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Datasheet for the decision of 15 September 2017

Case Number: T 1878/14 - 3.2.08

Application Number: 05075049.6

Publication Number: 1537840

IPC: A61F9/007, A61M1/00

Language of the proceedings: EN

Title of invention:
Method for controlling irrigation and aspiration of fluids during surgical procedures on the eye

Patent Proprietor:
Abbott Medical Optics Inc.

Opponent:
Geuder AG

Headword:

Relevant legal provisions:
EPC Art. 100(c), 100(a), 54, 56

Keyword:
Grounds for opposition - extension of subject-matter (no)
Novelty - (yes)
Inventive step - (yes)

Decisions cited:
G 0001/06, T 0196/10, J 0015/85

Catchword:

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Case Number: T 1878/14 - 3.2.08

D E C I S I O N
of Technical Board of Appeal 3.2.08
of 15 September 2017

Appellant: (Patent Proprietor)	Abbott Medical Optics Inc. 1700 E. St. Andrew Place Santa Ana, CA 92705-4933 (US)
Representative:	Potter Clarkson LLP The Belgrave Centre Talbot Street Nottingham NG1 5GG (GB)
Respondent: (Opponent)	Geuder AG Hertzstrasse 4 69126 Heidelberg (DE)
Representative:	Patent- und Rechtsanwälte Ullrich & Naumann PartG mbB Schneidmühlstrasse 21 69115 Heidelberg (DE)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 15 July 2014 concerning maintenance of the European Patent No. 1537840 in amended form.**

Composition of the Board:

Chairwoman	P. Acton
Members:	C. Herberhold
	Y. Podbielski

Summary of Facts and Submissions

I. By decision posted on 15 July 2014 the Opposition Division decided that European patent No. 1 537 840 as per the second auxiliary request then on file, and the invention to which it related, met the requirements of the EPC.

II. Appellant I (patent proprietor) and II (opponent) lodged appeals against that decision in the prescribed form and within the prescribed time limits.

III. By letter dated 8 June 2017 appellant II withdrew the appeal.

IV. Oral proceedings before the Board were held on 15 September 2017.

As announced by letter dated 1 June 2017 appellant I - in the following referred to as the appellant - did not attend.

Appellant II - in the following referred to as the respondent - equally did not attend, as announced by letter dated 22 August 2017.

V. The requests of the parties were as follows:

The appellant requested to set aside the decision of the opposition division and to maintain the patent as granted, in the alternative to maintain the patent on the basis of one of auxiliary requests 1 to 9 filed with the statement of grounds.

The respondent requested - before withdrawal of the appeal - to set aside the decision of the opposition division and to revoke the patent in its entirety.

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

"A computer (18) operated method for operating a phacoemulsification system, the system including a phacoemulsification handpiece, an ultrasonic power source, a vacuum source, a source of irrigating fluid, and a control unit having a vacuum sensor for controlling ultrasonic power provided to the handpiece and the aspiration of irrigating fluid from the handpiece, said operating method comprising the steps of:
(a) supplying irrigation fluid from the irrigation fluid source to and through the handpiece;
(b) providing ultrasonic powder [sic] from the ultrasonic power source to the handpiece;
(c) applying vacuum from the vacuum source to the handpiece and thereby aspirating the irrigating fluid through the handpiece at a selected rate;
(d) during said fluid aspiration step, sensing a vacuum level in the handpiece corresponding to an occluded condition of the handpiece; and
(e) variably controlling, in response to a sensed vacuum level in the handpiece corresponding to the occluded condition of the handpiece, the ultrasonic power being provided to the handpiece."

VII. The following documents are referred to in the present decision:

D3: WO-A-86/07249;
D7: JP 63275334;
D7': English translation of D7;

D8: Shimizo, Sugita, Yaguchi: "Multi-modulated Phacoemulsification (MMP)", IOL 7(2): 86-94, June 1993.

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

Article 100(c) EPC

The present patent originated from a chain of divisional applications. During prosecution of the earlier, initial application, the patent proprietor had cancelled the originally filed method claims, without stating at the same time that their deletion was without prejudice to the filing of a divisional application. In accordance with J 15/85, filing of a divisional application had thus to be refused. Therefore, the subject-matter of the patent extended beyond the content of the earlier application as filed.

Furthermore, the granted method claim did neither comprise the step of placing a handpiece in an operational relationship with an eye for aspiration of fluids therefrom, nor the steps of supplying irrigation fluid into the eye, performing the phacoemulsification procedure, and aspirating the irrigation fluid from the eye. These steps were, however, essential features of the method as disclosed e.g. on page 7, line 22 - page 8, line 5 of the application as originally filed, their omission thus amounting to an unallowable intermediate generalisation.

Therefore, the subject-matter claimed extended over the application as originally filed.

Article 100(a) and 54 EPC - document D7'

D7' disclosed a method of operating an emulsification system. While it was true that the term phacoemulsification was not explicitly mentioned, there was no difference as to the claimed method, neither in the method steps, nor in a structural characteristic.

