Datasheet for the decision
of 12 October 2018

Case Number: T 1933/15 - 3.2.08

Application Number: 04785373.4

Publication Number: 1670402

IPC: A61F9/007

Language of the proceedings: EN

Title of invention:
CONTROL OF PULSE DUTY CYCLE BASED UPON FOOTSWITCH DISPLACEMENT

Patent Proprietor:
Abbott Medical Optics Inc.

Opponent:
Geuder AG

Headword:

Relevant legal provisions:
EPC Art. 123(2), 54, 56
RPBA Art. 13(1)
Keyword:
Amendments
Novelty
Inventive step

Decisions cited:

Catchword:
Case Number: T 1933/15 - 3.2.08

DECISION
of Technical Board of Appeal 3.2.08
of 12 October 2018

Appellant: Abbott Medical Optics Inc.
(Patent Proprietor)
1700 E. St. Andrew Place
Santa Ana, CA 92705-4933 (US)

Representative: Hoffmann Eitle
Patent- und Rechtsanwälte PartmbB
Arabellastrasse 30
81925 München (DE)

Respondent: Geuder AG
(Opponent)
Hertzstrasse 4
69126 Heidelberg (DE)

Representative: Patent- und Rechtsanwälte Ullrich & Naumann
PartG mbB
Schneidmühlstrasse 21
69115 Heidelberg (DE)

Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted on 5 June 2015
revoking European patent No. 1670402 pursuant to
Article 101(3)(b) EPC.

Composition of the Board:
Chairwoman P. Acton
Members: M. Alvazzi Delfrate
Y. Podbielski
Summary of Facts and Submissions

I. By its decision posted on 5 June 2015 the opposition division revoked European patent No. 1670402.

II. The appellant (patent proprietor) lodged an appeal against this decision in the prescribed form and within the prescribed time limits.

III. Oral proceedings before the Board of Appeal were held on 12 October 2018. At the end of the oral proceedings the appellant requested that the decision under appeal be set aside and, as a main request, that the patent be maintained on the basis of auxiliary request 5 filed with letter of 13 June 2016.

The respondent (opponent) requested that the appeal be dismissed. The respondent had further requested that the main request (former auxiliary request 5) not be admitted into the proceedings.

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

"Ophthalmic lens extraction apparatus (10) comprising:

a phacoemulsification handpiece (30) having a needle and having electrical means configured to ultrasonically vibrate the needle;

a power source (12) for providing pulsed electrical power to the handpiece electrical means;

an irrigation source (34) for providing irrigation fluid to the eye and an aspiration source (14) to provide aspiration of fluid from the eye (38) via the needle; and
a footswitch (43A) for enabling a surgeon to select an amplitude of the electrical pulses, characterized in that the footswitch (43A) enables a surgeon also to select a duty cycle of the electrical pulses."

V. The following document played a role for the present decision:


VI. The arguments of the respondent can be summarised as follows:

Admission of the main request into the proceedings

The main request was not filed with the statement of grounds of appeal but only later, although the objections which it was intended to address were already part of the opposition proceedings. Hence, it should not be admitted into the proceedings.

Article 123(2) EPC

Originally filed claim 1 defined an off duty cycle being controlled to ensure heat dissipation before a subsequent pulse was activated. This feature limited the claim because it required the suitability of the claimed device to perform this function. The feature had been omitted from present claim 1, although no basis for the omission could be found in the application as originally filed. Thus, the requirements of Article 123(2) EPC were not satisfied.
Moreover, claim 1 also defined a footswitch. A footswitch was not the same as the footpedal originally disclosed on page 8. Also for this reason the requirements of Article 123(2) EPC were not complied with.

Novelty

D2 disclosed a device with all the features of claim 1. In particular, the device of D2 comprised control means which, in response to the selected pulse amplitude, controlled a pulse duty cycle. In this way a selection of a new pulse amplitude led to a change in the duty cycle. Thus, the device of D2 exhibited also the feature of the characterising portion of claim 1. Therefore, the claimed subject-matter was not novel.

