# BESCHWERDEKAMMERN BOARDS OF APPEAL OF CHAMBRES DE RECOURS OFFICE

DES EUROPÄISCHEN THE EUROPEAN PATENT DE L'OFFICE EUROPEEN DES BREVETS

### Internal distribution code:

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

# Datasheet for the decision of 28 November 2006

T 0322/03 - 3.3.06 Case Number:

Application Number: 96113198.4

Publication Number: 0761205

A61K 7/50 IPC:

Language of the proceedings: EN

## Title of invention:

Hair shampoo

## Patentee:

KAO CORPORATION

#### Opponent:

Henkel KGaA

## Headword:

Conditioning shampoo/KAO

## Relevant legal provisions:

EPC Art. 54, 56

#### Keyword:

"Novelty (yes)"

"Inventive step (yes)"

## Decisions cited:

## Catchword:



#### Europäisches Patentamt

European Patent Office

Office européen des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 0322/03 - 3.3.06

DECISION

of the Technical Board of Appeal 3.3.06 of 28 November 2006

Appellant: Henkel

(Opponent) Kommanditgesellschaft auf Aktien

TFP/Patentabteilung

D-40191 Düsseldorf (DE)

Respondent: KAO CORPORATION

(Patent Proprietor) 14-10, Nihonbashi Kayabacho 1-chome

Chuo-Ku, Tokyo 103 (JP)

Representative: Kindler, Matthias

Hoffmann Eitle,

Patent- und Rechtsanwälte

Arabellastrasse 4 D-81925 München (DE)

Decision under appeal: Interlocutory decision of the Opposition

Division of the European Patent Office posted 17 January 2003 concerning maintenance of the European patent No. 0761205 in amended form.

Composition of the Board:

Chairman: P.-P. Bracke
Members: P. Ammendola

J. Van Moer

- 1 - T 0322/03

# Summary of Facts and Submissions

- I. This appeal is from the interlocutory decision of the Opposition Division concerning the maintenance in amended form of European patent No. 0 761 205, relating to a hair shampoo.
- II. The Opponent had sought revocation of the patent in suit on the grounds of lack of novelty and of inventive step (Article 100(a) in combination with Articles 52(1), 54 and 56 EPC).

In the opposition proceedings it had referred, inter alia, to the prior use of shampoos produced by Henkel Cosmetics with the commercial name "Poly Ultra Care 3 in 1 für Trockenes und Sprödes Haar" (hereinafter "shampoos D1") and to documents

- (1a) Henkel Cosmetics' recipe Nr. "MZ94PAI 05-289" for
   "PPUCA POLY ULTRA CARE 3 IN 1 SUC 4" of type
   "C7140 HR., TROCKENES / SPROEDES HAAR" adjourned
   to the date 16 December 1997 and comprising the
   indication "VERKAUFSPRODUKT, NATIONAL AB:
   25.02.94",
- (1d) the "Einwaageprotokoll/Herstellvorschrift" of Czewo dated 21 October 1994 for two preparations of "Poly Ultra Care /Trockenes und Sprödes Haar" according to the recipe Nr. "MZ94PA105-289",
- (1e) the "Tages-/Monatsumsatzstatistik" of Henkel
   Cosmetics, dated 31.08.1994 and referring, inter
   alia, to the item "233510 SUC4 P.ULTRA CARE F.TR.",

- 2 - T 0322/03

- (1g) debit-note dated 30.11.94 addressed to "REWE DORTMUND GROSSHANDEL EG" containing the indication of the item "SUC 4 P. U-CARE TR. H. 250 ML 10",
- (2) EP-A-0 102 118

and

(7) WO 96/20993.

The Opponent had also offered a non-identified witness in order to support the alleged prior use of the shampoos D1.

III. The Patent Proprietor had filed under cover of a letter dated 13 September 2002 two sets of amended claims respectively labelled "second auxiliary request" and "third auxiliary request".

