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**Datasheet for the decision
of 6 November 2008**

Case Number: T 0963/07 - 3.2.07

Application Number: 97908006.6

Publication Number: 0900134

IPC: B26B 21/22

Language of the proceedings: EN

Title of invention:
Razor blade assembly

Patentee:
The Gillette Company

Opponent:
Eveready Battery Company, Inc.

Headword:

-

Relevant legal provisions:
EPC Art. 54, 56, 83, 100(a)(b)(c), 107, 123(2)
EPC R. 99(2)

Relevant legal provisions (EPC 1973):
EPC R. 64(b)

Keyword:
"Scope of appeal - determined only by the appeal of the proprietor (no)"
"Allowance of the amendments - Main request (no)"
"Inventive step - Auxiliary request 1 (no)"

Decisions cited:
G 0009/91, G 0009/92

Catchword:
see point 1



Case Number: T 0963/07 - 3.2.07

DECISION
of the Technical Board of Appeal 3.2.07
of 6 November 2008

Appellant: The Gillette Company
(Patent Proprietor) Prudential Tower Building
Boston, Massachusetts 02199 (US)

Representative: HOFFMANN EITLE
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Respondent: Eveready Battery Company, Inc.
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 11 May 2007
revoking European patent No. 0900134 pursuant
to Article 102(1) EPC.

Composition of the Board:

Chairman: H. Meinders
Members: K. Poalas
I. Beckedorf

Summary of Facts and Submissions

- I. The appellant (patent proprietor) lodged an appeal against the decision of the Opposition Division revoking the European patent No. 0 900 134.
- II. Opposition had been filed by the opponent against the patent as a whole based on Article 100(a) EPC, for lack of novelty (Article 54 EPC) and lack of inventive step (Article 56 EPC), on Article 100(b) EPC, for insufficient disclosure (Article 83 EPC) and on Article 100(c) EPC, for unallowable amendments (Article 123(2) EPC).

The Opposition Division found that the patent as granted (main request) met the requirements of Articles 83, 123(2) and 54 EPC and that the subject-matter of claim 1 according to one of the first, second and third auxiliary requests met the requirements of Articles 123(2) and (3) EPC. The Opposition Division found further that the subject-matter of claim 1 according to each of the main and first to third auxiliary requests did not involve an inventive step and thus did not meet the requirements of Article 56 EPC.

- III. Oral proceedings before the Board of Appeal took place on 6 November 2008.

(a) The appellant requested that

1. the decision under appeal be set aside and the patent be maintained as granted,

or alternatively,

2. in setting aside the decision under appeal the patent be maintained in amended form on the basis of the set of claims filed as auxiliary request 1 during the oral proceedings.

(b) The respondent (opponent) requested that the appeal be dismissed.

IV. Independent claim 1 of the main and the auxiliary request 1 filed during the oral proceedings reads as follows:

Main request (Claim as granted)

"A razor blade assembly (10) for mounting on a handle having a handle pivoting connecting structure, said assembly including a housing (12) having a guard member (14) at the front, a cap structure (2) at the rear, a blade mounting portion between the guard member (14) and the cap structure (2), upper surfaces at the sides of the blade mounting portion, arcuate bearing surfaces below the blade mounting portion that slidably engage said handle pivoting connecting structure and have radii of curvature so as to provide pivotal mounting on said handle for movement of the blade assembly about a pivot axis (P) located above said arcuate bearing surfaces, characterized in that first, second, and third blade members (18,20,22) are mounted in said blade mounting portion, said first blade member (18) being mounted nearest the guard (14) and the third blade member (22) being mounted nearest the cap (2), said first, second, and third blade members (18, 20, 22) having respective first, second, and third leading

