DECISION
of 26 January 2006

Case Number: T 0886/03 - 3.2.07
Application Number: 96906553.1
Publication Number: 0820368
IPC: B26B 21/22
Language of the proceedings: EN

Title of invention: Elastically suspended blade shaving system

Patentee: Warner-Lambert Company LLC

Opponent: The Gillette Company

Headword: -

Relevant legal provisions:
EPC Art. 54, 56, 83, 84, 123(2)

Keyword:
"Late filed evidence - not admitted"
"Auxiliary request filed during oral proceeding - admitted"
"Clarity objection - only admitted against claim amendments"
"Added subject-matter - yes (main request), no (auxiliary request"
"Novelty - yes"
"Inventive step - yes"

Decisions cited:
T 0367/96

Catchword: -
Case Number: T 0886/03 - 3.2.07

DECISION of the Technical Board of Appeal 3.2.07 of 26 January 2006

Appellant I: Warner-Lambert Company LLC (Proprietor of the patent) 201 Tabor Road Morris Plains NJ 07950 (US)

Representative: Powell, Timothy John Eric Potter Clarkson LLP Park View House 58 The Ropewalk Nottingham NG1 5DD (GB)

Appellant II: The Gillette Company (Opponent) Prudential Tower Building Boston, Massachusetts 02199-8004 (US)

Representative: Görg, Klaus Hoffmann Eitle Patent- und Rechtsanwälte Arabellastrasse 4 D-81925 München (DE)


Composition of the Board:
Chairman: K. Poalas
Members: P. O'Reilly
E. Lachacinski
Summary of Facts and Submissions

I. Opposition was filed against European Patent No. 0 820 368 as a whole, based on Article 100(a) EPC (lack of novelty and lack of inventive step), Article 100(b) EPC (insufficiency) and Article 100(c) EPC (added subject-matter).

The Opposition Division decided to maintain the patent in amended form.

II. Appellant I (proprietor) and appellant II (opponent) each filed an appeal against the decision.

III. Appellant I requested that the decision under appeal be set aside and the patent be maintained unamended (main request). Alternatively, the patent should be maintained in amended form on the basis of the first auxiliary request filed during oral proceedings on 26 January 2006.

Appellant II requested that the decision under appeal be set aside and the patent be revoked.

IV. Oral proceedings were held before the Board on 26 January 2006.

V. The independent claim of the patent as granted (main request) reads as follows:

"1. A razor head comprising:

a first support (20);
at least one resilient second support (80);"
a plurality of skin-engaging elements (40, 50, 60, 70) movably arranged in spaced relation and supported by said at least one resilient second support (80), wherein the space between said skin-engaging elements (40, 50, 60, 70) changes when said skin-engaging elements move in response to forces encountered during shaving, characterised in that the resilient second support (80) resiliently interconnects the plurality of skin-engaging elements (40, 50, 60, 70) such that the relative orientation between the skin-engaging elements is substantially invariant in response to forces encountered during shaving.

The independent claim of the first auxiliary request reads as follows (amendments when compared to claim 1 of the main request are depicted in bold):

"1. A razor head comprising:

   a first support (20);
   at least one resilient second support (80);
   a plurality of skin-engaging elements (40, 50, 60, 70) normally disposed in substantially parallel relation and movably arranged in spaced relation and supported by said at least one resilient second support (80), wherein the space between said skin-engaging elements (40, 50, 60, 70) changes when said skin-engaging elements move in response to forces encountered during shaving, characterised in that the resilient second support (80) resiliently interconnects the plurality of skin-engaging elements (40, 50, 60, 70) such that the relative orientation between the skin-engaging elements is substantially invariant in response to forces encountered during shaving and in that said skin-
engaging elements (40, 50, 60, 70) are disposed in substantially parallel relation when said skin-engaging elements move in response to forces encountered during shaving."

VI. The documents cited in the present decision are the following:

D1: US-A-4 069 580
HE 15: Computer simulation carried out using the computer programme Abaqus and filed with letter of 11 May 2004
HE 15-1: Computer simulation carried out using the computer programme Abaqus and filed with letter of 27 December 2005.

