mineral oils, which encompassed C₆-C₁₆ alkanes, as well as plant oils, which were known as being fatty acid esters.
- (e) The subject-matter of claim 1 of auxiliary request 3 did not involve an inventive step starting from either D12 or D17. The alleged improved effect had not been substantiated over the entire scope of the claim in comparison with the closest prior art embodiments. Starting from either D12 or D17, the present subject-matter of claim 1 of auxiliary request 3 constituted an obvious solution to the problem of providing an alternative, as revealed by *inter alia* D12, D17 or D11.
- (f) Auxiliary requests 4-9 did not meet the requirements of Article 56 EPC for the same reasons as auxiliary request 3.

Reasons for the Decision

Main request - Granted patent

1. Novelty
 - 1.1 The opposition division considered that the combination of claims 1, 17 and 22 of D3 would disclose the subject-matter of present claim 1. According to the appellant - patent proprietor, following this approach, a double selection (namely the right sequences of steps from claims 1 and 17 and the right oils from claim 17) had to be performed to arrive at the presently claimed subject-matter.
 - 1.2 The Board observes that, as argued by the opposition division and the appellant - opponent 2, the combination of claim 1 and claim 17 disclose 6 possible individual processes (depending on the order of the steps), out of which 5 correspond to the presently claimed sequence of steps. Claim 17 further encompass several non-silicon oils (plant, animal, mineral oils and their combinations as well as non-silicon synthetic oils). Finally, it was undisputed that the smoothing step disclosed in claim 22 (using a flat/hot iron at at least 100°C) is disclosed independently of the process (*i.e.* it applies to any one of the above processes). The disclosure of D3 thus generally encompasses several embodiments falling under the scope of present claim 1. While selections have to be performed within two lists, these selections remain still generic *i.e.* no individual embodiment is singled out. Furthermore, as argued by the appellant - opponent 2 during oral proceedings, claims 23 and 24 and the corresponding paragraphs [0037] and [0038] of D3 disclose two

preferred embodiments wherein the treated or pre-alkalized hair, respectively, is optionally contacted with a non-volatile oil and the hair is then (optionally) smoothed using a combination of heat and means for physically smoothing hair. These embodiments provide an unambiguous indication that the presently claimed sequence of step, *i.e.* applying the non-volatile oil before treating with a hot iron, is preferred. Thus only non-silicon oils have to be selected from claim 17 to arrive at subject-matter falling under the scope of present claim 1. Accordingly, D3 provides a direct and unambiguous disclosure of methods falling under the scope of present claim 1.

1.3 In this context the appellant - patent proprietor argued during oral proceedings that the claims of D3 would not describe several different processes but merely a general disclosure of the method, from which the skilled person had to choose the order of steps. As explained above, the Board cannot share this opinion, since a maximum of 6 different orders of steps are disclosed in claims 1 and 17, two of which are indeed individualised in claims 23 and 24 and paragraphs [0037] and [0038].

1.4 The appellant - patent proprietor further stated that some steps in the processes of claims 23 and 24 and paragraphs [0037] and [0038] are optional and that no smoothing device nor temperature is specified, so that further selections would have to be performed starting from these embodiments. This argument is however not convincing. These embodiments were not used *per se* as novelty destroying embodiments, but merely as a pointer to a preferred order of steps. Starting from the combination of claims 1, 17 and 22, the treatments with

an oil and with a hot iron have to be carried out and the specific smoothing device and temperature are disclosed. This combination of claims together with the pointer to the preferred order of steps offered by claims 23 and 24 and paragraphs [0037] and [0038] leads to the novelty destroying disclosure of D3.

- 1.5 The appellant - patent proprietor finally insisted on the fact that claim 17 would not disclose oils comprising at least 40% by weight of non-silicone oils. The Board cannot share this point of view. As explained by the appellant - opponent 2, claim 17 encompasses oils which are 100% non-silicone oils, such as the vast majority of plant, animal and mineral oils. Hence, when using such oils, non-silicone oils represent 100% by weight of the applied composition and there is no need to specifically select the "at least 40% by weight" proportion defined in present claim 1.
- 1.6 Accordingly, the subject-matter of claim 1 of the main request is not novel over D3 (Article 100(a) EPC in combination with Article 54 EPC).

Auxiliary requests 1 and 2

2. Admittance

- 2.1 The respondent - opponent 1 argued that the filing of auxiliary requests 1 and 2 had not been appropriately substantiated, because no arguments regarding inventive step had been provided in the statement setting out the grounds of appeal of the appellant - patent proprietor. T 420/14 would thus apply and these auxiliary requests were not to be admitted in the appeal proceedings.