edges (29) generally directed toward said guard member (14) and arranged to sequentially contact skin of a surface being shaved during a shaving operation, said leading edges (29) in an unloaded position being lower than said upper surfaces and further characterized in that said pivot axis (P) is located at a position which permits desired pivotal movement of the blade assembly and in a region defined by a boundary (80) extending from the first leading edge to the second leading edge when both are in the unloaded position, extending upward and rearward from the second leading edge to a position slightly below the upper surfaces of the housing (12) at a location in front of the third leading edge, extending along and slightly below the upper surfaces of the housing (12) to a position in front of the first leading edge, extending downward and forward to a location below and forward of the first leading edge and extending from said location below and forward of the first leading edge upward and rearward to the first leading edge, or in that said pivot axis (P) is located at a position which permits desired pivotal movement of the blade assembly and in a region defined by a boundary extending at or above a plane through at least two said leading edges (29) in the unloaded position and at or forward of a position approximately midway between the midportion of the skin engaging surface of the guard member (14) and the cap structure (2), and slightly below the upper surfaces of the housing".

Auxiliary Request 1 (amendments when compared to claim 1 as granted are depicted in bold or struck through)

"A razor blade assembly (10) for mounting on a handle having a handle pivoting connecting structure, said assembly including a housing (12) having a guard member (14) at the front, a cap structure (2) at the rear, a blade mounting portion between the guard member (14) and the cap structure (2), upper surfaces at the sides of the blade mounting portion, arcuate bearing surfaces below the blade mounting portion that slidably engage **shell bearings of** said handle pivoting connecting structure and have radii of curvature so as to provide pivotal mounting on said handle for movement of the blade assembly about a pivot axis (P) located above said arcuate bearing surfaces, characterized in that first, second, and third blade members (18,20,22) are mounted in said blade mounting portion, said first blade member (18) being mounted nearest the guard (14) and the third blade member (22) being mounted nearest the cap (2), said first, second, and third blade members (18, 20, 22) having respective first, second, and third leading edges (29) generally directed toward said guard member (14) and arranged to sequentially contact skin of a surface being shaved during a shaving operation, said leading edges (29) in an unloaded position being lower than said upper surfaces and further characterized in that said pivot axis (P) is located at a position which permits desired pivotal movement of the blade assembly and in a region defined by a boundary (80) extending from the first leading edge to the second leading edge when both are in the unloaded position, extending upward and rearward from the second leading edge to a position ~~slightly~~ below the upper surfaces of the housing (12) at a location in front of the third leading edge, extending along and ~~slightly~~ below the upper surfaces of the housing (12)

to a position in front of the first leading edge, extending downward and forward to a location below and forward of the first leading edge and extending from said location below and forward of the first leading edge upward and rearward to the first leading edge, **so that said razor blade assembly rotates through an arc of travel of at least 40° about said pivot axis (P) and relative to an imaginary arcuate extension (99) of said arcuate bearing surfaces without said arcuate extension (99) intersecting said housing (12) or in that said pivot axis (P) is located at a position which permits desired pivotal movement of the blade assembly and in a region defined by a boundary extending at or above a plane through at least two said leading edges (29) in the unloaded position and at or forward of a position approximately midway between the midportion of the skin engaging surface of the guard member (14) and the cap structure (2), and slightly below the upper surfaces of the housing (12)".**

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

- D0 : WO-A-97/37818 PCT-publication of the originally filed application of the patent in suit,
- D6 : WO 92/17322 A,
- D8 : WO 93/10947 A,
- D9 : WO 95/09071 A,
- D14: US 3 935 639 A.

VI. The appellant argued essentially as follows:

(a) *Scope of appeal*

Since the patent was revoked for lack of inventive step, the appeal is based solely on the appellant's appeal statement, ie on the issue of inventive step.

The appeal statement has a binding effect regarding the "reasons for setting aside the decision impugned or the extent to which it is to be amended" (Rule 64(b) EPC 1973, now Rule 99(2) EPC) for the subsequent appeal proceedings. According to G 9/92 (OJ EPO 1994, 875) requests by non-appealing parties to the appeal proceedings which are filed after the time limit for filing the Notice of Appeal expired, and which go beyond the appellant's original appeal request, are not admissible.

