Datasheet for the decision of 25 February 2008

Case Number: T 0770/06 - 3.3.10
Application Number: 94113325.8
Publication Number: 0640334
IPC: A61K 7/13

Language of the proceedings: EN
Title of invention:
Hair coloring composition
Patente:
Clairol Incorporated

Opponent:
KPSS-Kao Professional Salon Services GmbH

Headword:
Hair coloring composition/CLAIROL

Relevant legal provisions:
EPC Art. 56

Relevant legal provisions (EPC 1973):
-

Keyword:
"Inventive step (yes)"

Decisions cited:
-

Catchword:
-
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DECISION
of the Technical Board of Appeal 3.3.10
of 25 February 2008

Appellant: KPSS-Kao Professional Salon Services GmbH
(Opponent)
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Representative: -

Respondent: Clairol Incorporated
(Patent Proprietor)
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 14 March 2006 rejecting the opposition filed against European patent No. 0640334 pursuant to Article 102(2) EPC 1973.

Composition of the Board:
Chairman: R. Freimuth
Members: J.-C. Schmid
J.-P. Seitz
Summary of Facts and Submissions

I. The Appellant (Opponent) lodged an appeal on 13 May 2006 against the decision of the Opposition Division, posted on 14 March 2006 rejecting pursuant to Article 102(2) EPC 1973 the opposition against European patent No. 0 640 334, independent claim 1 thereof reading as follows:

"A two part aqueous composition for coloring human hair which forms a gel on mixing of the two parts comprising:

a: an alkaline aqueous lotion having a pH of from about 7.5 to about 11 containing from about 0.005 % by weight to about 5 % by weight of at least one primary intermediate and at least one coupler for the formation of oxidation dyes, from about 0.1 % to about 5 % of a monomeric quaternary ammonium compound having a linear long chain alkyl subsequent, from 0.5 % to 15 % by weight of an amphoteric surfactant at least 70 % by weight water; and

b: an aqueous developer having a pH of from about 2 to about 6 containing from about 0.5 % by weight to about 40 % by weight of a peroxide oxidizer and from about 0.1 % by weight to about 20 % by weight of a water insoluble anionic polymer I selected from esters of acrylic polymers and polyoxyalkylene glycol ethers of long chain fatty alcohols, which dissolves to form said gel when mixed with said alkaline aqueous lotion".
II. Notice of opposition had been filed by the Appellant requesting revocation of the patent in suit in its entirety on the grounds of insufficient disclosure Article 100(b) EPC, lack of novelty and lack of inventive step (Article 100(a) EPC), based inter alia on the documents:

(1) EP-A-0 241 707
(2) WO-A-92/01438 and
(4) GB-A-1 569 845.

III. The Opposition Division held that the claims in the form as granted satisfied the requirements of the EPC. The Opposition Division found that the invention in the patent in suit was sufficiently disclosed (Article 100(b) EPC), that the documents cited neither destroyed the novelty of, nor rendered obvious, the subject-matter of the patent in suit.

As regards inventive step, the Opposition Division considered that starting either from document (1) or from document (2) as the closest prior art, the skilled man would not have arrived at the claimed compositions. The decision of the Opposition Division can be summarized as follows:

"Starting from the two-part composition of D1 as the closest prior art, the skilled man would need to
(1) include a quaternary ammonium salt (part A),
(2) replace the preferred surfactant (part A), and
(3) replace the anionic polymer with one containing large anionic groups (part B)", "a quaternary ammonium (as defined in the claims) may have been an obvious thing" but "the further changes were against the
preferences of D1 (surfactant) as well as the cautionary remark of D4 (long chain anionic additive).

"Starting from the two-part composition of D2 as the closest prior art, the skilled man would need to (1) include a quaternary ammonium salt (part A), (2) replace the acrylate methacrylic acid copolymer with the specific anionic polymers of the patent (part B)" but "cannot accept that D1 provides the missing link as to the polymer".

