Title: SYSTEM AND METHOD FOR ANALYZING WAVEFRONT ABERRATIONS

Abstract: A system and method for specifying a vision correction prescription for a patient's eye, wherein in one embodiment, the method includes obtaining a wavefront aberration measurement of the patient's eye, applying at least one value from the wavefront aberration measurement to a statistical model trained using a plurality of objectively measured aberration values and a plurality subjectively measured visual acuity values as training data; and predicting a vision correction prescription for the patient's eye based on the at least one value and the statistical model.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC: A61B 3/00 (2006.01)

USPC: 351/205,246

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S.: 351/200-247

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>US 5,724,258 A (ROFFMAN) 03 March 1998 (03.03.1998), entire document.</td>
<td>1-57</td>
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Further documents are listed in the continuation of Box C.

See patent family annex.

- Special categories of cited documents:
  - "X" document defining the general state of the art which is not considered to be of particular relevance
  - "Y" document later published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
  - "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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  - "A" document member of the same patent family

Date of the actual completion of the international search
27 September 2006 (27.09.2006)

Date of mailing of the international search report
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