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(54) Title: FLOW CYTOMETER APPARATUS FOR THREE DIMENSIONAL DIFFRACTION IMAGING AND RELATED METHODS

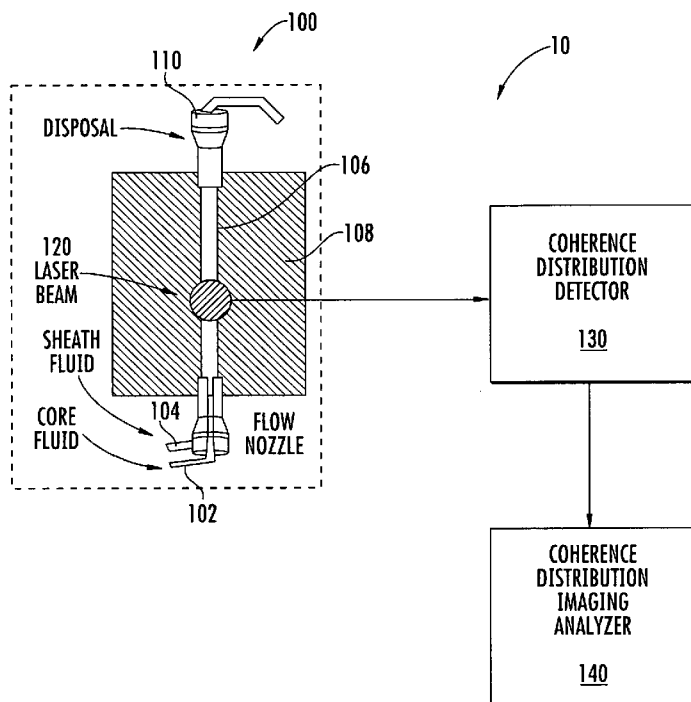


FIG. 1

(57) Abstract: A flow cytometer assembly includes a fluid controller configured to form a hydrodynamically focused flow stream including an outer sheath fluid and an inner core fluid. A coherent light source is configured to illuminate a particle in the inner core fluid. A detector is configured to detect a spatially coherent distribution of elastically scattered light from the particle excited by the coherent light source. An analyzing module configured to extract a three-dimensional morphology parameter of the particle from a spatially coherent distribution of the elastically scattered light.



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PCT/US2009/003508**A. CLASSIFICATION OF SUBJECT MATTER****G01N 15/14(2006.01)i, G01N 33/487(2006.01)i**

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)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean utility models and applications for utility models since 1975.
Japanese utility models and applications for utility models since 1975.Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal)**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5017497 A1 (BERNARD GERARD DE GROOTH et al.) 21 May 1991 See Abstract and Claims 1-8.	1-36
A	US 2002-0141625 A1 (ALAN C. NELSON) 03 October 2002 See Abstract and Claims 1-10.	1-36
A	US 4500641 A1 (GERRIT J. VAN DEN ENGH et al.) 19 February 1985 See Abstract and Claims 1-5.	1-36
A	US 2005-0110996 A1 (JONATHAN SHARPE et al.) 26 May 2005 See Abstract.	1-36

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

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Information on patent family members

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