The scope of the appeal as defined by the appellant's request is therefore extended if the non-appealing respondent files a request for rejecting the appeal also on the basis of lack of novelty, insufficient disclosure and undue extension of subject-matter.

With its main request, ie to maintain the patent as granted, the appellant aims to set aside this decision. Since this request does not involve amended claims, these need not be fully examined on appeal for compliance with all the requirements of the EPC.

Even if there are formally no "fresh grounds of opposition", it can be derived from G 9/91 (OJ EPO 1993, 408, point 18 of the Reasons) that in a situation like the present one, ie having on the one hand the finding of the Opposition Division that the requirements of Articles 54, 83 and 123(2) EPC are met and on the other hand the decision of the Opposition Division revoking the patent on the basis of lack of inventive step according to Article 56 EPC, objections based on Article 100(a) EPC in combination with 54 EPC and on Articles 100(b) and (c) EPC may not be introduced at the appeal stage by the non-appealing respondent.

- (b) *Claim 1 according to the main request -
Article 123(2) EPC*

Originally filed claim 1 has the location of the pivot axis in a region "slightly above the upper surfaces of the housing". In view of the prior art documents cited during the examination proceedings this has been amended to the pivot axis being "slightly below the upper surfaces of the housing".

Original claim 2 defining that the pivot axis is located "at or below" the upper surfaces of the housing is the basis for this limitation.

As the area for the location of the pivot axis has been reduced in size the scope of the claim is correspondingly limited.

In general, anything which is located "below" something is also located "slightly below" that something.

In figure 3 of the originally filed application, a region for the pivot axis as defined in originally filed claim 1, ie having an upper boundary located "slightly above" the upper surfaces of the housing, is shown. It can clearly be taken from said figure that if the area for location of the pivot axis merely extends to positions "below" the upper surfaces of the housing, also an area "slightly below" the surface is encompassed.

Therefore, the feature "slightly below the upper surfaces of the housing" is disclosed in the originally filed application.

(c) *Claim 1 according to auxiliary request 1 -
Article 56 EPC*

D14 discloses a razor blade assembly which does not include a handle pivoting connecting structure as claimed. Contrary to the claimed invention, the pivoting structure of the razor of D14 forms part of the handle as the separate razor blade assembly 12 is fixed via the flanges 18 to this pivoting structure. This is claimed as such in claim 1 of D14 and is derivable also from column 1, line 58 to column 2, line 6 discussing the assembly of the handle with the pivoting structure.

Further, in the embodiment according to the figures of D14, a shaving unit 12 comprising two

blades 34 and 36 is shown. There is no disclosure of three blades, thus, all the features of claim 1 which relate to a three-blade arrangement are not known from D14. In particular, the location of the pivot axis is defined in claim 1 by a boundary extending between certain positions with respect to the three leading edges of the three blades. Since document D14 does not show a three-blade arrangement, also the claimed location of a pivot axis is not disclosed in this document.

There is no hint in the prior art pointing to the solution according to claim 1.

In addition, D14 does not suggest improving the shaving characteristics by adding a further blade element. Rather, D14 teaches to improve the shaving characteristics by providing the shaving unit that is movable as such relative to the handle, with two blades operating in tandem. At least the latter would have had to be given up when adding a third blade. Therefore, document D14 is no appropriate starting point for the discussion of inventive step.

Even if the skilled person chooses D14 as a starting point, the subject-matter of claim 1 is not obvious as he would not know where to locate the pivot axis to avoid the problem of geometric interference with the handle due to the blade assembly becoming larger by the provision of the third blade member. Also, the behaviour of the blade assembly during shaving would be unknown.