The Opposition Division concluded on this basis that the claimed subject-matter provided a non-obvious alternative to the prior art and, thus, that the requirements of Article 56 EPC were fulfilled.

IV. The Appellant contested the decision of the Opposition Division only with respect to the issue of inventive step. The written submissions of the Appellant can be summarized as follows. Document (2) represented the closest prior art. The composition of document (2) differed from the compositions of claim 1 only by the presence of a quaternary ammonium compound. The specific anionic polymer of the claimed compositions was included within the general teaching of document (2), whose choice was arbitrary and thus did not constitute a real difference. Furthermore, this specific anionic polymer was a known cosmetic ingredient and was disclosed in document (1).

In the light of document (2), the objective problem to be solved by the patent-in-suit was the provision of a hair conditioning oxidative colouring composition. The solution proposed was the incorporation of a monomeric
quaternary ammonium compound. There was no evidence that this problem was solved over the whole breadth of the claim and the proposed solution was obvious in the light of document (4) which disclosed the use of quaternary ammonium compound as hair conditioning agent in oxidative colouring compositions.

The Appellant therefore concluded that the combination of document (2) with document (4) was obvious and resulted in the claimed invention.

V. The Respondent (Proprietor of the patent) agreed that document (2) represented the closest prior art. The claimed compositions differed from those described in document (2) not only by the presence of a quaternary ammonium compound having a long chain alkyl substituent but also by the presence of an anionic polymer selected from esters of acrylic polymers and polyalkylene glycol ethers of long chain fatty alcohols. The technical problem starting from document (2) was the provision of a two part aqueous composition for colouring hair with a conditioning effect. This problem was solved by the claimed compositions in the absence of any proof to the contrary. The skilled person would be discouraged from including a monomeric quaternary ammonium compound in the composition of document (2) having regard to the compatibility of these compounds with the anionic polymer having large anionic group.

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

The Respondent requested that the appeal be dismissed and that the patent be maintained as granted.
VII. At the end of the oral proceedings before the Board held on 25 February 2008 in the absence of the Appellant, which after having been duly summoned informed the Board by fax on 15 February 2008 that it would not attend, the decision of the Board was announced.

**Reasons for the Decision**

1. The appeal is admissible.

2. **Insufficiency of disclosure of the invention and novelty**

   Although raised as a ground for opposition, the Appellant did not maintain the objections of insufficiency of disclosure and lack of novelty, the Opposition Division having rejected these grounds. Nor has the Board any reason to take a different view. Thus, it is not necessary to give reasons in detail for the conclusion that the patent-in-suit discloses the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art and that the subject-matter of claim 1 is novel.

3. **Inventive step**

   In accordance with the "problem-solution approach" applied by the Boards of Appeal to assess inventive step on an objective basis, it is in particular necessary to establish the closest state of the art, to determine in the light thereof the technical problem
which the invention addresses and successfully solves and to examine the obviousness of the claimed solution to this problem in view of the state of the art.

3.1 The Board considers, in agreement with the Parties, that document (2) represents the closest state of the art, and hence, the starting point in the assessment of inventive step.

Document (2) discloses a two part hair colouring composition consisting of an alkaline aqueous lotion comprising oxidative dye precursors (primary intermediates and couplers) and an amphoteric surfactant, and an aqueous oxidizing developer which form a gel when mixed with the alkaline lotion (page 1, lines 1 to 6; claim 1).

The Appellant submitted that document (2) disclosed the insoluble anionic polymer as specified in part (b) of the claimed compositions, which finding was contested by the Respondent.

The Appellant relied on claim 2 of document (2) which disclosed the presence of a dispersed acrylic acid and/or methacrylic acid polymer or copolymer in combination with the last paragraph of page 6 of that document disclosing copolymers from (meth)acrylic acid and lower alkyl esters of acrylic acid. However, the compositions of claim 1 of the patent-in-suit requires the presence of esters of acrylic polymers and polyalkylene glycol ethers of long chain fatty alcohol. The polymers described in document (2) are therefore different to those required in the claimed compositions.
Furthermore, both Parties concurred on the fact that the compositions disclosed in that document do not contain any quaternary ammonium compound having a linear long chain alkyl substituent.

