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Datasheet for the decision of 15 November 2007

Case Number: T 0612/04 - 3.2.06

Application Number: 96116165.0

Publication Number: 0756836

IPC: A46B 7/06

Language of the proceedings: EN

Title of invention:
Toothbrush with flexibly linked zone between the head and a surrounding frame

Patentee:
SmithKline Beecham Consumer Healthcare GmbH

Opponent:
Colgate-Palmolive Company

Headword:
-

Relevant legal provisions:
EPC Art. 100(c), 123(2)
RPBA Art. 10b(1)

Keyword:
"Main, 1st and 2nd auxiliary requests - lack unambiguous disclosure"
"3rd and 4th auxiliary request - not admitted"

Decisions cited:
T 0157/90, T 0317/89, T 0284/94, T 0397/01

Catchword:
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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0612/04 - 3.2.06

D E C I S I O N
of the Technical Board of Appeal 3.2.06
of 15 November 2007

Appellant: (Opponent)
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Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted 8 March 2004 rejecting the opposition filed against European patent No. 0756836 pursuant to Article 102(2) EPC.

Composition of the Board:

Chairman: P. Alting Van Geusau
Members: M. Harrison
W. Sekretaruk

Summary of Facts and Submissions

I. The appellant (opponent) filed an appeal against the opposition division's decision of 28 March 2004 rejecting the opposition against European patent number 0 756 836 and requested that the patent be revoked.

II. In its reply to the appeal, the respondent (proprietor) requested that the appeal be dismissed.

III. Following the issue of a summons to oral proceedings, the Board informed the parties of its provisional opinion, it being noted *inter alia* under Article 100(c) EPC that, in as far as the features in the last three lines of granted claim 1 were based on Figures 1E and 1F, these features were seemingly only disclosed in combination with other features which had not however been defined in the claim.

IV. In its submission of 12 October 2007, the respondent filed a first auxiliary containing an amended claim 1, and in its further submission of 7 November 2007, a second auxiliary request containing further amendments to claim 1.

V. In the oral proceedings of 15 November 2007, the appellant maintained its request for revocation of the patent.

The respondent filed third and fourth auxiliary requests containing still further amendments to claim 1 and requested (main request) that the appeal be dismissed or alternatively that the decision under appeal be set aside and that the patent be maintained

on the basis of the set of claims of one of its first to fourth auxiliary requests.

VI. Claim 1 as granted (main request) reads as follows:

"A toothbrush having a handle (11, 21) and at one end thereof a bristle bearing portion which comprises a bristle bearing head (13, 23), the head (13, 23) and the handle (11, 21) being disposed along a longitudinal axis direction and having a width direction perpendicular to the longitudinal direction in which the bristles extend, the handle (11, 21) and bristle bearing portion (13, 23) being made of a plastics material, the head being wholly or partly surrounded by a frame (12, 22) which is an extended portion of the handle (11, 21), the head being flexibly and resiliently linked to the frame (12, 22), the head being capable of rocking motion relative to the handle (11, 21), the relative dimensions of the head (13, 23) and the frame (12, 22) being such that the head (13, 23) and frame (12, 22) are capable of relative rocking motion about the gap (16, 25), characterised by the gap being wholly or partly closed with a flexible and resilient elastomeric material and by the head being able to rock within the frame about a number of axes, including axes aligned both in the width direction and the longitudinal direction."

VII. Claim 1 of the first auxiliary request corresponds to that of the main request with the exception that the words "or partly" are deleted from the expression "the head being wholly or party surrounded by a frame (12, 22)…".

VIII. Claim 1 of the second auxiliary request is the same as that of the first auxiliary request, except that the characterising portion reads:

"characterised by the gap (16, 25) being open at its lower side but with its upper side closed by a thin diaphragm of an elastomeric material of a thickness such that it is flexible and resilient and by the head being able to rock within the frame about a number of axes, including axes aligned both in the width direction and the longitudinal direction."

