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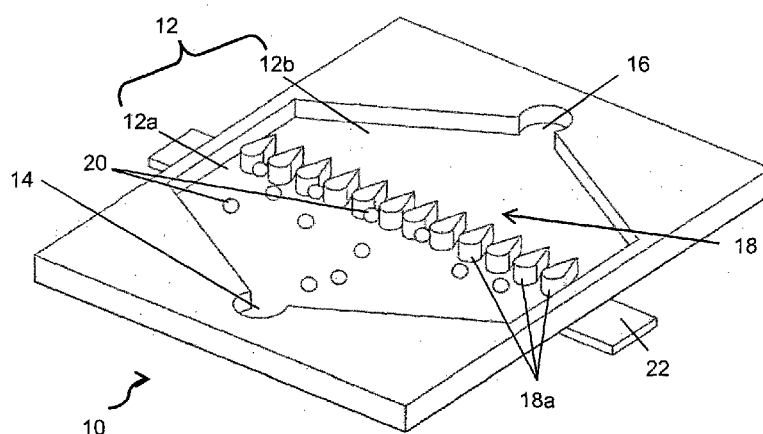


Fig. 1

(57) Abstract: A microfluidic device and method is provided for concentrating particles in a fluid sample. The microfluidic device has a chamber, wherein the chamber has a filtering unit defining a first compartment and a second compartment, the first compartment being in fluid communication with the second compartment and being for receiving a fluid sample containing particles, the filtering unit being configured to selectively retain particles of the fluid sample based on a size of the particles, at a sub-region of the first compartment as the fluid sample flows from the first compartment to the second compartment; and an acoustic transducer configured to generate acoustic waves in the sub-region to disperse the particles.



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