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**Datasheet for the decision  
of 11 October 2021**

**Case Number:** T 1651/18 - 3.2.08

**Application Number:** 11796256.3

**Publication Number:** 2579827

**IPC:** A61F9/008, G06T1/00, A61B3/14,  
A61G15/02, A61G15/10, A61F9/009

**Language of the proceedings:** EN

**Title of invention:**

IMAGE-GUIDED DOCKING FOR OPHTHALMIC SURGICAL SYSTEMS

**Patent Proprietor:**

Alcon Inc.

**Opponents:**

Johnson & Johnson Surgical Vision, Inc.  
AMO Ireland

**Headword:**

**Relevant legal provisions:**

EPC Art. 100(c), 123(2), 123(3)

**Keyword:**

Grounds for opposition - extension of subject-matter (yes)  
Amendments - broadening of claim (yes)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**

**Boards of Appeal**

**Chambres de recours**

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Case Number: T 1651/18 - 3.2.08

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.08**  
**of 11 October 2021**

**Appellant:**  
(Patent Proprietor)

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**Decision under appeal:**

**Decision of the Opposition Division of the  
European Patent Office posted on 26 April 2018  
revoking European patent No. 2579827 pursuant to  
Article 101(3) (b) EPC.**

**Composition of the Board:**

**Chairman**            M. Foulger  
**Members:**            A. Björklund  
                              J. Hoppe

## **Summary of Facts and Submissions**

- I. The appeal was filed by the patent proprietor (appellant) against the decision of the opposition division to revoke the patent in suit.
- II. The opposition division decided that the subject-matter of the claims as granted and as amended during the opposition proceedings extended beyond the content of the application as filed.
- III. After the appellant instituted infringement proceedings against AMO Ireland, the assumed infringer filed with letter of 15 January 2021 an intervention in the pending opposition appeal proceedings.
- IV. Oral proceedings were held before the Board on 11 October 2021.
- V. At the end of the oral proceedings, the requests were as follows:

The appellant (patent proprietor) requested that the decision under appeal be set aside and that the opposition be rejected, i.e. that the patent be maintained as granted (main request) or as an auxiliary measure,  
that the patent be maintained in amended form based on the following requests in the given order:  
auxiliary request 1 or 2, filed with the grounds of appeal, auxiliary request 3 or 4, filed with letter dated 29 December 2020 or auxiliary request 5, filed with letter dated 6 May 2021.

The appellant further requested that the case be remitted to the opposition division if deemed necessary.

Respondent 1 (opponent 1) and respondent 2 (intervener and opponent 2) requested that the appeal be dismissed and that the case not be remitted.

VI. Claim 1 of the main request (patent as granted), with feature designations from the impugned decision, reads as follows:

1 "An ophthalmic system comprising:  
2 a docking unit (55, 200, 455), configured to  
align the ophthalmic system and an eye;  
3 an OCT imaging system (56, 57, 457),  
configured to generate an image of an  
internal structure of the eye, comprising;  
4 an imaging controller, including  
4.1 a processor (430) that computes scanning data  
for a scanning pattern;  
4.2 a local memory controller (440, 440') that  
partially manages a transfer of the computed  
scanning data from the processor to a data  
buffer (450),  
4.2.1 configured to store the scanning data and to  
output the scanning data to an output  
digital-analog converter (460),  
4.2.2 coupled to the data buffer that converts  
selected scanning data to analog scanning  
signals and outputs the scanning signals to  
an OCT beam scanner (459); and;  
5 an OCT imaging unit (458), including  
5.1 an OCT camera (420) for recording OCT imaging  
data and for forwarding the recorded imaging

data to an OCT analyzer (480) synchronously with the scanning signals under the control of an imaging sync block (470), driven by the imaging controller,

5.2 wherein the OCT image analyzer is configured to output an OCT image based on the recorded OCT imaging data through the processor to a display (490)."

