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**Datasheet for the decision
of 5 December 2008**

Case Number: T 0533/07 - 3.4.01

Application Number: 00913974.2

Publication Number: 1257324

IPC: A61N 5/067

Language of the proceedings: EN

Title of invention:
Improved laser comb design/function

Patentee:
Lexington LaserComb IP AG

Opponent:
-

Headword:
-

Relevant legal provisions:
EPC Art. 123(2)

Relevant legal provisions (EPC 1973):
EPC Art. 54(1)(2), 56

Keyword:
"Amendments admissible"
"Novelty and inventive step (yes, after amendments)"

Decisions cited:
-

Catchword:
-



Case Number: T 0533/07 - 3.4.01

D E C I S I O N
of the Technical Board of Appeal 3.4.01
of 5 December 2008

Appellant: Lexington LaserComb IP AG
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Representative: Findlay, Alice Rosemary
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 21 September 2006
refusing European application No. 00913974.2
pursuant to Article 97(1) EPC 1973.

Composition of the Board:

Chairman: B. Schachenmann
Members: H. Wolfrum
G. Assi

Summary of Facts and Submissions

- I. European patent application 00 913 974.2 (publication No. EP-A-1 257 324) was refused by a decision of the examining division dispatched on 21 September 2006, for the reason of lack of inventive step (Articles 52(1) and 56 EPC 1973) of the subject-matter of claim 1 of each of the requests then on file.
- II. The applicant lodged an appeal against the decision and paid the prescribed fee on 28 November 2006. On 30 January 2007 a statement of grounds of appeal was filed.
- III. On 25 August 2008 the appellant was summoned to oral proceedings. Upon request of the appellant, the originally set date for the oral proceedings was postponed by a notification of the Board dated 9 September 2008.
- IV. In examination and appeal, reference was made to the following prior art documents:
- D1 : DE-U-91 02 407;
 - D2 : US-A-5 300 097;
 - D3 : EP-A-0 593 375;
 - D4 : US-A-2 397 757;
 - D5 : DE-A-33 36 939; and
 - D6 : DE-A-195 13 875.
- V. Oral proceedings were held on 5 December 2008.

After discussion the appellant requested that the decision under appeal be set aside and a patent be

granted on the basis of the following documents:

claims 1 and 2, filed in the oral proceedings,
description pages 1, 1a and 2, filed in the oral
proceedings,
drawings sheet 1/1 as originally filed.

VI. Claim 1 reads as follows:

"1. A hand-held laser skin treatment device for irradiating hair-growing skin comprising a casing, a laser assembly within the casing, the assembly including a radiation source and a power source for the radiation source, the radiation source consisting of a row of laser diodes, each diode having a lens and emitting a laser beam whereby the row of laser diodes emits a row of laser beams, and two parallel rows of teeth for parting hair, wherein the row of laser beams is centred between the parallel rows of teeth such that each beam is arranged between and associated with a pair of teeth, one from each of said rows of teeth, such that, in use when the device is moved transverse to the rows of teeth and beams in either direction across hair-growing skin, each beam is preceded [sic!] by one of the associated teeth which parts the hair to expose the skin in advance of the laser beam."

Claim 2 is a dependent claim.

VII. In support of inventive step for the subject-matter of its requests, the appellant argued in essence that none of the available documents of the prior art showed or hinted at a device for irradiating hair-growing skin in which each beam of a row of laser beams was centred

between a pair of hair parting teeth.

Reasons for the Decision

1. In the following reference is made to the provisions of the EPC 2000, which entered into force as of 13 December 2007, unless the former provisions of the EPC 1973 still apply to pending applications.
2. The appeal complies with the requirements of Articles 106 to 108 EPC 1973 and Rule 64 EPC 1973 and is, therefore, admissible.
3. *Amendments*

Claim 1 on file is based on the originally filed claim, to which information is added that is disclosed on page 1, lines 1 and 2 of the description as originally filed and published (*the row of laser diodes is centred between the parallel rows of teeth*), page 1, lines 15 to 17 in combination with what is unambiguously derivable from Figures 1 a to 1c (*each beam is arranged between and associated with a pair of teeth, ... such that ... each beam is preceded by one of the associated teeth which parts the hair to expose the skin in advance of the laser beam*), and page 2, lines 38 to 41 (*each diode having a lens*).

The additional feature given in claim 2 is disclosed on originally-filed page 2, lines 34 and 35.

The Board is thus satisfied that the claims on file meet the requirement of Article 123(2) EPC.

