DECISION of 5 April 2005

Case Number: T 0317/03 - 3.2.4
Application Number: 96935286.3
Publication Number: 0808114
IPC: A45D 26/00

Language of the proceedings: EN

Title of invention: Depilation apparatus with vibration member

Patentee: Koninklijke Philips Electronics N.V.

Opponent: Braun GmbH

Headword: -

Relevant legal provisions: EPC Art. 54(3), (4), 100(a)

Keyword: "Novelty (yes)"
"Inventive step (yes)"

Decisions cited: -

Catchword: -
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DECISION
of the Technical Board of Appeal 3.2.4
of 5 April 2005

Appellant: Braun GmbH
(Opponent)
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Representative: -

Respondent: Koninklijke Philips Electronics N.V.
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 30 January 2003 rejecting the opposition filed against European patent No. 0808114 pursuant to Article 102(2) EPC.

Composition of the Board:
Chairman: M. Ceyte
Members: C. Scheibling
T. Bokor
Summary of Facts and Submissions

I. By its decision dated 30 January 2003 the Opposition Division rejected the opposition. On 17 March 2003 the Appellant (opponent) filed an appeal and paid the appeal fee simultaneously. The statement setting out the grounds of appeal was received on 27 May 2003.

II. Opposition was filed on the grounds based on Article 100(a) (54 and 56) EPC.

III. Claim 1 reads as follows:

"1. A depilation apparatus comprising a housing (1), a depilation member (7) for gripping hairs on human skin and pulling the hairs from the skin, and a vibration member for exerting mechanical vibrations on the skin, characterized in that the vibration member comprises flexible protrusions (23) which are disposed on a carrier (19) and means for vibrating the carrier."

IV. The following documents played a role in the appeal proceedings:

D1: WO-A-97/00032
D2: FR-A-2 690 820
D3: FR-A-2 690 819
D4: JP-A-7-143910 (with partial English translation)
D5: EP-A-0 442 419
D8: EP-A-0 386 327
V. Oral proceedings took place on 5 April 2005.

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

He mainly argued as follows: The subject-matter of claim 1 is not new with respect to any of the documents D1, D2, D3, D4, D5, D8, and D11. Moreover, even if novelty should be given, the subject-matter of claim 1 would not involve an inventive step with respect to the disclosure of D11 when taking into account the normal capability of a person skilled in the art. Furthermore, D11 already solves the problem of providing a depilation apparatus which is comfortable on parts of the skin which overlie a relatively soft tissue and D4 solves the problem of providing a depilation apparatus which is comfortable on parts of the skin which closely overlie a bone and therefore a skilled person which seeks to solve the problem of the patent in suit, i.e. to provide a depilation apparatus which is comfortable both on parts of the skin which overlie a relatively soft tissue and on parts of the skin which closely overlie a bone, would provide the depilation apparatus of D11 with flexible rollers as disclosed in D4.

The Respondent (patentee) countered the Appellant's arguments and mainly argued as follows: None of the cited documents discloses in combination flexible protrusions disposed on a carrier and means for vibrating the carrier. Therefore novelty is given. Furthermore, starting from D11 there is no incentive for a skilled person to modify the depilation apparatus disclosed therein so as to arrive at the subject-matter of claim 1. Moreover the problem to be solved by the
patent in suit is not only to provide a depilation apparatus which is comfortable but which also provides an adequate anaesthetizing effect. Since there is no indication in D4 that any anaesthetizing effect can be obtained, a skilled person would not combine the roller system of D4 with the apparatus of D11 in order to solve the problem of the patent in suit. But even if a skilled person would contemplate such a combination, he would not arrive at an apparatus according to claim 1 of the patent in suit.

The Respondent requested that the appeal be dismissed.

Reasons for the Decision

1. The appeal is admissible.

2. Interpretation of claim 1:

2.1 In the prior art portion of claim 1 it stated: "depilation apparatus comprising a housing (1), a depilation member (7) for ... and a vibration member ..."

When giving the words the meaning and scope which they normally have, it is clear that the claimed depilation apparatus comprises a depilation member as well as a vibration member and that said members are two distinct items. This is also confirmed by the description and the drawings.

2.2 Claim 1 comprises inter alia also the following feature: "a vibration member for exerting mechanical vibrations on the skin" which comprises "flexible protrusions (23)
which are disposed on a carrier (19) and means for vibrating the carrier".

2.3 In the description, column 6, lines 17 to 23, it is indicated: "When mechanical vibrations are being exerted on the skin during the process of pulling hairs from the skin ... Due to the limited transmission capacity of the nerves, said nerve stimuli corresponding to the pain sensations are suppressed by said nerve stimuli corresponding to the comfortable sensation of the mechanical vibrations ..."