Claim 1 of the first auxiliary request, with additions compared to claim 1 of the main request underlined, reads:

1' "An ophthalmic laser surgical system (50) comprising:

2 a docking unit (55, 200, 455), configured to align the ophthalmic system and an eye;

2A a first imaging system configured to align a target pattern of the ophthalmic system in relation to a feature of the eye, wherein the first imaging system is one of a microscope or a video microscope;

3 an OCT imaging system (56, 57, 457), configured to generate an image of an internal structure of the eye, comprising;

4 an imaging controller, including

4.1 a processor (430) that computes scanning data for a scanning pattern;

4.2 a local memory controller (440, 440') that partially manages a transfer of the computed scanning data from the processor to a data buffer (450),

- 4.2.1 configured to store the scanning data and to output the scanning data to an output digital-analog converter (460),
- 4.2.2' coupled to the data buffer that converts selected scanning data to analog scanning signals and outputs the scanning signals to an OCT beam x-y or x-y-z scanner (459); and;
- 5 an OCT imaging unit (458), including
- 5.1 an OCT camera (420) for recording OCT imaging data and for forwarding the recorded imaging data to an OCT analyzer (480) synchronously with the scanning signals under the control of an imaging sync block (470), driven by the imaging controller,
- 5.2 wherein the OCT image analyzer is configured to output an OCT image based on the recorded OCT imaging data through the processor to a display (490)
- 5.3 the ophthalmic system being configured to improve an alignment of the docking unit (55, 455) with the internal structure of the eye in relation to the generated image; and to dock the docking unit to the eye."

Claim 1 of the second auxiliary request, with additions compared to claim 1 of the first auxiliary request underlined and deletions struck through, reads:

- 1' "An ophthalmic laser surgical system (50) comprising:
- 2 a docking unit (55, 200, 455), configured to align the ophthalmic system and an eye;
- 2A a first imaging system configured to align a target pattern of the ophthalmic system in



- relation to a feature of the eye, wherein the first imaging system is one of a microscope or a video microscope;
- 2B a surgical laser engine;
- 3 an OCT imaging system (56, 57, 457), configured to generate an image of an internal structure of the eye, comprising;
- 3A an OCT x-y or x-y-z beam scanner (459);
- 4 an imaging controller, including
- 4.1 a processor (430) that computes scanning data for a scanning pattern;
- 4.1A a local memory controller (440, 440'), a data buffer (450) and an output digital-analog converter;
- 4.2' athe local memory controller (440, 440') configured to~~that~~ partially manages a transfer of the computed scanning data from the processor to thea data buffer (450),
- 4.2.1' the data buffer configured to store the scanning data and to output the scanning data to ~~an~~the output digital-analog converter (460),
- 4.2.2'' coupled to the data buffer that converts selected scanning data to analog scanning signals and outputs the scanning signals to ~~the~~an OCT beam x-y or x-y-z scanner (459); and;
- 5 an OCT imaging unit (458), including
- 5A an OCT camera (420), an OCT analyzer, and an imaging sync block (470);
- 5.1' wherein ~~an~~the OCT camera (420) ~~for~~is configured to recording OCT imaging data and for forwarding the recorded imaging data to ~~an~~the OCT analyzer (480) synchronously with the scanning signals under the control of

- ~~the~~an imaging sync block (470), driven by the imaging controller,
- 5.2 wherein the OCT image analyzer is configured to output an OCT image based on the recorded OCT imaging data through the processor to a display (490)
- 5.3 the ophthalmic system being configured to improve an alignment of the docking unit (55,455) with the internal structure of the eye in relation to the generated image; and to dock the docking unit to the eye."

Claim 1 of the third auxiliary request differs from that of the second auxiliary request in that feature 5.3 has been deleted.

Claim 1 of the fourth auxiliary request, with additions compared to claim 1 of the third auxiliary request underlined and deletions struck through, reads:

- 1' "An ophthalmic laser surgical system (50) comprising:
- 1A an objective (54, 454);
- 2' a docking unit (55, 200, 455) coupled to the objective (54, 454), wherein the docking unit is configured to be aligned ~~the ophthalmic system and~~ with an eye;
- 2A a first imaging system configured to align a target pattern of the ophthalmic system in relation to a feature of the eye, wherein the first imaging system is one of a microscope or a video microscope;

- 2B' a surgical laser engine configured to generate a surgical laser beam, and a laser x-y-z scanner configured to scan the surgical laser beam across a surgical target region;
- 3 an OCT imaging system (56, 57, 457), configured to generate an image of an internal structure of the eye, comprising;
- 3A an OCT x-y or x-y-z beam scanner (459);
- 4' an OCT imaging unit (458) including an OCT camera (420), an OCT analyzer, an imaging sync block (470) and an imaging controller, the imaging controller including
- 4.1 a processor (430) that computes scanning data for a scanning pattern;
- 4.1A a local memory controller (440, 440'), a data buffer (450) and an output digital-analog converter;
- 4.2' the local memory controller (440, 440') configured to partially manage a transfer of the computed scanning data from the processor to the data buffer (450),
- 4.2.1' the data buffer configured to store the scanning data and to output the scanning data to the output digital-analog converter (460),
- 4.2.2'' coupled to the data buffer that converts selected scanning data to analog scanning signals and outputs the scanning signals to the OCT beam x-y or x-y-z scanner (459); and;
- 5 ~~an OCT imaging unit (458), including~~
- 5A ~~an OCT camera (420), an OCT analyzer, and an imaging sync block (470);~~