IX. Claim 1 of the third auxiliary request is the same as that of the second auxiliary request, except that the characterising portion reads:

"characterised by the gap (16, 25) being open at its lower side but with its upper side closed by a thin diaphragm of an elastomeric material of a thickness such that it is flexible and resilient and the gap being of dimensions such that the head is able to rock within the frame about a number of axes, including axes aligned both in the width direction and the longitudinal direction."

X. Claim 1 of the fourth auxiliary request is the same as that of the third auxiliary request, except that the characterising portion reads:

"characterised by the gap (16, 25) being open at its lower side but with its upper side closed by a thin diaphragm of an elastomeric material of a thickness such that it is flexible and resilient and the gap being of dimensions such that the head is able to rock

within the frame about axes aligned both in the width direction and the longitudinal direction."

XI. The appellant's arguments may be summarised essentially as follows:

As concerns Article 100(c) EPC, the application as filed contained no unambiguous disclosure of the following combination of features in claim 1:

"the head being able to rock within the frame about a number of axes, including axes aligned both in the width direction and the longitudinal direction."

Instead, the only disclosure of rocking about such perpendicular axes was in the Figures 1E, 1F, 2E and 2F. These embodiments as depicted and as described always disclosed further features, namely (i) a diaphragm of a certain type arranged in a particular manner, (ii) rocking of the head with respect to an axis aligned specifically with the longitudinal axis of the frame rather than just any longitudinal axis, (iii) rocking about two specific axes rather than merely about a number of axes "including" axes aligned with these two axes, and (iv) a gap having dimensions allowing the depicted movement. Since these further features were not defined in claim 1, the combination of features defined in claim 1 was an unallowable generalisation of the original disclosure.

Claim 1 of the first auxiliary request did not address these objections. Claim 1 of the second auxiliary request lacked features (ii), (iii) and (iv). Claim 1 of the third and fourth auxiliary requests both lacked

feature (ii). These requests were thus not allowable at least under Article 123(2) EPC and were late-filed.

XII. The respondent's arguments may be summarised essentially as follows:

The subject matter of claim 1 of the main request did not contravene Article 100(c) EPC. The application as filed at page 1, penultimate paragraph disclosed, generally, a rocking and "floating" movement of the head in the frame. Page 3, second full paragraph and page 4, first full paragraph disclosed rocking of the head "about a number of axes" again in a general manner. These passages generally disclosed axes including the defined axes. For a skilled person faced with this disclosure, there was clearly a basis for a claim in which a diaphragm was not required, even if such a diaphragm was shown in the Figures of specific embodiments. Thus, a diaphragm did not have to be defined in the claim containing a general rocking movement and including rocking about specifically aligned axes. Such a viewpoint was supported in T 284/94 since a complete technical solution had already been defined. T 157/90 and T 397/89 were further decisions supporting this view, since the rocking motion in Figures 1 and 2 had general applicability to the whole of the application.

The objections raised against the three features (denoted (ii), (iii) and (iv) above), did not give rise to objections under Article 123(2) EPC. As regards feature (ii), the preamble of claim 1 defined a longitudinal axis direction. In the art of toothbrushes this was used as an indication of the general

longitudinal axis or extent of the head and handle. No precise mathematical axis had to be defined, especially because a toothbrush had a thickness which had to be taken into account and the handle was often oblique to the head and could of course even be curved. "Axes aligned… in…the longitudinal direction" as used in the claim simply gave the general direction in which the handle and head extended and this was all that was required to properly define the rocking movement. This longitudinal axis and direction were also clearly shown in e.g. Fig. 1A and 1B of the application. The features used in claim 1 were thus fully disclosed and supported by the application as filed and no necessity existed to define the axis in a different way in the claim, especially as the claim only stated that rocking occurred about axes "aligned" with the longitudinal direction rather than specifically about the longitudinal axis.

