

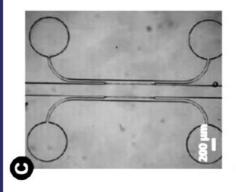


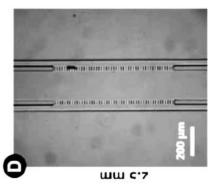


**PENDING** 

# (IN202211060178)

Fluid management and visualization platform for incubator based cell culture applications





### **NEED**

Remote monitoring of cell cultures often requires manual intervention, which can lead to errors and delays. But what if a portable, automated solution could manage fluid exchange and monitor cell growth seamlessly?

#### global biotechnology

MARKET ANALYSIS

market projected to grow at a CAGR of 9.5% from 2023 to 2033, reaching \$1,179.6 billion by 2033. Drivers include the rise of personalized medicine and bioprocess automation. (Source: Market Research Future, 2023)

### **TECHNOLOGY OVERVIEW**

This patent presents an automated, portable cell culture system with integrated fluid management and imaging. It eliminates manual interventions, enabling users to monitor cell cultures remotely while using standard culture dishes microfluidic systems.

## **Target Industries**

Biotechnology Equipment Manufacturers; Life Sciences Research Organizations; Healthcare R&D Institutions

### TECHNOLOGY KEY FEATURES

Portable and automated system; Fluid management with peristaltic pumps; Integrated imaging with camera sensor; Compatible with microfluidic devices and conventional dishes; Remote monitoring; Small and lightweight.

### AT A GLANCE

 SDG 3: Good Health and Well-being; SDG 9: Industry, Innovation, and Infrastructure

#### Read more here

Technology is available for licensing/ co-development. Reach out to Prof. Deepak Chitkara, Coordinator, BITS Technology Enabling Centre, BITS Pilani Contact Details: tec.bits@pilani.bits-pilani.ac.in, 91 1596-255913