The respondent's allegation of the existence of "only three possibilities for the location of a third blade", as suggested by D6, D8 or D9, each being obvious, is a typical hindsight approach and, thus, is not allowable. It can only be argued with hindsight that the skilled person would have just added a third blade without changing the positions of the other two blades, or that the skilled person would have shifted the positions of all blades to achieve a better fit of the increased number of blade elements in the shaving unit. The latter option, however, would in turn lead to a relative displacement of the blades with regard to the location of the pivot axis of the razor of D14, if the latter is left unchanged. In that case it cannot be said where the blades would then be positioned with respect to the pivot axis and vice-versa. The above mentioned approach is therefore not only a hindsight approach but even mere speculation without any basis in D14.

VII. The respondent argued essentially as follows:

(a) *Scope of appeal*

Already with its notice of opposition the respondent raised all three opposition grounds according to Article 100 EPC. The appellant actually argues that the respondent should have lodged an appeal against the first instance decision due to the fact that the contested patent was only revoked on the basis of Article 100(a) EPC, but not on the basis of Article 100(b) EPC or Article 100(c) EPC also referred to by the

respondent in the opposition proceedings, now repeated in the appeal proceedings.

The request of the respondent in the first instance proceedings was to revoke the patent. Based on this request, the Opposition Division decided to revoke the contested patent. Since the respondent had obtained what it requested, there was no possibility for it to lodge an appeal. Accordingly, whether or not a party can lodge an appeal is not a question of whether it is negatively affected by the reasons for the decision, but only by the outcome of the decision in respect of its request.

By lodging the appeal and requesting maintenance of the patent as granted, all the opposition grounds raised originally by the respondent become the subject of the appeal proceedings again. Therefore, the respondent can repeat all the arguments submitted in relation to these grounds.

(b) *Claim 1 according to the main request -
Article 123(2) EPC*

In accordance with established case law of the Boards of Appeal, the relevant question to be decided in assessing whether an amendment adds subject-matter extending beyond the content of the application as filed, is whether the proposed amendment is directly and unambiguously derivable from that application. This is obviously not the case for the replacement of "slightly above" by

"slightly below" in the first embodiment of granted claim 1.

According to originally filed claim 2 the pivot axis is located either "at" or "below" the upper surfaces of the housing.

There is no disclosure in the originally filed application that the pivot axis shall be located "slightly below" the upper surfaces of the housing. The only disclosure in the originally filed application in this context, in connection with the term "slightly", is that the pivot axis is located "slightly above" the upper surface of the housing.

Within the range defined by its upper limitation being located "below" the upper surfaces of the housing, there is, however, not the required clear and unambiguous information in the originally filed application that the pivot axis should in particular be "slightly below" the upper surfaces.

(c) *Claim 1 according to auxiliary request 1 -
Article 56 EPC*

In claim 1 the razor blade assembly is defined in rather general terms as including a housing having a guard member at the front, a cap structure at the rear, a blade mounting portion between the guard member and the cap structure, upper surfaces at the sides of the blade mounting portion, and arcuate bearing surfaces below the blade mounting portion. Claim 1 does not exclude that the housing

comprises two or more elements. Accordingly, the support structure 16 and the blade unit 12 of the razor blade assembly of D14 can be considered as the housing of the razor blade assembly in the sense of claim 1.

D14 discloses a razor blade assembly having several blades. Although a two-blade assembly is described for the embodiment shown in the figures of D14 the disclosure of D14 nevertheless also allows for more than two blades, see column 1, line 66: "may have one or more blade elements".

Furthermore, razor blade assemblies with three blades are well known in the prior art, see e.g. D6, D8 and D9. Also the advantages of a razor blade unit with three blades are well known. Therefore, if the person skilled in the art would like to add a third blade to the razor discussed in D14 in order to obtain these advantages, he would arrange the third blade in front of the two existing blades, behind the two existing blades or between the two existing blades. None of these options require inventive skills.

As pointed out in lines 6 to 12 of column 4 of D14, the effective axis 26 of rotation should be located approximately midway between the skin engaging surfaces of cap and guard, adjacent to and parallel to the cutting edges of the blades 34 and 36 and below the upper surfaces, to allow for proper pivoting of the blade assembly. When arranging the third blade in respect of the two other blades the person skilled in the art will

maintain this location. In doing this he will end up with a razor blade assembly in which the pivot axis is located within the region defined by claim 1.

