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Datasheet for the decision
of 21 March 2018

Case Number: T 0001/15 - 3.2.08
Application Number: 09161366.1
Publication Number: 2092876
IPC: A61B3/107

Language of the proceedings: EN

Title of invention: Customized Corneal Profiling

Patent Proprietor: Technolas Perfect Vision GmbH

Opponent: AMO Manufacturing USA, LLC

Headword: Relevant legal provisions:
EPC Art. 100(c)
RPBA Art. 13(1), 13(3)
**Keyword:**
Grounds for opposition - added subject-matter (no) - after amendment
Late-filed auxiliary requests - justification for late filing
(yes)
Remittal to the department of first instance

**Decisions cited:**
T 0516/13

**Catchword:**
DECISION of Technical Board of Appeal 3.2.08 of 21 March 2018

Appellant:
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Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted on 10 October 2014 revoking European patent No. 2092876 pursuant to Article 101(3)(b) EPC.

Composition of the Board:
Chairwoman
P. Acton

Members:
C. Herberhold
C. Schmidt
Summary of Facts and Submissions

I. By decision posted on 10 October 2014 the Opposition Division revoked European patent No. EP-B-2 092 876 on the grounds of Article 100(c) EPC.

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

III. Oral proceedings before the Board were held on 21 March 2018.

At the end of the oral proceedings the requests of the parties were as follows:

The appellant requested that the decision under appeal be set aside, or, alternatively, that the patent be maintained on the basis of the auxiliary request filed at the oral proceedings before the Board ("first auxiliary request") or on the basis of the auxiliary request filed at the oral proceedings before the opposition division ("second auxiliary request").

The respondent (opponent) requested that the appeal be dismissed.

IV. Main request

(a) Independent claim 1 of the main request (corresponding to claim 1 as granted) reads as follows:

"A system for developing a course of refractive treatment for an eye, comprising:
a corneal topography tool adapted to provide corneal topography data of the eye;
a wavefront aberration tool adapted to provide a wavefront aberration data of the eye; **characterised by** further comprising:
a computational unit adapted to first evaluate one of the data sets for patient suitability and to then employ the other data set to develop a treatment profile,
wherein the computational unit is adapted to calculate the wavefront aberration of the eye [sic] from the corneal topography data, and
wherein the computational unit is adapted to adjust the calculated wavefront aberration data based upon the wavefront aberration data provided by the wavefront aberration tool."

(b) Dependent claim 5 defines the system of claim 1 to further comprise:

"an excimer laser system adapted to provide a course of treatment for the eye based on the data set employed to develop a treatment profile."

(c) Dependent claim 7 claims the system of claim 1

"wherein the computational unit is adapted to compare the wavefront aberration data with the calculated wavefront aberration data to validate both".

V. Auxiliary request 1 differs from the main request in that claims 5 and 7 have been deleted and the dependencies of the remaining claims renumbered accordingly.
VI. The second auxiliary request plays no part in the present decision.

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

Main request

Claim 1 derived mainly from claim 37 of the PCT application. However, this was a very broad claim, which did not clearly and unambiguously disclose to perform patient suitability evaluation as the first, i.e. initial step when developing a course of refractive treatment for an eye. In fact, the temporal order now claimed could only be derived from the description.

The description, however, exclusively disclosed to initially evaluate corneal topography data for patient suitability. Since wavefront data was limited to the pupil area, only corneal topography evaluation allowed to detect certain parameters for the full eye such as corneal thickness, bulging and other physical parameters, which could lead to an outright rejection of the patient. Corneal topography measurements, not wavefront measurements, were thus the right tool for pre-screening. Moreover, corneal topography data were often used to correctly assign captured wavefront centroids and they were required to calculate the wavefront aberration of the eye from the corneal topography data. Thus, corneal topography was typically measured before wavefront aberration, as shown in the examples.

Step 526 of Figure 4A, which the appellant had cited as an example of evaluating patient suitability based on
wavefront aberration data, did not evaluate the suitability of the patient but rather served to detect errors in the refractive measurement, i.e. it served to detect errors in the procedure. Furthermore, the wavefront aberration data based evaluation in step 526 was not the first step within the meaning of claim 1, but occurred in the middle of a procedure in which patient suitability had initially been evaluated based on topography examination (see step 502).