As regards feature (iii), the term "including" was correct, because a flexible elastomeric material obviously allowed rocking about other axes as well. Similarly, in regard to feature (iv), it was self evident that the gap was dimensioned to allow the movement.

Reasons for the Decision

1. *Main request*

The features in the characterising portion of claim 1 which define the rocking of the head state that "the head (is) able to rock within the frame about a number

of axes, including axes aligned both in the width direction and the longitudinal direction".

In the application as filed, there is no *expressis verbis* basis for such features and the respondent has not disputed this. The application defines on the other hand a general capability of the head to perform a "rocking motion" relative to the frame (e.g. page 1, last paragraph) or the ability to "float" relative to the handle (e.g. page 1, penultimate paragraph). These passages are entirely general and so the skilled reader cannot deduce any specific axes about which rocking is able to occur, in particular not any longitudinal or width direction axes. The only further written disclosure concerning the axes about which the head is able to rock or float is included on page 4 (see first complete paragraph) of the application, which states that "The linking of the head to the extended portion in the above-described ways allows rocking of the head relative to the handle about a number of axes. Preferably the head is at least able to rock in the plane that contains the longitudinal axis of the handle." This latter paragraph however firstly refers to "the above-described ways", which concerns situations relating to head/frame connections with a diaphragm or splines, neither of which is defined in the claim and therefore which cannot be regarded as a general disclosure applicable to the whole application. Importantly however, this passage makes it clear that it is only "preferable" that a rocking in the plane containing the longitudinal axis of the handle is possible. It cannot therefore be assumed that rocking about any particular axes is present in any arbitrary head/frame structure. The ability to rock about

particular axes will depend on various factors such as the dimensions of the gap and the formation of the material (e.g. its structure and dimensions at any particular location) which may be made so as to permit or prevent this. Rocking about specific axes will therefore only apply to certain head/frame structures.

The only disclosure that can be identified in the filed application as providing a basis for rocking about axes aligned in a longitudinal direction and a width direction (as defined in the claim) is given by the embodiments shown in the Figures (see in particular the rocking motions shown in Figures 1E, 1F, 2E and 2F). However, these embodiments disclose a specific combination and arrangement including further structural elements (see the description of these embodiments on page 5 and 6 of the description as filed). In particular, the embodiments all disclose that the gap defined in claim 1 is open on its lower side and closed on its upper side by a thin, flexible and resilient elastomeric "diaphragm" which allows the shown rocking movement of the head relative to the "frame" (see page 5, lines 26 to 29). Nothing in the description or Figures of these embodiments can be seen which would make a skilled person conclude that the specific rocking motions shown only in the Figures should somehow be applicable more generally to other toothbrush head/frame structures without diaphragms for example. Thus, without the inclusion of the features concerning at least the diaphragm in the claim, the Board concludes that the subject matter of claim 1 is an unallowable intermediate generalisation of the disclosure in the originally filed application.

Decision T 284/94 cited by the respondent cannot alter the Board's conclusion in this matter. The headnote of this decision states that an "amendment of a claim by the introduction of a technical feature taken in isolation from the description of a specific embodiment is not allowable under Article 123(2) EPC if it is not clear beyond any doubt for a skilled reader from the application documents as filed that the subject-matter of the claim thus amended provides a complete solution to a technical problem unambiguously recognisable from the application." In the present case, the skilled reader is presented with absolutely no information in the filed application as to the particular importance of the rocking about the specific axes defined in claim 1 in terms of these specific axes representing a complete technical solution.

T 157/90 and T 397/89 also do not alter the above conclusion, since these decisions merely confirm that generalisation of a disclosed feature, unless such is evident to a skilled person in the relevant context, is not allowable. In the present case, the Board concludes that there is no disclosure in the filed application which would make it evident for the skilled person that the generalisation of the features of the head/frame structure shown and described should provide more general applicability in some way.

Claim 1 is therefore not allowable (Article 100(c) EPC).