The appellant specifically argues that possible interference problems and unknown shaving characteristics would have withheld the skilled person at the priority date from applying a third blade, as the location of the pivot axis would be unknown. So whilst it may have been desirable at the priority date to add a third blade to a twin-bladed structure, this would have resulted in a complete redesign of the housing as well as its pivot axis location, requiring inventive skills.

Claim 1, however, does not include any feature which could be identified as responsible for avoiding geometric interference of the assembly with the handle upon pivoting, when widened so as to accommodate a third blade. Accordingly, from the wording of claim 1 one can assume that one can simply add a third blade as long as eg the arcuate bearing surfaces are below the blade mounting portion and have radii of curvature so as to provide pivotal mounting of said handle for movement of the blade assembly about a pivot axis located above the arcuate bearing surfaces.

Reasons for the Decision

1. *Scope of appeal*

1.1 The appellant submits that the issue to be dealt with in the present appeal proceedings as far as its main request is concerned is restricted to the issue of inventive step, because the respondent did not file an appeal against the decision of the Opposition Division with respect to its findings that the claimed subject-matter was sufficiently disclosed, met the requirements of Article 123(2) EPC and was novel over the prior art.

1.2 The Board notes that in the present case the Opposition Division revoked the patent and that the respondent is not adversely affected by this decision because the decision is in conformity with its request for revocation of the patent. Consequently, in view of Article 107 EPC the respondent was not entitled to appeal against the decision of the Opposition Division.

1.3 In support of its contention the appellant relies on G 9/92 (*supra*). However, that case relates to the situation where the decision under appeal is an interlocutory decision, ie one maintaining the patent in amended form and the patentee is the sole appellant.

The first condition is not fulfilled here, thus the principles laid down by this decision find no application in the present circumstances.

1.4 The appellant further relied on G 9/91 (*supra*) for its contention that the objections of the respondent based on Articles 54, 83 and 123(2) EPC should be treated as

new grounds for opposition, which could not be admitted without the appellant's consent. This would all the more be so if, as in the present case, the patent is requested to be maintained as granted, ie without amendments.

However, in the present case exactly these objections had been raised and substantiated by the respondent in its notice of opposition, thus there cannot be a question of them forming new grounds of opposition. The principles of this decision therefore also find no application in the present case.

1.5 Thus, for the present case it is open to the respondent to re-argue on objections which had already been an issue before the Opposition Division.

2. *Claim 1 - amendments - Article 123(2) EPC*

Main request

2.1 The contested patent as originally filed defined three alternatives for the upper limit of the region for the pivot axis for the razor blade assembly according to the first alternative of granted claim 1, namely

a) "slightly above" the upper surfaces of the housing, see claim 1, figure 3 and lines 1 to 13 of page 14 of D0 (the application as originally filed, see point V above),

b) "at" the upper surfaces of the housing, see claim 2 of D0, and

c) "below" the upper surfaces of the housing, see claim 2 of D0.

2.2 There is no explicit disclosure in the originally filed application for an upper limit lying "slightly below" the upper surfaces of the housing.

This was also not contested by the appellant.

2.3 The Board agrees with the parties that the expression "slightly above" used in the originally filed claim 1 could be replaced by the expression "below" as used in the originally filed claim 2 without violating the requirements of Article 123(2) EPC. The relevant question then to be answered is whether the expression "below" known only from the originally filed claim 2 provides a basis for the expression "slightly below" as used in granted claim 1.

2.4 The appellant argued on the basis of figure 3 of D0, which showed what was meant by "slightly above the upper surfaces" as in original claim 1, that if the area for location of the pivot axis is limited to merely extend to positions "below" the upper surfaces, also an area "slightly below" is included. Therefore, the feature "slightly below" would be identical with "below".