2.2 The Board observes that auxiliary requests 1-2 were admitted into the first instance proceedings and resubmitted with the statement setting out the grounds of appeal of the appellant patent proprietor. In said statement, the appellant patent proprietor provided a reasoning as to why said requests would overcome the objection of lack of novelty raised for the main request. Furthermore the Board notes that decision T 420/14, appears to differ from the present case at least in that, in said decision, the admittance of the requests in question had not been discussed in first instance. Accordingly auxiliary requests 1 and 2 are taken into account in the present proceedings.

3. Novelty

3.1 The Board considers that the finding of lack of novelty of claim 1 of the main request (see points 1.2 to 1.5) applies *mutatis mutandis* to auxiliary requests 1 and 2. The further features introduced in claims 1 of these requests are already disclosed in D3, as follows:

- (g) a method of straightening of the keratinous fibres and a straightening iron (auxiliary requests 1 and 2) are disclosed in claims 1 and 22 of D3, and
- (h) a temperature of the iron of at least 100°C (auxiliary request 2) is disclosed in claim 22 of D3.

3.2 The appellant - patent proprietor did not provide any specific argument why these features would overcome the lack of novelty finding for the main request over D3.

3.3 As a result, the subject-matter of claims 1 of auxiliary requests 1 and 2 is not novel over D3 (Article 54 EPC).

Auxiliary request 3

4. Amendments

4.1 As stated by the appellant - patent proprietor, claim 1 of auxiliary request 3 is based on original claims 1, 2, 3 and 4 as well as on the original description, namely page 5 line 1, page 29 lines 9 to 10 and page 14 lines 31 to 33.

4.2 The appellant - opponent 2 argued that, starting from the original application, at least two arbitrary selections were necessary to arrive at the amended subject-matter, namely (i) C₆-C₁₆ alkanes within the list of original claim 4, and (ii) the straightening iron from original page 29 line 10. Furthermore, there would be no disclosure in the original application of these features together.

4.3 This argument is not convincing. The straightening iron is disclosed as a preferred embodiment independently of any other feature in the original description (see page 29 lines 9 to 10). Hence, the sole "selection" to be made would be the list of oils, which remains generic. Furthermore, "C₆-C₁₆ alkanes which are linear or branched" are preferred "hydrocarbons" according to original claim 4 and original page 14 lines 31 to 33. The combination of the above features (i) and (ii) is thus considered to be directly and unambiguously derivable from the original application. Hence, claim 1 of auxiliary request 3 fulfills the requirements of Article 123(2) EPC.

4.4 The further claims of auxiliary request 3 are based on the original claims and description and were not objected to under Article 123(2) EPC.

4.5 Auxiliary request 3 therefore meets the requirements of Article 123(2) EPC.

5. Novelty

5.1 Claim 1 of auxiliary request 3 differs from claim 1 of auxiliary request 1 in that the nature of the non-silicone fatty substances was further specified. The appellant - opponent 2 argued that claim 17 of D3 disclosed substances falling under the amended definition, namely:

(i) "mineral oils" included in the definition "C₆-C₁₆ alkanes" , and

(ii) "plant oils", which are known to be triglycerides *i.e.* fatty acid esters, included in the definition "fatty acid esters".

Regarding the argument of the appellant - patent proprietor, that there would be no indication in claim 17 that C₆-C₁₆ alkane will be present in 40% by weight, the appellant - opponent 2 considered that the feature of 40% by weight or more applies to the "one or more non-silicone fatty substances" and was not limited to C₆-C₁₆ alkanes, because mixtures of substances are claimed in claim 1 of auxiliary request 3. Accordingly a composition comprising small amounts of C₆-C₁₆ alkanes in addition to a plant oil, *i.e.* fatty acid esters, at a content of at least 40% by weight would fall under the scope of the claims.

5.2 The Board considers that, as stated by the appellant - patent proprietor, there is no direct and unambiguous disclosure in D3 of a non-volatile oil (whether 100% mineral oil, in combination with plant oils or 100% plant oil) necessarily containing at least 40% by weight of a specific substance according to the present

claim 1 or a mixture thereof. While D3 may indeed encompass such compositions, there is no individual disclosure thereof. There is also no evidence that animal, plant or mineral oils are necessarily constituted to 100% of the presently claimed substances. In this context, the appellant - opponent 2 argued during the oral proceedings that, while the disclosure of D3 was generic, the substances claimed in present claim 1 were also defined in a generic way. The disclosure of D3 could thus take away the novelty of the presently claimed subject-matter. The Board is not convinced by this argument because, even if the substances defined in present claim 1 are classes of chemical compounds, they are chemically more specific than the oils mentioned in D3 which are only defined by their source.

