BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

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

Datasheet for the decision of 20 October 2011

Case Number: T 0481/09 - 3.3.07

Application Number: 01610087.7

Publication Number: 1181925

IPC: A61K 7/06

Language of the proceedings: EN

Title of invention:
Protection of keratinous fibres using ceramides and/or glycoceramides

Applicants:
L'OREAL, S.A.

Headword:
-

Relevant legal provisions:
EPC Art. 56, 123(2), 114(2)
RPBA Art. 13(1)

Relevant legal provisions (EPC 1973):
-

Keyword:
"Inventive step (no) (Main Request)"
"Amendments not allowable - added subject-matter (First to Third Auxiliary Requests)"
"Late-filed request - not admitted into the proceedings - prima facie not allowable (Fourth Auxiliary Request)"

Decisions cited:
G 0001/93

Catchword:
-

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0481/09 - 3.3.07

D E C I S I O N
of the Technical Board of Appeal 3.3.07
of 20 October 2011

Appellants: (Applicants)
L'ORÉAL, S.A.
14, Rue Royale
F-75008 Paris (FR)

Representative:
Fevrier, Murielle Françoise E.
L'Oréal
DIPI
25-29 Quai Aulagnier
F-92665 Asnières-sur-Seine Cedex (FR)

Decision under appeal:
Decision of the Examining Division of the European Patent Office posted 16 October 2008 refusing European patent application No. 01610087.7 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman: J. Riolo
Members: F. Rousseau
M.-B. Tardo-Dino

Summary of Facts and Submissions

I. The appeal lies from the decision of the Examining Division, posted on 16 October 2008, refusing European application No. 01 610 087.7, on the ground that its subject-matter did not involve an inventive step. The decision was based on a set of claims 1 to 45, filed during the oral proceedings before the Examining Division held on 4 September 2008, claim 1 reading as follows:

"1. A composition for the protection of keratinous fibers, said composition comprising:

at least one compound chosen from ceramides and glycoceramides,
at least one cationic polymer, and
at least one amphoteric polymer which is polyquaternium-22."

II. The Examining Division held that document D2 (FR-A-2 718 960), which related to compositions comprising a ceramide and a cationic polymer for the protection and treatment of damaged hair, constituted the closest prior art. Neither the experimental data of the application as filed, which provided only a comparison with non-treated hair, nor those of document D5 (Experimental report electronically submitted on 1 August 2008), which did not indicate which compositions had been tested, allowed demonstration of any improvement brought about by Polyquaternium-22. The technical problem solved over D2 by the claimed subject-matter could therefore be seen in the provision of an alternative composition for the treatment and

protection of hair. Contrary to the Applicants' opinion, D3 (FR-A-2 470 596) disclosed that anionic polymers could be advantageously replaced by amphoteric polymers. Thus, the prior art did not discourage, but rather taught the use of an amphoteric compound in combination with a cationic polymer. Moreover, the selection of the well-known hair conditioning agent Polyquaternium-22 among the class of amphoteric polymers was an obvious choice for the skilled person, to merely provide an alternative composition for hair protection. The subject-matter of claim 1, therefore, lacked an inventive step within the meaning of Article 56 EPC.

III. With the statement setting out the grounds for appeal dated 16 February 2009, the Appellants submitted a revised version (D6) of the experimental report D5, wherein the nature of the compositions tested was indicated. A further experimental report (D7) and new sets of claims, which formed the Appellants' Main and First Auxiliary Requests and which replaced the claims then on file were submitted with a letter dated 20 December 2010. Additional sets of claims were submitted with a letter dated 3 August 2011 as the Appellants' Second and Third Auxiliary Request. In a communication dated 12 August 2011, the Board addressed the question of inventive step. It was pointed out that to convincingly demonstrate that the amended claims according to the Auxiliary Requests met the requirements of Article 123(2) EPC, it was not sufficient to merely indicate which parts of the text as originally filed had been aggregated. Rather it was necessary to show that the amended claimed subject-matter, among others the combination of classes of cationic and amphoteric polymers as defined in the

claims, was clearly and unambiguously disclosed in the application as filed.