At the oral proceedings held before the Opposition Division on 15 November 2002, the Patent Proprietor had then renamed these requests respectively as "main request" and "first auxiliary request" and had also provided a description adapted to the claims of such main request.

- IV. Claim 1 of the main request read:
  - "1. Aqueous hair shampoo composition containing a combination of
    - a) 1% to 25% by wt. of at least one alkyl amidoether carboxylic acid of formula I

- 3 - T 0322/03

$$R - C - N - (CH_2-CH_2-O)_n - CH_2 - COOH$$
 (I)

wherein R denotes an alkyl group having 8 to 18 carbon atoms, and n is a number between 1 and 10, and (or) water-soluble salts thereof;

- b) 1% to 25% by wt. of at least one anionic surfactant of the sulfate- and (or) sulfonate type;
- c) 0.1% to 10% by wt. of at least one compound selected from the group of C8-C18-acylmonoand -dialkanolamides, surface-active betaines and sulfobetaines and (or) surface-active amine oxides; and
- d) 0.05% to 5% by wt. of at least one cationic polymer having a charge density of at least 3.50 meq/g, all percentages calculated to the total shampoo composition."

The remaining claims 2 to 8 of the main request defined preferred embodiments of the shampoo of claim 1.

- V. The Opposition Division refuted the Opponent's offer of a witness because of the absence of precise information of what this latter was supposed to give evidence for and found that the claims of the main request (hereinafter "claims as maintained") and the description adapted thereto complied with the requirements of the EPC, inter alia, because:
  - the prior use of the shampoos D1 had not been sufficiently substantiated,

- 4 - T 0322/03

- the undisclosed charge density of the cationic polymer ingredient of the shampoos of document (7) had not been credibly proven to be of at least 3,50 meg/g and
- the claimed subject-matter was not obvious for the skilled person starting from the shampoos of the prior art disclosed in document (2) because the available prior art did not suggest that cationic polymers with a charge density of at least 3.50 meq/g could provide optimal hair conditioning effects.
- VI. The Opponent (hereinafter "Appellant") lodged an appeal against this decision, thereby subsidiary requesting oral proceedings. With the grounds of appeal it submitted the documents
  - (8) Facsimile of Kurt Dieker of Ondeo Nalco Personal
    Care to Hans Hayag, Hans Schwarzkopf GmbH
    regarding the cationic charge of Merquat® 100 and
    550 L,
  - (9) WO 94/06403

and

- (10) US-A-5 366 665.
- VII. The Patent Proprietor (hereinafter "Respondent")
  replied to the grounds of appeal also subsidiary
  requesting oral proceedings. With a letter of
  2 February 2006 it however withdrew the previous
  request for oral proceedings and requested a decision

- 5 - T 0322/03

on the basis of the arguments already provided in writing.

- VIII. On 8 September 2006 the Board summoned the parties to oral proceedings to be held on 28 November 2006, enclosing to the summons a communication with the Board's preliminary opinion on the case.
- IX. With a letter of 11 October 2006 the Appellant withdrew its request for oral proceedings, announced its absence to the forthcoming hearing and filed a request for a decision on the basis of the arguments already provided in writing.
- X. The Appellant argued in writing substantially as follows:
  - the internal recipe of Henkel Cosmetics given in document (1a), the monthly income of Henkel Cosmetics reported in document (1e) of 31 August 1994 for 59568 units of "233510 SUC4 P.ULTRA CARE F.TR." and the sale of "SUC 4 23351 P.U-CARE TR.H 250ML" to "REWE DORTMUND GROSSHANDEL EG" reported in document (1g) OF 30 November 1994, would demonstrate that the shampoos D1 according to the recipe "MZ 94 PA 105-289" had been brought to the market since 25 February 1994 and had been sold in large quantities already in the subsequent month of August, inter alia, to Rewe. The chemical composition of these products was derivable from both documents (1a) and (1d). Hence, the public availability before the priority date of the patent in suit of a product having the chemical composition described in claim 1 as maintained had been demonstrated.

