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**Datasheet for the decision
of 13 September 2019**

Case Number: T 2073/13 - 3.4.01

Application Number: 08700743.1

Publication Number: 2127613

IPC: A61C8/00, A61C13/00

Language of the proceedings: EN

Title of invention:
ARTIFICIAL TEETHRIDGE AND FANG

Applicant:
5-7 Corporation Limited

Headword:
TEETHRIDGE AND FANG / 5-7 CORPORATION

Relevant legal provisions:
EPC Art. 84, 56

Keyword:
Claims - clarity (no) - conciseness (no) - support in the
description (no)
Inventive step - (no)



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Case Number: T 2073/13 - 3.4.01

D E C I S I O N
of Technical Board of Appeal 3.4.01
of 13 September 2019

Appellant: 5-7 Corporation Limited
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 14 May 2013
refusing European patent application No.
08700743.1 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman P. Scriven
Members: T. Zinke
J. Geschwind

Summary of Facts and Submissions

- I. The Examining Division refused European patent application 08 700 743.1, which derives from international application PCT/CN2008/000200, published as W02008/095403.
- II. In its decision, the Examining Division held that the application did not meet the requirements of Articles 83 and 84 EPC.
- III. The applicant appealed, and, in its statement of grounds, requested:
- as sole substantive request, that the Examining Division's decision to refuse the application be set aside and that a patent be granted based on the claim set as filed on 14 March 2013, which was the basis of the appealed decision;
 - that the appellant be afforded an opportunity of filing auxiliary requests;
 - that oral proceedings be held, if the Board did not allow the sole substantive request.
- IV. With its statement of grounds, the appellant also submitted:
- a corrected English translation of the published PCT-application (which is in Chinese),
 - a corrected English translation of the version on which the International Preliminary Examination Report (IPER) was based (also in Chinese),
 - a clean copy of the description pages on which a grant was requested, and
 - document D15: "Advanced Ceramic Technologies & Products", The Ceramic Society of Japan, Springer, 2012, page 512.

- V. In a communication sent with the summons to oral proceedings, the Board set out its preliminary view. In particular, the Board set out which application documents, and their translations, were considered valid during appeal proceedings; and raised preliminary objections under Articles 83, 84 and 56 EPC.
- VI. The appellant indicated that it would not be represented at oral proceedings.
- VII. The oral proceedings were cancelled, and the Board informed the appellant that it would seek to reach a decision on the date for which the oral proceedings had been scheduled.
- VIII. The appellant filed no further submissions.
- IX. Independent claim 1 of the sole request reads as follows:

An artificial teethridge and fang, which is intended to be mounted and fixed on the curved structure of the top of the alveolar bone, comprising:

an artificial teethridge (10) which has an arched cross-section, having an arched top (11) and an arched bottom (12), wherein the bottom of the artificial teethridge (10) forms a concave profile to fit with the curved structure of the top of the alveolar bone, so that the artificial teethridge can be mounted and fixed on the curved structure of the top of the alveolar bone;

a plurality of fangs (13) form integral on the top of the artificial teethridge (10); and

a plurality of prostheses (30), the bottom of the prostheses (30) having cavities directly corresponding to each fang (13) one-to-one, and the prostheses (30) formed integral on the top of each fang (13);

characterized in that the artificial teethridge (10), the fangs (13), and each prosthesis (30) formed an integral structure.

Reasons for the Decision

Basis for amendments (Article 123(2) EPC), valid documents

1. The Board is satisfied that the amendments made to the description and to the claims have a basis in the application as originally filed.
2. Due to the plurality of translations filed during the examination proceedings, the Board, in its communication, specified which documents it considered valid during appeal proceedings. These were:
 - as translation of the original application, the version filed with the statement setting out the grounds of appeal, referred to there as "clean copy

of pages 1 to 25 of the corrected English translation of the PCT application as published";

- as description, the version that was also submitted with the statement setting out the grounds of appeal and referred to there as "clean copy of pages 1 to 13 of the description, on which the grant is requested".

3. Since no indication to the contrary was submitted by the appellant, these are the valid documents to which the Board in the following refers.

Clarity and support by the description (Article 84 EPC)

4. The Board will use the term "fang", since it is used throughout the application. This term, however, seems not to be used in dentistry. The prior art uses different terms as, for instance, "stumps" (D1, reference sign 14).
5. The formulations (in claim 1) "a plurality of fangs (13) form integral" (cf. 3rd paragraph) and "characterized in that the artificial teethridge (10), the fangs (13), and each prosthesis (30) formed an integral structure" (emphasis added by the Board) are linguistically incorrect. Appropriate correction would have been required, but it is not apparent what the correct text should be.
6. In claim 1, the term "integral" is used three times: "a plurality of fangs (13) form integral on the top of the artificial teethridge", "the prosthesis (30) formed integral on the top of each fang (13)", and "characterized in that the artificial teethridge (10),

the fangs (13), and each prosthesis (30) formed an integral structure". The characterising portion of the claim is, therefore, already defined in the pre-characterising portion. It is not apparent, how a feature can properly appear in both the preamble (which should define features known in combination from the prior art) and in the characterizing part (which should define the contribution made by the invention).

