

Internal distribution code:

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

**Datasheet for the decision
of 14 March 2024**

Case Number: T 0563/22 - 3.3.07

Application Number: 15731061.6

Publication Number: 3313364

IPC: A61K8/81, A61Q5/04, A61Q5/06,
A61Q5/00

Language of the proceedings: EN

Title of invention:
HAIR TREATMENT PROCESS

Patent Proprietor:
Kao Germany GmbH

Opponents:

The Procter & Gamble Company

Headword:
HAIR TREATMENT PROCESS/Kao Germany GmbH

Relevant legal provisions:
EPC Art. 123(2)

Keyword:
Amendments allowable - Combination of ranges

Decisions cited:

G 0001/05, G 0002/10, T 0002/81, T 1511/07, T 1408/21,
T 1731/18, T 1137/21, T 1621/16



Beschwerdekammern

Boards of Appeal

Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 0563/22 - 3.3.07

D E C I S I O N
of Technical Board of Appeal 3.3.07
of 14 March 2024

Appellant:

(Patent Proprietor)

Kao Germany GmbH
Pfungstädter Str. 98-100
64297 Darmstadt (DE)

Representative:

Grit, M.
Kao Germany GmbH
Pfungstädter Str. 98-100
64297 Darmstadt (DE)

Respondent:

(Opponent 2)

The Procter & Gamble Company
One Procter & Gamble Plaza
Cincinnati, OHIO 45202 (US)

Representative:

Arch, Peter Jonathan Sanders
Mathys & Squire
The Shard
32 London Bridge Street
London SE1 9SG (GB)

Decision under appeal:

**Decision of the Opposition Division of the
European Patent Office posted on 3 January 2022
revoking European patent No. 3313364 pursuant to
Article 101(3) (b) EPC.**

Composition of the Board:

Chairwoman

J. Lécaillon

Members:

D. Boulois

S. Ruhwinkel

Summary of Facts and Submissions

- I. European patent No. 3 313 364 B1 was granted on the basis of a set of 14 claims.

Independent claim 1 as granted read as follows:

"1. A process for treating hair wherein an aqueous composition comprising one or more cationic quaternary ammonium polymers having a cationic charge density of 3.0 mEq/g or more and having a pH in the range of 3.0 to 6.5 is applied onto hair, optionally left on the hair for a period of 1 to 15 min, optionally rinsed off from hair and the hair temperature is increased to the range of 80 to 140°C."

- II. The patent was opposed under Article 100 (a), (b), (c) EPC on the grounds that its subject-matter lacked novelty and inventive step, was not sufficiently disclosed and extended beyond the content of the application as filed.
- III. The appeal lies from the decision of the opposition division to revoke the patent. The decision was based on the claims as granted as main request and on auxiliary requests 1-6 filed with letter of 24 September 2021.
- IV. According to the decision under appeal, claim 1 of the main request did not meet the requirements of Article 123(2) EPC in view of the combination of the features "having a pH in the range of 3.0 to 6.5" and "to the range of 80 to 140°C" with the process features of claim 1.

The same conclusion was reached for all auxiliary requests.

- V. The patent proprietor (hereinafter the appellant), filed an appeal against said decision. With the statement setting out the grounds of appeal dated 13 May 2022, the appellant filed auxiliary requests 1-6 corresponding to the requests filed during the opposition proceedings.
- VI. Opponent 02 (hereinafter the respondent) replied to the statement of grounds of appeal by its letter dated 29 September 2022.
- VII. A communication from the Board, dated 23 November 2023, was sent to the parties. In it the Board expressed its preliminary opinion that the main request met the requirements of Article 123(2) EPC.
- VIII. Oral proceedings took place on 14 March 2024.
- IX. The arguments of the appellant may be summarised as follows:

Main request - Amendments

The pH limit was specified in the dependent claim 13 of the application as filed and had to be read in combination with claim 1. The temperature range of 80°C to 140°C found a basis in the second paragraph of page 3 as the paragraph discloses several ranges and the value of 80°C is disclosed which could be combined with the upper limit of 140°C. The pH limitation was disclosed in the application as filed in claim 13 and on page 13 wherein the value of 6.5 was disclosed; the

lower and upper limits could be combined and there was a basis for the claimed range.

