

CRYSTAL FORMING DEVICES AND SYSTEMS AND METHODS FOR MAKING AND USING THE SAME

ABSTRACT

The present invention provides for microfluidic devices and methods for their use. The invention further provides for apparatus and systems for using the microfluidic devices, analyze reactions carried out in the microfluidic devices, and systems to generate, store, organize, and analyze data generated from using the microfluidic devices. The invention further provides methods of using and making microfluidic systems and devices which, in some embodiments, are useful for crystal formation. In one embodiment, an apparatus includes a platen having a platen face with one or more fluid ports therein. The fluid ports spatially correspond to one or more wells on a surface of the microfluidic device. A platform for holding the microfluidic device relative to the platen is included, and a platen actuator for urging the platen against the microfluidic device so that at least one of the fluid ports of the platen is urged against one of the wells to form a pressure chamber comprising the well and the port, so that when pressurized fluid is introduced or removed into or from the pressure chamber through one of the ports, fluid pressure is changed therein.

FIG. 14B