2.5 The Board cannot follow the appellant's arguments for the following reasons:

2.5.1 In respect of figure 3 (and supposing that relative measures can be taken from the figures) the Board wishes to note that the upper limit of the area shown

for the pivot axis extends quite a distance from the upper surfaces of the housing. If this is to show the "slightly above" of claim 1 as originally filed, as contended by the appellant, then "slightly below" as now claimed can only mean the same distance, now below the upper surfaces.

However, such a specific upper limit is not directly and unambiguously derivable from D0, nor is it in agreement with the appellant's contention that "slightly below" is close to the upper surfaces (or even closer than "below").

2.5.2 In respect of the description of the invention it is also impossible to find proper basis for this feature. Page 10 of D0 mentions: "... by lowering the pivot axis from the top of the clips between the two blades... to the cutting edge of the middle blade member". As the "top of the clips" is the level of the "upper surfaces" as claimed, both references indicate a distancing away from the upper surfaces, not "staying as close as possible to the upper surfaces", as implied by "slightly below".

The other references in the description to the location of the pivot axis are also evidence of the intention to have it **either** close to the lower limit, ie the line through the blade edges ("the pivot axis P is located at the level of a skin engaging surface such as the blade cutting edge" (of the secondary blade), page 12, lines 28, 29; "Having the virtual pivot axis P at ... the face", page 13, lines 7, 8; "...the pivot axis P could be located on ... a plane through at least two cutting edges of the blades..." (claim 10 (when

referring to: "at a plane"), claim 24 (when referring to: "at a plane") and page 14, lines 23, 24) **or** at an undefined level above that line ("Having the virtual pivot axis ... into the face", page 13, lines 7, 8; "... the pivot axis P could be located ... above a plane through at least two cutting edges of the blades..." (claim 10 and claim 24 both when referring to: "above a plane"; and page 14, lines 23, 24)).

None of these passages give an indication that a close proximity to the upper surfaces, as suggested by the "slightly below", is envisaged with the invention, they all show the intention to go in the opposite direction (towards the blades).

2.5.3 Finally, if (which is possible) with the term "slightly below the upper surfaces" it is envisaged to designate a position for the pivot axis closer to the upper surfaces than would be defined by "below the upper surfaces", then such a specific position would be novel information for the skilled reader of D0, which is another indication for infringement of the requirements of Article 123(2) EPC.

2.6 Claim 1 according to the main request thus contravenes the requirements of Article 123(2) EPC. Therefore, the main request is not allowable.

Auxiliary request 1

2.7 Since claim 1 of auxiliary request 1 is not allowable for lack of inventive step of its subject-matter (see below) it is not necessary to go into the amendments

made with this request to claim 1 as granted.

3. *Claim 1 according to auxiliary request 1 - Article 56 EPC*

3.1 Closest prior art

The Board considers that D14 represents the closest prior art for the reasons that follow.

The razor according to the embodiment shown in the figures of D14 has a blade in the assembly arranged pivotally on a handle 14. Said razor blade assembly comprises two blades 34 and 36, wherein the pivot axis 26 is located above a line connecting the edges of the two blades and below the upper surfaces of the assembly.

The wording of claim 1 of auxiliary request 1 indicates that the housing itself comprises more than one element, e.g. guard member, cap structure, blade mounting portion, etc. Accordingly, the connector structure 20, the support structure 16 and the blade unit 12 can together be seen as parts of the housing of the razor blade assembly of D14 and not of the handle, contrary to the opinion of the appellant.

The connector structure 20 comprises arcuate bearing surfaces 24 slidably engaging with complementary shell bearings 22 of the handle pivoting connecting structure on the handle 14. These bearing surfaces 24 and bearings 22 have radii of curvature so as to provide pivotal mounting on said handle for movement of the blade assembly about a pivot axis 26 located above the arcuate bearing surfaces 24 (see figures 2 and 3).

The housing of the razor blade assembly known from D14 has a guard member 32 at the front, a cap structure 38 at the rear, a blade mounting portion between the guard member and the cap structure, and upper surfaces at the sides of the blade mounting portion.

