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Datasheet for the decision of 8 June 2021

Case Number: T 0356/16 - 3.3.07

Application Number: 03755465.6

Publication Number: 1505951

IPC: A61K6/02, A61K8/22, A61Q11/00

Language of the proceedings: ΕN

Title of invention:

Tooth whitening products

Patent Proprietor:

THE PROCTER & GAMBLE COMPANY

Opponent:

Colgate-Palmolive Company

Headword:

Tooth whitening products / PROCTER & GAMBLE

Relevant legal provisions:

EPC Art. 123(2)

Keyword:

Amendments - added subject-matter (yes)



Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 0356/16 - 3.3.07

DECISION
of Technical Board of Appeal 3.3.07
of 8 June 2021

Appellant: Colgate-Palmolive Company

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Representative: Jenkins, Peter David

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Respondent: THE PROCTER & GAMBLE COMPANY

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Decision under appeal: Interlocutory decision of the Opposition

Division of the European Patent Office posted on 11 December 2015 concerning maintenance of the European Patent No. 1505951 in amended form.

Composition of the Board:

Chairman A. Usuelli Members: E. Duval

Y. Podbielski

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Summary of Facts and Submissions

- I. European patent 1 505 951 ("the patent") was granted on the basis of 10 claims. Claim 1 of the patent pertained essentially to a tooth whitening product, comprising a strip of material and a thin layer of a tooth whitening composition disposed thereon, defined by the thickness of the thin layer and the presence of a peroxide active in a given concentration and density in the whitening composition.
- II. An opposition was filed against the patent on the grounds that its subject-matter lacked novelty and inventive step, and it was not sufficiently disclosed.
- III. The opposition division took the interlocutory decision that, on the basis of the main request filed during the oral proceedings, the patent met the requirements of the EPC.

Claim 1 of this main request read as follows:

- "A tooth whitening product, comprising:
 - a) a strip of material sized to cover the front surface of one or more teeth and soft tissue adjacent the front surface of the one or more teeth;
 - b) a thin layer of a tooth whitening composition disposed on said strip of material, wherein the thickness of said thin layer is between 0.008 mm and less than 0.3 mm and said whitening composition comprises a peroxide active having a concentration between greater than 7.5% and less than 20% by weight of said tooth whitening composition; and

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said tooth whitening composition has a peroxide density between greater than $0.5~\text{mg/cm}^2$ and less than $1.3~\text{mg/cm}^2$."

IV. The opposition division decided in particular that the main request fulfilled the requirements of Article 123(2) EPC for the following reasons.

Claims 8 and 9 as filed taught that a thickness range of up to 0.3 mm and greater than 0.008 mm was preferred. As regards the peroxide density, the application as filed stated that the upper limit was 1.3 mg/cm², and disclosed the lower limit of 0.5 mg/cm² as the most restricted value. Likewise, the application as filed taught that a peroxide concentration of more than 7.5 % w/w must be provided, and disclosed 20% as the most restricted upper limit. Additionally, the claimed ranges for peroxide density and peroxide concentration were derivable from the data points "7.5% in combination with 1.3. mg/cm²", and "20% in combination with 0.5 mg/cm²" provided in figure 9 and on page 9 of the application as filed.

- V. The opponent (appellant) lodged an appeal against the interlocutory decision of the opposition division.
- VI. With its reply to the grounds of appeal, the patent proprietor (respondent) defended its case on the basis of the main request upheld by the opposition division, and on the basis of auxiliary requests 1-3 filed with this reply.

Claim 1 of auxiliary request 1 differed from claim 1 of the main request in that the lower limit of the peroxide concentration was 8%.

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Claim 1 of auxiliary request 2 differed from claim 1 of the main request by the feature that the strip of material be substantially flat.

Claim 1 of auxiliary request 3 combined both amendments.

VII. The appellant's arguments regarding added subjectmatter can be summarised as follows:

> Claim 1 of the main request defined three numerical ranges in combination, namely a layer thickness between 0.008 mm and less than 0.3 mm, a peroxide concentration between greater than 7.5 % and less than 20%, and a peroxide density between greater than $0.5~\text{mg/cm}^2$ and less than 1.3 mg/cm^2 . The application as filed only disclosed open ranges, and did not provide support for the combination of the specific lower and upper thresholds for each range recited in claim 1, let alone for the specific combination of these ranges. The paragraph bridging pages 9 and 10 recited several upper and lower values for the peroxide concentration and density, without identifying any of these values as preferred. Figure 9 and the passages of the description referring to it did not disclose the claimed ranges or their combination either. These parts of the application as filed were silent about the thickness of the thin layer. The quadrants I and II of figure 9 did not support the claimed ranges for the peroxide density and concentration either.

Consequently, claim 1 of the main request contravened Article 123(2) EPC. For the same reasons, none of auxiliary requests 1-3 met the requirements of Article 123(2) EPC.

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VIII. The respondent's arguments regarding added subjectmatter can be summarised as follows:

Claim 1 of the main request was based on claim 1 as filed. As regards the thickness of the thin layer, the upper limit of 0.3 mm was presented in the application as filed as the first option on page 11, line 10, and as the sole upper limit in claim 8, and the lower limit of 0.008 mm found basis in claim 9. The upper limit in the peroxide concentration was the narrowest in the range of values on page 10, line 2 and hence the most preferred upper limit. The lower limit of the peroxide density was the most preferred lower limit on page 9, antepenultimate line. It could also be seen from figure 9, that this value defined a preferred lower cut-off value for the peroxide density.

