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**Datasheet for the decision  
of 9 April 2020**

**Case Number:** T 1112/17 - 3.2.08

**Application Number:** 10161786.8

**Publication Number:** 2289461

**IPC:** A61C8/00

**Language of the proceedings:** EN

**Title of invention:**

Dental superstructure, and a method of manufacture thereof

**Applicant:**

Kulzer GmbH

**Relevant legal provisions:**

EPC Art. 56, 123(2)

**Keyword:**

Amendments - allowable (no)

Inventive step - (no)



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Case Number: T 1112/17 - 3.2.08

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.08**  
**of 9 April 2020**

**Appellant:** Kulzer GmbH  
(Applicant) Leipziger Strasse 2  
63450 Hanau (DE)

**Representative:** Ström & Gulliksson AB  
P O Box 4188  
203 13 Malmö (SE)

**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 23 December  
2016 refusing European patent application No.  
10161786.8 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairwoman** P. Acton  
**Members:** G. Buchmann  
C. Schmidt

## Summary of Facts and Submissions

- I. The examining division refused European patent application No. 10161786.8.
- II. In its decision, the examining division held that claims 1 and 2 of the then only request contravened Article 123(2) EPC.

The examining division also provided the opinion that claims 1 and 2 contravened Article 84 EPC, and that the subject-matter of claim 1 lacked novelty and inventive step (Articles 54 and 56 EPC).

- III. The applicant (appellant) lodged an appeal against that decision.
- IV. The following document is relevant for the present decision:

D1: US 5,015,186 A

- V. The appellant requested that the decision under appeal be set aside and a patent be granted on the basis of the main request re-filed on 5 December 2019 in electronic form (on which the impugned decision was based), or as auxiliary measure, that a patent be granted on the basis of the auxiliary request filed on 5 December 2019 in electronic form.

The appellant had filed a request for oral proceedings but withdrew it by letter of 19 September 2019.

- VI. On 3 February 2020 the Board sent a communication, together with a summons to oral proceedings for

18 May 2020. The Board informed the appellant of its preliminary opinion that claim 1 of the main request contravened Article 123(2) EPC and that claim 1 of the auxiliary request lacked inventive step over D1 in combination with common general knowledge (Article 56 EPC).

With a letter of 3 March 2020, the appellant informed the Board that it would not attend the oral proceedings. The appellant did not provide any arguments regarding the inventive-step objection raised for the first time in the communication of 3 February 2020.

#### VII. Claims

Independent claim 1 of the main request reads as follows:

"A screw-member for cooperation with a dental implant, comprising a threaded part (52) and a screw-head (51) with a recess for receiving a driving means, said screw-head (51) comprising a surface (53) for bearing on shoulders of a screw-member seat of a dental superstructure, **characterized in that** said surface (53) is arched towards said threaded part (52) along with the surface (53) from a diameter of the screw member head (51) to a diameter of the threaded part (52) of the screw member."

Claim 1 of auxiliary request 1 differs from claim 1 of the main request in that the characterising portion has been amended in the following way:

"said surface (53) is arched towards said threaded part (52) ~~along with the surface (53)~~ from a diameter of the

screw member head (51) to a diameter of the threaded part (52) of the screw member."

VIII. The appellant's arguments can be summarised as follows.

The features which were objected to under Article 123(2) EPC by the examining division were to be found on page 10, lines 14-24 of the originally filed description. In particular, lines 20 and 22-24 provided literal support for the passage "along with the surface (53) from a diameter of the screw member head (51) to a diameter of the threaded part (52) of the screw member". Some parts of the cited section were not added to the claim, because they related to the dental superstructure and not the screw itself, which was the object of claim 1. Further, the appellant disagreed with the argument of the examining division that the amended claim appears to comprise an additional surface.

Regarding the novelty objection based on D1, the appellant argued that Fig. 8 was clearly not a construction drawing and, therefore, no dimension could be derived from it. An arched surface of the screw head could not be derived from the drawing and, if anything, the surface seemed to be conical instead. Moreover, there was no implicit disclosure of an arched surface either, because an implicit disclosure would require that no other configuration was possible. This was, however, not the case. To the contrary, it was indeed possible that the surface was conical, as supported by column 10 which described a construction where the shape of the screw head was irrelevant.

