

### SYSTEM AND METHOD TO FORM CONTINUOUS GLUCOSE MONITORING DEVICE IITM Technology Available for Licensing

#### Problem Statement

- **Painful Process:** Traditional SMBG strips require finger pricking, causing user discomfort.
- **Cost and Convenience:** CGM devices are expensive and need a separate reader unit, which can be cumbersome during activities.
- **Need for Improvement:** There is a demand for a cost-effective and user-friendly glucose monitoring device.

#### Intellectual Property

- IITM IDF Ref. 2522
- IN 537167 - Patent Granted

#### TRL (Technology Readiness Level)

TRL - 4: Technology validated in lab scale.

#### Technology Category/ Market

**Category - Wearable Medical Devices, Medical & Surgical Devices.**

**Applications-** Digital Health and Remote Patient Monitoring

**Industry-** Telehealth, Healthcare and Medical Devices

**Market -** Non-invasive Glucose Monitoring Devices Market size is estimated to grow by USD 25.98 million from 2024 to 2028 at a CAGR of 15%.

#### Research Lab

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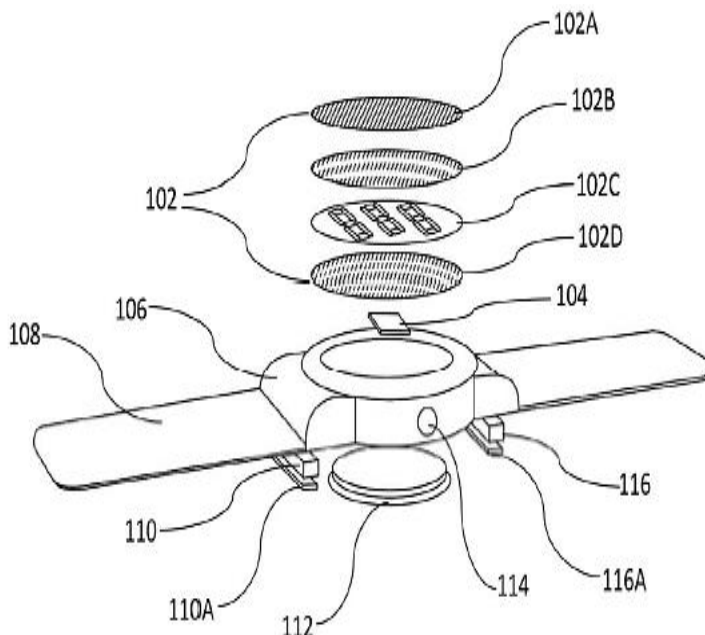


FIG. 1. illustrates a perspective view of a system to receive a continuous glucose monitoring patch. The system include a display unit (102), a reader unit (104), and a modular housing (106), a strap (108), one or more batteries (110, 116), a battery cover (110A, 116A), a CGM patch (112) and a control button (114).

#### Technology

1

The invention includes a continuous glucose monitoring (CGM) device with a modular housing and an integral display unit, allowing users to view glucose levels directly on the device.

2

The CGM patch is designed to be removably disposed within the modular housing and is capable of detecting glucose levels, which are then displayed and calibrated through a reader unit.

3

The system aims to provide a cost-effective and user-friendly solution for glucose monitoring, addressing the pain and inconvenience associated with traditional SMBG strips and the higher costs of existing CGM devices.

#### CONTACT US

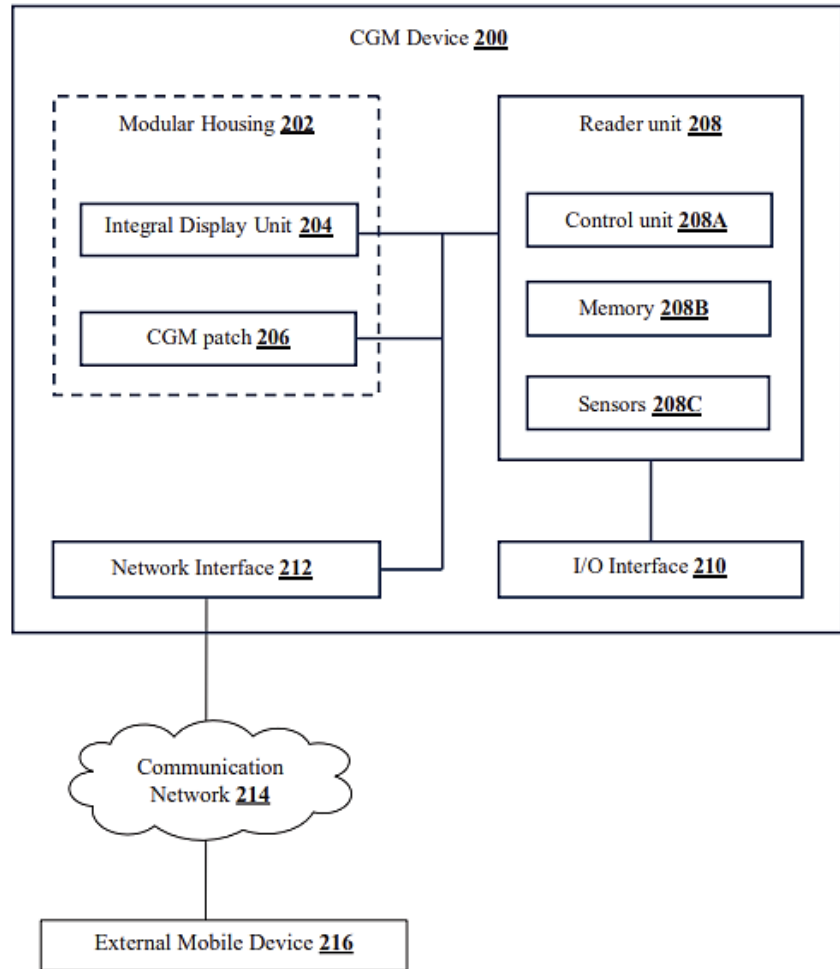
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**FIG. 2. Block diagram of a continuous glucose monitoring device.**



### Key Features / Value Proposition

#### 1. Reusable Modular Housing

Enables effective reuse with multiple CGM patches, enhancing cost-efficiency.

#### 2. Optimal Interchangeability

Accommodates various patch dimensions, providing flexibility for diverse user needs.

#### 3. Low-Powered Display

Utilizes electro-thermochromic, thermochromic, or electrochromic ink for energy-efficient glucose level display.

#### 4. Pain Reduction

Minimizes user discomfort compared to traditional SMBG strips, improving the user experience.

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