VII. The arguments of appellant I may be summarised as follows:

(i) It is accepted that HE 15 was filed in time and no objection is raised against its admittance into the proceedings. HE 15-1 however was filed only one month before the oral proceedings. There was not therefore sufficient time to verify the results shown in this document. Document HE 15-1 should not therefore be admitted into the proceedings.

(ii) Claim 1 of the main request fulfils the requirements of Article 123(2) EPC. Figure 4 of the application as filed shows the movement of the blades of the razor and shows that their relative orientation does not change in response to forces
encountered during shaving. On page 7, lines 29 - 30 of the application as filed reference is made to unparallel blade movement. This means that the movement does not have to be parallel, i.e. the blades may have a non-parallel orientation.

Page 8, lines 3 - 7 and 19 - 23 of the application as filed shows that the blades may be disposed non-parallel and would move in a non-parallel manner, i.e. with invariant relative orientation. Also, the paragraph bridging pages 9 and 10, which refers to skin-engaging elements, supports the view that the non-parallel movement applies to skin-engaging elements in general and not just to the blades.

(iii) The new first auxiliary request should be admitted into the proceedings. The request is filed during the oral proceedings since it is in response to the discussion during the oral proceedings.

(iv) Claim 1 of the first auxiliary request fulfils the requirements of Article 123(2) EPC since it is a combination of claims 20, 22 and 23 of the application as filed.

(v) Claim 1 of the first auxiliary request fulfils the requirements of Article 84 EPC. The skilled person would have no problem in understanding how the concept of parallel could be applied to a cap or guard, as well as to blades.

(vi) The patent according to the first auxiliary request is sufficiently disclosed. Appellant II relies on HE 15 to support this ground. The forces
used in the simulation come from the opposite direction to that which would occur during shaving. The forces would require the razor to be moved in a direction in which no shaving, i.e. cutting of the hair, would occur. This movement cannot be considered as shaving. Also, the manner in which the three dimensional simulation was reduced to two dimensions is not shown. For this reason it not possible to consider whether the indicated forces were applied as point forces or spread out along the blade.

(vii) The subject-matter of claim 1 of the first auxiliary request is novel over D14. D14 does not disclose a resilient interconnection between the skin-engaging elements. From column 4, lines 23 - 26 of D14 it is clear that blades move independently so that the interconnection between them is not resilient. The base forms part of the interconnection and that is not resilient, so that the interconnection is not resilient.

(viii) The subject-matter of claim 1 of the first auxiliary request involves an inventive step. Starting from D1, according to appellant II and the Opposition Division claim 1 is only distinguished by the feature that the space between the skin-engaging elements changes when moving in response to shaving forces. However, this document is not a suitable starting point since it is directed to a razor which is intended to have a constant spacing between the blades. In order to combine the teaching of this document with that of D14 it would be necessary to remove
the web 67. Web 67 however is an essential feature of the razor disclosed in D1 since this feature ensures the constant geometry desired in D1. The skilled person would not consider D14 since this discloses a razor with variable geometry.

VIII. The arguments of appellant II may be summarised as follows:

(i) HE 15-1 was filed one month before the oral proceedings and hence within the time limit set by the Board for making submissions. The document is a reaction to the objections raised by appellant I against the forces used in the computer simulation HE 15. If the oral proceedings have to be adjourned in order to give appellant I more time then appellant II is willing to bear the costs.

(ii) Claim 1 of the main request does not fulfil the requirements of Article 123(2) EPC. There is no disclosure in the application as filed that the resilient second support is resilient "such that" the relative orientation of the skin-engaging elements remains invariant. The passages cited by appellant I on page 8, lines 3 - 7 and 19 - 23 of the application as filed refer only to blades and not to skin-engaging elements in general. The paragraph bridging pages 9 and 10 does not support the idea that the disclosure concerning blades also applies to skin-engaging elements in general, i.e. also to the cap and guard.