Thus, a person skilled in the art is given the teaching that the mechanical vibrations have to be such that they create nerve stimuli sufficient to suppress the pain sensations during the process of pulling hairs from the skin.

2.4 Furthermore according to claim 1 the apparatus comprises means for vibrating the carrier. These means are part of the apparatus and this implies that vibration can be obtained without any external influence and thus, that the carrier is vibrated irrespective of whether or not the apparatus is brought in contact with the skin.

2.5 According the Britannica Concise Encyclopaedia Online (2004) "to protrude" means to jut out from the surrounding surface. Therefore a protrusion is a part jutting out from the surrounding surface.
3. **Novelty:**

3.1 With respect to D1:

D1 has been cited in accordance with the provisions of Article 54(3) and (4) EPC.

D1 (Figure 4) discloses a first embodiment in which elements 16 are pushed in a protruding position by spring means (Figures 5 and 6). In this embodiment the carriers are formed by the shafts 31 (see Figure 5). However, the apparatus according to this embodiment does not comprise any means for vibrating these carriers. Indeed the carriers and the elements supported thereon are solely subjected to a motion when the elements or protrusions 16 come into contact with the skin.

D1 discloses also a second embodiment (Figure 7) in which the shafts of the elements are guided in a curved path so as to be in a protruding position when not in contact with the skin and in a progressively retracted position when rolling over the skin. In this embodiment, neither the elements, nor the carriers are flexible.

The Appellant argued that according to the passage, page 16, lines 3 to 14, the embodiment according to Figure 7 could also be provided with spring means according to Figure 5. However, it is unclear how the shafts 31 can be guided in a path so as to be forced in their motion and at the same time be flexibly supported by spring means as disclosed in Figure 5. In this respect, it has to be noted that an unclear teaching does not allow to define a corresponding embodiment in such way that it is possible to determine without any
speculation, whether or not such an embodiment discloses all of the features of a claim for the purpose of examining novelty.

3.2 With respect to D2:

This document does not disclose protrusions.

The Appellant argued that the grid comprises ribs which each form a protrusion. This cannot be accepted.

In D2, the ribs 32 are part of a protection grid whose aim is to be in smooth contact with the skin and to avoid that the skin can be pinched between the rollers. Said ribs do not comprise any part which is jutting out of the plane of the grid and therefore do not form protrusions in the sense of the patent in suit.

3.3 With respect to D3:

The Appellant considered that the ribs 230 (Figure 27) exert a mechanical vibration on the skin. This cannot be accepted.

The apparatus of D3 comprises pinching rods each of which includes skin stretcher ribs (230) which, as disclosed page 9, lines 13 and 14 "act to stretch the skin forward and sideward with respect to the advancing direction A for facilitating the hair plucking without irritating the skin."

Thus, the aim of the skin stretcher ribs is to maintain the skin stretched while the hair is plucked and not to vibrate the skin, since vibrating would imply a periodical slackening of the skin which would be
detrimental to the result to be achieved. Thus, D3 does not comprise a vibration member for exerting mechanical vibrations on the skin.

3.4 With respect to D4:

The embodiment according to Figures 14, 15 and 22, disclose rollers (3990) disposed on a carrier (shaft 3911) supported on a depilation drum, which rollers can be moved in and out of contact with the skin, by rotation back and forth of the depilation drum over an angle of substantially 90°. As it is clear from Figure 15, the depilation member and the vibration member constitute a single item. Furthermore, the carrier is mounted between the side flanges 31A (Figure 14a and 14b) and the rollers (3990) are arranged in recesses provided in the depilation drum; thus, the rollers (3990) are not jutting out of the outer surface of the depilation drum. Finally, as far as the rollers are considered as protrusions mounted on a carrier (shaft 3911), no means are provided for vibrating this carrier which is freely rotating.

3.5 With respect to D5:

D5 (Figures 1, 3) comprises protrusions (13, 13') for pinching the hair. The Appellant considered that said protrusions also provide vibrations to the skin and that the ultimate inner and outer protrusions 13' could be considered to form the carrier.
However, said protrusions are part of the depilation member and thus, D5 does not disclose separate depilation and vibration members. Furthermore, all protrusions are supported by a bottom 17 and a rib 20 which therefore are to be considered as forming the carrier in the meaning of the patent in suit (whereas the ultimate inner and outer protrusions 13' do not form the carrier). However, no means are provided for vibrating said carrier (17, 20).