Accordingly, there are two modifications in the compositions described in document (2) vis-à-vis the claimed compositions, i.e. the presence of a quaternary ammonium compound having a long chain alkyl substituent and the presence of an anionic polymer selected from esters of acrylic polymers and polyalkylene glycol ethers of long chain fatty alcohols.

3.2 In view of this state of the art, the problem underlying the patent in suit as submitted by the Respondent during the oral proceedings before the Board was to provide further gel forming hair colouring compositions providing a conditioning effect.

3.3 As a solution to this problem, the patent in suit proposes compositions as defined in claim 1 comprising from 0.15 to 5% by weight of a monomeric quaternium compound and from 0.1% by weight to about 20% by weight of a water insoluble anionic polymer selected from esters of acrylic polymers and polyoxyalkylene glycol ethers of long chain fatty alcohols.

3.4 The Appellant expressed doubts as to whether the problem underlying the invention was solved over the whole breadth of the claim, based on the finding that there was no evidence in the patent-in-suit on the viscosity and hair conditioning effect of the claimed compositions.
The claimed compositions contain in part (b) an anionic polymer which, when brought to the alkaline pH range used in hair dyeing, is known to form a highly aqueous dye system (see document (1), page 3, lines 1 to 20). The claimed compositions furthermore contain a quaternary ammonium compound which is known to provide a hair conditioning effect in hair dyeing compositions (see document (4), page 1, lines 20 to 45). Therefore, the burden of proof for the allegation that such compositions containing both gelling and conditioning agents would not achieve these two effects rests upon the Appellant. Hence, in the absence of any substantiating facts and corroborating evidence, the Board considers the Appellant's allegation that the claimed compositions would not show the purported properties as mere speculation what the Board cannot sanction.

Thus, the Board is satisfied that the solution provided by the patent-in-suit successfully solves the problem underlying the invention as defined in point 3.2 above.

3.5 Finally, 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 state of the art.

The Appellant exclusively addressed documents (1) and (4) in order to object to obviousness.

Document (4) is directed to two part compositions containing a quaternary ammonium compound having long chain aliphatic hydrocarbon to provide hair conditioning. The compositions described in document (4)
are explicitly taught not to contain any additives having large anionic groups which deactivate said quaternary ammonium compound (claim 1, page 1, lines 37 to 39, page 4, lines 58 and 59).

Document (1) discloses a two part oxidative hair dyeing composition comprising acrylates/steareth 20 methacrylate copolymers as an additive to increase the viscosity of the composition upon mixture of the two parts. The acrylates/steareth 20 methacrylate copolymer is an anionic copolymer which is within the scope of additives containing large anionic groups. However, their presence is explicitly prohibited in the compositions described in document (4). Document (4) therefore advices against using this polymer in combination with the quaternary ammonium compound.

3.6 For this reasons, the Board considers that the skilled person would have been deterred from combining a quaternary ammonium compound as described in document (4) with an anionic polymer as described in document (1) into the hair colouring composition of the closest prior art document (2) in order to provide a further gel forming hair conditioning oxidative colouring composition.

The Board concludes from the above that the further state of the art represented by documents (1) and (4) does not lead the person skilled to the solution proposed by the patent-in-suit.

3.7 For these reasons, the solution proposed to the problem underlying the invention, i.e. the subject-matter of claim 1, is not obvious in the light of the prior art.
Hence, the subject-matter of claim 1, and by the same token that of independent claim 5 which is directed to a kit containing a two part aqueous composition according to claim 1, of independent claim 7 which is directed to a method of colouring human hair with a composition according to claim 1, and of dependent claims 1 to 4, 6 and 8 to 10 involve an inventive step.

4. As a result, the Appellant's challenge to the lack of inventive step (Article 56 EPC) is rejected.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar

The Chairman

P. Cremona

R. Freimuth