(iii) The new first auxiliary request should not be admitted into the proceedings. Appellant I has had
ample time earlier in the proceedings to file auxiliary requests, so that filing a further request during the oral proceedings is not warranted.

(iv) Claim 1 of the first auxiliary request does not fulfil the requirements of Article 123(2) EPC. The claim is a combination of independent claim 20 and dependent claims 22 and 23 of the application as filed. Each of dependent claims 22, 23 and 29 is only directly dependent on independent claim 20. There are no interdependencies between these dependent claims. These claims cannot therefore be combined to provide support for the amendment.

(v) Claim 1 of the first auxiliary request does not fulfil the requirements of Article 84 EPC. Since the skin-engaging elements can include the cap or guard a reference to these elements being parallel is not clear since they have no shape which defines a plane.

(vi) The patent according to the first auxiliary request does not fulfil the requirements of Article 83 EPC. The last feature of claim 1 is a functional feature and the skilled person must know how to carry out the function. HE 15 shows that the embodiment of figure 3 does not work when modelled on a computer using typical input values. Appellant I has attacked the value of HE 15. However, appellant I has had plenty of time to do this and should have done it earlier in the proceedings and not have waited until the oral proceedings before the Board. It is true that the
simulation does not correspond completely to the embodiment of figure 3 since the cap is fixed. However, it is within the scope of claim 1 that the cap is fixed. The forces used in the simulation are realistic because they come from the experience of appellant II. It is correct that HE 15 contains no information regarding the reduction from a three-dimensional model to a two-dimensional printout. However, as indicated above appellant I should have reacted earlier in this respect.

(vii) The subject-matter of claim 1 of the first auxiliary request lacks novelty in view of D14. D14 in particular discloses a resilient interconnection between the skin-engaging elements. From column 4, lines 23 - 26 of D14 it is clear that blades move independently against springs so that the interconnection between them is resilient. The base, which is not resilient, forms part of the interconnection. However, this does not alter the fact that the interconnection is resilient. A resilient interconnection can contain non-resilient elements as in the present case.

(viii) The subject-matter of claim 1 of the first auxiliary request lacks an inventive step. Starting from D1, claim 1 is only distinguished by the feature that the space between the skin-engaging elements changes when moving in response to shaving forces. The feature solves the problem of moving the blades to less aggressive positions during shaving. This feature is disclosed in D14.
In view of D14 the skilled person would have modified D1 in this manner and arrived at subject-matter of claim 1.

Reasons for the Decision

1. Late filed evidence

1.1 With letter of 11 May 2004 appellant II filed a computer simulation (HE 15) of the movement of the blades of a razor according to an embodiment of the patent. The evidence is intended to support the ground of insufficiency.

With letter of 27 December 2005, i.e. one month before the oral proceedings, appellant II filed a further computer simulation (HE 15-1) in which the conditions had been changed.

Appellant I accepts the filing of the HE 15 but objects to the filing of HE 15-1, in particular because of the lack of time before the oral proceedings to verify this evidence.

1.2 The Board agrees with appellant I. The computer simulation requires the input of data which, after treatment by the computer programme, produces an output. The required programme is not one which will normally be installed on a computer but one which is specially purchased. The Board considers that it is unreasonable to expect appellant I to have been able to recreate the computer simulation so as to check it in the one month available before the oral proceedings. Such a check is
clearly necessary since the report (HE 15) concerning the first computer simulation contained false statements (see below) which indicate that the results of the computer simulations cannot be accepted unquestioned.

Appellant II suggested that the oral proceedings be adjourned to allow appellant I time to study HE 15-1. Appellant II further offered to bear the costs of appellant I in this respect. It is however for the Board to decide whether a document is to be admitted into the proceedings and also whether an apportionment of costs is appropriate according to Article 11a of the Rules of Procedure of the Boards of Appeal. The admissibility of a document cannot be influenced by a pecuniary offer of the party submitting the document.

