# PATENTAMTS

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### Datasheet for the decision of 9 June 2016

Case Number: T 0488/13 - 3.3.10

Application Number: 03722596.8

Publication Number: 1496849

IPC: A61K8/25, A61Q5/10

Language of the proceedings: ΕN

#### Title of invention:

COMPOSITION FOR THE OXIDATION DYEING OF HUMAN KERATINOUS **FIBRES** 

### Patent Proprietor:

L'Oréal

### Opponents:

Henkel AG & Co. KGaA Kao Germany GmbH The Procter & Gamble Company

### Headword:

### Relevant legal provisions:

EPC Art. 56, 84, 123(2), 123(3)

### Keyword:

Admissibility of late-filed requests (yes) - filed in direct response to objections raised by Respondents

Main and auxiliary request 1: novelty (yes) - objection based on alleged prior use not reasoned

Main request: inventive step (no) - alleged improvement not shown over entire scope of claim, reformulation of problem, obvious alternative

Auxiliary request 1: inventive step (yes) - improvement plausible, means for achieving it not suggested by prior art Clarity - no power to examine

### Decisions cited:

G 0001/10, G 0003/14, T 0020/81

### Catchword:



### Beschwerdekammern **Boards of Appeal** Chambres de recours

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Case Number: T 0488/13 - 3.3.10

DECISION of Technical Board of Appeal 3.3.10 of 9 June 2016

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CLI Patents

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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 14 January 2013 revoking European patent No. 1496849 pursuant to

Article 101(3)(b) EPC.

### Composition of the Board:

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### Summary of Facts and Submissions

- I. The Appellant (Proprietor of the Patent) lodged an appeal against the decision of the Opposition Division revoking European patent No. 1 496 849.
- II. Notices of Opposition had been filed by Respondents I to III (Opponents 1 to 3, respectively), requesting revocation of the patent in its entirety on the grounds of lack of novelty and inventive step (Article 100(a) EPC). Inter alia the following documents were submitted in opposition proceedings:
  - (1) WO-A-01 474 86 and
  - (6) Cosmetic Research USA News Publication, page 92, August-September 1996.
- The Opposition Division found that the dyeing composition of claim 1 of the then pending main request (patent as granted) was novel over inter alia documents (1) and (6) and that there was insufficient evidence to prove the alleged prior use. The subject-matter of the main request and of auxiliary requests 2 and 3 was not inventive, document (6) being considered to represent the closest prior art. It also found that claims 15 and 16 of the then pending auxiliary request 1 did not satisfy the requirements of Article 84 EPC.
- IV. With a letter dated 9 January 2014, the Appellant filed a main request and auxiliary requests 1 to 7. During oral proceedings before the Board, which took place on 9 June 2016, the Appellant renumbered auxiliary requests 1, 5 and 7 as the main request and auxiliary requests 2 and 3, respectively, and filed a new auxiliary request 1, which differed from previous auxiliary request 3, only in that a correction had been

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made to claim 3. The previous main request and previous auxiliary requests 2, 3, 4 and 6 were withdrawn.

V. Claim 1 of the main request reads as follows:

"Dyeing composition for the oxidation dyeing of human keratinous fibres and more particularly hair, free of oxidizing agent, comprising, in a cosmetically acceptable medium based on water and at a basic pH, at least one oxidation dye and an alkalinizing agent, characterized in that the alkalinizing agent is a combination of sodium metasilicate and aqueous ammonia and the alkalinizing agent comprises, as active substance, at least 1% by weight of sodium metasilicate relative to the total weight of the dyeing composition."

Claim 1 of auxiliary request 1 differs from claim 1 of the main request only in that the alkalinizing agent comprises, as active substance, from 1 to 3% by weight of sodium metasilicate relative to the total weight of the dyeing composition.

VI. The Appellant submitted that all requests filed with letter dated 9 January 2014 should be admitted into the proceedings, since these were filed more than two years prior to the oral proceedings in response to objections of the Respondents. Auxiliary request 1 filed during the oral proceedings before the Board was in response to an objection raised by Respondent III two days before said proceedings. The subject-matter of claim 1 of all requests was inventive, document (1), and not document (6), representing the closest prior art, since document (1) disclosed coloring cremes having a pH of 10 comprising water glass in an amount of 0.6% by weight relative to the total weight of the dyeing composition, document (6) being silent with regard to