3.6 With respect to D8:

The apparatuses disclosed in D8 with respect to figures 16 to 22 apply vibrations to the skin during hair engagement and removal. Nevertheless the apparatuses according to figures 16 to 18 and 20 to 22 do not disclose any protrusions (see section 2.7 above). The apparatus according to figure 19 does not comprise any eccentric drive washer, indeed the embodiment according to figure 19 does not need any eccentric drive washer, since the spring itself is bent at intervals to define a plurality of section which are off-axis with respect to each other (column 14, lines 19 to 22). In this embodiment either the stiffening wire or the drive gears are to be considered as forming the carrier. However no means are provided for vibrating these parts.

Moreover in D5 the depilation member and the vibration member would not form separate items.

3.7 With respect to D11:

As it is clear from Figures 1 and 2, the depilation apparatus according to D11 comprises a vibration member
in form of a screen plate being provided at one end with a bent-back lug 17 so that the plate can pivot about a pin 18. From this end the plate extends in a first plane and is bent twice so as to further extend in a second plane, which is parallel to the first one.

The Appellant considered that the angle that the plate forms at the joint between the two planes constitutes a protrusion. The Board cannot agree to this. As indicated in section 2.7 above, a protrusion is a part jutting out from the surrounding surface. In D11, although the plate is angled between the two planes in which it extends, there is no part jutting out of any of said planes. Thus, D11 does not disclose protrusions.

3.8 The Board is satisfied that no other cited document discloses in combination all the features of claim 1 of the patent in suit. Consequently, the subject-matter of claim 1 of the patent in suit is novel with respect to the prior art cited by the Appellant.

4. Inventive step - main request:

4.1 D11 is considered to be the closest prior art document.

From D11 (column 2, lines 15 to 21; Figures 1, 2) there is known a depilation apparatus comprising a housing (1), a depilation member (3, 4) for gripping hairs on human skin and pulling the hairs from the skin, and a vibration member (15) for exerting mechanical vibrations on the skin.
4.2 The apparatus according to claim 1 of the patent in suit differs from that according to D11 in that the vibration member comprises flexible protrusions which are disposed on a carrier and means for vibrating the carrier.

Thus, the problem to be solved by the invention can be seen in providing a depilation apparatus which has an adequate anaesthetizing effect and is comfortable both on parts of the skin which overlie a relatively soft tissue and on parts of the skin which closely overlie a bone (patent specification, paragraph [0004]).

The Board is satisfied that said problem is solved by the features of the characterising part of claim 1 of the patent in suit.

4.3 The Appellant considered that a skilled person, who observes that the screen plate of D11 is painful on parts which closely overlie a bone would on the basis of its general knowledge, would immediately understand that the pain is due to the hardness of the material of the screen plate and thus, would automatically provide it with a flexible coating.

However, the Board notes that providing the screen plate with a flexible coating does not lead to the claimed subject-matter, since a coating does not necessarily comprise the claimed flexible protrusions.

4.4 The Appellant also considered that it would be obvious for a skilled person to combine the apparatus of D11 with the flexible roller means of D4, because the rollers of the depilation apparatus according to D4 are
said to soften the impact of the depilation means on parts of the skin which closely overlie a bone (see ultimate sentence of the paragraph "constitution" of the English translation of D4).

However, in D4 the rollers (3990) are mounted on a shaft which is freely rotating on the depilation drum. This is not possible in D11 since D11 use a different type of depilation member. For this reason it would not be obvious for a skilled person to combine the rollers of D4 mounted on a depilation drum with an apparatus according to D11 provided with a vibrating screen plate. But even if a skilled person would contemplate such a combination, two possibilities would mainly be offered to him. The first possibility would be to locate the rollers on the screen plate such that contact between the screen plate and the skin is avoided. In this case the distance between the screen plate and the skin would be increased. This would be detrimental to the effectiveness of the apparatus. Therefore, a skilled person would be deterred from proceeding this way. The second possibility would be to position the rollers beside the screen plate. In this case the rollers and their carrier would not be vibrating since in D11 solely the screen plate is vibrating and according to the teaching of D4 no means are provided for vibrating the shaft carrying the rollers in question. In other words the combination of D11 and D4 cannot lead to a device having all the essential features of claim 1 in suit, since neither D11 nor D4 discloses means for vibrating the carrier on which the flexible protrusions are mounted, as far as the rollers of D4 are considered as flexible protrusions.
Thus, the Appellant failed to demonstrate that the subject-matter of claim 1 of the patent in suit is obvious having regard to the cited prior art. Therefore, the subject-matter of claim 1 of the patent in suit involves an inventive step having regard to the state of the art cited by the Appellant.

Order

For these reasons it is decided that:

The appeal is dismissed

The Registrar:     The Chairman:

G. Magouliotis     M. Ceyte