The combination of features could not be considered as a combination of two selections. Decision T 1621/16 was cited in support of the argumentation.

- X. The arguments of the respondent may be summarised as follows:

Main request - Amendments

Claim 1 was amended to specify that the aqueous composition has a pH in the range 3.0 to 6.5, and the range for the hair temperature increase was amended to 80°C to 140°C. The pH range of 3.0 to 6.5 was not explicitly disclosed in the application as filed, but had been constructed by selecting the lower limit of 3.0 and the upper limit of 6.5 from a list of ranges on page 13 of the application as filed. Similarly, the temperature range of 80°C to 140°C was not an originally disclosed range, but had been constructed by selecting lower and upper limits from a list of temperature ranges on page 3 of the application as filed.

Even if each of these ranges were derivable separately from the description of the application as filed, there was no direct and unambiguous disclosure in the application as filed of a pH range of 3.0 to 6.5 in combination with a temperature range of from 80 to 140°C. Accordingly, the "gold standard" was not satisfied. The new combination of ranges introduced subject matter which extended beyond the content of the application as filed.

Decisions T 1511/07, T 1408/21, T 1731/18 and T 1137/21 were cited in support of this argumentation on the main request.

XI. Requests

The appellant requested that the decision under appeal be set aside and the patent be maintained as granted, or alternatively according to the sets of claims filed as auxiliary requests 1-6 with letter of 13 May 2022. The appellant further requested that the case be remitted to the opposition division to take a decision on substantive matters based on the main request or one of the auxiliary requests.

The respondent requested that the appeal be dismissed. In the event that the Board concludes that any of the Patentee's requests meets the requirements of Article 123(2) EPC, the respondent requested that the case be remitted to the opposition division for a decision in respect of the remaining issues.

—

Reasons for the Decision

1. Main requests - Amendments

1.1 The subject-matter of claim 1 as granted differs from claim 1 as originally filed in that it now includes the following features:

- a) "and having a **pH in the range of 3.0 to 6.5**" for qualifying the pH of the aqueous composition comprising the cationic polymer;
- b) "the range of **80 to 140°C**" for the characterization of the hair temperature used in the claimed process.

1.2 The opposition division considered in its decision that the end-points of a range can be taken from end-point values that are disclosed in the original filing as a part of other ranges, and, for this reason, that the claimed ranges of "a pH in the range of 3.0 to 6.5" and of the temperature in "the range of 80 to 140°C" are derivable as such from the original application, but that it is the **combination** of these two construed ranges in the process of claim 1 that lacks a basis in the application as filed. The respondent agreed with the conclusion of the opposition division (OD).

1.3 Feature a): "a pH in the range of 3.0 to 6.5"

The pH feature originates from page 13, last paragraph of the original application which discloses: "the pH of the compositions according to the present invention is suitably between 3.0 and 8.0 and preferably in the range of 3.5 to 6.5, more preferably between 4.0 to 5.5 and most preferably 4.0 to 5". All ranges disclosed in this passage of the description are included in the preceding range "3.0 and 8.0", and are given in a convergent way of preference.

Moreover, dependent claim 13 as filed refers also to a "pH in the range of of 3.0 to 8.0" which is a direct reference to the value disclosed in the description.

Consequently, the now claimed pH feature originates from the combination of two range limits, namely from the lower limit of the broadest range "**3.0** and 8.0" and the upper limit of the first intermediate narrower range "3.5 to **6.5**" which was disclosed on page 13. Hence, said feature is derivable directly and unambiguously from the application as filed.

The Board concurs with the conclusion of the OD, namely it is generally allowable to combine thresholds or range limits from different levels of preference to form a new range. The person skilled in the art is directly and unambiguously provided with the information that any one of the upper and lower limits proposed could be combined in order to select a suitable range, irrespective of the fact that they were presented as "preferable" or "more preferable" values. Such range can be regarded as directly and unambiguously derivable for the skilled person.