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the pH and the amount of sodium metasilicate in the hair dye composition. During the oral proceedings before the Board, the Appellant conceded that water glass was sodium metasilicate. In the light of document (1), the problem to be solved by the present invention was to provide a dyeing composition which resulted in improved coloration intensity. The experimental report filed before the Opposition Division with letter dated 10 October 2012 showed that the presence of at least 1%, more particularly 1 to 3%, by weight of sodium metasilicate led to more intense coloration of the hair than when amounts outside these values were used. The results from comparative tests 1 and 2 of said report could not be fairly compared with each other, because a different total molar amount of alkalinizing agent was used in each test. None of the prior art taught that by using this amount of sodium metasilicate in the alkalinizing agent, the intensity of the coloration of the hair could be improved.

Since the dependent claims objected to for lack of clarity were present in the same form in the claims as granted, Article 84 EPC could not be raised against them. In any case, their subject-matter was clear.

VII. Respondent III requested that all claim requests submitted by the Appellant with letter dated 9 January 2014, as well as the request filed during oral proceedings before the Board, should not be admitted into the proceedings as they were late filed. With letter dated 7 June 2016, Respondent III submitted that there was no support in the application as filed for the value of 1.8% in various claims of the main and auxiliary requests 1 to 5 filed 9 January 2014, such that these requests did not fulfil the requirements of Article 123(2) EPC. Respondent III submitted that

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sufficient evidence had been provided before the Opposition Division to prove the prior use of the product Londacolor Crème-Haarfarbe, relying only on its previous submissions before the first instance in this respect. During the oral proceedings before the Board, no objections were made to the novelty of the subjectmatter of the claims of the main request or auxiliary request 1.

The Respondents submitted that the subject-matter of claim 1 of all requests was not inventive. During the oral proceedings before the Board, Respondents II and III agreed that in view of the Appellant's concession that water glass was indeed sodium metasilicate, document (1), and not document (6), represented the closest prior art. The Appellant's experimental report showed that a dyeing composition according to claim 1 of the main request, namely composition C comprising 4.4 wt.% sodium metasilicate, resulted in less intense coloration than the comparative composition D, comprising 0.7 wt.% silicate, such that the problem had not been solved over the entire scope of claim 1 of the main request. The subject-matter of claim 1 of auxiliary request 1 was also not inventive, since the experimental report provided evidence only for compositions comprising three specific weight amounts of sodium silicate, it not having been shown that the effect was achieved over the whole weight range of 1 to 3% claimed. Respondent I argued in writing that it was necessary to take into account all of the L\*, a\* and b\*-values when determining the intensity of coloration, and on this basis, the comparative composition D resulted in the most intense coloring of all the Examples. The amount of silicate in the claimed compositions was therefore arbitrary.

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The Respondents II and III argued that the subjectmatter of at least claim 5 of the main request and claim 3 of auxiliary request 1 were unclear, in view of said claims requiring that the compositions simultaneously comprised at most 1.6%, and preferably at least 1.2% by weight, of ammonia.

VIII. The Appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of the main request (corresponding to auxiliary request 1 filed with letter dated 9 January 2014), or, alternatively, on the basis of auxiliary request 1 filed during the oral proceedings before the Board, or on the basis of auxiliary requests 2 or 3 (corresponding to auxiliary requests 5 and 7, respectively, filed with letter dated 9 January 2014).

The Respondents requested that the appeal be dismissed.

IX. At the end of the oral proceedings, the decision of the Board was announced.

### Reasons for the Decision

- 1. The appeal is admissible.
- 2. Admissibility of requests
- 2.1 Respondent III requested that all claim requests submitted by the Appellant on 9 January 2014 should not be admitted into the proceedings as they were late filed, the present main request and auxiliary requests 2 and 3 corresponding to auxiliary requests 1, 5 and 7, respectively, filed on 9 January 2014. Respondent III also submitted that auxiliary request 1 filed during the oral proceedings before the Board should not be

admitted on the basis that it was filed at an even later stage of the proceedings.