Inventive step

On the basis of the information in the patent in suit the problem solved starting from D2 was the provision of further control of pulse delivery, as described in paragraph [0087]. The person skilled in art knew that in order to control the pulse delivery it was possible to manually select also other parameters, such as the pulse duty cycle. It was obvious to select this further parameter in the same way as the amplitude, i.e. via the footswitch. Therefore, the subject-matter of claim 1 did not involve an inventive step.

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

Admission of the main request into the proceedings
In respect of the former main request the present main request differed in that the aspiration source provided aspiration of fluid from the eye "via the needle". This amendment addressed an objection of added subject-matter raised by the respondent in the response to the statement of grounds of appeal. It was true that the same objection had been raised at the oral proceedings in opposition. However, the objection had not convinced the opposition division, so that there was no reason to file the request earlier. Thus, the new main request should be admitted into the proceedings.

Article 123(2) EPC

The feature concerning the off duty cycle being controlled to ensure heat dissipation before a subsequent pulse was activated, which had been omitted from claim 1, had no limiting value. In any event it did not represent the contribution of the invention but rather something which was known in the art. For these reasons, it could be omitted without contravening the requirements of Article 123(2) EPC.

As to the footswitch, it was literally disclosed in claim 2 as originally filed. Thus, claim 1 complied with the requirements of Article 123(2) EPC.

Novelty

The subject-matter of claim 1 was distinguished over D2 by the features of the characterising portion. The claim required that amplitude and duty cycle be independently selected. By contrast, in D2 the choice of the amplitude determined also the duty cycle. Therefore, the subject-matter of claim 1 was novel.
Inventive step

Starting from the closest prior art D2 the objective problem to be solved was to have a better precision and better adaptation to the area subject to surgery. There was no obvious reason for the person skilled in art to select, in addition to the pulse amplitude, the duty cycle. He could have instead selected a different parameter, such as shape and frequency of the pulse. At least for these reasons the subject-matter of claim 1 involved an inventive step.

Reasons for the Decision

1. Admission of the main request into the proceedings

The main request was not filed with the statement of grounds of appeal but only with letter of 13 June 2016 (as auxiliary request 5). Hence its admission into the proceedings is at the Board's discretion (Article 13(1) RPBA).

Claim 1 of the main request differs from granted claim 1 solely in that the aspiration source is "to provide aspiration of fluid from the eye via the needle". This amendment addresses an objection of added subject-matter raised by the respondent. Therefore, it does not raise any complex issue.

It is true that said objection of added subject-matter had already been raised in opposition proceedings. However, this was done for the first time at the oral proceedings, so that the appellant had no possibility to submit this request in the written opposition
procedure. Nor had he any reason to submit it at the oral proceedings in opposition or together with the statement of grounds of appeal, because the opposition division did not find the objection convincing. Hence, the submission of the present main request with letter of 13 June 2016 was a timely response to the re-submission of said added subject-matter objection in the reply to the statement of grounds of appeal (dated 5 February 2016).

Under these circumstances, the Board decided to admit the request into the proceedings.

2. Article 123(2) EPC

2.1 The wording "[comprising] ... an off duty cycle being controlled to ensure heat dissipation before a subsequent pulse is activated", which was present in originally filed claim 1, has been omitted from present claim 1.

Present claim 1 defines that the device enables a surgeon to select a duty cycle of the electrical pulses. Hence, the claimed device can be used to manually select an off duty cycle. The inherent effect of an off duty cycle is to reduce the heating and thus, as a consequence, to ensure some heat dissipation. Therefore, the claimed device is inherently suitable to select an off duty cycle being controlled to ensure heat dissipation before a subsequent pulse is activated.