IV. Oral proceedings were held on 20 October 2011, in the course of which the Appellants submitted a further set of claims as their Fourth Auxiliary Request.

V. The respective independent claims 1 of the present requests read as follows (the additions made in the claims as filed are indicated in bold and underlined):

Main Request

"1. A composition for the protection of keratinous fibers, said composition comprising:

at least one compound chosen from ceramides and glycoceramides,
at least one cationic polymer, and
at least one amphoteric polymer."

First and Second Auxiliary Requests

"1. A composition for the protection of keratinous fibers, said composition comprising:

at least one compound chosen from ceramides and glycoceramides,
at least one cationic **polyquaternary ammonium** polymer, and
at least one amphoteric polymer **chosen from dialkylaminoalkyl methacrylate, dialkylaminoalkyl acrylate, dialkylaminoalkylmethacrylamide and**

dialkylaminoalkyl acrylamide copolymers and dialkyldiallylammonium salts."

Third Auxiliary Request

"1. A composition for the protection of keratinous fibers, said composition comprising:
at least one compound chosen from ceramides and glycoceramides,
at least one cationic **polyquaternary ammonium** polymer, and
at least one amphoteric polymer **is diallyl dimethyl ammonium chloride/acrylic acid copolymers**."

Fourth Auxiliary Request

"1. A composition for the protection of keratinous fibers, said composition comprising:
at least one compound chosen from ceramides and glycoceramides,
at least one cationic polymer, and
at least one amphoteric polymer **is diallyl dimethyl ammonium chloride/acrylic acid copolymers**."

VI. The arguments of the Appellants, as far as they are relevant to the present decision, can be summarised as follows:

(a) Concerning inventive step, D2 constituted the closest prior art. The composition according to

claim 1 of the Main Request differed from those of D2 in that they contained an amphoteric polymer as an additional component. The claimed compositions, which comprised in combination a ceramide or glycoceramide, a cationic polymer and an amphoteric polymer, exhibited improved hair cosmetic properties, in particular feel and smoothness of wet damaged hair, when compared to those of the closest prior art. This was due to a more closed and homogeneous structure of hairs' scales from the root to the end, which provided improved resistance to external agents. The improvement was evidenced by the comparative tests of document D7, which showed that the replacement of an amount of cationic polymer by the same amount of amphoteric polymer led to improved feel and smoothness of damaged hairs. The technical problem solved over the closest prior art D2 was therefore seen in the provision of compositions which improved cosmetic properties of wet damaged hair. It had been made credible in view of the three different combinations tested in D7 that this improvement would be obtained for any cationic polymer and any amphoteric agent, when taken in combination. There was no reason to take a different position, as none of the documents cited, in particular D3, suggested that various cationic polymers (respectively various amphoteric polymers) should behave differently when used in the framework of the present invention. As none of the documents cited suggested that the replacement of an amount of cationic polymer by the same amount of amphoteric polymer would provide improved feel and smoothness of damaged hair, an

inventive step had to be acknowledged. Also, adding an amphoteric polymer to the compositions of D2, was not an obvious solution to said problem, as it was known that too large an amount of conditioning agent would lead to hair's heaviness.

(b) Concerning claim 1 of the First and Second Auxiliary Requests, the restrictions to the classes of cationic and amphoteric polymers defined therein were disclosed in claim 11 and claim 14 as originally filed. As regard the Third Auxiliary Request, the limitation in claim 1 to specific amphoteric polymers found a basis on page 30, line 5 of the application as filed. Hence, the amendments contained in the First to Third Auxiliary Requests fulfilled the requirements of Article 123(2) EPC.

