Internal distribution code:
(A) [ ] Publication in OJ
(B) [ ] To Chairmen and Members
(C) [ ] To Chairmen
(D) [X] No distribution

Datasheet for the decision of 22 November 2012

Case Number: T 2408/10 - 3.2.08

Application Number: 04007245.6

Publication Number: 1579819

IPC: A61C 8/00

Language of the proceedings: EN

Title of invention:
Improved intraosteal dental implant

Patentee:
Straumann Holding AG

Opponent:
Dentsply IH AB

Headword:
-

Relevant legal provisions:
EPC Art. 114(2), 123(2), 84, 100(a)

Keyword:
"Late-filed documents (not admitted)"
"Late-filed request (admitted)"
"Added subject-matter and lack of clarity (no)"
"Novelty and inventive step (yes, after amendment)"

Decisions cited:
-

Catchword:
-

This datasheet is not part of the Decision.
It can be changed at any time and without notice.

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 2408/10 - 3.2.08

D E C I S I O N
of the Technical Board of Appeal 3.2.08
of 22 November 2012

Appellant: (Opponent)
Dentsply IS AB
Aminogatan 1
S-431 21 Mölndal (SE)

Representative:
Somlo, Tommy
Awapatent AB
Södra Hamngatan 37—41
P.O. Box 11394
S-404 28 Goteborg (SE)

Respondent: (Patent Proprietor)
Straumann Holding AG
Hauptstrasse 26d
CH-4437 Waldenburg (CH)

Representative:
Modiano, Micaela Nadia
Modiano Josif Pisanty & Staub Ltd
Thierschstrasse 11
D-80538 München (DE)

Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted 13 October 2010 rejecting the opposition filed against European patent No. 1579819 pursuant to Article 101(2) EPC.

Composition of the Board:

Chairman: T. Kriner
Members: M. Alvazzi Delfrate
D. T. Keeling

Summary of Facts and Submissions

I. By decision posted on 13 October 2010 the opposition division rejected the opposition against European Patent No. 1 579 819.

II. The appellant (opponent) lodged an appeal against this decision on 6 December 2010, paying the appeal fee on the same day. The statement setting out the grounds for appeal was filed on 7 February 2011.

III. Oral proceedings before the Board of Appeal were held on 22 November 2012.

IV. The appellant requested that the appealed decision be set aside and that the patent be revoked.

The respondent (patent proprietor) requested that the patent be maintained on the basis of the main request filed at the oral proceedings.

V. Claim 1 of the main request reads as follows:

"An intraosteal dental implant (1) having a roughened bone tissue apposition surface (2) extending from a tip (1') of the dental implant (1) up to an interface (4) at a neck portion of the dental implant (1), and a polished soft tissue apposition surface (3) extending from the interface (4) to a shoulder (5) of the dental implant (1), wherein the shoulder (5) is inclined with respect to the axis (7) of the dental implant (1), and wherein the shoulder (5) is substantially contained in a plane, the dental implant (1) having further a bore (14) in the form of a blind hole, coaxial with the axis

(7) and for receiving an abutment therein, characterized in that the interface (4) is substantially not parallel to the shoulder (5)."

VI. The following documents, which were filed in the opposition proceedings, play a role in the present decision:

O2: WO -A- 01/ 49 199 and
O3: US -A- 2003/ 0 104 337.

The following documents were cited for the first time in the appeal proceedings:

O10: WO -A- 2004/082504;
O11: US -B- 6 283 754;
O12: CA -A- 2 445 292;
O13: DE -U- 8 903 050;
O14: US -B- 6 386 877;
O15: A. Schroeder et al.: Orale Implantologie Allgemeine Grundlage und ITI System (1994), pages 128-131;
O16: IMZ Implant System Interpore Hex Implant System, pages 2-3, 7-8, 29;
O17: Straumann Dental: Konzept und chirurgisches Verfahren Basisinformation, pages 8-10, 29;
O18: T.G. Wilson: ITI Dental Implants Planning, Placement, Restoration, and Maintenance (1993), page 17;
O19: Color Atlas of Dental Medicine, H. Spiekermann Implantology (1995), pages 15, 18-21;
O20: US -A- 4 826 434;
O21: WO -A- 02/00133;
O22: US -A- 5 779 481;

O23: J. Clin. Periodontol. 2002 (29), pages 448-455; and
O24: US -A- 5 642 996.