To conclude, the original disclosure only supported first evaluating patient suitability based on corneal topography data. Claim 1, which also covered first evaluating patient suitability based on wavefront aberration data, was thus an unallowable intermediate generalisation.

Likewise, dependent claims 5 and 7 extended beyond the original disclosure.

Claim 5 was derived from claim 23 of the original PCT application, which via back-reference to claim 19 defined a laser system adapted to provide a course of treatment for the eye based on data combining wavefront aberration data with corneal topography data. Present claim 5, however, defined the course of treatment to be based on "the data set employed to develop a treatment profile", i.e. it allowed the course of treatment to be based exclusively on the wavefront aberration data or exclusively on the corneal topography data, without combining them. This was new information for the skilled person.

Dependent claim 7 derived from claim 26 of the PCT application, which was dependent on claims 19 and 25, but not on claim 27 of the earlier application. As
claim 1 of the main request included the subject-matter of claim 27, dependent claim 7 combined the subject-matter of original claims 27 and 26, which had only been disclosed as alternatives. Furthermore, claim 7 combined subject-matter of different original independent claims, which the Board had found in parent case T 516/13, reasons point 2.3 to be an extension of subject-matter. Therefore, the skilled person was again confronted with new technical information.

To conclude, Article 100(c) EPC prejudiced the maintenance of the patent as granted.

Auxiliary request - admission into the proceedings

The respondent objected to the auxiliary request submitted at the oral proceedings before the Board as being late-filed and thus not admissible. Since the compatibility of claims 5 and 7 with Article 123(2) EPC had already been an issue in the written proceedings, the appellant could and should have filed this request earlier. This applied all the more because the deletion of claims 5 and 7 of the main request was an obvious reaction to these objections and easy to do.

Article 100(c) EPC - Auxiliary request

For the reasons discussed in the context of the main request, the subject-matter of claim 1 still extended beyond the original disclosure.

VIII. The essential arguments of the appellant can be summarised as follows:
Main request

Claim 37 on its own clearly and unambiguously disclosed the use of one of either corneal topography data or wavefront aberration data for the evaluation of patient suitability. There were only two alternatives in the claim, which could thus hardly be considered unduly broad, contrary to what was argued by the respondent.

Evaluating for patient suitability and then developing a treatment profile was likewise disclosed to the skilled reader by claim 37. Indeed, it made no sense to first develop a treatment profile based on one data set and to thereafter verify based on the other data set whether the patient was at all suitable to undergo said treatment or not.

Furthermore, the above teaching, which was derivable from claim 37 on its own, was confirmed by the description, which gave examples for the evaluation of patient suitability based on corneal topography (see Figure 4A, step 502), as well as based on wavefront aberration data (see step 526 and the corresponding passages in the description). Step 526, although not being the very first or initial step in the flow diagram, was performed before ablation planning (step 528). Thus, with respect to the consecutive claim step of employing the other data set to develop a treatment profile, wavefront based suitability evaluation was done "first". As the decision taken in step 526 may lead to the rejection of a candidate, i.e. to a candidate being considered unsuitable, step 526 had to be seen as the evaluation of patient suitability based on wavefront aberration data.
The subject-matter of claim 1 was thus clearly and unambiguously derivable from the original application.

Dependent claim 5 was - apart from minor editorial adaptations of its wording to the language of present claim 1 - identical to claim 23 of the PCT application, which depended on claim 19 of the PCT application, the subject-matter of which was part of present claim 1. It was further clear from the description, see e.g. page 36, line 9 onwards, that the captured data were to be used in laser treatment of the eye. The subject-matter of dependent claim 5 was thus originally disclosed.

Likewise, dependent claim 7 was based on original claim 26, which equally depended on claim 19 of the PCT application. While it was true that original claim 26 was not dependent on claim 27 - whose subject-matter was incorporated into independent claim 1 - this was only a consequence of US restrictions on claim drafting. As could be seen from the description, page 15, lines 9-15, comparison of wavefront data with calculated wavefront aberration data in addition to wavefront aberration data based adjustment of the calculated wavefront aberration was originally disclosed.