5.3 The novelty of the subject-matter of the claims of auxiliary request 3 over the remaining cited documents was not contested. Hence, auxiliary request 3 fulfills the requirements of Article 54 EPC.

6. Inventive step

6.1 During oral proceedings both attending parties developed their argumentation based on either D12 or D17 as closest prior art.

D12 discloses a hair pressing composition able to straighten curly or kinky hair (see column 1, lines 57 to 59). The composition disclosed in Example II of D12 contains more than 40 wt.% of non-silicone fatty substances according to present claim 1, including anhydrous lanolin, white petrolatum and coconut oil. After the application of this composition to the hair, a warm iron, which may be a straightening comb or any

other suitable styling iron, is applied to seal the composition to the hair fibers. Depending on the conditions (hair structure, environment), the original application may hold for as long as a month or two (see column 3, lines 44 to 56).

D17 relates to a method for waving or straightening the hair, such that the hair setting effect is durable (see paragraphs [0001], [0007]). According to D17, a hair cosmetic composition is applied prior to setting the hair using an hair iron. The composition comprises a water-soluble polymer, at least one vegetable oil and a lower alcohol. In particular, D17 mentions that the vegetable oil may be present in a concentration ranging from 0.1 to 10 wt.% (see paragraph [0016]). More specifically the vegetable oil can be avocado oil, almond oil, camelia oil or macadamia nut oil (see paragraphs [0015] and examples), and the hair is set with a straightening iron at a temperature of 180°C (see paragraphs [0005],[0022]).

The Board concurs with the parties and the opposition division, that both documents qualify as closest prior art. Both corresponding approaches are thus detailed in the following paragraphs, since they were both discussed in detail by the parties during oral proceedings.

- 6.2 D17 as closest prior art
 - 6.2.1 The present method differs from the one of D17 in the amount of non-silicon fatty substances used.
 - 6.2.2 According to the appellant patent proprietor, this led to an enhanced reshaping effect in a longer lasting manner as substantiated by D26, which compared two

compositions differing from each other only in the amount of non-silicon fatty substances

With regard to the tests performed in D26, the Board observes the following points:

- (a) According to the appellant - patent proprietor, D26 provides the comparison of compositions containing 15% and 50% by weight of oily substance, respectively. The lower-end value of the claimed range (40% by weight) is quite remote from the value of the composition representative for the subject-matter of claim 1 (50% by weight). There is no evidence that the effect observed at 50% by weight would be maintained at 40% by weight. The Board is not convinced that the comparison performed in D26 is appropriate to substantiate the purposive choice of the present lower end-point of the claimed range.
- (b) As argued by the appellant - patent proprietor, the crucial criterion according to established Case Law (see Case Law of the Boards of Appeal of the European Patent Office, 9th Edition 2019, I.D. 10.9), that the compared examples must differ from each other only in the nature of the distinguishing feature versus the closest prior art, was indeed fulfilled in the comparative tests of D26. Furthermore the statement of the appellant - patent proprietor, that elements of comparative examples may be modified as long as the difference remains the distinguishing feature compared to the prior art is also correct. However, in the Board's view, in such a case the comparative composition should be as close as possible to the compositions disclosed in the prior art document and in any case it should reflect the general teaching of that document. In the present case, the components

described as essential in D17, *i.e.* water-soluble polymer and lower alcohol, were excluded from the compositions of the comparative examples. As explained by the appellant - opponent 2 during oral proceedings, these components are disclosed as contributing to the straightening and setting effect in D17 (see paragraphs [0014], [0017] and [0018]). The effects of each essential component of the composition of D17 appear interrelated. In this context the appellant - patent proprietor argued that the water-soluble polymer would anyway be rinsed off following the protocol of D26, which tests the resistance of straightening to shampoos. Its inclusion or not in the tested compositions would thus not make any difference. This assertion was not substantiated by experimental data. Moreover, before testing the resistance to shampoos, the hair is heat treated with the straightening iron, possibly ensuring some sealing to the hair fibres. In addition, as mentioned by the appellant - opponent 2, shampoos are not made of only water, so that also oily substances may be washed off, for examples due to surfactants. The argument of the appellant - patent proprietor is therefore not convincing. Hence, it cannot be concluded that the effect obtained with the comparative composition of D26 is representative of the method of D17. In the present case, because none of the essential features of the closest prior art were maintained in the comparative examples and because an interrelation between said features and the present distinguishing feature cannot be excluded, the chosen comparative example is not appropriate to credibly substantiate an effect over the closest prior art.

The Board is therefore not convinced that a longer lasting straightening effect due to the specific concentration of oily substance has been credibly substantiated over the whole breadth of present claim 1 compared to the method of D17.

