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(71) Applicant: AUFBAU MEDICAL INNOVATIONS LTD.
[IE/IE]; Palmerston House, Fenian Street, Dublin, D02 (IE).

(72) Inventors: HURLEY II, David D.; 999 Hidden Lake Drive, Apt. 3E, North Brunswick, New Jersey 08902 (US). PENA, John T.G.; 55 East 9th Street, Apt 7L, New York, New York 10003 (US). LEE, Hwi Yong; 1380 Oak Tree Drive, J, North Brunswick, New Jersey 08902 (US). RAJAMANTHRILAGE, Apeksha C.; 14 Ari Drive, M, Somerset, New Jersey 08873 (US). HO, Kathleen; 458C Hamilton Street, Somerset, New Jersey 08873 (US). BELDNER,

Shayna F.; 1251 Rahway Road, Scotch Plains, New Jersey 07076 (US).

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(54) Title: SYSTEMS, DEVICES, AND METHODS FOR MICROFLUIDIC FLUID ANALYSIS

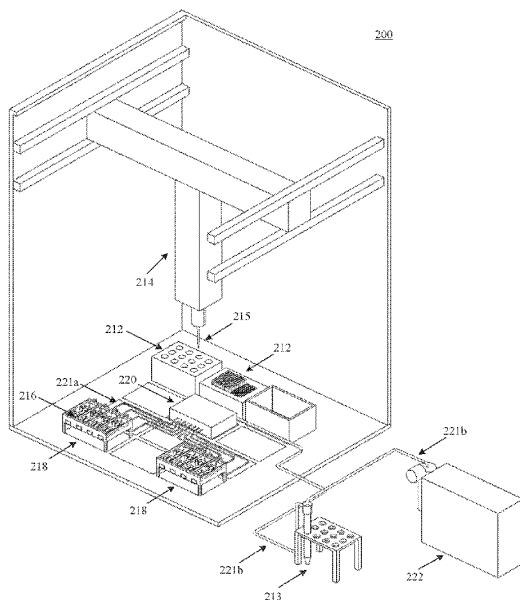


FIG. 2A

(57) Abstract: Described here are systems, devices, and methods useful for high-throughput and automated separation of extracellular matrix bodies using a microfluidic chip. A system for separating extra-cellular matrix bodies (ECMBs) from a biological fluid may comprise a holder configured to receive the biological fluid, a robot configured to transfer the biological fluid from the holder to a microfluidic chip, a chip connector configured to hold at least one microfluidic chip, a manifold coupled to the at least one microfluidic chip, and a negative pressure source coupled to the manifold. The negative pressure source may be configured to apply a negative pressure of between about 10 mm HG and about 760 mm HG to the at least one microfluidic chip.

[Continued on next page]

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