Moreover, as could be seen from the cover sheet of D8, the inventor of D7' was a well-known ophthalmologist. It was therefore clear that the method disclosed in D7' was for operating a phacoemulsification system.

Furthermore, the term "variably controlled" was very broad and included switching on and off the ultrasonic power as disclosed in D7'.

Consequently, claim 1 was not novel over D7'.

Article 100(a) and 56 EPC

Even if D7' did not clearly and unambiguously disclose a method for operating a phacoemulsification system, claim 1 of the main request could not be considered inventive, because no modification of the device disclosed in D7' was necessary to perform the method of granted claim 1.

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

Article 100(c) EPC

As correctly analysed by the opposition division, see points 1.1 and 1.2 of the decision, there had been no deliberate renouncing of any subject-matter during

prosecution of the case. This was in accordance with the guidelines for examination, section C.IX.1.3, which made clear that a deletion of claims from an application was not prejudicial to the valid filing of a divisional application.

Also the respondent's allegation that, by deleting essential surgical features from the originally filed subject-matter, the granted claims lacked basis is unfounded. No omission of essential features had taken place, as correctly analysed by the Opposition Division, see the decision points 1.3 and 1.4.

Article 100(a) and 54 EPC - document D7'

Document D7' did not clearly and unambiguously disclose a phacoemulsification system. In particular, factors such as the identity or profession of any of the inventors could not lead to a reinterpretation of the disclosure of the document, which remained nothing more than what was directly and unambiguously disclosed. Furthermore, simply turning on and off ultrasonic power could not anticipate the claimed feature according to which the power was variably controlled.
Lastly, D7' did not discuss the possibility of any occlusion in the handpiece. Its system was thus not set up to determine when an occlusion had occurred, or to take a specific action in response to a vacuum level in the handpiece corresponding to the occluded condition of the handpiece.

For all these reasons, the subject-matter of claim 1 was novel over the disclosure of document D7'.

Article 100(a) and 56 EPC

The technical effect of the claimed invention was a more effective method of operating a phacoemulsification device, the problem to be solved therefore being to provide a more effective method of operating a phacoemulsification device.

Thus, in order to solve the above problem, the person skilled in the art had firstly to modify the system of D7' for use as a phacoemulsification system. This had to be considered an important hurdle as D7' did not indicate that the system was suitable for use inside the delicate structure of an eye.

Consequently, the subject-matter of claim 1 was inventive over D7' and the common general knowledge.

Reasons for the Decision

1. Main request, Article 100(c) EPC

1.1 According to Article 100(c) EPC, opposition may only be filed on the grounds that:
(a) ...
(b) ...
(c) the subject-matter of the European patent extends beyond the content of the application as filed, or, if the patent was granted on a divisional application ... beyond the content of the earlier application as filed.

As indicated by the word only, the list of grounds for opposition in Article 100 EPC is exclusive. Therefore, whether the examining division would have been obliged to refuse its consent to the filing of a divisional

application in accordance with decision J 15/85 is irrelevant in opposition proceedings (see T 196/10, reasons 1.8).

According to Article 100 (c) EPC it does, furthermore, not play a role, which claims have ultimately been pursued during grant proceedings of the grandparent, parent or of the patent itself because the article explicitly refers to the content of the application or earlier application as filed.

Therefore, it only needs to be examined, whether the subject-matter of the European patent extends beyond the content of the application as filed (Article 100(c) first sentence) or beyond the content of the earlier application as filed (Article 100(c), second sentence).

1.2 In the present case of a sequence of applications consisting of a root (originating) application followed by divisional applications, each divided from its predecessor, what needs to be examined is whether anything disclosed in the divisional application leading to the impugned patent is directly and unambiguously derivable from what is disclosed in each of the preceding applications as filed. (G 1/06, Headnote).

1.3 In the present case, the description and the drawings as filed of the grandparent (WO-A-95/20374), of the parent (EP02005606.5) and of the application leading to the impugned patent (EP05075049.6) are substantially identical - apart from minor amendments in the discussion of prior art on page of 4 of the description of the parent and of the application leading to the impugned patent.

1.4 Article 100(c) EPC will thus not prejudice the maintenance of the patent as granted if the subject-matter does not extend beyond the content of the description and drawings of the application as filed (EP05075049.6) leading to the present patent.

Page 6, lines 5-14 of this document describes a "method for operating a phacoemulsification system", in which "ultrasonic power being provided to the handpiece may be variably controlled in response to a sensed vacuum level in the handpiece corresponding to an occluded condition", wherein "this control may be increasing the power to the handpiece when an occluded condition is signalled or alternatively, decreasing the ultrasonic power being provided to the handpiece when an occluded condition is sensed". The phacoemulsification system to be operated in the method is further defined on page 7, lines 13 to 20. Computer operation of the method resorts from Figure 1 (No. 18) in combination with Figure 3 and page 11, lines 1-19 and page 12, lines 23 to 34.

