Abstract: Two common-path interferometers share a measuring cavity for measuring opposite sides of opaque test parts. Interference patterns are formed between one side of the test parts and the reference surface of a first of the two interferometers, between the other side of the test parts and the reference surface of a second of the two interferometers, and between the first and second reference surfaces. The latter measurement between the reference surfaces of the two interferometers enables the measurements of the opposite sides of the test parts to be related to each other.
### INTERNATIONAL SEARCH REPORT

#### A. CLASSIFICATION OF SUBJECT MATTER

**IPC:** G01B 11/02 (2006.01)

**USPC:** 356/503.512

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.: 356/489, 495, 503, 511-515

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

NONE

Electronic database consulted during the international search (name of database and, where practicable, search terms used)

Please See Continuation Sheet

#### 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>A</td>
<td>US 6,504,615 B1 (ABE et al) 07 January 2003 (07.01.2003), see entire document.</td>
<td>1-43</td>
</tr>
<tr>
<td>A</td>
<td>US 5,995,226 A (ABE et al) 30 November 1999 (30.11.1999), see entire document.</td>
<td>1-43</td>
</tr>
</tbody>
</table>

* Further documents are listed in the continuation of Box C.

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Date of the actual completion of the international search: 28 September 2006 (28.09.2006)

Date of mailing of the international search report: 26 Oct 2006

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Form PCT/ISA/210 (second sheet) (April 2005)
Continuation of B. FIELDS SEARCHED Item 3:
EAST: US-PGPUB; USPAT; EPO; JPO; IBM_TDB
search terms: interfer or interfere or interfering or interference or interferometer or interferometric or interferometrically or interferogram; opposite or opposing; contour or contouring or profile or profiling; distance or position; parallel; polariz or polarize or polarizing or polarization