- 6 - T 0322/03

- the Opposition Division had erred in deciding not to hear the offered witness, since this latter could have added to the available written evidence his own knowledge about the current practice at Henkel in respect of the production and sale of products and, thus, would have allowed to set aside the doubts of the Opposition Division on the prior use of the shampoos D1.
- the compositions disclosed in document (7) would preferably contain, as explicitly stated in claim 16 and in the description at page 14, a cationic polymer such as Merquat® 100, i.e. the same conditioning polymer indicated in document (8) to have the cationic charge of 6 meq/g. Hence, the skilled person would arrive at the claimed subject-matter by making a selection out of a single list of alternatives within the disclosure of document (7) and, thus, the subject-matter of claim 1 as maintained would not be novel.
- the subject-matter of claim 1 as maintained would in any case be obvious in view of the prior use of the shampoos D1 or in view of the combination of the shampoos already known from document (2) with the teachings in any of documents (9) or (10) as to the incorporation of cationic polymers with high charge density for improved conditioning.
- XI. The Respondent refuted in writing the Appellant's reasoning and maintained that documents (9) and (10) should not be admitted as late filed and irrelevant.
- XII. On 28 November 2006 oral proceedings took place in the absence of both parties.

- 7 - T 0322/03

- XIII. The Appellant has requested in writing that the decision under appeal be set aside and the patent be revoked.
- XIV. The Respondent has requested in writing that the appeal be dismissed and the patent maintained in the amended form that the Opposition Division found to comply with the requirements of the EPC or, alternatively, on the basis of the claims 1 to 7 of the first auxiliary request as filed during the oral proceedings of 15 November 2002 and corresponding to the third auxiliary request as filed under cover of the letter dated 13 September 2002.

#### Reasons for the decision

1. Admissibility of documents (8) to (10)

The Board notes that the filing of documents (8), (9) and (10) has occurred with the grounds of appeal and aims manifestly at contradicting some conclusions in the decision under appeal (that document (7) would not disclose cationic polymers with high charge density and that cationic polymers with high charge density were not known to provide optimal hair conditioning effects to shampoos).

Hence, the Board decides to admit them into the appeal proceedings under the provisions of Article 114(2) EPC

Claim 1 as maintained: novelty (Article 100(a) in combination with Articles 52(1) and 54 EPC) This claim (see above point IV) defines an aqueous hair shampoo composition comprising given amounts of the alkyl amidoether carboxylic acid "a)", of the sulfate-and (or) sulfonate anionic surfactant "b)", of at least one of dialkanolamide, betaine or amine oxides surfactant "c)" and of at least one cationic polymer "d)" with a charge density of at least 3.50 meq/g.

The Appellant has objected to the novelty of the claimed subject-matter only in view of the prior use of the shampoos D1 and of the shampoos of document (7) (prior art only under Articles 54(3) and (4) EPC).

- 2.1 Prior use of the shampoos D1
- 2.1.1 In the Appellant's opinion, documents (1a), (1e) and (1g) would demonstrate that these shampoos had been sold on the market before the filing date of the patent in suit.
- 2.1.2 The Board concurs however with the decision under appeal (see point 3.2 of the decision) that the sentence "Verkaufsprodukt.National ab: 25.02.94" in the document (1)a internal of Henkel Cosmetics does not necessarily register an actually occurred public sale of the formulation disclosed in the same document, as it could as well only report an intention. In other words, this sentence could per se only indicate a planned sale, without necessarily implying that this sale has actually occurred as planned.

The Board considers also the indication in the further internal document (1)e that certain products with

certain names and identification codes have produced revenues for Henkel Cosmetics (without providing any further details thereupon) as insufficient for demonstrating that the identified products have necessarily been rendered unrestrictedly available to the public. Indeed earnings might in principle also derive from sales under secrecy agreements (e.g. to other branches of the same firm).