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

Late-filed documents

Documents O10 and O11 were filed late because the appellant became aware of them only at an advanced stage of the proceedings.

Moreover, O10 showed in Figure 100 an interface between the bone tissue apposition surface and a soft tissue apposition surface which was not parallel to the shoulder of the implant. As to O11, it disclosed in column 5, lines 5 to 8, that the shoulder could also be inclined with respect to the axis of the implant. Accordingly, both documents were prima facie novelty-destroying. Hence, they were to be admitted into the proceedings.

Introduction of the main request into the proceedings

The main request had been filed at a very late stage. Moreover, it required, contrary to all the requests previously on file, that the soft tissue apposition surface be polished. Hence, this request should not be admitted into the proceedings.

Article 123(2) EPC

A roughened bone tissue apposition surface was disclosed in the application solely in paragraph [0012]. However, this paragraph referred to Figures 1A to 4, i.e. to embodiments exhibiting specific shapes of the interface. Since said specific shapes had not been included in claim 1 the introduction of the term "roughened" was an unallowable intermediate generalisation, which contravened Article 123(2) EPC.

Article 84 EPC

Additionally, since the claim did not define to which extent the bone tissue apposition surface had to be roughened, a lack of clarity arose as a result of that amendment.

Novelty

O3 disclosed in Figure 14 an implant with all the features according to claim 1. In particular, since the wording of the present claim did not require the soft tissue apposition surface to be completely polished, region 62 of the implant of O3 could be seen as part of said surface. Therefore, in the implant of O3 the interface between the soft tissue apposition surface and the bone tissue apposition surface was the interface between the region 62 and the apical region with large threads. Since this interface was not parallel to the shoulder, no difference could be seen between the subject-matter of claim 1 of the implant shown in O3. Therefore, the subject-matter of claim 1 lacked novelty.

Inventive step

In the event that the subject-matter of claim 1 was considered to be novel over O3, it did at least not involve an inventive step.

Figure 1D of O2 represented the most relevant prior art for assessing inventive step. The only difference between the claimed implant and that shown in this drawing was that the shoulder of the latter was not inclined with respect to the axis of the dental implant.

The object to be achieved by virtue of this distinguishing feature was to provide an implant readily accessible to the implantologist, in particular in the palatal or lingual area, while still conforming to aesthetic requirements.

O3 showed in Figure 14 an implant whose shoulder was inclined with respect to the axis of the implant. Although this document did not address the problem of access to the implant, it was clear from Figure 14, showing the profiles of the bone tissue and the soft tissue, that the depicted implant was advantageous in this respect. Therefore, the combination of O2 and O3 rendered it obvious to achieve the above object by an implant according to claim 1. Accordingly, the subject-matter of claim 1 did not involve an inventive step.

VIII. The arguments of the respondent may be summarised as follows:

Late-filed documents

Documents O10 and O11 were not prima facie novelty destroying and were not to be admitted into the proceedings.

Introduction of the main request into the proceedings

The new main request was merely a clarification of the ninth auxiliary request already on file. Therefore, it should be admitted into the proceedings.

Article 123(2) EPC

The feature that the bone tissue apposition surface is roughened was disclosed in paragraph [0012] of the application. Figures 1A to 4, to which that paragraph referred, covered all the possible shapes of the interface between bone tissue apposition surface and soft tissue apposition surface disclosed in the application. Therefore, it was clear that this feature was not linked to any particular shape of said interface. Accordingly, its introduction in the claim did not contravene Article 123(2) EPC.

Article 84 EPC

Neither did a lack of clarity arise from the amendment, since it was perfectly clear to the person skilled in the art what a roughened surface was, especially when compared to a polished surface.

