Datasheet for the decision
of 18 December 2012

Case Number: T 2238/10 - 3.2.08
Application Number: 04759430.4
Publication Number: 1613253
IPC: A61F 9/01
Language of the proceedings: EN

Title of invention:
Method, system and algorithm related to treatment planning for vision correction

Applicant:
Technolas Perfect Vision GmbH

Headword:
-

Relevant legal provisions:
EPC Art. 56, 111(1)
EPC R. 43(3)

Keyword:
"Clarity - main request, auxiliary requests A, 1A, 2, 2A, 3 - no"
"Clarity - auxiliary request 3A - yes"

Decisions cited:
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Catchword:
-
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DECISION of the Technical Board of Appeal 3.2.08 of 18 December 2012

Appellant: Technolas Perfect Vision GmbH
(Applicant)
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 15 June 2010 refusing European patent application No. 04759430.4 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman: T. Kriner
Members: P. Acton
U. Tronser
Summary of Facts and Submissions

I. On 11 August 2010 the appellant (applicant) filed a notice of appeal against the examining division's decision posted on 15 June 2010 refusing the European patent application No. 04 759 430.4. The appeal fee was paid on the same day and the statement of grounds was received on 25 October 2010.

II. The appellant requested that the decision under appeal be set aside and that a patent be granted on the following basis:

main request submitted with the grounds of appeal, or alternatively

one of the auxiliary requests A, 1, 1A, 2, 2A or 3 submitted with the grounds of appeal and the letter dated 16 November 2012 or

on the basis of auxiliary request 3A submitted during the oral proceedings.

III. Independent claim 1 according to the main request reads:

"A system used for planning a treatment for vision correction in a patient's eye, comprising:

means (310) for receiving a diagnostic input data (210) about the patient's vision, for analyzing the input data (210) and

automatically selecting a plurality of potentially useable treatment algorithms from a database comprising
an equal or larger number of available treatment algorithms (265) (Feature E) and

for processing said potentially useable treatment algorithms based upon the input data (210) and one or more algorithm default parameters; means (370) for displaying a plurality of treatment plans (290) corresponding, respectively, to the plurality of potentially useable treatment algorithms; for selectively modifying the algorithm default parameters and other defined treatment influencing parameters, and for displaying a respective plurality of modified treatment plans, operatively connected to said receiving means."

Independent method claim 25 according to the main request reads:

"A method for aiding the selection of a treatment plan for correcting vision in a patient's eye, comprising:

obtaining selected input diagnostic data (210) about the patient's eye; analyzing (230) the data to automatically select a plurality of potentially useable treatment algorithms from a database comprising an equal or larger number of available treatment algorithms (265), and processing said plurality of potentially useable treatment algorithms, wherein said available treatment algorithms utilize one or more default parameters; presenting (270) for review a plurality of treatment plans (290) corresponding to said plurality of potentially useable treatment algorithms; selectively modifying the one or more default parameters and other treatment parameters; re-processing (230') said plurality of potentially useable
treatment algorithms using the modified parameters; and re-presenting (270') for further review the plurality of treatment plans corresponding to said plurality of potentially useable treatment algorithms."

Claim 1 according to the auxiliary request A differs from claim 1 according to the main request in that the following feature is introduced after Feature E:

"wherein the analyzing step comprises identifying an allowable limit parameter for each of the available treatment algorithms (256) and determining the potentially useable treatment algorithms based upon whether the allowable limit parameters are exceeded" (Feature A).

Claim 1 according to the auxiliary request 1 differs from claim 1 according to the main request in that the following feature is introduced before Feature E:

"means for parameterizing the input data adapted to automatically classify the patient's eye into one of a predetermined plurality of classification sets (135, 140, 145, 150)" (Feature B).

Claim 1 according to the auxiliary request 1A is a combination of claim 1 according to the auxiliary requests A and 1 and comprises Features A and B.

Claim 1 according to the auxiliary request 2 differs from claim 1 according to the auxiliary request 1 by addition of the following feature:
wherein the diagnostic input data (210) is selected from a group including at least one of wavefront data only, wavefront and topography data with or without corneal pachymetry data, and one of the preceding data plus other selected algorithm influencing data" (Feature C).

Claim 1 according to the auxiliary request 2A is a combination of claim 1 according to auxiliary requests A and 2 and comprises Features A, B and C.

Claim 1 according to the auxiliary request 3 differs from claim 1 according to the auxiliary request 2 in that it further specifies that the treatment algorithms comprise

"at least a standard ablation treatment, a customized or semi-customized wavefront-based treatment and a topographically-based treatment or a hybrid-driven treatment" (Feature D).

The independent method claims according to the auxiliary requests A, 1A, 2, 2A and 3 have been amended accordingly.