Therefore, the Board concludes that only the commercial document (1)g demonstrates credibly that certain products have actually been rendered unrestrictedly available to the public before the valid filing date of the patent in suit. This document indeed relates to a sale to "REWE Dortmund Grosshandel" (i.e. credibly a wholesale dealer for retailers shops) on 30 November 1994, i.e. more than 8 months before the priority date of the patent in suit.

2.1.3 However, the Appellant has provided no document disclosing expressly the chemical composition of the relevant formulation mentioned in document (1)g (i.e. the "SUC4 23351 P.U.-CARE TR.H.250ML" allegedly corresponding to the shampoos D1).

Nor can the chemical composition thereof be considered necessarily identical to one of those given for differently labelled products prepared according to the recipe "MZ 94 PA 105-289" from the ingredients mentioned in document (1a) (for "PPUCA POLY ULTRA CARE 3 IN 1 SUC 4" of type "C7140 HR., TROCKENES / SPROEDES HAAR") or in document (1d) (for "Poly Ultra-Care / Trockenes u. Sprödes Haar").

- 10 - T 0322/03

The Board wishes to stress that the logical expectation that even names or abbreviations (used to identify products in written documents) which differ only slightly could nevertheless refer to different products, is implicitly confirmed in the present case by the presence within document (1e) of slightly different labelling expressions, apparently indicative of different products. As a matter of fact, document (1e) mentions two other product names ("233512 SUC4 P.U.-CARE TR.H.300ML" and "233455 SUC4C P.ULTRA CARE TH. 2E") that are very similar to the "233510 SUC4 P.ULTRA-CARE F.TR." referred to by the Appellant.

Hence, the Board concludes that the Appellant has provided no convincing evidence on the actual chemical composition of the product rendered unrestrictedly available to the public by means of the sale mentioned in document (1g).

- 2.1.4 The Board arrives at the same conclusions even when assuming, for the sake of an argument in favour of the Appellant, that also the revenue-producing articles mentioned in document (1)e were rendered unrestrictedly available to the public. Indeed, also the labelling of the product mentioned in document (1e) and considered relevant by the Appellant (i.e. the formulation labelled "235510 SUC4 P. ULTRA CARE F. TR.") is not identical to that used for labelling the products whose chemical composition is referred to in documents (1a) or (1d).
- 2.1.5 The Board finds also that the offer of witness made by the Appellant in the grounds of opposition for supporting the prior use of the shampoos D1 did not

- 11 - T 0322/03

identify what the (un-named) witness was supposed to give evidence for (see in the grounds of opposition page 3, lines 17 to 18). Even when additionally taking into account the further statements contained in the grounds of appeal (see the last paragraph at page 3), it seems that the witness' offer was somehow related to some (allegedly erroneous) interpretations of the filed documents made by the Opposition Division. This, however, does not equate to a clear indication of the specific facts that the Appellant intended to prove by means of the witness' hearing. Hence, the Board sees no reason for reversing the decision under appeal in this respect.

- 2.1.6 In view of the above, the Board finds the available evidence insufficient for demonstrating that the shampoos sold by Henkel Cosmetics in 1994 had the same composition as the presently claimed ones and, thus, finds the alleged prior use of the shampoos D1 insufficiently substantiated.
- 2.2 Document (7)
- 2.2.1 The Appellant has contested the novelty of the claimed subject-matter in view of the disclosure contained in claim 16 and in the description of document (7) (see from page 12, line 17 to page 13, line 26) of compositions containing a skin or hair conditioning cationic polymer. In particular, the presently claimed shampoo would result from the selection of the polymer with trade name "Merquat 100" (cited at page 13, line 14, of document (7)) out of the list of the possible cationic polymer ingredients.

- 12 - T 0322/03

The Appellant has further argued that document (8) would demonstrate that the cationic charge density of "Merquat 100" is 6.192 meq/g. This last argument has not been disputed by the Respondent.