To conclude, Article 100(c) EPC did not prejudice the maintenance of the patent as granted.

Auxiliary request - admission into the proceedings

The appellant was of the opinion that its auxiliary request filed at the oral proceedings before the Board should be admitted. Since, in this request, claims 5 and 7 of the main request had been deleted, its filing should be seen as a straightforward reaction to the
Board's conclusion, announced at the oral proceedings, that claims 5 and 7 of the main request contained subject-matter that extended beyond the content of the earlier application and of the application as originally filed.

Article 100(c) EPC - Auxiliary request

With dependent claims 5 and 7 being removed, the objections based on extension of subject-matter in these claims became moot.

Reasons for the Decision

1. Main request


The description of the present application is essentially identical to the description of the parent, with the claims of the parent application as filed being added to the divisional application as "items". The drawings of the parent and divisional applications are identical.

For examination of the requirements of Articles 76(1) and 123(2), it is thus sufficient to verify that the subject-matter is disclosed in the parent application as filed. In this respect, reference is made to WO-A-01/28410.
1.2 Independent claim 1

The respondent's objection with respect to the extension of subject-matter in claim 1 as granted is basically that the claim covers a system comprising a computational unit which is adapted to first evaluate patient suitability based on wavefront aberration data and then to employ corneal topography data to develop a treatment profile. Such a system was not derivable from the application or the earlier application as originally filed.

Claim 37 of the original PCT application discloses a system with a computational unit adapted to "evaluate one of the data sets for patient suitability and to employ the other data set to develop a treatment profile", the data sets being corneal topography data of the eye or wavefront aberration data of the eye. Claim 37 thus covers precisely two alternatives: Either the computational unit evaluates corneal topography data for patient suitability and employs wavefront aberration data to develop a treatment profile, or the computational unit evaluates wavefront aberration data for patient suitability and employs corneal topography data to develop a treatment profile. This is a clear technical teaching of two equivalent alternatives, and the Board cannot see why the claim should be considered unduly broad.

Thus, claim 37 of the earlier application as filed clearly and unambiguously teaches the skilled person that in particular patient suitability may be evaluated based on wavefront aberration data. There is no need to a posteriori construe anything into the clear and unambiguous wording of that claim.
Moreover, its disclosure is not invalidated by the description of a particular embodiment using corneal topography data for that purpose, or by technical considerations in the light of which corneal topography data were considered to be the better choice for patient suitability evaluation.

As to the temporal order established in claim 1 as granted, it should not be forgotten that, according to established jurisprudence (Case Law of the Boards of Appeal, 8th edition 2016, II.E.1: "the gold standard"), amendments may be made within the limits of what the skilled person would derive directly and unambiguously, using common general knowledge, and seen objectively and relative to the date of filing, from the whole of the description, claims and drawings as filed.

In this context, the Board observes that generally in the medical field patient suitability is evaluated before a treatment (profile) is planned or developed. The skilled person reading claim 37 of the earlier application as filed would thus have implicitly understood the order now claimed (i.e. "suitability first") as being disclosed.

It is true, as observed by the opposition division in point 3.1.1.4 of the impugned decision, that, for extremely irregular eyes, first a course of treatment may be generated using topography data (page 4, line 26-30). However, this concerns extremely irregular eyes and thus is rather the exception than the rule. Therefore, it does not change the skilled person's above understanding of claim 37 as filed.

In view of the above-discussed disclosure in claim 37 itself, it is irrelevant whether step 526 can be
considered the "first step" or an evaluation of patient suitability.

Furthermore, while it is true that "calculation of the wavefront aberration of the eye from the corneal topography data" and "adjustment of the calculated wavefront aberration data based upon the wavefront aberration data provided by the wavefront aberration tool" require corneal topography data to be provided, these steps likewise require wavefront aberration data to be provided. Therefore, no restriction can be derived from said features as to which of the two data sets would need to be evaluated first for patient suitability.