Claim 1 according to the auxiliary request 3A reads:

"A system used for planning a treatment for vision correction in a patient’s eye comprising: means (310) for receiving a diagnostic input data (210) about the patient’s vision, wherein the diagnostic input data (210) comprises at least one of wavefront data only, wavefront and topography data with or without corneal pachymetry data, and one of the preceding data plus
other selected algorithm influencing data, for
analyzing the input data (210), for parameterizing the
input data adapted to automatically classify the
patient’s eye into one of a predetermined plurality of
classification sets (135, 140, 145, 150), to
automatically select a plurality of potentially useable
treatment algorithms from a database comprising an
equal or larger number of available treatment
algorithms (265) comprising at least a standard
ablation treatment, a customized or semi-customized
wavefront-based treatment and a topographically-based
treatment or a hybrid-driven treatment based upon the
classification wherein the analyzing means is
configured to identify an allowable limit parameter for
each of the available treatment algorithms (265) and to
determine the potentially useable treatment algorithms
based upon whether the allowable limit parameters are
exceed, and for processing said potentially useable
treatment algorithms based upon the input data (210)
and one or more algorithm default parameters; means
(370) for displaying a plurality of treatment plans
(290) corresponding, respectively, to the plurality of
potentially useable treatment algorithms; for
selectively modifying the algorithm default parameters
and other defined treatment influencing parameters, and
for displaying a respective plurality of modified
treatment plans, operatively connected to said
receiving means."

The independent method claim 23 according to the
auxiliary request 3A reads:

"A method for aiding the selection of a treatment plan
for correcting vision in a patient's eye, comprising:
obtaining selected diagnostic input data (210) about the patient's eye, wherein the diagnostic input data comprises at least one of wavefront data only, wavefront and topography data with or without corneal pachymetry data, and one of the preceding data plus other selected data, analyzing (230) the input data (210), parameterizing the input data to classify the patient's eye into one of a predetermined plurality of classification sets (135, 140, 145, 150) to automatically select a plurality of potentially useable treatment algorithms from a database comprising an equal or larger number of available treatment algorithms (265) comprising at least a standard ablation treatment, a customised or semi-customised wavefront-based treatment and a topographically-based treatment or a hybrid-driven treatment based upon the classification wherein the analysing step comprises identifying an allowable limit parameter for each of the available treatment algorithms (265) and determining the potentially useable treatment algorithms based upon whether the allowable limit parameters are exceeded, and processing said plurality of potentially useable treatment algorithms, wherein said available treatment algorithms utilize one or more default parameters; presenting (270) for review a plurality of treatment plans (290) corresponding to said plurality of potentially useable treatment algorithms; selectively modifying the one or more default parameters and other treatment parameters; re-processing (230’) said plurality of potentially useable treatment algorithms using the modified parameters; and re-presenting (270’) for further review the plurality of treatment plans corresponding to said plurality of potentially useable treatment algorithms."
The definition of the Features A to E was introduced by
the Board.

IV. The appellant argued

The claims according to all requests complied with the
requirements of Article 84 EPC.

Main request

Claim 1 comprised all essential features of the present
invention. It was true that some of these features were
formulated as functional features. However, this
formulation was sufficient since the skilled person was
in a position to provide the means described in this
feature in the context of the description. In
particular, the embodiments of the description allowed
the skilled person to prepare a database comprising a
variety of treatment algorithms and to set up an
analysis to assign potentially useable treatment
algorithms to diagnostic input data about the patient's
vision, as required by Feature E.

Auxiliary requests A, 1A, 2A

Claim 1 according to these requests comprised Feature A
which specified how the analysing step had to be
carried out. Therefore, at least all essential features
of the means for analysing the input data were present
in this claim.
Auxiliary request 1

Claim 1 according to auxiliary request 1 comprised feature B, which specified the presence of additional means for parameterizing the input data, leading to the classification of the patient's eye, and explained how the selection had to be done. Therefore, at least the essential features concerning the means for parameterizing the input data were present in this claim.

Auxiliary requests 2 and 3

The features added to claim 1 of auxiliary requests 2 and 3 had the exclusive aim of overcoming the objections raised with respect to lack of inventive step raised by the examining division.

Auxiliary request 3A

Claim 1 according to auxiliary request 3A comprised all features essential to the definition of the invention. Therefore, this claim as well as independent claim 23 which had been adapted to claim 1 complied with the requirements of Article 84 EPC.

Reasons for the Decision

1. The appeal is admissible.
2. Main request

Claim 1 according to the main request requires amongst others that the system comprises means for

"automatically selecting a plurality of potentially useable treatment algorithms from a database comprising an equal or larger number of available treatment algorithms" (Feature E).

The appellant argued that due to the explanations in the description, the skilled person was able to design a system in accordance with Feature E and that the claim therefore comprised all essential features concerning the means for automatically selecting potentially useable treatment algorithms.

