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(57) Abstract :

A wearable cardiovascular monitoring system comprising a blood pressure monitoring arrangement with a blood pressure monitoring sensor on an inflatable cuff 102 around bicep area of a garment 101, connected to a roller 102a and a strap assembly 102b, a pulse oximeter sensor in inverted U-shaped clamp 103, connected to wrist portion of the garment 101 via a first stretchable strap 104, a non-invasive, multi-wavelength haemoglobin concentration detector (SpHb), into a single finger-slot optical assembly 105, connected to the garment 101 via a second stretchable strap 106, a single lead electrocardiogram (ECG) sensor 109 to record the heart's electrical signals, enabling early detection of abnormalities, a multi-frequency bio-impedance sensor 108 for detecting variations in extracellular fluid in the wristband 107, a holographic projector 110 to assist the user and nearby individuals during emergencies, and a thermal sensor to monitor the user's core body temperature.

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