(c) With regard to the Fourth Auxiliary Request, this had not been submitted prior to the oral proceedings, as the Appellants had not expected that the First to Third Auxiliary Requests would be found to contravene the requirements of Article 123(2) EPC. Claim 1 of the Fourth Auxiliary Request met the requirements of Article 56 EPC for the same reasons as those given for the Main Request.

VII. The Appellants requested that the decision under appeal be set aside and that a patent be granted either on the basis of the claims submitted with letter of 20 December 2010 (Main and First Auxiliary Requests), or on the basis of the claims submitted with letter of 3 August 2011 (Second and Third Auxiliary Requests), or

on the basis of the claims submitted on 20 October 2011 during the oral proceedings before the Board (Fourth Auxiliary Request).

VIII. At the end of the oral proceedings the decision of the Board was announced.

Reasons for the Decision

1. The appeal is admissible

Main Request

2. The Examining Division did not object to the novelty of the present claims. The Board sees no reason to take a different view. There is, however, no need in the present appeal decision to provide a reasoning in respect of this issue, as claim 1 of the Main Request fails for other reasons given below.

Inventive step

Closest prior art

3. The present invention relates to compositions for the protection of keratinous fibers containing at least one compound chosen from ceramides and glycoceramides, at least one cationic polymer, and at least one amphoteric polymer. The invention also relates to a process of protecting keratinous fibres subjected to chemical treatment using those compositions. D2 is concerned with non-washing compositions intended for the treatment and protection of hair, based on ceramide

and/or glycoceramide and on cationic polymers (claim 1, page 2, lines 14-16), which compositions may be used before or after permanent-waving or between the reducing and fixing stages, and before or after bleaching or dyeing or straightening (D2, page 12, lines 24-27). Consequently, in agreement with the Examining Division and the Appellants, the disclosure of document D2 specified above represents the closest state of the art, and, hence, the starting point in the assessment of inventive step.

Problem and solution

4. Having regard to this prior art, the Appellants submitted that the technical problem solved by the subject-matter according to claim 1 of the Main Request was the provision of compositions providing improved cosmetic properties to wet damaged hair, in particular improved feel and smoothness. As a solution to this problem the subject-matter of claim 1 according to the Main Request proposes to use an amphoteric polymer in addition to the compounds already employed in D2.

5. In order to support the view that the solution proposed by the subject-matter of claim 1 of the Main Request successfully solves the technical problem mentioned above, the Appellants referred to test report D7. D7 shows that three specific combinations of poly(quaternary ammonium) polymer and amphoteric polymer used in a weight ratio of 1:1, namely Hexadimethrine chloride with Polyquaternium-22, Polyquaternium-6 with Polyquaternium-39 and Polyquaternium-2 with Polyquaternium-22, bring about better feel during rinsing and smoothness of wet hair,

than the same specific poly(quaternary ammonium) polymer, when used alone in an amount corresponding to the total amount of poly(quaternary ammonium) polymer and amphoteric polymer used for the combination.

6. Apart from the indication that the conditioning polymers should be cationic or amphoteric, their structure remains completely undefined and, thus, embraces any conceivable variation. In view of the structural differences existing between all conceivable polymers encompassed by the expressions "cationic polymers" and "amphoteric polymers" and the absence of any technical explanation by the Appellants as to why such combination, regardless of the structure of the cationic or amphoteric polymers, is deemed to provide the same improvement as that observed for the specific embodiments tested in D7, the test report according to D7 alone cannot be regarded as sufficient evidence to lead to the inference that all combinations of any cationic polymer with any amphoteric polymer, irrespective even of their weight ratio, provide the alleged technical effect. In other words, the Appellants failed to render credible that the technical effect observed for the specific compositions tested in D7 can be extrapolated to the various compositions encompassed by the more general definition given in present claim 1. According to the jurisprudence of the Boards of Appeal, alleged advantages to which the applicant merely refers, without offering sufficient evidence to support the comparison with the closest prior art, cannot be taken into consideration in determining the problem underlying the claimed invention and therefore in assessing inventive step (see Case Law of the Boards of Appeal of the European

Patent Office, 6th edition, 2010, I.D.4.2). Therefore, the technical problem as defined by the Appellants needs to be redefined. In view of the application as filed and the teaching of document D2, the technical problem solved over D2, thus, can only be seen in the mere provision of further compositions for the protection of keratinous fibres.