Therefore, the respondent's objections to claim 1 as granted are not persuasive.

1.3 Dependent claim 5

Dependent claim 5 derives from claim 23 of the earlier application, which defined the system as comprising a "laser system adapted to provide a course of treatment for the eye based on the combined data." Claim 5 as granted, however, defines the provision of the course of treatment based on "the data set employed to develop a treatment profile". According to claim 1 as granted, the data set employed to develop a treatment profile may be the wavefront aberration data or the corneal topography data. Although the wording of claim 1 does not exclude both data sets being used for treatment profile development, the subject-matter of claim 5 as granted includes the provision of a course of treatment for the eye based on one of the data sets only. This had not been part of the subject-matter of claim 23 of the earlier application, which required the course of
treatment to be based on combined wavefront aberration data and corneal topography data. Also, page 36, line 9-12 of the description (mentioned by the appellant) relates to a treatment 144 based on combined wavefront aberration data (see Figure 7B, No. 134) and corneal topography data (see Figure 7B, No. 118).

Thus, the subject-matter of claim 5 extends beyond the content of both the earlier application and the application as originally filed.

1.3.1 Dependent claim 7

Dependent claim 7 essentially combines the subject-matter of claims 19, 25, 26, 27 and 37.

T 516/13, reasons point 2.3 - mentioned by the respondent - on the contrary dealt with the combination of the subject-matter of independent claims 19 and 32. The conclusion reached therein is thus based on different independent claims, i.e. on different facts, and does not simply apply by analogy.

In the present case, claim 27 (which is part of present claim 1) and claim 26 (which corresponds to dependent claim 7) of the original claim set had both been dependent on claim 25. The original claim set thus disclosed the subject-matter of claims 26 and 27 as distinct alternatives, without indication that they were to be combined into the same system.

The appellant has pointed to page 15, lines 9-15 in support of the combination of both functionalities into a single system. However, said passage mentions comparison of captured and calculated wavefront data "to ensure there are no gross discrepancies in the
wavefronts", because "such discrepancies could indicate, for example, a large irregularity in the optics of the eye not recognized by the topographic or wavefront data, and could suggest against continuing the procedure". This is not the same as "to validate both", i.e. to check that both sets of data are valid.

Thus, the subject-matter of claim 7 likewise extends beyond the content of the earlier application and of the application as originally filed.

2. Auxiliary request 1

2.1 Admission into the proceedings

Auxiliary request is late-filed. Thus, according to Article 13(1) RPBA, its admission depends on a discretionary decision of the Board. In this respect, the decisive criteria are the complexity of the newly filed request and the question as to whether or not it is deemed to be acceptable for the other parties and the Board to deal with the request during the oral proceedings, see Article 13(1) and (3) RPBA. Exercising this discretion, the Board admits auxiliary request 1.

The request was filed immediately after the Board had announced its conclusion that claims 5 and 7 of the main request contain subject-matter which extends beyond the content of the application as filed. Although the respondent objected to this request as being late-filed, it submitted that the deletion of claims 5 and 7 was an obvious and easy reaction to the objections just accepted by the Board. Thus, the respondent itself argued that auxiliary request 1 was easy to understand and that it by no means complicated
the proceedings. Indeed, the respondent had no substantial objections to auxiliary request 1.

2.2 Auxiliary request 1 - Article 100(c) EPC

The omission of dependent claims 5 and 7 obviously overcomes all objections discussed above with respect to these claims. Consequently, Article 100(c) EPC does not prejudice the maintenance of the patent on the basis of the claims of the first auxiliary request.

3. Remittal

Further objections raised in the notice of opposition, in particular those regarding novelty and inventive step, have not been addressed in the impugned decision. Consequently, following the appellant's request, the Board finds it appropriate to remit the case to the Opposition Division for continuation of the proceedings (Article 111(1) EPC).
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 for further prosecution on the basis of the first auxiliary request, filed at the oral proceedings before the Board.

The Registrar: The Chairwoman:

K. Boelicke P. Acton

Decision electronically authenticated