2.2 The Board notes that the claim requests filed with letter of 9 January 2014 were in direct response to objections raised by the Respondents in their replies to the Appellant's statement setting out the grounds of appeal, more particularly to objections under Article 84 EPC to certain claims filed with said statement. The amendments essentially involved deletion of those claims objected to for lack of clarity from these claim requests, such that the Board holds that the amendments are appropriate. Furthermore, these claim requests were all filed over two years prior to the oral proceedings before the Board, leaving the other parties sufficient time to consider them. Auxiliary request 1 was filed during the oral proceedings before the Board in response to Respondent III's objection raised two days before said proceedings to the lack of support in the application documents as filed for the value of 1.8% by weight of ammonia in dependent claim 3 of auxiliary request 3 filed with letter 9 January 2014. However, said value of 1.8% was present only in the printed version of the granted patent specification, and not in the version accepted by the EPO, the value in the "Druckexemplar" being 1.6%, said finding not being contested by the Respondents. A printing error, which cannot be imputed to the Patentee, should normally be correctable at any time. The proposed amendment effectively corrects such a printing error, so that the proposed amendment is appropriate and necessary. It is also obviously allowable under Articles 123(2) and (3) EPC, see also G 1/10 (OJ EPO 2013, 194, point 13 of the Reasons).

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2.3 For these reasons the Board admits the main request and auxiliary requests 1 to 3 into the proceedings.

Main request and auxiliary request 1

- 3. Novelty
- During the written procedure, Respondent III submitted that sufficient evidence had been provided before the Opposition Division to prove the prior use of the product Londacolor Crème-Haarfarbe. However, it relied only on its previous submissions before the first instance, without providing any reasons as to why the contested decision was wrong in this respect. During the oral proceedings before the Board, no objections were raised against the novelty of the subject-matter of the claims of the main request or auxiliary request 1.
- 3.2 The Board holds that in the absence of arguments as to why the contested decision was wrong with respect to the prior use not being considered to be state of the art, the objection to lack of novelty raised in writing was not reasoned. In any case, the alleged prior use was based on a product which allegedly contained 0.5% by weight of sodium metasilicate (see page 7 of contested decision), such that said prior use is prima facie irrelevant with respect to the novelty of the subject-matter of the claims before the Board, which all relate to dyeing compositions comprising at least 1% by weight of sodium metasilicate, the claims of the main request before the Opposition Division not specifying an amount of sodium metasilicate.
- 3.3 The Board thus holds that the subject-matter of both the main request and auxiliary request 1 is novel.

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### Main request

- 4. Inventive step
- 4.1 Claim 1 is directed to a dyeing composition for the oxidation dyeing of human keratinous fibres comprising inter alia at least 1% by weight sodium metasilicate, which results in intense colorations in varied shades (see patent in suit, paragraph [0010]).
- Document (1) discloses in the Table on page 33 coloring cremes free of oxidizing agent and having a pH of 10, comprising water, an oxidation dye (p-aminophenol, p-tolyldiamine sulphate, 2-methylresorcinol, 5-amino-3-methylphenol), water glass in an amount of 0.6% by weight relative to the total weight of the dyeing composition, and aqueous ammonia. During the oral proceedings before the Board, the Appellant conceded that water glass was sodium metasilicate. Document (1) describes oxidation dyes as providing intensive coloration (see page 1, third paragraph, first sentence).
- 4.2.1 The Opposition Division and Respondent I started from document (6) as closest prior art, but this was under the premise that the water glass of document (1) was not synonymous with sodium <a href="metasilicate">metasilicate</a>. During the oral proceedings before the Board, the Appellant conceded that water glass was indeed sodium metasilicate, such that document (1) represents the closest prior art, since it discloses coloring cremes having a pH of 10 comprising sodium metasilicate (water glass) in an amount of 0.6% by weight relative to the total weight of the dyeing composition, document (6) being silent with regard to the pH and the amount of

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sodium metasilicate in the hair dye composition disclosed therein. Respondents II and III agreed that in the light of the Appellant's concession that water glass was sodium metasilicate, document (1), and not document (6), represented the closest prior art.

- 4.2.2 Since document (1) has more technical features in common with the claimed invention than document (6), both documents relating to oxidation dye compositions for human hair, the Board considers, in agreement with the Appellant and Respondents II and III, that document (1) represents the closest state of the art and starting point in the assessment of inventive step.
- 4.3 In view of this state of the art, the problem underlying the claimed invention, as formulated by the Appellant, was the provision of a dyeing composition which resulted in improved coloration intensity.
- 4.4 As the solution to this problem, claim 1 of the main request proposes a dyeing composition comprising at least 1% by weight sodium metasilicate relative to the total weight of the dyeing composition.
- whether or not the problem defined in point 4.3 above was successfully solved vis-à-vis the closest prior art. The Appellant submitted that the experimental report filed before the Opposition Division showed that a dyeing composition comprising sodium metasilicate in an amount greater than 1% by weight, more particularly in an amount of 1.5 wt.% in composition A', led to more intense coloration of the hair, namely an L\*-value of 33.95, than a composition comprising an amount less than 1% by weight, more particularly in an amount of 0.7 wt.% in comparative composition D, namely an L\*-

