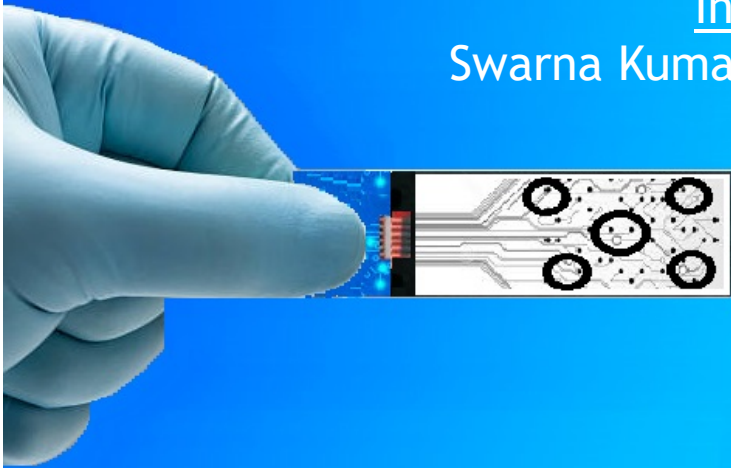


# Title of the Invention

Medical Diagnostic Slide with  
Sensors and Internet of Things  
(IOT)

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# Technical Field of the invention

Technically advanced microscope slide having embedded sensors(Bio/Nano) and Internet of Things (IOT) features for medical diagnostic purpose.

# IPR Status

- This invention is filed and published at Indian patent office.

Application Number : 201741032643

Application Filed Date : 14 Sep 2017

Published Date : 06 Oct 2017

(Patent Pending)

# Prior Art

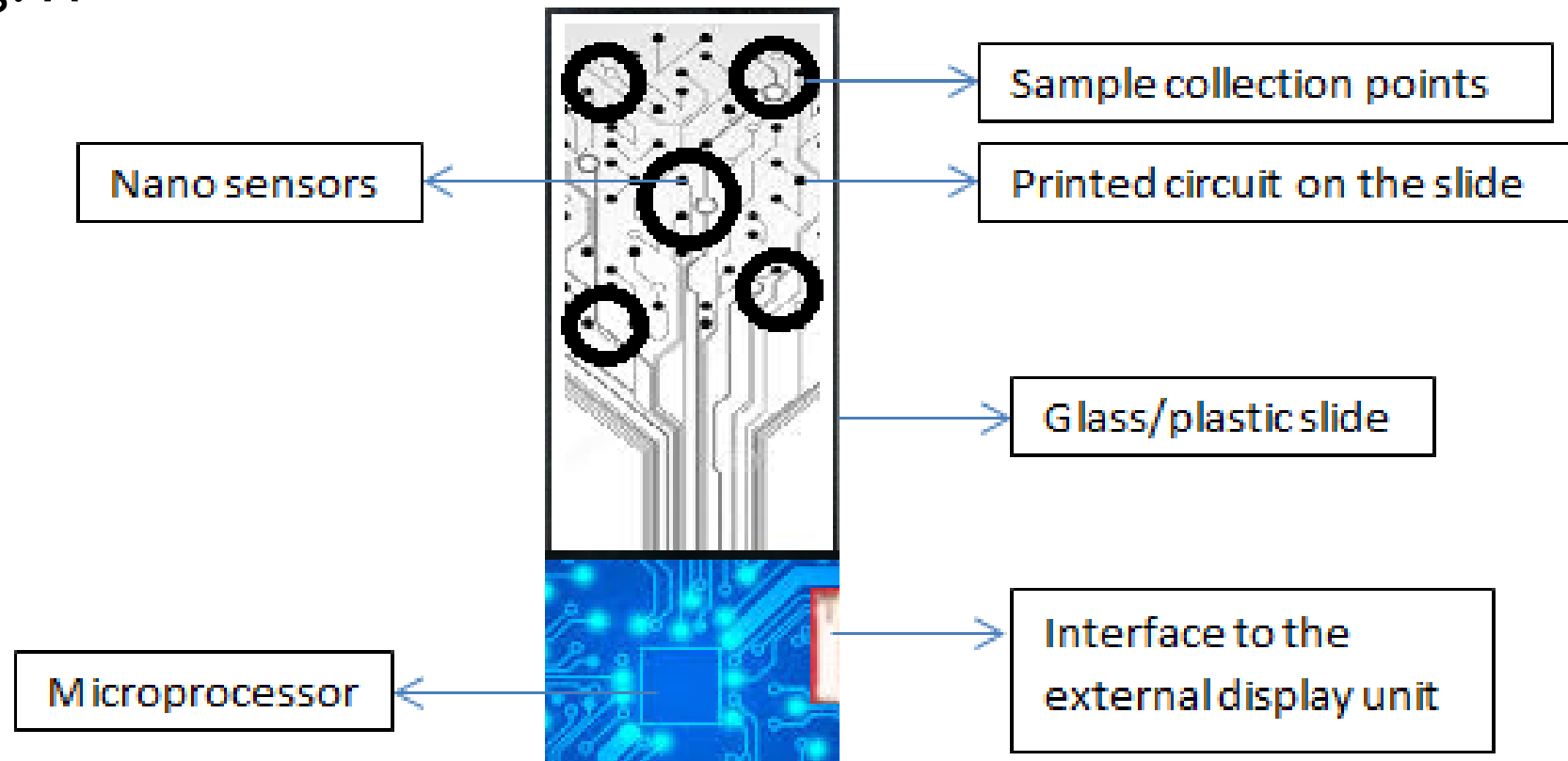
It is not an admission that any of the information provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.