It was apparent from the context of the application as filed that the thickness of the layer, the peroxide concentration and the peroxide density were features which were intended to be read together. The upper and lower limits of the ranges of each integer were also intended to be read together. Only the broadest or most preferred values have been used. Hence the claimed subject-matter did not result from selections from multiple lists and complied with Article 123(2) EPC.

- IX. The appellant requests that the decision under appeal be set aside and that the patent be revoked.
- X. The respondent requests that the appeal be dismissed and the patent be maintained on the basis of the claims held allowable by the opposition division (main request), or that the patent be maintained on the basis of one of auxiliary requests 1-3 filed with the reply to the grounds of appeal.

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Reasons for the Decision

- 1. Main request, Article 123(2) EPC
- Claim 1 of the main request relates to a tooth whitening product, comprising a strip of material and a thin layer of a peroxide-containing tooth whitening composition disposed thereon, characterised in particular by the following features:
 - the thickness of the thin layer is between 0.008 mm and less than 0.3 mm, $\,$
 - the peroxide concentration is between greater than 7.5% and less than 20% by weight of the tooth whitening composition, and
 - the peroxide density is between greater than 0.5 mg/ cm^2 and less than 1.3 mg/cm².
- Under Article 123(2) EPC, amendments can only be made within the limits of what a skilled person would derive directly and unambiguously, using common general knowledge, from the whole of the application as filed (following the "gold standard" set out in G 2/10). In the present case, the question is not only whether the application as filed discloses each of the claimed ranges for the layer thickness, peroxide concentration and peroxide density, but also whether the application as filed contains a pointer to their combination.
- 1.3 The claimed range for the layer thickness ("between 0.008 mm and less than 0.3 mm") is not shown as such in the application as filed. It derives from a combination

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of the upper limit shown in dependent claim 8 (less than about 0.3 mm) and the lower limit of the range shown in claim 9 (between about 0.008 mm and about 0.1 mm) of the application as filed. Although this combination of endpoints is not in itself contestable under Article 123(2) EPC, it must be seen as a (first) selection from the list of possible ranges deriving from combinations of claims 8 and 9, or from the lists of upper and lower limits on page 11 (first full paragraph). Contrary to the opposition division's finding (see paragraph 2.2 of the decision), the application as filed does not identify the thickness range 0.008-0.3 mm as being preferred.

- 1.4 The claimed range for the peroxide concentration combines the general lower limit of claim 1 as filed (greater than about 7.5 % by weight) with one of the upper limits shown in the paragraph bridging pages 9 and 10 (less than about 20%). This paragraph discloses peroxide concentrations "greater than about 7.5%, or greater than about 8%, or greater than about 10%, or greater than about 12%, or greater than about 16%, or greater than about 20 %, and/or less than about 40%, or less than about 35%, or less than about 30%, or less than about 20%". According to the respondent, the upper limit of less than 20% is the narrowest in the range of values shown in this paragraph, and hence the most preferred. The Board rather shares the appellant's view that no such preference can be inferred from this paragraph. This passage of the application as filed does not point to concentrations below 20% any more than it points to concentrations above 20%.
- 1.5 Likewise, the claimed range for the peroxide density combines the general upper limit of claim 1 as filed (less than about $1.3~{\rm mg/cm^2}$) with one of the lower

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limits shown in the same paragraph bridging pages 9 and 10. According to this paragraph, the peroxide density is "less than about 1.2 mg/cm², or less than about 1.1 mg/cm², or less than about 1 mg/cm², or less than about 0.75 mg/cm², or less than about 0.5 mg/cm², and/or greater than about 0.01 mg/cm² or greater than about 0.1 mg/cm², or greater than about 0.25 mg/cm², or greater than about 0.5 mg/cm². Here again, no preference for densities greater than 0.5 mg/cm² over e.g. densities below this value can be derived.

1.6 The decision under appeal additionally relies on figure 9 and page 9. In particular, the first full paragraph on page 9 mentions an embodiment characterised by a peroxide concentration of 20% and a peroxide density of 0.5 mg/cm², and the second paragraph on the same page points to peroxide densities (with respect to the tolerability lines) in the upper two quadrants I and II of figure 9.

However, as noted by the appellant, these passages and figure do not mention any layer thickness. Furthermore, the claimed concentration and density ranges do not cover the embodiment 20% / 0.5 mg/cm², since these values are excluded by the expressions "less than 20%" and "greater than 0.5 mg/cm²". These claimed ranges do not correspond to the upper two quadrants I and II of figure 9 either, since they cover values in quadrant TIT.

1.7 In conclusion, the subject-matter of claim 1 of the main request results from the combination of features selected from several lists. The application as filed does not contain any pointer to the claimed combination.

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Accordingly, the requirements of Article 123(2) EPC are not met.

2. Auxiliary requests 1-3, Article 123(2) EPC

Claim 1 of auxiliary request 2 is characterised by the same ranges for the layer thickness, peroxide concentration and peroxide density as claim 1 of the main request. As to claim 1 of each of auxiliary requests 1 and 3, the lower limit for the peroxide concentration is amended to 8%, which involves a further combination with the lower limit of the range of claim 2 in the application as filed. Thus, as for the main request, claim 1 of each of auxiliary requests 1-3 involves selections within multiple lists of alternative features. In the absence of any pointer to these particular combinations, the criteria of Article 123(2) EPC are not fulfilled.

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Order

For these reasons it is decided that:

The decision under appeal is set aside.

The patent is revoked.

The Registrar:

The Chairman:



S. Sanchez Chiquero

A. Usuelli

Decision electronically authenticated