The arcuate bearing surfaces discussed above are below the blade mounting portion, as claimed. The pivoting connecting structure discussed above permits pivotal movement in the range of 20° to 90° (see claims 10 and 13). A pivotal movement to 90° falls within the range of claim 1 according to auxiliary request 1 claiming that the razor blade assembly can rotate through an arc of travel of at least 40° about the pivot axis and relative to an imaginary arcuate extension of the arcuate bearing surfaces. From figure 3 of D14 it is easily derivable that such an imaginary arcuate extension does not intersect the connector structure 20, nor the support structure 16, nor the blade unit, so that it does not intersect the housing of the known razor blade assembly.

Of the two blades mounted in the blade mounting portion of the assembly of D14 the rear one is mounted nearest the cap, the front one is mounted nearest the guard member, their leading edges are generally directed toward the guard member, are arranged to sequentially contact skin of a surface being shaved during a shaving operation and are in an unloaded position lower than the upper surfaces discussed above, all as claimed.

- 3.2 Accordingly, of the razor blade assembly of claim 1 according to auxiliary request 1 only remain to be

discussed:

- a) the features relating to the provision of a third blade, and
- b) the features relating to the region in which the pivot axis is located.

3.3 Although a two-blade razor is described for the embodiment shown in the figures of D14 this document nevertheless explicitly states that the invention described therein is not limited to a razor having only two blade members. In column 1, line 64 to column 2, line 3 it is stated that the razor may have "one or more blade elements"; accordingly, D14 does not exclude or prejudice a further blade.

Furthermore, at the priority date of the patent in suit safety razors having three blades and the advantages of such three-blade razors were well known to the person skilled in this art. This fact is documented by D6, D8 and D9, whereby D9 is also acknowledged in paragraph [0020] of the patent in suit. The existence of three-blade razors before the priority date of the patent in suit was also not disputed by the appellant.

The third blade provides the effect of a closer shave (D6, page 1, third paragraph; D9, page 1, line 26) and improved comfort (D6, page 1, third paragraph).

Thus, the provision of a third blade in the safety razor known from D14 was for the skilled person seeking at the priority date of the patent in suit to achieve these generally accepted positive effects a normal development option.

3.4 The remaining questions to be answered in the present case are where the third blade would be positioned in the blade mounting portion of the housing of the razor blade assembly of D14 and what this entails for the pivot axis 26.

3.4.1 By adding a third blade to the safety razor of D14 in order to achieve the advantages discussed above, the skilled person has three possibilities: in front of the two existing blades, behind the two existing blades or between the two existing blades, whereby the first blade would be mounted nearest the guard 32 and the third blade would be mounted nearest the cap 38.

When accommodating the third blade in the housing of the razor of D14 the skilled person will have to provide the same distance between the cutting edges of the added blade and its adjacent blade as was provided between the two blades of the embodiment discussed in D14, as that is the general teaching relating to the provision of three blades, see D6, claim 7; D9, page 6, lines 32 to 35.

Of the three options discussed above the arrangement of the third blade between the two existing blades is the more evident option for the skilled person as both the other options, while maintaining the required distance between the first blade edge and the skin engaging surface of the guard member and between the rear blade edge and the skin engaging surface of the cap, would result in an asymmetrical housing, which would have a negative effect on the pivotability of the razor blade assembly of D14.

Positioning the additional blade in the middle between the two existing blades, while maintaining the required distances to the skin engaging surface of the guard and cap as mentioned above, results in a blade assembly of which the skin engaging surface of the cap will be displaced rearwardly over half the distance between the blade edges of two adjacent blades and the skin engaging surface of the guard will be advanced forwardly over that same distance. The pivotability of the blade assembly and therefore its behaviour during shaving is not impaired by this symmetrical arrangement, nor will the "imaginary arcuate extension" of the shell bearings 22 on the handle intersect with the accordingly adapted housing, taking account of the relative measures derivable from figures 2 and 3 of D14.