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value of 37.19. Respondents II and III argued that the experimental report showed that a dyeing composition according to claim 1 of the main request, namely composition C comprising 4.4 wt.% sodium metasilicate, resulted in less intense coloration, namely an L\*-value of 38.58, than the comparative composition D comprising 0.7 wt.% silicate with an L\*-value of 37.19, such that the problem had not been solved over the entire scope of claim 1 of this request. Respondent I argued in writing that it was necessary to take into account all of the L\*, a\* and b\*-values when determining the intensity of coloration, and on this basis, the comparative composition D resulted in the most intense coloring of all the Examples. The Appellant countered that the L\*-value alone was a meaningful measurement of coloration intensity, and that the results for composition C and comparative composition D could not be fairly compared with each other, because a different total molar amount of alkalinizing agent was used in the respective tests 1 and 2.

- 4.5.1 All of the parties at the oral proceedings, namely the Appellant and Respondents II and III, agreed that the L\*-value alone was a valid measurement for the intensity of the coloration of hair, Respondent I not having explained why it was necessary to take all of the L\*, a\* and b\*-values into account in this respect, such that the Board accepts the L\*-value alone as a measure of the coloration intensity.
- 4.5.2 The Board holds that considering the results of test 1 alone, a comparison of composition A comprising 2.9 wt. % sodium metasilicate with composition C, comprising 4.4 wt.% sodium metasilicate, shows that the L\*-value deteriorates significantly from a value of 32.93 to a value of 38.58, such that it is not

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plausible that at any amount of sodium silicate greater than 1 wt.% an improvement in the L\*-value  $vis-\grave{a}-vis$  amounts less than 1 wt.% would be achieved.

- 4.5.3 Furthermore, the Board holds that the results from tests 1 and 2 of said report may be meaningfully compared with each other. Thus, since the total molar amount of ammonia and sodium metasilicate is slightly greater in test 1, namely 0.112, than in test 2, namely 0.0956, said difference favours test 1, since as argued by Respondent II, high pH is generally known to ease penetration of the dye, leading to better L\*-values. However, even under these favourable conditions, composition C of test 1, comprising a molar amount of sodium silicate falling within claim 1 of the main request, namely 4.4 wt.%, has a higher L\*-value, and thus results in less intense coloration, than comparative composition D of test 2, comprising 0.7 wt. % of sodium silicate.
- 4.5.4 Thus, the experimental report relied upon by the Appellant for supporting the alleged improvement cannot demonstrate that the technical problem has been solved over the whole range of the claim.
- According to the case law of the Boards of Appeal, alleged but unsupported advantages cannot be taken into consideration in respect of the determination of the problem underlying the invention (see e.g. decision T 20/81, OJ EPO 1982, 217, point 3, last paragraph of the Reasons). Since in the present case no improvement has been shown, the technical problem as defined in point 4.3 above needs reformulation in a less ambitious way.

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- 4.7 Consequently, the objective problem underlying the claimed invention in the light of the teaching of document (1) is merely the provision of an alternative dyeing composition.
- 4.8 It remains to be decided whether or not the proposed solution to this problem is obvious in view of the cited state of the art.
- 4.8.1 Document (1) itself teaches (see page 4, lines 1 to 8) that hair dye compositions may comprise an amount of hydrated silica compound of up to 5 wt.%, preferably up to 2 wt.% and even more preferably up to 1.5 wt.%, such that it is obvious for the skilled person to select an amount greater than 1 wt.%, when the problem to be solved consists merely of providing an alternative dyeing composition.
- 4.9 As a result, the Appellant's main request is not allowable as the subject-matter of claim 1 thereof lacks inventive step pursuant to Article 56 EPC.

### Auxiliary request 1

### 5. Amendments

- 5.1 Claim 1 of auxiliary request 1 is based on original claims 1 and 6, which correspond to granted claims 1 and 6, respectively, the scope of protection being thereby restricted.
- 5.2 Dependent claims 2 to 16 are based on original claims 7 to 9 and 11 to 22, respectively, which correspond to granted claims 7 to 9 and 11 to 22, whereby the value of 1.8% by weight of ammonia in claim 8 of the printed version of the granted patent specification has been in

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effect corrected in corresponding dependent claim 3 to the value of 1.6, as present in claim 8 of the version accepted by the EPO, as explained in point 2.2 above. The Respondents did not submit any substantive arguments against the possibility of such a correction.