# Summary of the Invention

- ❑ This slide has multiple specimen collection points and each collection point has capable of analysing each type of specimen/sample at a time. All of the collection points will work parallel and independent.
- ❑ This slide will allow the user to customize the specimen collection points to analyse any kind of specimen and also user can use only single collection point and later they can use the other collection points to analyse the specimens.
- ❑ This slide can analyse different specimens at a time and collate the report by microcontroller and send through various devices(wired or wireless). The microcontroller unit can be attachable and detachable to the sensor unit.
- ❑ This slide has option to connect external display unit such as monitor to the microcontroller unit to monitor the specimen results while processing by the bio/nano sensors.

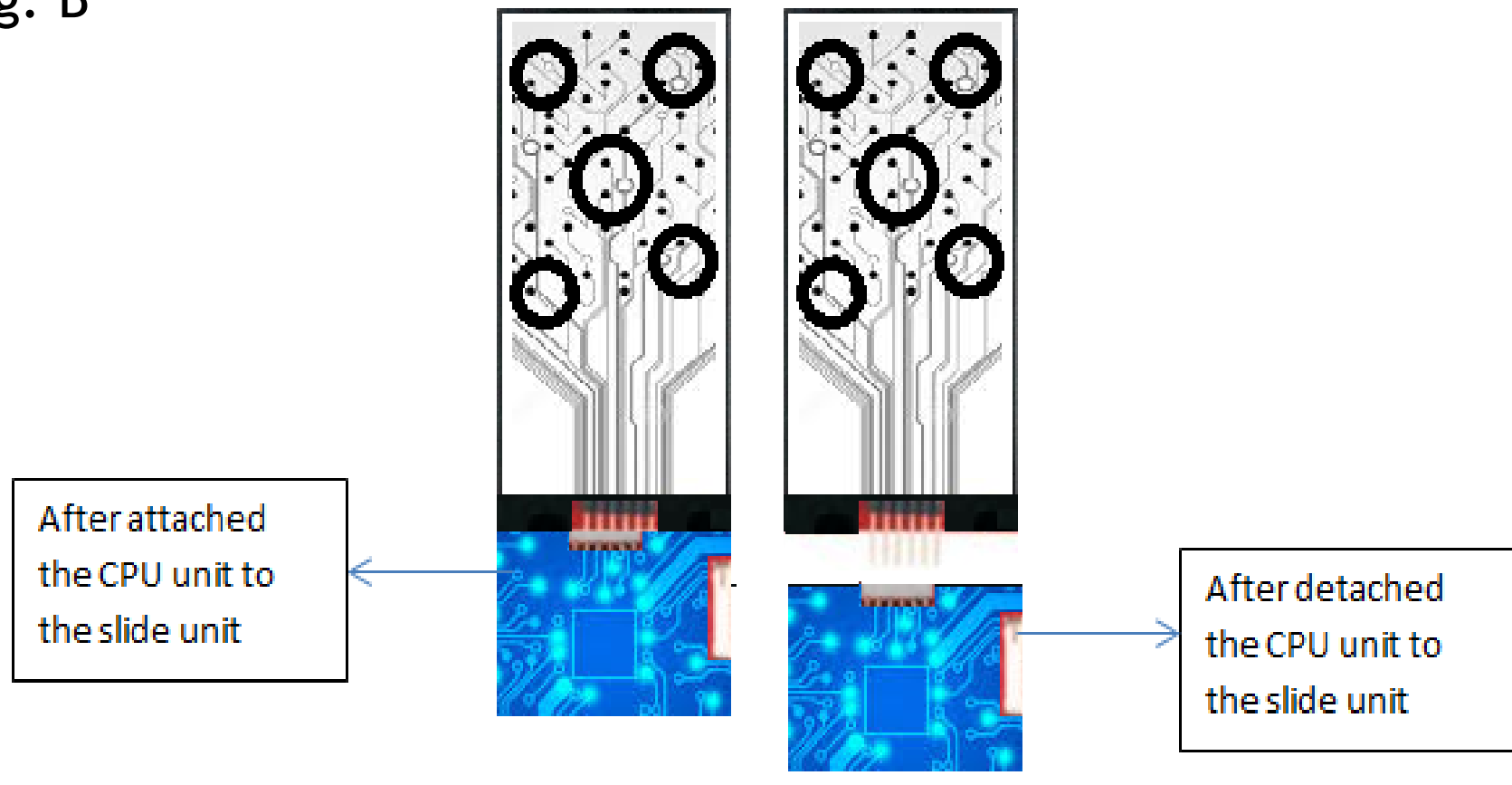
# Graphical Representation of IOT Slide (Imaginary)