The arguments of the appellant that adding a third blade to a two-blade razor known from D14 would lead to geometric interference and, thus, to poor shaving characteristics and that the respondent's allegation of "three possibilities for the location of a third blade" is a typical hindsight approach thus find no support with the Board.

- 3.4.2 The position of the pivot axis of such a modified blade assembly does not change relative to the housing, as it is the centre of the circle of which the existing arcuate bearing surface and the shell bearings form a segment.

According to lines 6 to 15 of column 4 of D14 "the effective axis 26 of rotation of the shaving unit 12 is adjacent to and parallel with the cutting edges of blades 34 and 36 and approximately midway between the

skin engaging surfaces of cap 38 and guard 32 of the shaving unit 12". Figure 2 of D14 shows the pivot axis 26 below the upper surfaces of the housing in close proximity to the leading edge of the blade closer to the cap. Furthermore, the pivot axis 26 lies approximately midway between the skin engaging surfaces of cap 38 and guard 32.

The Board considers that the skilled person, who does not possess inventive skills, will abide by these instructions in D14 and not change the relative position of the pivot axis when accommodating the third blade between the two existing blades as described above.

When providing space for the third blade between the two existing blades (see point 3.4.1) the rear one will be moved back half the distance between the blade edges of two adjacent blades, resulting in the pivot axis having its relative position rearward of the added (now second) blade, but still in front of the third blade edge and above the line through the three blade edges when they are in the unloaded position. The pivot axis will also keep its relative position below the upper surfaces of the housing, all as claimed.

According to claim 1, the pivot axis should be above a line extending from the first leading edge to the second (=middle) leading edge and from the second leading edge upward and rearward to a position below the upper surfaces of the housing at a location in front of the third leading edge.

As the claim does not specify how the boundary of the region for the location of the pivot axis "from the second leading (=blade) edge upward and rearward to a position below the upper surfaces of the housing at a location in front of the third (=rearmost) leading (=blade) edge" is drawn, e.g. in a straight or curved line, the pivot axis 26 of the housing, modified as discussed above in point 3.4.1 to accommodate a third blade, can still be considered located within the region as defined in claim 1, as this region is further delimited (insofar as relevant for the pivot axis presently discussed) by a boundary "extending along and below the upper surfaces to a position in front of the first leading edge...".

- 3.4.3 The appellant argues that, even if razors with three blades were already known in the art before the priority date of the patent in suit, see e.g. D6, D8 or D9, the skilled person was not prompted to add a third blade to the razor of D14, because the specific structure of D14 only exhibits maximum effectiveness when having two blades acting in tandem: "... is employed to particular advantage **when the shaving unit comprises two blade elements ...**, the edges operating in tandem ..."), see column 4, lines 43 to 47.

The Board cannot follow the appellant's argumentation for the following reasons:

The appellant interprets this reference in D14 to the two blades of the specific embodiment out of its context. In said passage of D14 it is actually stated that the specific arrangement: "The above described arrangement" (ie the one described in column 3, line 4

to column 4, line 43, which has two blades), is particularly advantageous when the existing two blades have their respective cutting edges positioned "parallel with and close to each other", whereby the edges operate "in tandem during use of the razor". Accordingly, the passage referred to by the appellant concerns on the one hand the optimisation of the positioning of the cutting edges of the two blades and on the other hand the operational optimisation of said blades.

There is no indication in said passage that a razor assembly with more than two blades is less effective than one with two blades. A "tandem operation" of shaving blades defines a shaving operation of parallel blades being positioned one behind the other and it does not restrict the shaving operation in the sense that only a "pair of blades" has to be used. The Board notes that in the same sense a group of "three tandem blades" is mentioned in line 3 of page 2 of D6.

- 3.5 For the above mentioned reasons, the subject-matter of claim 1 of the first auxiliary request does not involve an inventive step in the sense of Article 56 EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

G. Nachtigall

H. Meinders