The Board therefore decided that HE 15 is admitted into the proceedings, but that HE 15-1 is not admitted into the proceedings as late filed.

Main request

2. Article 123(2) EPC

2.1 The preamble of claim 1 of the patent in suit corresponds to independent claim 20 of the application as filed. Dependent claims 22 and 23 of the application as filed respectively indicate for the skin-engaging elements a substantially parallel normal position, i.e. unbiased (cf. page 6, lines 2 - 4 of the application as filed), and a substantially parallel disposition when moved in response to forces encountered during shaving. These claims correspond to the illustrated embodiments
in figures 1 to 8 of the application as filed. The description of the application as filed on page 7, lines 7 to 12 explains how the resilient support functions to keep the blades horizontal, i.e. parallel. These claims, together with the cited part of the description, may provide support for at least a substantially invariant parallel movement of the skin-engaging elements in response to forces encountered during shaving.

2.2 With respect to the more general disclosure for the skin-engaging elements to have a substantially invariant relative orientation, reference has been made by appellant I to page 8, lines 3 - 7 and 19 - 23 of the application as filed. In these passages however it is merely stated that the blades may be disposed in a non-parallel manner and that they would not move as in figures 1 - 4. In this regard it is not disclosed what would be the actual movement.

Reference has also been made to the paragraph bridging pages 9 and 10 of the application as filed. This paragraph refers to coordination between the movement of the blades and cap. However, the nature of the coordination is not specified.

Reference has further been made to dependent claim 29 of the application as filed. This claim specifies that the blades are normally, i.e. when unbiased, disposed in non-parallel relation. However, there is no indication that this non-parallel relation remains relatively invariant during movement.
On page 7, lines 26 - 32 of the application as filed it is explained that as an alternative to parallel blade movement there may be unparallel blade movement which may increase or decrease the aggressiveness of shaving. Aggressiveness generally means the angle of attack of the blade on the skin. Appellant I argued that this passage is consistent with the relative orientation of the blades remaining invariant. Appellant I accepted however that this passage is also consistent with the relative orientation of the blades changing during movement. Indeed, in the opinion of the Board the fact that this movement increases or decreases the aggressiveness of the shaving geometry would imply for the skilled person that an invariant relative orientation is not maintained during movement since only then can this change in aggressiveness occur.

On page 8, lines 7 - 10 of the application as filed it is explained that the vertical position of a single blade may be moved more on one side than the other. Such a movement by just one blade would not maintain the relative orientation contrary to the invariance of the relative orientation of the skin-engaging elements according to claim 1.

There is therefore no support in the application as filed for the general form of claim 1 whereby the relative orientation of the skin-engaging elements is specified to remain invariant during movement against shaving forces.

2.3 The Board concludes therefore that the patent as granted does not comply with Article 123(2) EPC and
therefore the ground of opposition under Article 100(c) EPC succeeds against the main request.

First auxiliary request

3. Admissibility of the request

3.1 In the course of the discussion concerning compliance with Article 123(2) EPC of claim 1 of a request which had been submitted with the appeal grounds, appellant I modified the request so that it took on the form of the present first auxiliary request. In particular, the definition of the substantially parallel relationship of the skin-engaging elements was modified to more strictly conform to the wording of claim 3 as granted.

Appellant II has objected to the lateness of the request and requested that it should not be admitted into the proceedings. Appellant II admitted that the amendment did not affect the arguments regarding other objections to the amendment.

3.2 The amendment arose from the discussion during the oral proceedings. Moreover, the amendment has no effect on the arguments concerning other aspects of the allowability of the request so that appellant II would not be put at an unacceptable disadvantage. In view of this the Board admitted the request into the proceedings.

