

Request Information

Permalink

# Fluidic System For The Rotational Cycle-Determined Release Of Liquid From A Chamber In A Rotor

Tech ID: 32736 / UC Case 2008-326-2

## BRIEF DESCRIPTION

See patent information below. The present invention relates to a fluidic device. More specifically but not exclusively, the present invention relates to serial siphon valves for a fluidic device.

Control of the release of liquid from a fluidic chamber via a spinning rotor is a very important function in the area of centrifuged-based fluidic systems for applications such as immunoassays, nucleic acid analysis, biochemical tests, chemical tests and sample preparation. This is because it is often necessary to mix different reagents together at the appropriate time, either in parallel or in series.

It is a non-limiting object of the present invention to provide a method using a co-radial arrangement of siphon structures each separated by a capillary valve in a fluidic system. Such a method allows saving radial space. This saved radial space can be used, for example, to add more features on a fluidic device.

It is a non-limiting object of the present invention to provide siphon structures that enable to sequentially distribute liquids in a fluidic system upon successive centripetal accelerations and decelerations applied to a rotary platform. Sequential fluid distribution can be controlled by the length and number of serial siphon structures.

It is a non-limiting object of the present invention to provide a device using a co-radial arrangement of siphon structures each separated by a capillary valve in a fluidic system. Such a device allows saving radial space. This saved radial space can be used, for example, to add more features on a fluidic device.

## FULL DESCRIPTION

## SUGGESTED USES

## ADVANTAGES

## PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	8,534,319	09/17/2013	2008-326

## CONTACT

Alvin Viray  
aviray@uci.edu  
tel: 949-824-3104.



## OTHER INFORMATION

## CATEGORIZED AS

- » Engineering
- » Other

## RELATED CASES

2008-326-2

**UCI** Beall  
Applied Innovation

5270 California Avenue / Irvine, CA  
92697-7700 / Tel: 949.824.2683



© 2022, The Regents of the University of  
California  
[Terms of use](#)  
[Privacy Notice](#)