## Reasons for the Decision

### 1. Main Request

Amendments - Article 123(2) EPC

- 1.1 The preamble of claim 1 is essentially based on the preamble of "clause 1" on page 15 of the original application. The characterising portion corresponds to the particular embodiment of the screw head surface, given on page 10, line 8 to page 11, line 22.

This passage discloses (see page 10, lines 10-24) that "...the diameter of the screw member head 51 may decline, in an arched way, along with a surface 53 ... from the diameter of the screw member head 51 to approximately a diameter of a threaded part 52 of the screw member".

This means that the diameter of the screw is decreasing, in an arched way, from one diameter (of the head) to another diameter (of the threaded part).

In contrast, the claim defines that "...said surface (53) is arched towards said threaded part (52), along with the surface 53 from the diameter of the screw member head 51 to approximately a diameter of a threaded part 52 of the screw member".

The wording of the claim cannot be found literally in the description. Moreover, its technical meaning cannot be derived from the description, because the meaning of the passage "the surface 53 is arched along with the surface 53" is obscure. It might just have the meaning that the surface is arched, but then it is not clear why the surface is defined to be arched along itself.

Given the fact that the wording of the claim has no clear meaning, it follows that it cannot be derived from the description which is formulated clearly.

1.2 The board agrees with the appellant that the claim does not define a second surface. This is, however, not relevant in view of the above reasoning.

1.3 Therefore, claim 1 of the main request contravenes Article 123(2) EPC.

## 2. Auxiliary Request

Lack of Inventive Step - Article 56 EPC

Document D1 discloses (see D1, Fig. 8, and column 9, line 55 to column 10, line 14) a screw member 84 for co-operation with a dental implant 14, comprising a threaded part (Fig. 8) and a screw head (Fig. 8, column 10, line 6) with a recess for receiving a driving means (implicit), said screw head comprising a surface (lower surface in Fig. 8) for bearing on shoulders of a screw-member seat of a dental superstructure (74, 66), wherein said surface ~~is arched~~ extends towards said threaded part (of the screw) from a diameter of the screw member head to a diameter of the threaded part of the screw member.

D1 does not mention the shape of said lower surface of the screw head. Additionally, this shape is not unambiguously derivable from Fig. 8. Therefore, the subject-matter of claim 1 differs from the screw member of D1 in that the lower surface, which extends from the diameter of the screw member head to a diameter of the threaded part of the screw member, is arched.

Hence, the Board agrees with the appellant's arguments concerning novelty. However, claim 1 lacks inventive step for the following reasons.

The problem to be solved is the provision of a screw which is adapted for the fixation of the head 66 of the superstructure to the base member 12 and implant 14 of D1.

Fig. 8 shows the head of screw 84 seated in a concavity of the seat portion 74 of the superstructure. The concavity of the seat portion 74 shown in Fig. 8 has an overall arched shape. The head 66 is adapted for swivelling attachment to the cuff portion 68 of the base member in order to allow adaptation of the angle between head and base member (column 9, lines 55-66, column 10, lines 15-29). In use, the seat portion 74 is swivelled when the screw is loosened. Once the optimum orientation is reached, the screw is tightened to lock the seat in the selected orientation (column 10, lines 37-41). This means that the screw must provide a stable fixation for several possible angular positions of the head 66 (with seat portion 74) relative to the screw 84 and the implant 14.

When seeking a suitable geometry for the screw, the skilled person can choose from screws having a screw head with a lower surface profile being flat, conical or somehow arched. In view of the described adaptation of the angular position of the head 66, followed by tightening of the screw 84, the skilled person would choose a similar, if not the same, contour for both the screw head and its seat.

Therefore, the skilled person would choose an arched



lower surface of the screw head and arrive at the subject-matter of claim 1 of the auxiliary request without performing an inventive step (Article 56 EPC).

The appellant has not provided any arguments against this objection.

3. The appeal therefore had to be dismissed. Since the appellant announced not to attend oral proceedings scheduled for 18 May 2020 this decision could be taken in writing. The statement not to attend oral proceedings is treated as equivalent to a withdrawal of the request for oral proceedings (see Case Law of the Boards of Appeal of the European Patent Office, 9th edition 2019, III.C. 4.3.2 and the decisions cited there).

## Order

### **For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairwoman:



C. Moser

P. Acton

Decision electronically authenticated