2. *First auxiliary request*

The amendment made with this request does not alter any of the conclusions reached with respect to the main request and the subject matter of claim 1 is therefore not allowable for the same reasons as apply to the subject matter of claim 1 of the main request. Since an amendment of a granted claim is involved, the subject matter of the claim fails to meet the requirements of Article 123(2) EPC.

3. *Second auxiliary request*

In this request, as in the main request, the axes about which rocking should occur are defined as axes including axes aligned…in…the longitudinal direction." However, the only embodiments showing a rocking movement about specific axes also disclose specifically (see Figures 1E, 1F, 2E and 2F) that the rocking about a longitudinal axis and about a width direction is rocking of the head only about an axis aligned with the frame of the toothbrush, rather than merely any undefined axis of the toothbrush on the handle for example. Indeed as explained by the respondent, when proceeding along the general axial extension of the toothbrush from the tip of the handle to the outer end of the frame, the axis running through the handle of the toothbrush, even if it were unidirectional, would be aligned differently to that through the frame. Due to the curvature of such handles, which as explained by the respondent occurs commonly in toothbrushes, the axis through the handle could even adopt a very slanted or even a curved orientation which would be extremely different to that of the frame supporting the head.

Claim 1 however defines, in terms of the longitudinal direction, that rocking occurs about axes aligned with this direction but fails to define whether this direction concerns an axis of the handle or the frame. Merely because rocking about an axis aligned with the longitudinal direction of the frame is disclosed in Figures 1E and 2E, in no way implies that a rocking motion is possible about some other specific axis aligned with another axis of the handle. Indeed, rocking about any particular axis depends on the shape and structure of the gap and the particular dimensions at any location thereon of the diaphragm. The embodiments of Figures 1 and 2 disclose a specific structure, allowing, in as far as can be ascertained from the disclosure, rocking about axes aligned with the longitudinal direction of the frame.

The Board is not convinced by the respondent's argument that a toothbrush is generally understood in the art as having a single longitudinal axis or direction which would thereby obviate any need to define the longitudinal axis or direction of the frame of the toothbrush. The Board concludes on the contrary that whilst it is evident to a skilled person that the toothbrush has a general longitudinal extent, and whilst this may be generally understood to lie in the direction following line A-A shown in e.g. Fig. 1 of the filed application, such a line cannot be used to define an axis aligned with the longitudinal direction about which rocking occurs, since the line A-A is not representative of an axis having a particular direction but merely shows a line running along the toothbrush when seen in plan view, which is representative only of a vertical plane through line A-A. A longitudinal

direction and axes aligned with same can only be ascertained when considering several views. In the present case, the other views depicted in Fig. 1C, 1E and 1F for example clearly show that the line A-A in Fig. 1A changes direction at the transition from the handle to the frame. Thus, rocking about axes aligned with the longitudinal direction as seen by the axis along the frame is entirely different to that of the handle, also in the embodiments shown. When curved handles and the like are used, which are also covered by the claim, even more axes are possible about which rocking should be able to occur according to the claim. However, in as far as rocking about specific axes is concerned, the application provides only a disclosure of a head able to rock about axes aligned with the longitudinal and width direction of the frame. Since the longitudinal axis of the frame is not included in claim 1 of the second auxiliary request, the subject matter thereof is an unallowable intermediate generalisation of the disclosure in the originally filed application contrary to the requirement of Article 123(2) EPC.

4. *Third and fourth auxiliary requests*

These requests are late-filed, since they were filed for the first time during the oral proceedings of 15 November 2007. Also, neither of the requests overcomes the objection existing under Article 123(2) EPC applicable to claim 1 of the second auxiliary request mentioned above. The Board therefore exercises its discretion not to admit either request into proceedings (see e.g. Article 10b(1) of the Rules of Procedure of the Boards of Appeal and e.g. T 397/01).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

M. Patin P. Alting van Geusau