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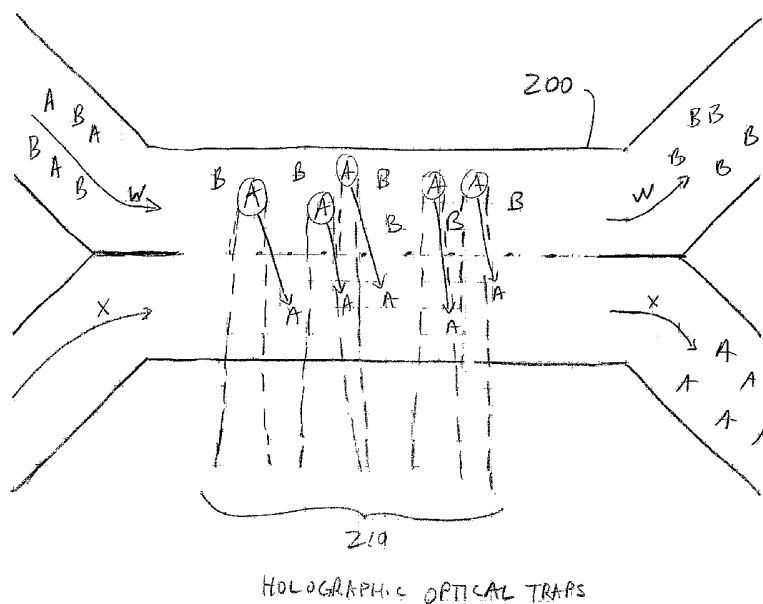
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(54) Title: MULTIPLE LAMINAR FLOW-BASED PARTICLE AND CELLULAR SEPARATION WITH LASER STEERING



(57) Abstract: An apparatus (100) for separating a plurality of components (A, B, C, E) in a fluid includes an optically transparent sorting channel (110) having a first inlet (120) for a first flow (W) and a second inlet (120) for a second flow (X), and a first outlet (130) for the first flow (W) and a second outlet (130) for the second flow (X); and a holographic optical trap system (210) coupled to the optically transparent sorting channel (200) for selectively moving a first component (A) of the plurality of components (A, B, C, E) in the first flow (W) into the second flow (X) to form an enriched second flow (X).

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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
 NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 NONE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,849,178 A (HOLM et al) 15 December 1998 (15.12.1998), see entire document.	1-71

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	"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
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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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. (703) 305-3230	Authorized officer Kiet T. Nguyen Telephone No. 571-272-2479 <div style="text-align: right;"> DEBORAH A. THOMAS PARALEGAL SPECIALIST GROUP 1300 <i>Delt</i> </div>
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