7. Besides these linguistic issues, the term "integral" itself is unclear, and - as describing a connection of the fang/teethridge and the prostheses - not supported by the description.
8. In the valid description, the term "integral" is used, with regard to the embodiments shown in Figures 1 to 10, only in connection with the artificial teethridge and the "fangs" (cf. page 8, line 15 to 17), but not in connection with the prostheses.
9. Also, in the "three main characters" of the invention (page 6, line 19 to page 7, line 11 of the valid description), only an "integral" structure of the artificial teethridge and the "fangs", but no "integral" structure of either of those with the prostheses is mentioned. Whereas in Fig.1 (lower part) the artificial teethridge and the "fangs" are shown as a single part, the prostheses are shown as a separate part. All the other embodiments also show a boundary between the prostheses and the fang/teethridge.
10. It is also disclosed only that the teethridge is first mounted and fixed on the bone, and then, after an osseointegration period of a few weeks, the denture set (the prostheses) is mounted (page 10, lines 16 to 21 of

the valid description).

11. Therefore, throughout the embodiments, the connection between the prostheses and the "fang"/teethridge is different from the connection between "fang" and teethridge. It is not clear how it can be "integral" as well; and the description does not support it.
12. The original PCT application mentions an integral structure involving the prosthesis in claims 3, 15, 27, and 39. Its description refers only to an integral structure formed from the artificial teethridge, the "fang", the fixture, and the prosthesis (cf. page 11, line 24 to page 12, line 11). There is no support for an integral structure involving the prosthesis but not the fixture. Therefore, the latest translation of the PCT application does not aid the appellant.
13. The issues under sections 8. to 11. above were discussed during examination proceedings, and findings under Articles 83 and 84 EPC were made (cf. Grounds for the decision, sections 2.2 and 2.3).
14. With the statement setting out the grounds of appeal, the appellant submitted document D15, and argued that the "integral form" should be interpreted as referring to a sintering process (pages 2 to 4, subheading: "Sufficiency of disclosure - Article 83 EPC").
15. The Board is not persuaded by this. The process as described in D15 relies on a combination of ceramic and metal material. However, neither for ceramic nor for metal is there any disclosure in the application. There is no basis for reading a sintering process onto the different materials of the invention.

16. Hence, claim 1 is neither clear, nor concise, nor supported by the description (Article 84 EPC).

Inventive step (Article 56 EPC)

17. Even if "integral" were interpreted, as indicated by the appellant in the statement setting out the grounds of appeal, as meaning that the "prostheses directly fuse on the fang, so there is no boundary between the prostheses and the fangs, so in the inner of the prostheses the cavity no longer remains visible" (page 5, fourth paragraph)", the subject matter of claim 1 would lack an inventive step.
18. Document D1 (WO-A-2002/039921) discloses all the features of claim 1 besides the "integral" connection between the "fangs" and the prosthesis.
19. According to the description, the technical effect of this feature lies in providing "a strong and stable structure with great force support, uniform force dispersion, firm fixation, and well force conduction" (cf. description in the latest translation, page 6, lines 12 to 18).
20. Document D15, however, discloses that "In order to enhance the strength, the porcelain-fused-to-metal crown, made by means the fusion of metal and ceramic material, was introduced in 1956 and is still used even today". Also the appellant referred to this passage in the statement setting out the grounds of appeal (cf. page 3, first full paragraph). Hence, the person skilled in the art was well aware, at the priority date of the present application, that better connection strength could be achieved with the process of

sintering, thereby forming an "integral structure".

21. Hence, a correspondingly interpreted subject-matter of claim 1 would have been obvious, starting from document D1, in view of D15.
22. During proceedings before the Examination Division, the appellant argued that, in the prior art then on file, it was always thought that "different parts must be assembled to build the dental structure gradually" and, "Before the present application, prosthesis had never been formed integral with the other parts (implant and abutment) to form an unitary dental structure." (cf. letter of 14 March 2013, page 5, last paragraph).
23. However, from the wording of the claim, it is evident that the prosthesis has cavities that are used in assembling the prosthesis on top of the fang. Hence, the subject-matter of claim 1 is an assembled device. The "integral" feature seems to rely on a particular way of assembling, but a strong connection resulting in an "integral" structure could also be formed by using a traditional dentist cement, which was common general knowledge in the field of dentistry and disclosed, for instance, in document D2 (FR-A-2.138.224) for connecting a prosthesis with an implant (cf. D2, page 1, lines 10 to 13).
24. Hence, the subject-matter of claim 1 would also have been obvious, starting from document D1, in view of the common general knowledge or document D2.

Right to be heard (Article 113(1) EPC)

25. The reasons for the present decision are all mentioned in the Board's communication of 16 May 2019, to which the appellant made no substantive response. The Board sees no reason to change its opinion as set out in the communication.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



R. Schumacher

P. Scriven

Decision electronically authenticated