This is all the more true since, in the present particular case, the pH range of "3.0 to 6.5" appears to be directly derivable by combination of the general broadest quantitative range of values, *i.e.* the range of "**3.0** and 8.0", together with an included preferred narrower range, *i.e.* from "3.5 to **6.5**". In the Board's view, the disclosure of the broadest quantitative range of values together with an included preferred narrower range also directly discloses the two possible part-ranges lying within the overall range on either side of the narrower range. Hence a simple combination of a disclosed narrower range and one of these part-ranges, *i.e.* lower or higher range limit of the broadest range, appears to be unequivocally derivable and supported by the original disclosure (cf. for instance decision T 2/81). The Board considers that the formation of such new range from the limits of the general and a more preferred narrower range is a different situation than it would have been the case through the formation of a random sub-range from selected upper and lower limits of sub-ranges, which could constitute a newly created range which cannot be discerned in the application as filed.

1.4 Feature b): the hair temperature "in the range of 80 to 140°C"

The conclusion reached for feature a) applies also to feature b), *i.e.* the claimed temperature range of "80 to 140°C" characterizing the hair heating step of the process of claim 1.

Claim 1 as originally filed comprised a broader temperature treatment range of "40 to **140°C**", while the lower limit of 80°C can be found on page 3, second paragraph of the original application, wherein several convergent ranges of temperature were disclosed, namely "a temperature in the range of 40 to **140°C**, preferably 60 to 140°C, more preferably 70 to 130°C, most preferably **80** to 120°C and in particular 90 to 110°C".

The claimed range results from the combination of the upper limit of the broadest range "40 to **140°C**" and the lower limit of the range "**80** to 120°C". As argued above under point 1.3 and for the same reasons, the Board considers that this range can be regarded as directly and unambiguously disclosed for the skilled person.

1.5 Combination of feature a) and b)

1.5.1 The crucial question is whether the application as filed directly and unambiguously discloses the combination of the first amendment with the second amendment, each of them being directly and unambiguously derivable from the original application.

1.5.2 The fundamental test for determining whether subject-matter meets the requirements of Article 123(2) EPC, namely the "gold standard" is the disclosure test (see G 1/05 of 28 June 2007, point 5.1 of the reasons, and G

2/10, point 4.3 of the reasons). This standard requires that the subject-matter of a claim of a patent application or a granted patent remains within the limits of what a skilled person would derive directly and unambiguously, using common general knowledge, and seen objectively and relative to the date of filing, from the whole of the earlier application as filed. The skilled person may not be presented with new technical information (see G 2/10, point 4.5 of the reasons).

The Board considers that a systematic approach to deciding whether the requirements of Article 123(2) EPC are met cannot be followed and this has to be decided on a case-by-case basis.

- 1.5.3 As stated above, the selection of explicitly disclosed upper and lower borderline values for defining a new range or sub-range of a particular feature is not contestable under Article 123(2) EPC when the ranges belong to the same list. The Board considers therefore that the present situation is analog to the situation wherein two originally and explicitly disclosed convergent ranges are selected and combined.

It still remains to be assessed whether the specific combination of such ranges is supported by the content of the application as filed. In the Board's view, the combination of two individual amended ranges emerging from two separate lists and pertaining to two distinct features may be considered to be derivable from the application as filed in particular when there is a clear pointer to such a combination. In this sense, the Board does not see any difference with the conclusions of decision T 1621/16 which was reached for the combination of convergent alternatives (see Headnotes and point 1.7 of T 1621/16).

A pointer can usually be constituted by a specific indication or teaching in the original application directing the skilled person to a specific disclosure. Such specific indication can originate in particular from the original claims and/or from specific embodiments disclosed, in particular the examples of the application as filed, when said application comprises examples. When the examples of the original application present an uniform disclosure with regard to a specific feature or association of features and when they all fall under the scope of the claims, said examples might in particular be a strong pointer for the allowability of the feature or combination of features. However, the simple presence of one discordant example would also be the indication of the inadequacy of the examples as possible pointer.

- 1.5.4 In the present case, the Board considers that the combination of the two features is derivable directly and unambiguously from the original application, since there are clear pointers in favour of their combination.

