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[Continued on next page]

(54) Title: STANDARD MEDIA SUSPENSION BODY, OPTICAL PARTICULATE MEASUREMENT INSTRUMENT, AND VERIFICATION METHOD FOR AN OPTICAL PARTICULATE MEASUREMENT INSTRUMENT

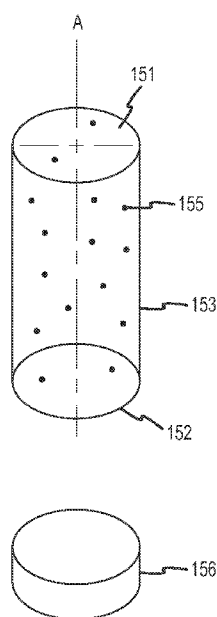


FIG. 3

(57) Abstract: A standard media suspension body (150) for verification and calibration of an optical particulate measurement instrument and configured to be at least partially immersed in a sample fluid is provided according to the invention. The body (150) includes a substantially solid outer surface including a first end (151) and a second end (152) disposed along an axis of illumination A and at least one outer surface (153). The first end (151) is configured to admit impinging light. The suspension body further includes an inner volume. At least a portion of the inner volume includes a substantially suspended light scattering material (155) that is configured to scatter a predetermined quantum of the admitted light. The suspension body (150) further includes an end cap (156) formed on the second end (152) and comprising a light absorbing material. Light exiting the second end (152) is substantially absorbed by the end cap (156).



Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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INTERNATIONAL SEARCH REPORT

International application No

PCT/US2008/075188

A. CLASSIFICATION OF SUBJECT MATTER

INV. G01N21/47 G01N21/27

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)

G01N

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)

EPO-Internal, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 291 981 A (OHNISHI MASAOKI ET AL) 29 September 1981 (1981-09-29) * col. 2, lines 3-33; col. 3, line 14 to col. 5, line 62; figures 1,3,4,6,9 *	1-4,6
Y	-----	7
Y	EP 0 374 034 A (TOA MEDICAL ELECTRONICS [JP]) 20 June 1990 (1990-06-20) * abstract; figures 1,2; page 3, lines 47-53; page 4, lines 29-54 *	7
A	EP 0 959 353 A (SUMITOMO METAL MINING CO [JP]) 24 November 1999 (1999-11-24) abstract ----- -/--	1

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document 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

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

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Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	MOFFITT T ET AL: "Preparation and characterization of polyurethane optical phantoms" JOURNAL OF BIOMEDICAL OPTICS, SPIE, BELLINGHAM, WA, US, vol. 11, no. 4, 1 July 2006 (2006-07-01), pages 41103-1, XP007907347 ISSN: 1083-3668 * sections 1 and 2 * -----	1,7
A	ZHAO HUIJUAN ET AL: "Imaging of in vitro chicken leg using time-resolved near-infrared optical tomography" PHYSICS IN MEDICINE AND BIOLOGY, TAYLOR AND FRANCIS LTD. LONDON, GB, vol. 47, no. 11, 1 June 2002 (2002-06-01), pages 1979-1993, XP007907363 ISSN: 0031-9155 * section 2 * -----	1,2

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2008/075188

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see annex

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-7

A scattering material used in a standard media suspension body.

2. claim: 8

Polished surfaces of a standard media suspension body.

3. claims: 9-41

An optical particulate measurement instrument configured to perform an instrument verification, and a corresponding method.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2008/075188

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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