- 5.1' wherein the OCT camera (420) is configured to record OCT imaging data and for forwarding the recorded imaging data to the OCT analyzer (480) synchronously with the scanning signals under the control of the imaging sync block (470), driven by the imaging controller,
- 5.2 wherein the OCT image analyzer is configured to output ~~an OCT image based on the recorded transformed~~ OCT imaging data through the processor, the processor being configured to generate an OCT image and to output the generated OCT image to a display (490)."

Claim 1 of the fifth auxiliary request differs from that of the fourth auxiliary request in that feature 5.1' has been amended. It will be designated feature 5.1'' and has the following underlined additions respectively struck through deletion:

- 5.1'' "wherein the OCT camera (420) is configured to record OCT imaging data and for forwarding the recorded imaging data to the OCT analyzer (480) synchronously with the scanning signals under the control of the imaging sync block (470), driven based on the imaging sync block getting a synchronizing signal from the output digital-analog converter of ~~by~~ the imaging controller,"

VII. The appellant's arguments as far as relevant for the present decision can be summarised as follows:

*Violation of the right to be heard*

The appellant considered its right to be heard to be infringed because the opposition division raised new issues during the oral proceedings that went against the preliminary opinion and had not been highlighted therein. The comments during the oral proceedings were not comprehensive and the oral proceedings progressed in a piecemeal manner, full details and reasoning were provided only in the decision. As the opposition division did not issue a supplementary note to their preliminary opinion, there was no opportunity for the appellant to consider the objections fully and to prepare a response.

*Articles 100(c) and 123(2) EPC - Main request, first, second and third auxiliary requests*

It must be considered how the skilled person would interpret the claim.

The skilled person would not read the wording "configured to align" in feature 2 as requiring the docking unit to be able to actively align in the sense of moving the ophthalmic system relative to the eye. Instead they would understand it to mean that the docking unit was configured to enable an alignment of the system and the eye to keep their relative positions fixed. This feature had a basis in paragraph [0004] of the application as filed.

Should the feature be understood as requiring a docking unit which actively aligned the ophthalmic system and the eye, this had a basis in paragraph [0108], which disclosed that adjusting the docking units position relative to the eye could be performed by one or more electric actuators or by a computer.

Feature 2 therefore had a basis in the application as filed.

*Article 123(3) EPC - Fourth and fifth auxiliary request*

Feature 2' defined an objective coupled to the objective. It was also more specific regarding how the docking unit was configured to be aligned with an eye and this was anyway how the skilled person would have understood the wording of feature 2 of the granted patent.

The amendments made in feature 2' of claim 1 of the fourth and fifth auxiliary requests thus did not extend the protection conferred.

VIII. The respondents' arguments as far as relevant for the present decision can be summarised as follows:

*Articles 100(c) and 123(2) EPC - Main request, first, second and third auxiliary request*

The wording of feature 2 was clear and defined a docking unit which in itself was configured to actively align the ophthalmic system and the eye. This was evident from the wording of feature 2 where the docking unit was the subject. Such a docking unit would have been implementable and the skilled person would thus not interpret the term differently based on the description.

Paragraphs [0004] and [0108] of the application as filed however disclosed a docking unit which was passive and moved by some other mechanism or someone to become aligned with the eye.

Feature 2 did thus not have a basis in the application as filed.

*Admittance of the first to fourth auxiliary requests*

The requests were late filed and should therefore not be admitted into the proceedings.

*Article 123(3) EPC - Fourth and fifth auxiliary request*

Feature 2 of granted claim 1 defined that the docking unit itself could actively align the ophthalmic system and an eye.

Amended feature 2' of the fourth and fifth auxiliary requests no longer required the docking unit to actively align the ophthalmic system and an eye, but rather defined a passive docking unit which was moved by someone or something else into alignment with an eye. It thus encompassed docking units which were not encompassed by claim 1 as granted, consequently extending the protection conferred.

## **Reasons for the Decision**

1. The appellant did not dispute the admissibility of the intervention filed by the assumed infringer with letter of 15 January 2021.