The respondent was of the opinion that the omission of surgical steps led to an extension of the subject-matter. However, firstly the above mentioned passages only concern the phacoemulsification system and do not mention those surgical steps. Furthermore, what is claimed is a method concerning the (internal) operation of a device. With respect to said internal operation of the device, it is irrelevant whether the handpiece has been brought into the eye or not. A sensed vacuum level corresponding to an occlusion of the handpiece will lead to a respective adjustment of ultrasonic power no matter where the handpiece is and what has caused the occlusion. Therefore, the method concerning the operation of the phacoemulsification system is fully

(in the sense of comprising all essential steps) defined without the surgical steps. The omission of the surgical steps thus does not amount to an unallowable intermediate generalisation.

Consequently, Article 100(c) EPC does not prejudice the maintenance of the patent as granted.

2. Main request - Novelty, document D7'

2.1 It is uncontested (respondent, statement of grounds, page 8, penultimate paragraph) that document D7' does not explicitly mention phacoemulsification but only refers to emulsification of affected tissue (e.g. D7', sentence bridging pages 3 and 4). In fact, there is no mention of the affected tissue being the lens or any other ocular tissue.

Furthermore, in several parts of D7' reference is made to washing away the "broken tissues and the accompanying blood" (e.g. page 4, second paragraph). This disclosure points away from cataract surgery because the lens is avascular. Thus, although some bleeding typically occurs when the corneal incision is made, during phacoemulsification there is no bleeding and no need to wash away any blood.

On the other hand, ultrasonic tissue ablation systems are used for fragmentation, emulsification and aspiration of various soft tissues, including gynaecologic surgery or aesthetic surgery, in which bleeding regularly occurs.

The Board does not agree with the respondent that any non-specified emulsification method or system is suitable for phacoemulsification. For example,

different emulsification applications require adapted cannula sizes (typically around 0.7-1 mm diameter in phacoemulsification and around 2-5 mm in soft tissue ablation) and specific control unit settings with respect to ultrasound energy, vacuum level, fluid flow etc.

Therefore, D7' does not disclose even implicitly that the method or the device disclosed in D7' was for operating a phacoemulsification system.

2.2 Also the fact that the inventor of D7' works in the department of ophthalmology is at best an indirect hint and no direct and unambiguous disclosure of D7' being applied in the field of ophthalmology.

2.3 D7' furthermore does not disclose that the control unit variably controls the ultrasonic power provided to the handpiece **in response to** a sensed vacuum **level corresponding to the occluded** condition of the handpiece.

As becomes clear from page 5, last paragraph, D7' solves the problem that, when the tissues are separated from the tip of the absorbing port 12, it becomes insufficient to absorb and remove the broken tissues and the irrigating liquid. In other words, with the D7' method being applied, absorption and removal of the broken tissues and the irrigation fluid proceeds as wanted, i.e. the handpiece is not in an occluded condition.

Therefore, although the ultrasound energy is switched "on" at a certain level of negative pressure (see also the impugned decision, page 5, point 3.3), this level

is less than the pressure level corresponding to the occluded condition.

It is correct that in the method disclosed in D7' also the rising vacuum level due to an occluded condition will have (at the beginning of build-up of the vacuum) triggered switching "on" of the ultrasound energy. However, this control (control unit action) is not "**in response** to a sensed vacuum level in the handpiece corresponding to the occluded condition of the handpiece", but in response to a sensed vacuum level in the handpiece corresponding to a vacuum level characteristic for a certain pump phase in which non-occluded debris and irrigation fluid aspiration occurs.

In other words, in both cases an action in response to a vacuum level in the handpiece is taken (i.e. the ultrasound energy is switched on), but in the process according to D7', the control unit activates the ultrasound earlier (i.e. at a less negative vacuum level), before the vacuum level corresponding to the occluded condition is reached, and thus not in response to a vacuum level corresponding to the occluded condition of the handpiece.

2.4 Therefore, claim 1 as granted is novel over D7'.

3. Main request - Inventive step

3.1 For the reasons explained above, even if the D7' method was modified for phacoemulsification, the person skilled in the art would not arrive at a method in which the control unit variably controls the ultrasonic power in response to a sensed vacuum level in the handpiece corresponding to the occluded condition of the handpiece.

3.2 D3 (discussed in the impugned decision, see point 3.7) discloses a phacoemulsification method in which, upon clogging during phacoemulsification, the pump is stopped and a release valve is opened. Even if one assumed in the respondent's favour that the person skilled in the art would modify the D3 method to include the pump cycle dependent modulation of the ultrasound energy according to D7', this would - as explained above - likewise not result in a method in which the control unit variably controls the ultrasonic power in response to a sensed vacuum level in the handpiece corresponding to the occluded condition of the handpiece.

3.3 Thus, the subject-matter of claim 1 as granted is inventive.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is maintained as granted.

The Registrar: The Chairwoman:

C. Moser P. Acton

Decision electronically authenticated