Novelty

According to claim 1 the interface between the bone tissue apposition surface and the soft tissue apposition surface was defined by the boundary between the roughened and the polished surfaces. Since in Figure 14 of O3 that boundary was parallel to the shoulder of the implant, this document could not be novelty destroying. Hence, the subject-matter of claim 1 was novel.

Inventive step

The object to be achieved starting from Figure 1D of O2 was to provide an implant which was readily accessible to the implantologist. This object was achieved by the provision of an implant whose shoulder was inclined with respect to the axis of the implant.

Starting from O2 the person skilled in the art had no reason to consult O3, which did not mention that object at all, but would have rather chosen the solutions proposed in the other embodiments of O2, which all involved an interface parallel to the shoulder.

Moreover, even consulting O3 he would not have selected the arrangement of the shoulder shown in Figure 14 without arranging the interface in the same way, i.e. parallel to the shoulder, since this was an essential feature. Therefore, the subject-matter of claim 1 also involved an inventive step.

Reasons for the Decision

1. The appeal is admissible.

2. Late-filed documents

2.1 Documents O10 to O24 were all filed for the first time in the appeal proceedings. Accordingly, they are all late-filed and it lies in the discretion of the Board to admit them into the proceedings or not.

2.2 O12 to O24 relate to the issue of the definition of the interface between the bone tissue apposition surface and the soft tissue apposition surface. This point was already discussed during the written proceedings at first instance (see for instance the letter of the opponent dated 16 August 2010, point 3.). Hence, there is no justification for the delay in the filing of O12 to O24, which, additionally, are not more relevant than the documents already filed during the first instance proceedings.

2.3 Nor is there a good reason for the delay in the filing of O10 and O11, since they do not relate to an issue raised for the first time in the decision under appeal either. The fact that the appellant became aware of these documents only at a late stage of the proceedings cannot change this finding. Furthermore, Figure 100 of O10 does not clearly and unambiguously show an interface between the bone tissue apposition surface and the soft tissue apposition surface which is not parallel to the shoulder of the implant. As to O11, in column 5, lines 5 to 8, it merely states that the shoulder is approximately 90° to the axis of the

implant, without clearly and unambiguously disclosing that it is inclined with respect to the axis. Accordingly, neither of these documents is prima facie novelty destroying, contrary to the appellant's submissions.

2.4 Under these circumstances none of the documents O10 to O24 is admitted into the proceedings.

3. Introduction of the main request into the proceedings

The main request has been filed at a very late stage of the proceedings, namely at the oral proceedings before the Board of Appeal. Moreover, contrary to all the requests previously on file, it requires that the soft tissue apposition surface is polished. However, claim 1 of the 9th auxiliary request filed on 22 October 2012 already stated that the soft tissue apposition surface is machined, for instance by polishing. Therefore, the main request recites a feature which was already present, albeit as an exemplary one, in the 9th auxiliary request already on file, and cannot take the appellant by surprise. Under these circumstances, the main request is admitted into the proceedings.

4. Article 123(2) EPC

The application as filed discloses in paragraph [0012] that the bone tissue apposition surface can be roughened. It is true that that paragraph makes reference to Figures 1A to 4, which show implants having certain shapes of the interface between the bone tissue apposition surface and the soft tissue apposition surface. However, those interface shapes are

different from each other and represent the totality of the interface shapes disclosed in the embodiments of the patent in suit. Therefore, a roughened bone tissue apposition surface is not associated to any particular shape of the interface. As a consequence, the introduction of this feature into claim 1 does not represent an unallowable intermediate generalisation and complies with Article 123(2) EPC.

5. Article 84 EPC

The term "roughened", relating to the bone tissue apposition surface, is a relative one. Nevertheless this term must be considered in connection with the term "polished", which relates to the soft tissue apposition surface. Together they serve to define the interface between those two surfaces. It was not disputed that the definition of that interface as the interface between a roughened and a polished surface is clear. Therefore, claim 1 has not been amended in a way which renders it unclear, contrary to the requirements of Article 84 EPC.

