

Title (en)
MICROFLUIDIC CHIP

Title (de)
MIKROFLUIDISCHER CHIP

Title (fr)
PUCE MICROFLUIDIQUE

Publication
EP 3022544 A1 20160525 (EN)

Application
EP 13889551 A 20130716

Priority
US 2013050669 W 20130716

Abstract (en)
[origin: WO2015009284A1] A microfluidic chip orients and isolates components in a sample fluid mixture by two- step focusing, where sheath fluids compress the sample fluid mixture in a sample input channel in one direction, such that the sample fluid mixture becomes a narrower stream bounded by the sheath fluids, and by having the sheath fluids compress the sample fluid mixture in a second direction further downstream, such that the components are compressed and oriented in a selected direction to pass through an interrogation chamber in single file formation for identification and separation by various methods. The isolation mechanism utilizes external, stacked piezoelectric actuator assemblies disposed on a microfluidic chip holder, or piezoelectric actuator assemblies on-chip, so that the actuator assemblies are triggered by an electronic signal to actuate jet chambers on either side of the sample input channel, to jet selected components in the sample input channel into one of the output channels.

IPC 8 full level
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