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(71) Applicants and

(72) Inventors: **HADJIOANNOU, Arion-Xenofon F.** [US/US]; 1954 Camden Avenue, Los Angeles, California 90025 (US). **NAM, Vu** [US/US]; 4160 W. 182nd Street, #203, Torrance, California 90504 (US). **YU, Tak For** [CN/US]; 550 Veteran Avenue, Apt.101, Los Angeles, California 90024 (US). **TSENG, Hsian-Rong** [CN/US]; 1932 Selby Avenue, #101, Los Angeles, California 90025 (US).

(74) Agent: **DALEY, Henry J.**; Venable LLP, P.O. Box 34385, Washington, District Of Columbia 20043-9998 (US).

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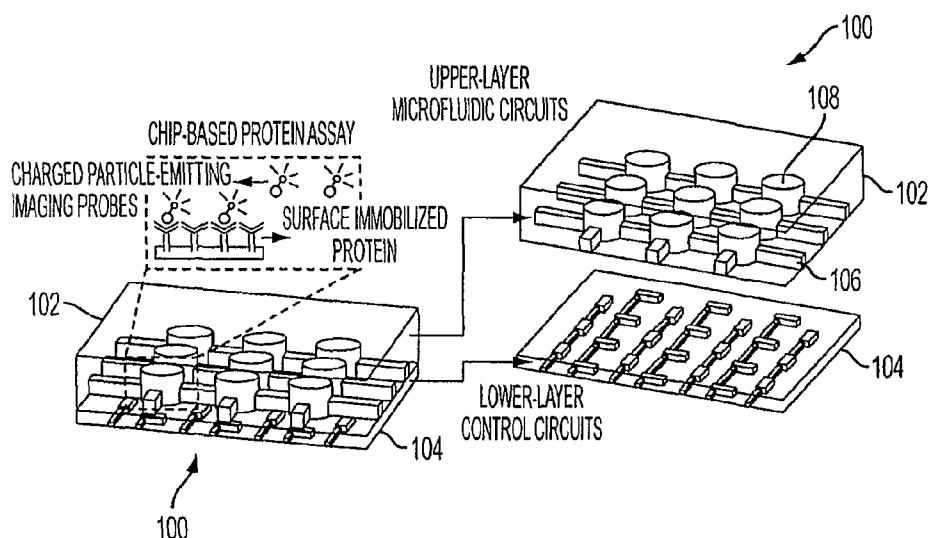
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Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: DEVICE FOR QUANTIFICATION OF RADIOISOTOPE CONCENTRATIONS IN A MICRO-FLUIDIC PLATFORM



(57) Abstract: A micro-fluidic device has a micro-fluidic circuit layer and a charged-particle detection layer disposed proximate the micro-fluidic circuit layer. The micro-fluidic device is constructed to provide a two-dimensional image of charged-particle emissions from a sample within the micro-fluidic circuit layer while in operation. A method of quantification of radioactivity in a biological sample includes directing a fluid containing the biological material into a microfluidic device, detecting charged particles emitted from the biological material with a two-dimensional imaging sensor, and forming a two-dimensional image over time corresponding to radioactivity of the biological sample.

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- *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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A. CLASSIFICATION OF SUBJECT MATTER

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USPC: C12Q 1/68;G01N 15/06,33/00,33/48,35/00

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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,306,590 B1 (MEHTA et al.) 23 OCTOBER 2001.	1-18
A	US 6,589,729 B2 (CHAN et al.) 08 JULY 2003.	1-18
A, P	US 7,118,910 B2 (UNGER et al.) 10 OCTOBER 2006.	1-18
A, E	US 7,244,598 B2 (DUFFY) 17 JULY 2007.	1-18



Further documents are listed in the continuation of Box C.



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* Special categories of cited documents:		"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
"A"	document defining the general state of the art which is not considered to be of particular relevance	"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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"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		

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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. (571) 273-3201

Authorized officer

B.J. Sines

Telephone No. (571) 272-9000