Therefore, although some wording has been omitted from the claim no limiting feature has been deleted. Accordingly, this amendment complies with the requirements of Article 123(2) EPC.
2.2 The device of present claim 1 also comprises a footswitch, which was not mentioned in claim 1 as originally filed. However, claim 2 as originally filed literally discloses a footswitch. Thus, without the need to consider whether a footpedal as mentioned on page 8 is the same as a footswitch, it is concluded that this amendment equally complies with the requirements of Article 123(2) EPC.

3. Novelty

3.1 It is common ground that D2 discloses a device according to the preamble of claim 1. The device disclosed in D2 is an ophthalmic lens extraction apparatus comprising: a phacoemulsification handpiece (30) having a needle and having electrical means configured to ultrasonically vibrate the needle (abstract); a power source for providing pulsed electrical power to the handpiece electrical means (abstract); an irrigation source for providing irrigation fluid to the eye and an aspiration source to provide aspiration of fluid from the eye via the needle (abstract); and a footswitch (footpedal, page 13, lines 30-32) for enabling a surgeon to select an amplitude of the electrical pulses (page 8, lines 21-22 and page 13, lines 25-30).

3.2 D2 discloses also control means provided for controlling a pulse duty cycle in response to the selected pulse amplitude. A surgeon may vary the pulse amplitude in a linear manner via the switch 43 and the control unit controls a pulse duty cycle in response to the selected pulse amplitude, irrigation and aspiration fluid flow rates (page 8, lines 21-24 and page 15, lines 27-31).
The respondent argued that, since in this way a selection of a new pulse amplitude led to a change in the duty cycle, the device of D2 exhibited also the feature of the characterising portion of claim 1. However, the characterising part of the claim recites that "the footswitch (43A) enables a surgeon also to select a duty cycle of the electrical pulses". Reading this feature together with the rest of the claim, which defines "a footswitch (43A) for enabling a surgeon to select an amplitude of the electrical pulses", it is clear that the claim requires that two independent selections (amplitude and duty cycle) must be possible. As explained above this is not the case in D2, wherein the choice of the amplitude determines also the duty cycle.

Therefore, the characterising part of claim 1 is not known from D2 and the claimed subject-matter is novel.

4. Inventive step

The parties disagree on what is the objective problem to be solved starting from the closest prior art D2. The appellant argued that the problem was to have a better precision and better adaptation to the area which is subject to surgery. However, the patent in suit provides no evidence that this problem is actually solved. Hence, the Board concurs with the formulation of the problem of the respondent, who, on the basis of paragraph [0087] of the patent, saw it in the provision of further control of pulse delivery.

The person skilled in art knows that in order to control the pulse delivery it is possible to act, in addition to the pulse amplitude, on different
parameters, comprising shape and frequency of the pulse and the duty cycle.

When starting from D2, however, he would also consider the teaching of this document. D2, like the patent in suit (paragraph [0026]), aims at the avoidance of overheating of eye tissue during phacoemulsification (page 8, lines 4-7). D2 teaches to achieve this aim through input means for enabling a surgeon to select an amplitude of the electrical pulse and control means which, in response to the selected pulse amplitude, automatically control a pulse duty cycle. Hence, the teaching of D2 points in the opposite direction of present claim 1. While the latter requires an independent selection of amplitude and duty cycle, D2 teaches to control the duty cycle in dependence of the selected amplitude.

Hence, the person skilled in the art, without the knowledge of the claimed invention, had no obvious reason to solve the problem above as requested by claim 1 but would rather have solved the problem above by providing the possibility of an independent selection for the other parameters, such as shape and frequency of the pulse, for which D2 does not teach a dependency from the amplitude.

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

5. Description

The description has not been adapted. In this context the Board notes that no adaptation of the description has taken place in the examination phase either.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the opposition division with the order to maintain the patent on the basis of claims 1-8 of the main request, filed as auxiliary request 5 with letter dated 13 June 2016, and a description and figures to be adapted thereto.

The Registrar: C. Moser

The Chairwoman: P. Acton

Decision electronically authenticated