4. Article 123(2) EPC

4.1 Claim 1 of this request is a combination of claims 1, 3 and 4 as granted, whereby claims 3 and 4 as granted
respectively correspond to claims 22 and 23 of the application as filed. Claim 1 is thus narrowed to a movement which starts from a substantially parallel disposition of the skin-engaging elements and maintains this substantially parallel orientation invariant during the movement in response to shaving forces. As indicated above in the discussion of claim 1 of the main request for compliance with Article 123(2) EPC, the disclosure of the application as filed is in fact limited to just this arrangement being claimed in the present request. Claims 22 and 23 of the application as filed were not interdependent. However, from the description on page 7, lines 7 to 12 of the application as filed, it is clear that the parallel starting disposition is maintained during movement in response to shaving forces due to the resilient second support.

Appellant II referred in his arguments to claim 29 of the application as filed. However, that claim referred to a non-parallel starting disposition of the skin-engaging elements. This is the opposite of a parallel starting disposition and has no effect on the disclosure of claims 22 and 23 of the application as filed.

The Board concludes therefore that claim 1 of this request as amended complies with Article 123(2) EPC.

5. Article 84 EPC

5.1 Appellant II raised this ground with respect to claim 1 of this request. In accordance with the jurisprudence of the Boards of Appeal, cf. T 367/96, this ground may only raised against amendments which do not derive from
claims contained in the patent as granted. The Board made reference to this decision in their provisional opinion annexed to the summons to oral proceedings.

In the present case claim 1 is derived from a combination of claims 1, 3 and 4 as granted. However, claims 3 and 4 were only directly dependent upon claim 1, so that a lack of clarity resulting from their combination may be examined, as well as any changes in the wording used in claim 1 as amended as compared with the wording used in these claims 1, 3 and 4 as granted. In fact no such change of wording has occurred so that the examination is limited to any lack of clarity resulting from the combination of claims 3 and 4. The Board, however, cannot identify any lack of clarity arising from this combination. The argument of appellant II that a substantially parallel relation of skin-engaging elements was not clear in the absence of an indication of the shape of these elements cannot be accepted. The relevant parts of claim 1 which refer to this substantially parallel relationship were separately contained in dependent claims 3 and 4 as granted and are thus not open to attack under Article 84 EPC.

5.2 The Board concludes therefore that no lack of clarity arises in the amendments to claim 1 which do not derive from a claim present in the patent as granted.

6. Article 83 EPC

6.1 For this ground appellant II relied in part on the computer simulation HE 15. This simulation is stated to be a simulation of the embodiment of figure 3 of the
patent in suit during shaving conditions. However, it is immediately apparent that the cap, shown in the printout presented in the document, does not move. On the other hand in the description of the embodiment of figure 3 it is clearly indicated that the cap is movably supported (cf. column 3, lines 8 to 13 of the patent in suit). The statement in the report that it concerns a computer simulation of the embodiment of figure 3 is therefore incorrect, as was accepted by appellant II during the oral proceedings before the Board. Already in view of this incorrect statement the value of this piece of evidence is put into considerable doubt.

Appellant I has pointed out that the computer printout is in two dimensions whereas the necessary modelling must have been made in three dimensions. Furthermore, there is no indication of how the three dimensions were reduced to two. As an example, appellant I pointed out that there is no indication whether the forces were modelled as point forces, which would be unrealistic for shaving, or spread out along the blades, which would be more realistic for shaving. Appellant I further pointed out that the forces come from a direction which would never occur in shaving. In essence, the modelled force could only occur if the razor were pushed in the wrong direction over the face. In such a movement, however, the blade would perform no cutting function and hence no shaving function. The argument of appellant II that the forces are derived from their experience is without value in the absence of supporting evidence. Also, the argument of appellant II that appellant I should have presented his arguments earlier regarding the reduction from three to
two dimensions cannot be followed. It is up to the party supplying evidence to ensure that the evidence is complete. The Board agrees with appellant I regarding these further deficiencies in HE 15.

6.2 It may be summarised therefore that the computer simulation HE 15 includes incorrect statements, incomplete information regarding the simulation and inappropriate input parameters. The Board concludes that HE 15 has no value as evidence and hence the content of the document cannot be taken into account when considering the ground of insufficiency.