The description does indeed disclose a database comprising a specific variety of treatment algorithms and the way of assigning the potentially useable treatment algorithms to diagnostic input data about the patient's vision. Accordingly the application discloses the invention in a manner sufficiently clear and complete for it to be carried out by the skilled person (Article 83 EPC).

However, it is also clear from the description that these aspects represent essential features of the invention (see for example page 9, last paragraph to page 11, first paragraph).

However, since independent claim 1 fails to indicate the specific variety of treatment algorithms and the way the potentially useable treatment algorithms are
assigned to the diagnostic input data about the patient's vision, it does not comply with the requirements of Article 84 EPC in combination with Rule 43(3) EPC which require that each independent claim states all essential features of the invention.

3. Auxiliary request A

Claim 1 according to auxiliary request A comprises, in addition to the other features of claim 1 according to the main request, Feature A according to which

"the analyzing step comprises identifying an allowable limit parameter for each of the available treatment algorithms (256) and determining the potentially useable treatment algorithms based upon whether the allowable limit parameters are exceeded".

Although it is true that this feature provides further information with respect to Feature E, it describes a method step while the claim relates to an apparatus. Due to this mixture of categories it is not clear whether claim 1 refers to a device or to a method claim. Therefore, this claim does not comply with the requirements of Article 84 EPC for this reason alone.

Moreover, even if Feature A were to be interpreted as defining the means for analysing the input data, claim 1 according to auxiliary request A would lack clarity, since it does not specify any correlation between the analysis of the input data, the limit parameter of the treatment algorithm and the means for automatically selecting the potentially useable algorithm and hence still fails to specify the way the
selection of the potentially useable algorithm is carried out. Since this correlation represents an essential feature of the invention, claim 1 according to auxiliary request A does not comply with the requirements of Article 84 EPC in combination with Rule 43(3) EPC.

4. Auxiliary request 1

Claim 1 according to auxiliary request 1 comprises, in addition to the other features of claim 1 according to the main request, the feature according to which the system comprises means for

"parameterizing the input data adapted to automatically classify the patient's eye into one of the pre-determined plurality of classification sets (135, 140, 145, 150)". (Feature B).

Since this feature fails to define any relationship between the parameterisation of the input data and the selection of the potentially useable treatment algorithm, claim 1 according to auxiliary request 1 does not comprise that essential feature of the invention referring to the way the selection of the potentially useable treatment algorithm is carried out. Hence it too does not comply with the requirements of Article 84 EPC in combination with Rule 43(3) EPC.

5. Auxiliary request 1A

Claim 1 according to auxiliary request 1A comprises both features A and B. As stated above, these features do not introduce any link between the means of analysis
of the input data, the allowable limit parameters and the means for selecting the potentially useable treatment algorithm either. Hence, this claim does not comprise all essential features of the invention and therefore does not comply with the requirements of Article 84 EPC in combination with Rule 43(3) EPC either.

6. Auxiliary requests 2 and 3

Claim 1 according to auxiliary requests 2 and 3 additionally comprises features C and D respectively. As put forward by the appellant, these features were introduced in the claims with the exclusive aim of overcoming the objection relating to lack of inventive step raised by the examining division. It was not contested that they can not contribute to overcoming the issue of lack of any relationship between the input data and the selection of the potentially useable treatment algorithm and of lack of a feature essential to the invention.

Hence claim 1 according to auxiliary request 2 and 3 does not comply with the requirements of Article 84 EPC in combination with Rule 43(3) EPC either.

7. Auxiliary request 2A

Since - as stated above in sections 3 and 6 above - the features A, B and C introduced in claim 1 according to auxiliary request 2A do not comprise all essential features of the invention, this claim does not comply with the requirements of Article 84 EPC in combination with Rule 43(3) EPC either.
8. **Auxiliary request 3A**

The features introduced into claim 1 according to auxiliary request 3A create a link between the input data, their parameterization, the classification of the patient's eye and the selection of the potentially useable treatments. Moreover, they specify the kind of input data received by the system as well as the minimum type of treatment algorithms amongst which the system is going to select the potentially useable treatment algorithm.

Therefore, claim 1 according to auxiliary request 3A complies with the requirements of Article 84 EPC in combination with Rule 43(3) EPC.

The independent method claim (now renumbered as claim 23) has been amended accordingly and complies with the requirements of Article 84 EPC as well.

9. **Since the independent claims according to auxiliary request 3A differ fundamentally from those on which the decision of the examining division was based, and since a further search might be necessary for assessing the patentability of their subject matter, the Board considers it appropriate to remit the case to the department of first instance for examination of the further requirements of the EPC.**
Order

For these reasons it is decided that:

The decision under appeal is set aside. The case is remitted to the department of first instance for further prosecution on the basis of the auxiliary request 3A filed during the oral proceedings.

The Registrar:  
The Chairman:

V. Commare  
T. Kriner