4. *Novelty*

Document D1 shows a hand-held laser skin treatment device for irradiating hair-growing skin which comprises a casing and a laser assembly within the casing, the assembly including a radiation source and a power source for the radiation source, the radiation source consisting of a row of laser diodes, each diode emitting a laser beam whereby the row of laser diodes emits a row of laser beams. In front of each diode a hollow tooth is arranged for parting the hair. The inside of each tooth has a reflective coating such that the tooth forms and guides the laser beam to the skin. The subject-matter of claim 1 on file differs from the known device in that each diode has a lens for forming the laser beam and that the row of diodes is centred between parallel rows of teeth such that each laser beam is arranged between and associated with a pair of teeth.

Moreover, the subject-matter of claim 1 on file is distinguished from the devices for irradiating hair-growing skin known from documents D2, D4, D5 and D6 *inter alia* in that the latter use UV lamps instead of laser light.

Finally, document D3 does not refer to a device for irradiating hair-growing skin but concerns a dental hygiene appliance for brushing teeth.

Therefore, the subject-matter of claim 1 under consideration is new within the meaning of Articles 52(1) and 54(1) and (2) EPC 1973 with respect to the teachings of the available prior art documents.

5. *Inventive step*

5.1 Due to the fact that in distinction to the device known from document D1 the teeth in the claimed device do not have to shape and guide the laser beam they can be made finer and more sharply pointed for effectively parting the hair. The overall structure of the device with the teeth being arranged laterally offset from the laser diodes is less complex.

Thus, the objective problem can be seen in the desire to reduce the complexity of the device whilst obtaining efficient irradiation of the hair-growing skin.

5.2 In the devices for irradiating hair-growing skin known from documents D5 (see Figures 1 to 3 and the corresponding description) and D6 (see Figures 3 and 4) an elongated UV lamp is centred between two parallel rows of teeth.

In the Board's view, even if the skilled person, when looking for a solution to the above problem, takes documents D5 and D6 into consideration, he would still not arrive at the claimed subject-matter in an obvious manner, simply because, given the omni-directional emission of light from the lamp and thus the absence of a light source which provides illumination in the form of a row of beams, these documents do not teach or hint at the claimed specific arrangement of a pair of teeth with respect to an individual light beam.

5.3 The Board notes that taking alternatively document D5 or D6 as the starting point for the problem-solution-

approach does not lead to a different judgement.

In that case, the claimed subject-matter is distinguished from a device shown by document D5 or D6 not only by the use of a row of laser diodes instead of the UV lamp but also by the association of a pair of teeth with each laser diode in such a manner that in the device when used each beam is preceded by one of the associated teeth which parts the hair to expose the skin in advance of the laser beam.

Whilst no inventive merit is seen in replacing the UV lamp of the device of document D5 or D6 by a row of diode lasers as shown by document D1, the Board fails to see in the known teachings any hint to the replacement of the light conducting teeth of document D1 by lenses and the claimed specific arrangement of hair parting teeth.

- 5.4 The examining division has based its decision to refuse the application for lack of inventive step on document D4 in combination with document D1.

The Board concurs with the examining division that document D4 (see in particular Figures 2 and 3) discloses a device for irradiating hair-growing skin with UV light which has a row of light beams formed by UV conducting teeth which is centred between parallel rows of teeth in the form of bristles. In one embodiment (see page 2, lines 2 to 9), the bristles are intransparent to the UV light and solely serve for the purpose of parting hair.

Given the fact that the light-guiding teeth in the known device serve for the purpose of placing the UV light source in direct contact with the skin to be treated (see

page 2, lines 35 to 40, in D4) and that document D4 is silent as to details of the mutual arrangement of the light-guiding teeth and the surrounding bristles, the Board is of the opinion that even replacing the UV lamp by a row of laser diodes as known from document D1 would not lead the skilled person to a structure as defined by amended claim 1.

- 5.5 For the sake of completeness it is noted that none of the other available documents of the prior art, *ie* documents D2 and D3, would inspire the skilled person to arrange the laser beams and hair-parting teeth as claimed by claim 1 under consideration.

In fact, document D2 concerns a hair brush in which each bristle is formed as a UV guiding fibre.

Document D3 shows a toothbrush with an integrated laser for irradiating the teeth during dental cleaning. Notwithstanding the fact that the means for directing the laser radiation to the teeth are separate from the bristles of the brush, there are no individual laser beams and thus there is no teaching as to a specific mutual arrangement of laser beams and teeth. Besides, it is doubtful whether the skilled person would consult the document since it refers to a different technical field.

- 5.6 In conclusion, the subject-matter of claim 1 under consideration does not follow in an obvious manner from the available prior art. Therefore, the claimed subject-matter involves an inventive step within the meaning of Articles 52(1) and 56 EPC 1973.

Order

For these reasons it is decided that:

The decision under appeal at is set aside.

The case is remitted to the examining division with the order grant a patent with:

- claims 1 and 2 filed in the oral proceedings;
- description pages 1,1a and 2 filed in the oral proceedings; and
- drawing sheet 1/1 as originally filed.

The Registrar

The Chairman

R. Schumacher

B. Schachenmann