



**Name of the Technology/knowhow/process:** Portable Blood Pressure Monitor

**Summary:** Regular monitoring of blood pressure is crucial for maintaining cardiovascular health and preventing serious conditions like hypertension, heart attack, and stroke. To address this need, we have developed a portable, non-invasive blood pressure monitoring device designed for accuracy and convenience. The device provides comprehensive blood pressure measurements, including systolic blood pressure (SBP), diastolic blood pressure (DBP), mean arterial pressure (MAP), and heart rate (HR). Compact and easy to use, it features advanced algorithms to ensure precise readings. Ideal for both clinical and personal use, this innovative device empowers users to monitor of their health with reliable and consistent results.



**Applications:**

1. **Healthcare Monitoring:** Widely used in clinics, hospitals, and at home for tracking and managing blood pressure.
2. **Chronic Disease Management:** Essential for patients with hypertension, diabetes, or cardiovascular conditions.
3. **Fitness and Wellness:** Helps individuals monitor heart health and maintain a healthy lifestyle.

**Novelty features:**

1. **Compact and Portable Design:** Lightweight and easy to carry, making it ideal for home and on-the-go monitoring.
2. **Comprehensive Measurements:** Simultaneously provides SBP, DBP, MAP, and HR for a complete health assessment.
3. **Advanced Sensors and Algorithms:** Ensures high accuracy and reliability in readings, meeting universal health standards.



**Advantages:**

1. **Non-Invasive and Safe:** Provides accurate blood pressure readings without discomfort or risk.
2. **User-Friendly Operation:** Simple interface suitable for users of all ages, with minimal training required.
3. **Cost-Effective:** Affordable solution for regular blood pressure monitoring compared to clinical alternatives.

**Readiness level of the Technology:**

| Idea | Concept Definition | Proof of Concept | Prototype | Lab Validation | Technology Development | Technology Demonstration | Technology Integrated | Market Launch |
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**Year of Introduction:** 2024

**Broad Area/Category:** Electronics & Instrumentation

**User Industries:** Home, Office, Medical center, Doctor