Obviousness

7. D2 advises on page 12, line 14, the use of further conditioning agents in addition to the cationic polymer. Moreover, it is not disputed that amphoteric polymers represented a well-known class of conditioning agents used for the treatment of keratinous fibres. It was also known from D3 (claim 1) that they could be used in combination with poly(quaternary ammonium) polymers. Hence, the skilled person, starting from D2 and merely wishing to provide further compositions for the protection of keratinous fibres, would have been guided by the available prior art to use in combination with the cationic polymer employed in D2 an amphoteric polymer, arriving thereby in an obvious manner at the subject-matter of present claim 1. The Appellants' argument that it was known that too large an amount of conditioning agent would lead to hair's heaviness, fails to convince, as the amount of conditioning agent is not a distinguishing feature of present claim 1 over D2.

8. Hence, the Main request does not involve an inventive step, as required by article 56 EPC and is therefore not allowable.

First and Second Auxiliary Requests

Amendments

9. Claim 1 according to the First and Second Auxiliary Requests derives from claim 1 as originally filed, wherein the combination of cationic and amphoteric polymers has been defined to be at least one cationic poly(quaternary ammonium) polymer and at least one amphoteric polymer chosen from dialkylaminoalkyl methacrylate, dialkylaminoalkyl acrylate, dialkylamino-alkyl methacrylamide and dialkylaminoalkyl acrylamide copolymers and dialkyldiallylammonium salts. The Appellants argued that the use of cationic poly(quaternary ammonium) polymers was disclosed in claim 11 as originally filed, whereas the limitation to the present group of amphoteric polymers was disclosed in claim 14 of the original application.

10. In order to determine whether amended claim 1 complies with Article 123(2) EPC, it has to be examined whether or not technical information has been introduced which a skilled person would not have directly and unambiguously derived from the application as filed. In this context, it is not sufficient to demonstrate that the text as originally filed provides a basis for each of the features introduced into original claim 1 when they are considered in isolation, as has been done by the Appellants, but it is rather necessary to demonstrate that those features are disclosed in the application as filed in the context of present claim 1, *i.e.* in their present combination. The use of at least one cationic poly(quaternary ammonium) polymer is in the present case not disclosed in the context of the

restricted list of amphoteric polymers given in claim 14 as originally filed. Rather it is disclosed in the more general context of compositions comprising at least one amphoteric polymer, as defined in original claim 1. The Appellants could not indicate any passage of the application as filed pointing to the use of at least one cationic poly(quaternary ammonium) polymer together with at least one amphoteric polymer as defined in present claim 1 of the First and Second Auxiliary Requests. Under these circumstances, the Board can only conclude that the combination of cationic and amphoteric polymers defined in claim 1 of the First and Second Auxiliary Requests amounts to new information that cannot be considered as directly and unambiguously disclosed in the original application. All compositions exemplified in the application as filed use a specific combination of cationic and amphoteric polymers, namely Hexadimethrine chloride and Polyquaternium-22. From these examples, the skilled reader derives nothing more than the bare disclosure of a combination of specific polymers. These examples do not disclose compositions in which the specific cationic polymer Hexadimethrine chloride or the specific amphoteric polymer Polyquaternium-22 are replaced respectively by the broader classes of cationic and amphoteric polymers defined in claim 1 of the First and Second Auxiliary Requests. Although it is apparent from the application as filed that a more general teaching than that given in the exemplified compositions was also contemplated, the question to be answered is nevertheless whether the limits now proposed for that generalization by the presently claimed compositions, are directly and unambiguously derivable from the application as filed. This, however,