- 2.2.2 The Board notes however that neither claim 16 nor the referred portion of the description of this citation disclose per se shampoos comprising the combination of ingredients required in claim 1 as maintained. In particular, claim 16 of document (7), which describes "A composition according to any of claims 1 to 15 additionally comprising from 0.01% to 3%.....of a cationic or nonionic polymeric skin or hair conditioning agent ... ", refers to compositions containing ingredient "c)" as defined in claim 1 as maintained only when considered in combination with other portions of this citation, i.e. in combination with the betaines disclosed, among other amphoteric surfactant ingredients, either in claim 12 or in the corresponding list of suitable amphoteric surfactants given at pages 6 to 9. Hence, in order to arrive at a composition according to claim 1 as maintained the skilled reader of this citation must not only select "Merquat 100" among the possible alternatives disclosed therein for the additional cationic polymer, but must also select betaines among the possible alternatives for the amphoteric surfactant. Hence, it is apparent that the claimed subject-matter cannot be considered to derive from a single selection out of one list among the alternative shampoo ingredients disclosed in document (7).
- 2.2.3 Therefore, the Board concludes that the shampoo according to claim 1 as maintained is novel over the cited prior art and, thus, that the subject-matter of

- 13 - T 0322/03

this claim complies with the requirements of Article 54 EPC.

- 3. Claim 1: Inventive step (Article 100(a) in combination with Articles 52(1) and 56 EPC)
- 3.1 The technical problem addressed in the patent in suit is that of overcoming the difficulties in the prior art in formulating a shampoo that provides in addition to effective lathering also the beneficial effects of hair and skin conditioning agents (see page 2, lines 27 to 32).
- 3.2 The Appellant has maintained that the claimed subjectmatter was rendered obvious either by the prior use of
  the shampoos D1 or by the combination of the prior art
  disclosed in document (2) with the teaching of document
  (9) or (10) that cationic polymers with high charge
  density provided excellent conditioning effect.
- 3.3 Since, as indicated above (see point 2.1.6), the prior use of the shampoos D1 has been found insufficiently substantiated, it remains to be established whether or not the combination of document (2) with any of documents (9) or (10) renders obvious the subjectmatter claimed.
- 3.3.1 The Appellant has considered that the skilled person aiming at simultaneously achieving optimal lathering and conditioning effects would have started from the shampoos of document (2) (e.g. those disclosed in examples 5 and 6 and from which the claimed ones differ only for the additional presence of the cationic polymer "d)") and would have then considered obvious to

- 14 - T 0322/03

add thereto the cationic conditioning agents with high charge density that are disclosed in document (9) or (10) to provide excellent conditioning effect, thereby arriving at the claimed subject-matter.

- 3.3.2 The Board considers this reasoning non convincing already because it would be unreasonable for the skilled person searching for a solution to the technical problem indicated in the patent in suit (see above point 3.1) to start from the prior art disclosed in document (2). As a matter of fact, this citation does not even mention conditioning agents and addresses a totally different technical problem, i.e. that of rendering available a novel surfactant of general applicability that is superior to those of the prior art in its toxicity towards living cells and, thus, particularly suitable for environmental reason or for cosmetic applications on human skin (see document (2) page 3, last 7 lines, from page 4, line 18 to page 5, line 2, and the figures). The simple similarity between some shampoos exemplified in this citation and those of the patent in suit (which differ from the former ones only for the absence of the cationic conditioning agent) does not render this prior art more relevant than the already previously existing shampoos containing conditioning agents. Nor has the Appellant indicated any reason depriving of credibility the technical problem identified in the patent in suit or equating it to that addressed in document (2).
- 3.3.3 Hence, the skilled person could only have reasonably started from the shampoos containing conditioning agents already known in the prior art.

- 15 - T 0322/03

Accordingly, the Board finds (as already mentioned in the communication enclosed to the summons to the oral proceedings) that the conditioning shampoos disclosed in document (9) represent such reasonable starting point. Indeed, this citation addresses substantially the same problem as the patent in suit and states to have overcome the difficulties deriving from the antagonist nature of surfactants and cationic conditioning agents (see document (9) from page 1, line 18 to page 2, line 27).

