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(71) Applicant: MICROBIOSENSOR LIMITED [GB/GB];

The Manchester Incubator Building, Grafton Street, Manchester Greater Manchester M13 9XX (GB).

(72) Inventors: **BARKER, Michael Gordon**; Microbiosensor Limited, The Manchester Incubator Building, Grafton Street, Manchester Greater Manchester M13 9XX (GB). **DOBSON, Curtis**; Microbiosensor Limited, The Manchester Incubator Building, Grafton Street, Manchester Greater Manchester M13 9XX (GB). **GOVIND-JI-BHATT, Nishal**; Microbiosensor Limited, The Manchester Incubator Building, Grafton Street, Manchester Greater Manchester M13 9XX (GB). **KELL, Darren**; Microbiosensor Limited, The Manchester Incubator Building, Grafton Street, Manchester Greater Manchester M13 9XX (GB). **HENDERSON, Duncan**; Microbiosensor Limited, The Manchester Incubator Building, Grafton Street, Manchester Greater Manchester M13 9XX (GB). **KNIGHT, Christopher**; Microbiosensor Limited, The Manchester Incubator Building, Grafton Street, Manchester Greater Manchester M13 9XX (GB). **GODDARD, Nicholas**; Microbiosensor Limited, The Manchester Incubator Building, Grafton Street, Manchester Greater Manchester M13 9XX (GB).

(54) Title: A CELL COUNTER AND DIAGNOSTIC DEVICE

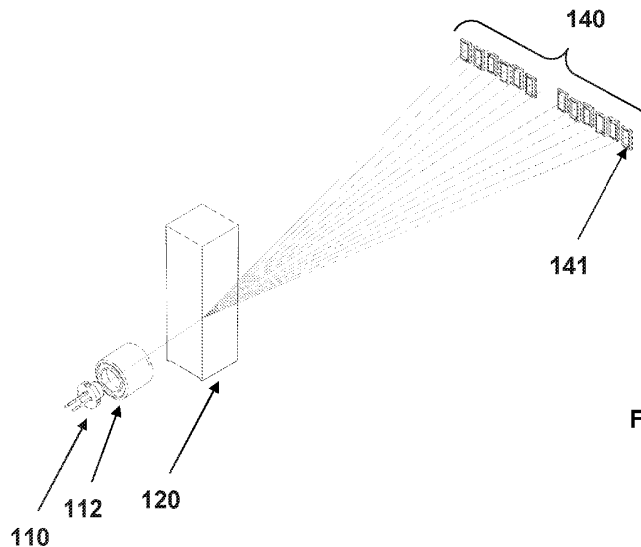


Fig. 4a

(57) Abstract: Disclosed is a device for determining a concentration of cells of a given size in a sample of fluid, the sample comprising a plurality of cells, comprising: a light source arranged to emit light along a central axis to illuminate the plurality of cells in the fluid sample; a detector arranged to receive light at a plurality of displacements from the central axis, the light having passed through the plurality of cells in the fluid sample, and to produce a plurality of signals, each associated with, and indicative of an intensity of the received light at, a respective one of the plurality of displacements; and a processor arranged to determine a concentration of cells of a given size, based on the plurality of signals from the detector, wherein the processor is arranged to compare the plurality of signals from the detector with one or more pre-stored thresholds or profiles, indicative of a particular concentration.

[Continued on next page]

(GB). **SMITH, Martin**; Smallfry, The Old School Building, School Street, Wolston, Coventry, West Midlands CV8 3HF (GB).

(74) **Agent: APPLEYARD LEES IP LLP**; 15 Clare Road, Halifax Yorkshire HX1 2HY (GB).

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