- 6.3 Starting from D17 as closest prior art, the objective technical problem to be solved thus resides in the provision of an alternative method for hair straightening.
- 6.4 D17 generally encompasses compositions with any amount of oily substance (see paragraph [0009], wherein no limitation on the amount of the oily substance is defined). The range of 0.1 to 10% by weight is merely preferred, but D17 does not prevent from working outside of this range. Furthermore D12 provides a further indication that the amount of fatty substance may be above 40% by weight (see example II). In the absence of a particular effect, increasing the amount of oily substance in the compositions of D17 appears to be an option which the skilled person willing to solve the problem posed would have considered without exercising any inventive skills.
- 6.5 D12 as closest prior art
- 6.5.1 The present method differs from the one of D12 in:
(i) the implementation of a specific temperature range, and
(ii) the specific use of a straightening iron.
- 6.5.2 No effect has been substantiated for the feature (i). Regarding feature (ii), the appellant patent proprietor argued that it led to an enhanced straightening effect in a longer lasting manner as substantiated by D25.

With regard to the tests performed in D25, the Board observes the following points:

- (a) No details regarding the specific straightening iron used in the test of D25 are provided. Furthermore the definition of the term "iron" in the patent in suit is broad (see paragraphs [0159] and [0160]). This lack of information regarding the exact nature of the distinguishing feature in the comparative examples renders the extrapolation of the obtained results over the whole scope of the claims doubtful. In this context, the appellant - patent proprietor explained during oral proceedings, that the iron used in the tests of D25 was a conventional straightening iron according to the invention. This argument is, in light of the broad definition in the patent in suit, not convincing.
- (b) The same considerations as provided under point 6.2.2(b) regarding the choice of the comparative compositions apply *mutatis mutandis* in the present case. In particular, the components described as essential in D12, *i.e.* lanolin and white petrolatum, were excluded from the compositions of the comparative examples. According to the example of D12 the treatment with the straightening comb aims at sealing the composition to the hair fibers. The effect of the straightening device in D12 appears thus interrelated with the composition used. Moreover, D12 actually already states that, depending on the conditions, the effect may be long lasting (see column 3, lines 44-56). Hence, it cannot be concluded that the effect obtained with the straightening comb in the comparative test of D25 is representative of the method of D12.

- 6.5.3 As in the previous case, the alleged effect cannot be acknowledged and the objective technical problem resides in the provision of an alternative method for hair straightening.
- 6.5.4 It was not disputed that the claimed temperature range of 60 to 250°C is a conventional temperature range for hair straightening and D11 as well as D17 disclose operating within said temperature range (see D11, page 9, "150-232°C", and D17, paragraph [005], "120-180°C" and "200-220°C"). Furthermore, D12 generally suggests the use of any "suitable styling iron" (see example II) and D11 mentions that flat iron is becoming the most popular hair straightening device (see page 9). The use of a straightening iron at a temperature within the claimed range would thus have appeared obvious to the skilled person willing to solve the problem posed.
- 6.6 Accordingly, starting from either D12 or D17, the subject-matter of claim 1 of auxiliary request 3 does not involve an inventive step (Article 56 EPC).

Auxiliary requests 4 to 9

7. Inventive step

- 7.1 Claims 1 of auxiliary requests 4 to 9 correspond to claim 1 of auxiliary request 3, wherein the following modifications were performed:
- (i) deletion of non-liquid non-silicone fatty substances (auxiliary requests 4 to 9),
 - (ii) limitation of the temperature range to "100 to 250°C" (auxiliary requests 5 and 7), and/or

(iii) limitation of the liquid non-silicone fatty substances to specific substances (auxiliary requests 6 to 9).

- 7.2 Both parties referred to their reasoning presented for auxiliary request 3, at least starting from D17.
- 7.3 As argued by the appellant - opponent 2, D17 discloses operating temperatures (see paragraphs [0005] and [0022]) and oils (fatty acid esters, oils of vegetable origin, in particular avocado oil and camelia oil; see paragraphs [0015] and examples) falling under the scope of these amended claims. Consequently, the Board is of the opinion that the argument developed for auxiliary request 3, at least starting from D17, applies *mutatis mutandis* to the present auxiliary requests 4 to 9, since no additional distinguishing feature versus D17 was introduced. The limitation of the scope "around" the comparative example of D26 mentioned by the appellant - patent proprietor is not suitable to overcome the issues mentioned under point 6.2.2., because the reasons provided under said point apply equally to auxiliary requests 4 to 9.
- 7.4 Accordingly, starting from D17, the subject-matter of claims 1 of auxiliary requests 4 to 9 does not involve an inventive step (Article 56 EPC).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside
2. The patent is revoked.

The Registrar:

The Chairman:



B. Atienza Vivancos

A. Uselli

Decision electronically authenticated