Other than the computer simulation reported in HE 15, appellant II produced no arguments with regards to insufficiency.

6.3 Therefore, the subject-matter of the patent is sufficiently disclosed in the sense of Article 83 EPC.

7. Novelty

7.1 Appellant II argued lack of novelty based on D14. The critical point which was discussed by the appellants was whether this document discloses the feature whereby the resilient second support resiliently interconnects the skin-engaging elements such that they remain parallel during movement due to shaving forces.

The appellants were in agreement upon the disclosure of D14 in this respect. D14 discloses a first support and two blades supported on this support. Each blade is independently supported by a spring and hence is resiliently supported on this first support. This means
that there is an interconnection between the blades, which is effected via the first support.

7.2 In the view of appellant II this interconnection must be seen as resilient since there are resilient elements in the interconnection. Appellant II argued that the further presence of a non-resilient element - the first support - as part of the interconnection was irrelevant as the whole interconnection did not have to be resilient.

7.3 In this respect appellant I argued that a resilient interconnection implied that the skin-engaging elements were not independent, so that the passage in column 4, lines 23 - 26 of D14 indicates that the interconnection was not resilient.

7.4 Since the parties have agreed upon the existence of a connection, the crucial question to be answered is: what is the nature of a **resilient** interconnection in the sense of the patent?

If two bodies are joined by a spring, without any other restraint, then such an interconnection is undoubtedly resilient. One of the effects of such a connection is that if one of the bodies moves a force will be transmitted to the other body which, if not otherwise restrained, will also move. If, on the other hand, part of such a spring connection is non-resilient, i.e. rigid, and this part is not connected to anything else to restrain its movement then the resilient connection and its effects would remain as before.
If however in the latter case the rigid part were to be fixed to some further body such as to restrain its movement, then the effect of a resilient interconnection whereby movement of one body results in a force, and possible movement, of the other body, would be lost. The Board considers that such an interconnection could no longer be termed a resilient interconnection between the bodies in the sense of the patent. This situation, however, is exactly the situation in D14, wherein part of the interconnection is rigid and attached to the remainder of the razor head so that movement of one of the blades relative to the razor head does not result in a force on, and consequent movement of, the other blade, i.e. they move independently.

The Board would further note that the interpretation reached above is consistent with the description of the patent in column 1, lines 36 to 40, column 2, lines 7 - 14 and column 4, lines 6 - 9, which indicate that the position of one skin-engaging element will be changed as a result of movement of a single other skin-engaging element.

7.5 Therefore, the subject-matter of claim 1 of this request is novel in the sense of Article 54 EPC.

8. Inventive step

8.1 Appellant II argued lack of inventive step starting from D1 and combining its teaching with that of D14. The difference to claim 1 is considered to be the feature that the space between the blades changes when the blades move in response to forces encountered
during shaving. Appellant II argued that the problem to be solved is to modify D1 so that the blades move to a less aggressive position during shaving. The solution was considered to be found in D14.

The Board would first note that the argumentation of appellant II requires that the skilled person modifies the blade assembly of D1 by removing a feature - web 67 - which is apparently an essential feature for the blade assembly to achieve the object of the invention of D1, cf. column 2, lines 6 to 11. Also, it is not clear that changing the spacing would solve a problem reducing the aggressiveness. Furthermore, D14 reduces the aggressiveness by reducing the exposures of the blades. There is no disclosure in D14 of using a change in spacing between skin-engaging elements to solve a problem of aggressiveness. The Board therefore cannot agree with the inventive step argumentation of appellant II.

8.2 Therefore, the subject-matter of claim 1 of this request involves an inventive step in the sense of Article 56 EPC.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent with the following documents:

   Claims: 1 - 24 filed during the oral proceedings on 26 January 2006;
   Description: columns 1 - 6 filed during the oral proceedings on 26 January 2006, and column 7 as granted;
   Drawings: figures 1 - 8, 9A, 9B as granted.

The Registrar:       The Chairman:

G. Nachtigall        K. Poalas