Fig. A



# Graphical Representation of IOT Slide (Imaginary)

Fig. B



# Core Functionalities

(Reference Fig. A & B)

- ❖ The IOT slide has combination of two individual devices such as sensor unit and microcontroller unit and these units can be attachable or detachable.
- ❖ The IOT sensor slide is having multiple specimen collection points and all these collection points work independently and send the analysing results to the microcontroller unit.
- ❖ The Microcontroller unit can connect to multiple devices to share the specimen report through wired or wireless technologies such as Bluetooth, Wi-Fi etc...
- ❖ This slide has option to connect any external display unit to the microcontroller unit to monitor the specimen results while processing by the bio/nano sensors.
- ❖ Microcontroller unit can be reused multiple times with new slides so we can say it has reusable capability.



# Advantages

- ✓ Sensor unit is combination of multiple bio/nano sensors to analyse the specimen accurately. The microcontroller unit can be reusable multiple times and simply attach with new sensor slide to start functioning.
- ✓ Any person can use this device at home for specimen test without depending on medical labs. This device is pocket fit it means very light in weight and very small in size so anyone can carry with them easily.
- ✓ Any collection point can be used for any kind of specimen and each collection point will work individually. Thanks to collection points customization.
- ✓ The IOT slide can connect to any wired or wireless devices to print and share the reports with doctors/patients etc...
- ✓ Microcontroller unit will collect all the specimen reports sent by each collection points and collate them and prepare as a single report.

# Abstract

## MEDICAL DIAGNOSTIC SLIDE WITH SENSORS AND INTERNET OF THINGS (IOT)

A medical diagnostic device and a method to determine one or more characteristic of one or more specimen is disclosed. The method for determining can include the steps of receiving, by a specimen collection point of the medical diagnostic device, the one or more specimen; determining, by a first sensor of the of the medical diagnostic device the one or more characteristic of the one or more specimen received by the specimen collection point; fetching, by a detachable microcontroller unit communicably connected with the first sensor, the one or more characteristic determined to generate at least a medical report; transmitting, by an input/output (I/O) interface communicably connected with the detachable microcontroller unit, at least the one or more characteristic of the one or more specimen or the medical report generated to at least communication device.

# Application

- ✓ This technology can be used by all pharmaceutical companies
- ✓ This technology can apply for all medical/health related industries

# Deal

## WISH TO DEAL WITH FOLLOWING INDUSTRIES

- Pharmaceutical Industry
- Any Health/Medical Industries

# Commercial Terms

- ❖ Technology transfer fees and royalties
- ❖ Licensing Fees

# Current Status of the Innovation

- This technology can be developed and implemented with existing/new resources.
- Above diagrams of my invention is very clear interns of how this device functioning.
- By using this invention we can commercialize this technology in the market within few years.

Thank You