The Board also finds the intervention to be admissible. The notice of intervention was filed in accordance with Article 105 EPC and Rules 89, 76 EPC on 15 January 2021 in a written reasoned statement within three months of

the date on which proceedings for infringement of the patent (Article 105 (1) (a) EPC) were instituted against the intervener. The opposition fee was paid on the same date. Thus, the admissible intervention is to be treated as an opposition (Article 105(2) EPC).

It does not need to be decided, if the additional submission filed with letter dated 16 February 2021 formed part of the intervention as its content is not relevant for the conclusions in the present decision.

2. Procedural violation - Article 113(1) EPC

The opposition division did not infringe the appellant's right to be heard under Article 113(1) EPC by diverging from its preliminary opinion.

As also acknowledged by the appellant, a preliminary opinion is in general not binding but rather can be changed. A preliminary warning announcing the deviation, as requested by the appellant, is not necessary. Moreover, in the present case, the appellant was already aware from the preliminary opinion of the opposition division and the objections as set out in detail by the opponent in the first instance proceedings that the objections under Article 100(c) EPC were to be discussed at the oral proceedings. From the minutes it can also be derived that the opposition division announced its conclusions, that the appellant was given the opportunity to present its comments and to address the new issues brought up in the oral proceedings by filing new requests. Thus, even if the oral proceedings progressed in a "piecemeal" manner, the appellant had the opportunity to reply.



3. Article 123(2) EPC - Main request, first, second and third auxiliary request

3.1 Feature 2 reads "a docking unit, configured to align the ophthalmic system and an eye".

The appellant submitted that the skilled person would understand feature 2 to define a docking unit configured to establish a fixed position between the system and the eye because the skilled person would have interpreted the claim in light of the description.

However, the wording of feature 2 is perfectly clear to the skilled person. It uses the active voice to define a subject, the docking unit, which is configured to align the ophthalmic system and an eye. Feature 2 thus defines that the docking unit itself is a component able to align the ophthalmic system and the eye. As the claim itself is clear, there is no reason to look for another interpretation in the description of the patent.

3.2 Paragraph [0004] of the application as filed discloses a method which may include the steps of aligning a docking unit of the ophthalmic system and an eye. It does not disclose how the aligning is carried out, in particular not that it is carried out by the docking unit itself.

Paragraph [0108] discloses various ways of how the docking unit is aligned with an eye. The adjustments [during alignment] can be performed out manually by the surgeon, or by operating one or more electric actuators, or by a computer. It is however not disclosed that it is the docking unit itself which carries out the alignment, nor that the electric

actuators or the computer are part of the docking unit. The same holds true for the other passages and figures cited by the appellant.

A docking unit, configured to align the ophthalmic system and an eye according to feature 2 is thus not disclosed in these paragraphs or any other passage of the application as filed.

3.3 The subject-matter of claim 1 of the main request thus extends beyond the content of the application as filed.

The ground for opposition under Article 100(c) EPC thus prejudices the maintenance of the patent as granted.

3.4 Feature 2 is present also in claim 1 of the first, second and third auxiliary requests. They thus contravene Article 123(2) EPC and are not allowable either.

4. Article 123(3) EPC - Fourth and fifth auxiliary request

4.1 As set out above, contrary to the view expressed by the appellant, the Board is of the opinion that the the skilled person would interpret feature 2 according to its clear and literal wording. That is, the docking unit itself is able to align the ophthalmic system and an eye.

4.2 In claim 1 of the fourth and fifth auxiliary requests, feature 2 has been replaced with amended feature 2'.

Feature 2' defines that the "docking unit is configured to be aligned with an eye". The docking unit in feature 2' is an indirect object which is passive in the alignment. In contrast with feature 2, it is thus no

longer required that the docking unit itself is able to align the ophthalmic system and an eye, but this could be performed by another mechanism or by a person operating the system.

- 4.3 Due to the amendments in feature 2', claim 1 of the fourth and fifth requests thus encompasses systems which were not encompassed by claim 1 as granted. The extent of protection conferred is therefore extended, contrary to Article 123(3) EPC.

Consequently, the fourth and fifth auxiliary requests are not allowable.

5. For the reasons set out above, none of the requests on file are allowable.

The question of whether any particular auxiliary request should be admitted into the proceedings or not is therefore moot.

## **Order**

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

The appeal is dismissed

The Registrar:

The Chairman:



C. Moser

M. Foulger

Decision electronically authenticated