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Datasheet for the decision of 23 April 2015

Case Number: T 1079/12 - 3.2.08

Application Number: 01908781.6

Publication Number: 1255502

IPC: A61C8/00

Language of the proceedings: EN

Title of invention:
MAXILLOFACIAL SURGICAL ELEMENTS HAVING ORDERED MICROGEOMETRIC SURFACE PATTERNS

Applicant:
Evollution IP Holdings, Inc.

Headword:

Relevant legal provisions:
EPC Art. 54, 56

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

Decisions cited:

Catchword:

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It can be changed at any time and without notice.

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Case Number: T 1079/12 - 3.2.08

D E C I S I O N
of Technical Board of Appeal 3.2.08
of 23 April 2015

Appellant: (Applicant)	Evollution IP Holdings, Inc. 3500 South Dupont Highway Dover, DE 19901 (US)
Representative:	Høiberg A/S St. Kongensgade 59 A 1264 Copenhagen K (DK)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 22 December 2011 refusing European patent application No. 01908781.6 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	T. Kriner
Members:	P. Acton
	D. T. Keeling

Summary of Facts and Submissions

I. On 1 March 2012 the appellant (applicant) filed a notice of appeal against the examining division's decision posted on 22 December 2011 refusing the European patent application No. 01 908 781.6. The appeal fee was paid simultaneously and the statement of grounds was received on 27 April 2012.

II. Oral proceedings took place before the board of appeal on 23 April 2015.

The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims of the Main Request filed at the oral proceedings before the Board of Appeal.

III. The following documents cited in the search report are relevant for the present decision:

D1: US-A-5 588 838
D2: US-A-5 607 607
D3: US-A-5 989 027
D4: US-A-5 716 412

IV. Claim 1 according to the main request reads:

"A dental implant system comprising an implant element (40,46, 100, 200) for surgical insertion into a maxillofacial bone and tissue of a patient, said implant element having a proximal collar section (42, 50, 150, 250) and a distal, anchorlike section (44, 52, 53, 244), said implant element configured for complemental receipt of an abutment element, and said Implant element configured such that upon receipt of an abutment element the uppermost proximal region of said

proximal collar section abuts said abutment element, the entirety of the lateral surface of said proximal collar section (42, 50 ,150, 250) having a first ordered microgeometric, repetitive surface pattern in a form of a multiplicity of alternating ridges and grooves, each having an established width in a range of about 2 to about 25 microns, and an established depth in a range of about 2 to about 25 microns, whereby said micro-geometric repetitive patterns define a guide for a preferential promotion of the rate, orientation and direction of growth of colonies of cells of said maxillofacial bone or tissue, which are in contact with said surface patterns."

V. The appellant's arguments can be summarised as follows:

The wording of the claim now clearly specified that the entirety of the proximal (uppermost) collar section of the implant element had repetitive surface patterns of a specific width and depth. None of the documents cited in the search report showed an implant element with such a structure. Hence the subject-matter of claim 1 was novel.

Moreover, both D2 and D3 did not suggest to provide the uppermost part of the collar section with a specific microgeometric patter. On the contrary, both documents underlined the importance of providing a smooth section at the proximal end of the collar.

Hence the subject-matter of claim 1 involved an inventive step as well.

Reasons for the Decision

1. The appeal is admissible.

2. Novelty

2.1 Each of D2 and D3 discloses (see particularly Figure 9 of D2 and Figure 1 of D3):

A dental implant system comprising an implant element (55, D2; 10, D3) for surgical insertion into a maxillo-facial bone and tissue of a patient, said implant element having a proximal collar section (60, 61, D2; 26, 28, D3) and a distal, anchorlike section (62), said implant element configured for complemental receipt of an abutment (57, D2; see column 3, lines 54 to 56, D3) element,

and said implant element configured such that upon receipt of an abutment element the uppermost proximal region of said proximal collar section abuts said abutment element,

a part (61, D2; 26, D3) of the lateral surface of said proximal collar section having a first ordered micro-geometric, repetitive surface pattern in a form of a multiplicity of alternating ridges and grooves, each having an established width in a range of about 2 to about 25 microns, and an established depth in a range of about 2 to about 25 microns, whereby said micro-geometric repetitive patterns define a guide for a preferential promotion of the rate, orientation and direction of growth of colonies of cells of said maxillofacial bone or tissue, which are in contact with said surface patterns.

However, the collar of the implant element of D2 and D3 is made of a smooth zone (60, see column 11, lines 57 to 65, D2; see column 4, lines 34 to 44, D3) and of a texturized zone (61, D2; 26, D3). Therefore, contrary to what is required by claim 1, D2 and D3 do not disclose that the entirety of the proximal collar section has an ordered microgeometric, repetitive surface pattern.

2.2 The other documents cited in the search report either have less features in common with the claimed system or do not refer to dental implant systems at all.

2.3 Hence the subject-matter of claim 1 is novel over all prior art cited in the search report.

3. Inventive step

As stated above, the only difference between the subject-matter of claim 1 and the dental implant systems according to D2 and D3 is that the entirety of the collar section is provided with a microgeometric, repetitive structure.

The problem to be solved is the provision of a collar structure which promotes the growth of colonies of cells of the maxillofacial bone or tissue (see page 5, first two paragraphs).

Both D2 and D3 show an upper part of the collar which is smooth and they both stress that the presence of this smooth region is essential in order to "promote the growth and attachment of gingival epithelium tissue" (D2, column 11, line 66 to column 12, line 3) and to "allow removal of bacterial plaque deposits thereon" (D3, column 4, lines 41 to 44).

Hence the skilled person would not consider replacing the smooth portion of the collar of the implant elements according to D2 or D3 with a patterned surface, since by doing this he would act contrary to the teaching of these documents.

Moreover, none of the further documents cited in the search report addresses the above problem and cannot lead to the solution thereof in the manner described in claim 1.

Therefore, the subject-matter of claim 1 also involves an inventive step.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the Examining Division with the order to grant a patent on the basis of the following documents:

   - Claims 1 to 15 of the Main Request filed during the oral proceedings;
   - Description, pages 1 to 26, as filed during the oral proceedings;
   - Figures 1 to 19 as originally filed with the patent application and Figures 20 to 32 filed during the oral proceedings.

The Registrar: The Chairman:

V. Commare T. Kriner

Decision electronically authenticated