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# Point-Of-Care Devices And Methods For Microarray-Based Serology Testing

Tech ID: 34163 / UC Case 2020-656-0

## BRIEF DESCRIPTION

This technology offers a revolutionary approach to point-of-care diagnosis and large-scale health surveillance by enabling portable, high-accuracy detection of proteins, bioparticles, and cells.

## FULL DESCRIPTION

This invention encompasses processes, methods, kits, devices, and software for detecting proteins, particles, or cells in human or animal samples, potentially derived from viruses, bacteria, immune responses, or cancer cells. It includes portable imaging systems designed for use with microarrays or biochips, capable of supporting protein or bioparticle precipitates, and employing light sheet illumination for imaging in liquids. These systems are aimed at facilitating point-of-care diagnosis, immunity analysis, epidemiological surveillance, and the development of therapeutics and vaccines, particularly in the context of epidemics or pandemics.

## SUGGESTED USES

- Point-of-care diagnostic devices for healthcare facilities and field use.
- Epidemiological surveillance and public health monitoring.
- Immunity analysis for vaccine development and therapeutic research.
- Education and research tools for biomedical studies.

## ADVANTAGES

- Enables point-of-care, high-accuracy diagnosis.
- Supports large-scale, high-throughput imaging.
- Portable and cost-effective, making advanced diagnostics accessible.
- Capable of detecting a wide range of health markers, including antibodies and antigens related to diseases like COVID-19.
- Designed for ease of manufacture and use in epidemic/pandemic response.

## PATENT STATUS

Country	Type	Number	Dated	Case
Patent Cooperation Treaty	Reference for National Filings	WO 2021/216958	10/28/2021	2020-656

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## OTHER INFORMATION

## KEYWORDS

fluorescence, microarrays, imaging, point-of-care devices, COVID-19, antibody testing, virus detection

## CATEGORIZED AS

- » Medical
  - » Diagnostics
  - » Vaccines
- » Research Tools
  - » Other

## RELATED CASES

2020-656-0

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