3.3.4 The Board notes that the "optimal" level of conditioning achieved by the shampoos of the patent in suit is expressly stated to be superior to that already achieved by the prior art shampoos containing conditioning agents, in particular also by the shampoos based on conventional sulphate anionic surfactants (compare in the patent in suit the already-cited indication of the known difficulties in the prior art reported page 2, lines 27 to 32, with the subsequent indication of the achieved effects at page 2, lines 33 to 34, and at page 4, lines 11 to 13 and with the observed experimental evidence thereof mentioned in example 4). The achievement of such superior level of conditioning has not been disputed by the Appellant.

Since the hair shampoo compositions disclosed in document (9) are indeed also representative of this less satisfactory prior art (see in document (9) the exemplified compositions all based on sulfate surfactants and claim 1 that defines unspecified anionic surfactants in general as the main ingredient of the shampoos disclosed in this citation), the technical problem credibly solved by the claimed

- 16 - T 0322/03

subject-matter vis-à-vis the prior art is that of improving the level of hair conditioning.

- 3.3.5 Since the shampoos claimed differ from those of document (9) for the additional presence of the acid "a)", it is to be established if the skilled person would have added such surfactant to these shampoos of the prior art in the reasonable expectation to improve their hair conditioning level.
- 3.3.6 That such improvement could be obtained by such addition is, however, neither self-evident nor suggested in any of the available citations. In particular, of the citations referred to in the Appellant's reasoning on inventive step only document (2) mentions the surfactants "a)", which, as already indicated above (see point 3.3.2), is totally silent as to the possible presence of conditioning agents in the shampoo disclosed therein and, thus, cannot possibly allow any prediction on hair conditioning.

Thus, the Board concludes that the cited prior art does not render obvious the claimed solution to the problem posed.

3.3.7 The Board considers appropriate to indicate that even arbitrarily assuming, for the sake of an argument in favour to the Appellant, that the skilled person could have started from the prior art disclosed in document (2), still the claimed subject-matter would not be obvious.

The Appellant's reasoning fails in that it does not take into account the already mentioned fact that the

- 17 - T 0322/03

"optimal" level of conditioning achieved by the shampoos of the prior art based on conventional anionic surfactants has been found lower than that obtained by the presently claimed shampoos.

Hence, the technical problem solved by the claimed subject-matter vis-à-vis the shampoos of document (2) cannot not be simply seen, as suggested by the Appellant, that of providing them with the same level of hair conditioning already known to be achievable by the prior art shampoo compositions, since such level is lower than that undisputedly achieved in the patent in suit.

The technical problem credibly solved by the claimed subject-matter vis-à-vis the shampoos disclosed in document (2) must therefore be seen as that of providing shampoos with a level of hair conditioning superior to that previously obtained in the prior art shampoos containing conditioning agents.

Since document (10) does not even allege that the shampoos disclosed therein displayed conditioning effect superior to that of the prior art (but only that this effect is maximised when using cationic polymers with high charge density, see column 7, lines 17 to 20),

and since document (9), being representative of the very same prior art whose conditioning level is undisputedly lower than that aimed at in the patent in suit, cannot possibly provide an indication as to how to solve the problem posed, the Board concludes that these citations do not suggest any means evidently suitable for solving the problem posed and, thus,

- 18 - T 0322/03

cannot possibly render evident the claimed solution thereto.

3.3.8 In view of the above, Board concludes that the subject-matter of claim 1 as maintained is not rendered obvious by the available prior art and, thus, that this claim complies with the requirements of Article 56 EPC.

4. Claims 2 to 8 as maintained: Novelty and Inventive step (Article 100(a) in combination with Articles 52(1), 54 and 56 EPC)

Claims 2 to 8 refer to preferred embodiments of the shampoo composition of claim 1 on which they depend and, hence, the Board finds that their subject-matter is novel and based on an inventive step for the same reasons indicated above.

## Order

#### For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Rauh P.-P. Bracke