- 5.3 The requirements of Article 123(2) and (3) EPC are thus satisfied.
- 6. Inventive step
- 6.1 The coloring cremes in the Table on page 33 of document (1) remain the closest prior art, while the technical problem underlying the invention of auxiliary request 1 is the provision of a dyeing composition which results in improved coloration intensity.
- As the solution to this problem, claim 1 of auxiliary request 1 proposes a dyeing composition comprising from 1 to 3% by weight sodium metasilicate relative to the total weight of the dyeing composition.
- As in the case of the main request, the Appellant relied on the experimental report filed before the Opposition Division in order to show that the problem had been solved, the crucial difference vis-à-vis the main request being that the composition C of test 1 now falls outside the scope of auxiliary request 1, and thus becomes a comparative composition. As such, it has now been undisputedly shown that compositions A and B, comprising 2.9 and 1.464 wt.% of sodium silicate, respectively, have better L\*-values than comparative composition C, comprising 4.4 wt. % sodium metasilicate, and that composition A', comprising 1.5 wt.% of sodium silicate, has a better L\*-value than

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comparative composition D, comprising 0.7 wt. % sodium metasilicate.

- 6.3.1 Respondents II and III argued that the experimental report provided evidence only for compositions comprising these three specific weight amounts of sodium silicate, it not having been shown that the effect was achieved for compositions comprising sodium silicate over the whole weight range of 1 to 3% claimed.
- 6.3.2 The Board holds, however, that since the three amounts of 1.464, 1.5 and 2.9 wt.% of sodium metasilicate for which an improvement for the compositions has been shown are well distributed over the claimed range of 1 to 3 wt.%, it is reasonable to extrapolate the results obtained for these three values over the entire range of 1 to 3 wt.%. As such, the Board considers that on the basis of the comparative tests, and in the absence of evidence on file to the contrary, it is plausible that the technical problem defined above has effectively been solved over the whole range of the claim.
- 6.4 Finally, it remains to be decided whether or not the proposed solution to the technical problem defined in point 6.1 above is obvious in view of the cited prior art.
- 6.4.1 As indicated in point 4.8.1 above, document (1) teaches hair dye compositions comprising preferably up to 2 wt. %, and even more preferably up to 1.5 wt.%, of a hydrated silica compound. However, document (1) does not provide any hint that by raising the amount of sodium silicate from a value of 0.6 wt.% to within a range of from 1 to 3 wt.%, a dyeing composition with

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improved coloration intensity would be obtained, there being no link in document (1) between the hydrated silica compound, let alone sodium metasilicate in particular, and coloration intensity.

- 6.4.2 Accordingly, there is no suggestion in document (1), or in any of the prior art cited, to improve the intensity of coloration of a hair dyeing composition by increasing the amount of sodium silicate in the composition to within a range of from 1 to 3 wt.
- 6.5 For these reasons, the Board concludes that the dyeing composition according to claim 1, and of dependent claims 2 to 16, of auxiliary request 1 involves an inventive step.

### 7. Clarity

- 7.1 The Respondents II and III argued that the subjectmatter of at least claim 3 of auxiliary request 1 was
  unclear, in view of said claim requiring that the
  compositions simultaneously comprised at most 1.6%, and
  preferably at least 1.2% by weight, of ammonia,
  unclarity arising because the latter preferred value
  was broader than the former.
- 7.2 Article 84 EPC is, however, not a ground for opposition, no substantive amendments having been made to dependent claim 3, which corresponds to granted claim 8, apart from the correction of a printing error (see point 5.2 above). Hence, the Board has no power to examine this claim for clarity (G 3/14, OJ EPO 2015, A102, see catchword and order).
- 7.3 The Board therefore rejects the Respondents' arguments regarding lack of clarity.

### Auxiliary requests 2 and 3

8. Since the auxiliary request 1 is allowable for the reasons set out above, there is no need for the Board to decide on these lower ranking auxiliary requests.

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### Order

### For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the department of first instance with the order to maintain the patent on the basis of claims 1 to 16 of the auxiliary request 1 filed during the oral proceedings before the Board and a description to be adapted.

The Registrar:

The Chairman:



C. Rodríguez Rodríguez

P. Gryczka

Decision electronically authenticated