is not the case as shown above. Therefore, irrespective of whether the subject-matter of claim 1 according to the First and Second Auxiliary Requests is seen as a restriction of original claim 1 or a generalization of the exemplified compositions, it contains technical information that a skilled person would not have directly and unambiguously derived from the application as filed, contrary to the requirements of Article 123(2) EPC. The underlying idea of Article 123(2) EPC is that an applicant shall not be allowed to improve his position by adding subject-matter not disclosed in the application as filed, which would give him an unwarranted advantage and could be damaging to the legal security of third parties relying on the content of the original application (G 1/93 OJ EPO, 1994, 541, point 9 of the reasons for the decision). It would be unfair to third parties to allow an undisclosed intermediate restriction or generalization, as it would give an applicant who files a broad speculative claim, based merely on a few specific embodiments, an unwarranted advantage over other applicants who would be the first to attribute any significance to a specific combination of features encompassed by said broad claim. The underlying principle is that any invention for which protection is sought, *i.e.* in the specific form claimed, must have been made at the date of filing of the application and must be properly disclosed therein. In the present case, the application as originally filed does not contain any fall-back position, in particular dependent claims or passages of the description directed to compositions comprising the specific combination of polymers as presently defined in claim 1 of the First and Second Auxiliary Requests.

Therefore, the First and Second Auxiliary Requests cannot be allowed.

Third Auxiliary Request

11. Claim 1 according to the Third Auxiliary Request also derives from claim 1 as originally filed and defines a combination of at least one cationic poly(quaternary ammonium) polymer with at least one diallyldimethylammonium chloride/acrylic acid copolymer as amphoteric polymer. The Appellants merely argued that the use of cationic poly(quaternary ammonium) polymers was disclosed in claim 11 as originally filed and that the use of a diallyldimethylammonium chloride/acrylic acid copolymer was described on page 30, line 5 of the application as filed. The latter passage, however, does not point in the direction of a combination of a diallyldimethylammonium chloride/acrylic acid copolymer with any poly(quaternary ammonium) polymer. Rather it merely concerns the possibility of using an amphoteric compound having this precise structure. Hence, for the same reasons as given for the First and Second Auxiliary Requests, the Third Auxiliary Request is not allowable, as its claim 1 does not meet the requirements of Article 123(2) EPC.

Fourth Auxiliary Request

12. The Appellants submitted a Fourth Auxiliary Request in the course of the oral proceedings, i.e. after the Board had indicated that the subject-matter of claim 1 according to any of the First to Third Auxiliary Request contravened the requirements of Article 123(2) EPC. Although they had been informed of this objection

well in advance of oral proceedings in the Board's communication dated 12 August 2011, the Appellants did not attempt to overcome this objection by submitting either additional arguments or filling a new set of claims, until the Fourth Auxiliary Request was filed towards the end of the oral proceedings. It follows therefore that the admission into the proceedings of the Fourth Auxiliary Request, which was not occasioned by new developments in the proceedings, is subject to the Board's discretionary power contained in Article 114(2) EPC, as well as in Article 13(1) RPBA.

13. The Board's discretion shall be exercised in view of *inter alia* the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy. In the present case, claim 1 according to the Fourth Auxiliary Request differs from claim 1 according to the Main Request in that it requires that at least one amphoteric polymer is a diallyldimethylammonium chloride/acrylic acid copolymer. This restriction to a specific class of amphoteric polymers, while the cationic polymers are still broadly defined, *prima facie* does not change the assessment of inventive step given in points 3 to 8 above regarding the Main Request. This is due to the fact that the amendment proposed does not affect the formulation of the problem solved over D2, as it still would not be credible that the technical effect observed for the specific compositions tested in D7 can be expected to also be achieved for all claimed compositions, regardless of the cationic polymer used and the ratio of the amounts of cationic and amphoteric polymers. Therefore, The Fourth Auxiliary Request, the filling of which contradicts the principle of

procedural economy, is not admitted into the proceedings.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar The Chairman

S. Fabiani J. Riolo