- 1.5.5 A first pointer is the presence of the temperature range and the pH range in the original claims, respectively original claim 1 and dependent claim 13, instead of being disclosed originally only in the description. This presence in the original claims means that both features are essential to the process involving the aqueous composition and that the original claims disclose the combination of both features together as an embodiment. The situation is in particular different from a case wherein such combined features were only defined and disclosed in the description and incorporated later in the claims,

creating possibly an artificial combination by selecting randomly these features among numerous other features from the description.

The incorporation of the pH range of dependent claim 13 in claim 1 follows the applicant's right to restrict the claims to those subject-matters which are conceptually clear and supported by the description in combination with other features, in particular when they are the subject-matter of dependent claims.

It is undisputed that the claimed process at the claimed temperature range of original claim 1 and for a solution having the pH range of dependent claim 13 is originally explicitly disclosed. The skilled person would furthermore consider any further limited temperature and pH ranges originally disclosed in the description as also applying to said process. This applies to the present amended ranges since they are considered to be derivable as such from the original application. This all the more since both parameters are not directly interrelated, but relate respectively to the claimed process steps and to the claimed composition characteristics. It results that the combination of the two ranges, each being derivable as such from the original application, is also derivable from the original application.

1.5.6 Another clear pointer can be found in the examples of the original application.

The Board notices that all examples present a disclosure of the temperature and pH included in the claimed range of the main request, which appears to be a strong pointer for the allowability of the combination.

The pH range in the examples is comprised between 3.8 and 4.5 in examples 1-10, which excludes the pH range values of "4 to 5.5" and "4 to 5".

The hair treatment temperature is only indicated in example 1, wherein it is 95°C and 100°C.

Consequently, all the examples fall under the scope of the amended claim without any discordance, and this is seen as a sufficient indication that the combination is not arbitrary but purposeful.

The Board does in particular not agree with the respondent that the claims should have been restricted to the most preferred disclosed range of temperature and pH, namely a pH range of "4 to 5" and a temperature range of "90 to 110°C". First, in view of the pH of the compositions disclosed in the examples, *i.e.* comprised between 3.8 and 4.5, there would have been a clear lack of pointer for such combination and it would have been questionable whether such combination would have been allowable under Article 123(2) EPC. Then, the Board considers that the patent proprietor has a right to restrict the claims to those subject-matters which are conceptually clear, supported by the description and with the necessary parameters and properties required by the claimed process and/or composition which are able to solve the problem addressed by the patent. This can be done in the broadest possible way that is permitted by the original disclosure of the application.

- 1.6 Several decisions were cited by the respondent with regard to the crucial point of the allowability of combination of ranges.

- 1.6.1 The Board shares the view expressed in T 1511/07 that the combination of an individual range from a first list with another range from a second list relating to a different feature cannot be considered as disclosed in the application as filed, unless there is a clear pointer for such combination. The situation described in T 1511/07 differs however from the present situation in that the features were originally disclosed only in the description and since there was no pointer for their combination. The Board notices in particular that in T 1511/07 some examples were discordant and could therefore not qualify as pointers.
- 1.6.2 In the decision T 1731/18 a first range was formed through the association of a lower and an upper range limit originating from sub-ranges only disclosed in the description. This newly formed range was associated with a particular non-preferred excipient which was selected from a further list given in the description, and for which there was no pointer, since this excipient was not present in most examples of the application as filed. Hence, the Board does not see any contradiction between the present decision and decision T 1731/18 as argued by the respondent.
- 1.6.3 The case T 1408/21 was not comparable to the present case, since there were no defined ranges, but only lists of upper and lower limits. Hence, a first and a second range were indeed created from the combination of a list of isolated upper and lower range limits, and both ranges were considered as selections, without any pointer for their combination.
- 1.6.4 In decision T 1137/21, claim 1 was the result of numerous multiple selections of very specific features

from different dependent claims as originally filed, while none of the other options of several further dependent claims had been inserted in claim 1. The Board then considered that, in view of the sheer number of possibilities present in the original claims, the subject-matter of claim 1 could not be unambiguously derivable from the dependent claims and that the examples could not serve as pointer. This case differs obviously from the present case in the number and complexity of the combined features, and the conclusions reached in T 1137/21 cannot apply.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division for further prosecution.

The Registrar:

The Chairwoman:



B. Atienza Vivancos

J. Lécaillon

Decision electronically authenticated