New Microwell Plate Configurations to Increase Microwell Density

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PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,095,852	08/04/2015	2011-574

BRIEF DESCRIPTION

Researchers at the University of California, Irvine have developed a process and method to increase microwell density by as much as twofold in a 2D imaging plane using 3-D arrangements of micro-well reactor plates.

SUGGESTED USES

This new arrangement may be used in biochemical or biological reaction and assays that require the mointoring of fluorescence intensity or colorimetric changes within individual wells.

ADVANTAGES

The primary advantage is that the density of the reactor wells per unit area are increased by as much as twofold.

INVENTORS

- Hatch, Andrew C.
- Lee, Abraham P.

OTHER INFORMATION

KEYWORDS

droplet, micro-reactor, microfluidics, microwell, fluorescence, colorimetric

CATEGORIZED AS

- **Biotechnology**
  - Other
- **Medical**
  - Devices
  - Diagnostics
  - Research Tools

- **Research Tools**
  - Nucleic Acids/DNA/RNA
  - Other
- **Sensors & Instrumentation**
  - Scientific/Research

RELATED CASES

2011-574-0, 2011-163-0, 2011-159-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- Controlled 'One-Cell-One-Bead' Encapsulation in Droplets
- Microfluidic device for multiplex diagnostics / Microfluidic devices and methods
- Microfluidic Device for Cell Separation Using Dielectrophoresis and/or Magnetohydrodynamics
- On-Demand Cell Encapsulation Using On-Demand Droplet Generation and Impedance-based Detection
- High throughput and precision cell sorting

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