6. Novelty

O3 discloses in Figure 14 an intraosteal dental implant comprising three different regions: (a) an apical region with large threads, (b) a region with micro threads 46b and/or grit blasted surface 62 and (c) a machined collar 76.

The appellant argued the soft tissue apposition surface according to present claim 1 does not have to be completely polished and that region (b) can be regarded

as part of it. However, this argument is not convincing, since claim 1 of the main request requires that the soft tissue apposition surface is polished and extends from the interface separating it from the roughened bone tissue apposition surface. Accordingly, the implant disclosed in Figure 14 of O3 has a roughened bone tissue apposition surface, represented by the regions (a) and (b) above, extending from a tip of the dental implant up to an interface at a neck portion of the dental implant, and a polished soft tissue apposition surface represented by the region (c) above, extending from the interface to a shoulder (74) of the dental implant.

Since said shoulder is parallel to the interface which separates the polished surface from the roughened bone tissue apposition surface (see Figure 14), the subject-matter of claim 1 is novel.

7. Inventive step

7.1 O2 shows in Figure 1D an intraosteal dental implant having a roughened bone tissue apposition surface extending from a tip of the dental implant up to an interface (110) at a neck portion of the dental implant (see page 13, lines 15 to 29), and a polished soft tissue apposition surface (see page 13, lines 22 to 23) extending from the interface to a shoulder (12) of the dental implant, wherein the shoulder is substantially contained in a plane, the dental implant having further a bore in the form of a blind hole, coaxial with the axis and for receiving an abutment therein (see page 12, lines 28 to 30), and wherein the interface is substantially not parallel to the shoulder, which is

perpendicular to the axis of the implant (see Figure 1D).

7.2 The object to be achieved starting from this prior art is to provide an implant readily accessible to the implantologist, in particular in the palatal or lingual area, while still conforming to aesthetic requirements (see paragraph [0006] of the patent in suit).

This object is achieved in accordance with claim 1 of the main request by virtue of the fact that the shoulder is inclined with respect to the axis of the dental implant. This inclination reflects the morphologic difference between the palatal or lingual sides on one hand and the labial side on the other hand with respect to the alveolar bone anatomy (see paragraph [0018] of the patent in suit).

7.3 O3 does not mention that object. Moreover, paragraph [0043] of O3 presents the basic teaching in respect of the "coronal contour". Said contour represents the interface between the bone tissue apposition surface and the soft tissue apposition surface. This is clear from the statement that the apical-coronal dimension or lingual high point does not include any implant collar, if present, but only the bone engaging surface of the implant as the invention primarily addresses bone preservation. According to paragraph [0043] said coronal contour, i.e. the interface between the bone tissue apposition surface and the soft tissue apposition surface, is a straight line or a slightly convex contoured design as long as one bone-engaging side of the implant body, which would become the lingually oriented side of the implant fixture, is

longer in the apical-coronal bone engaging dimension than any other apical-coronal bone engaging dimension. Accordingly, the teaching of O3 is at odds with that of O2, which requires that the interface 110, i.e. the bone engaging contour, exhibits the shape of a saddle (see claim 1). Therefore, contrary to the appellant's view, it was not obvious for the person skilled in the art to consider the teaching of O3 for achieving the object above when starting from O2. In other words, it was not obvious to combine these documents.

Moreover, even in that case, the person skilled in the art would have had no hint to select the shape of the shoulder shown in Figure 14 of O3 without at the same time selecting the shape of the bone engaging contour, i.e. the interface between the bone tissue apposition surface and a soft tissue apposition surface, which is shown in Figure 14 and consistently presented as an essential feature in O3. Since this would have resulted in an interface parallel to the shoulder, the combination of O2 and O3 would not have rendered obvious the subject-matter of claim 1.

Therefore, the claimed subject-matter 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 first instance with the order to maintain the patent on the basis of the following documents:

   - Claims 1 to 15 as filed at the oral proceedings;

   - Description, columns 1, 2 and 5 to 8 as granted and columns 3 and 4 as filed at the oral proceedings;

   - Drawings, Figures 1A to 7 as granted.

The Registrar: The Chairman:

V. Commare T. Kriner