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(54) Title: MICROFLUIDIC DEVICE AND METHOD FOR PROCESSING BIOLOGICAL SAMPLES

(57) Abstract: A microfluidic device for processing a sample comprises an inlet port fluidically coupled to a closed system is disclosed. The closed system comprises a plurality of linear loading conduits, a plurality of terminating chambers, and pluralities of microchambers for receiving the sample. Also disclosed are methods for drawing sample amounts into microchambers of the microfluidic device. One method includes a step of applying a pluralty of pressure pulses to contents within the microfluidic assemblies, the pluralty of pressure pulses comprising a first pressure applied for a first time interval and a second pressure applied for a second time interval, wherein a volume of the sample is drawn into a plurality of microchambers of the microfluidic device. These and other embodiments of microfluidic devices and methods are disclosed.

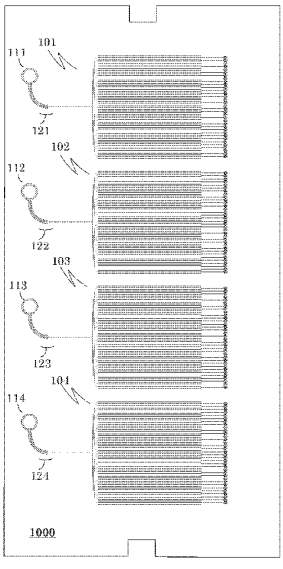


FIG. 1

WO 2023/043848 A1

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