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(54) Title: DEVICE AND METHOD FOR MICRODROPLET DETECTION OF CELLS

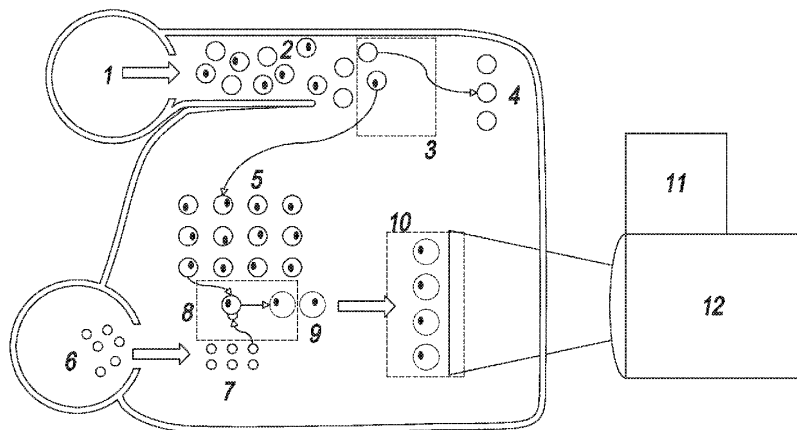


Fig. 1

(57) Abstract: Devices, systems, and associated methods are provided for manipulating and/or determining one or more characteristics of cells contained within a biological sample. In particular a device and methods of use thereof are provided, the device comprising a sorting component configured to separate cell-containing microdroplets from empty ones into a population of cell-containing first microdroplets; a microdroplet manipulation component configured to manipulate the first microdroplets using real or virtual electrowetting electrodes, and an optical detection system configured to detect an optical signal from the microdroplets via the one or more detection windows.

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