UNIVERSITI MALAYA

IP MARKETPLACE

CONNECTING INNOVATION TO YOUR BUSINESS

TECH OFFER

WIRELESS MONITORING OF VITAL SIGNS FOR MULTIPLE PATIENTS USING WIRELESS SENSOR NETWORKS

MORE INFORMATION

MEGA-TREND

- Wellness and Well Being (HWW)
- Healthcare

TECHNOLOGY READINESS LEVEL (TRL)

- TRL 4

PATENT/ GRANTED NUMBER

- MY-158856-A

TECHNOLOGY OVERVIEW

Design and architecture of a multiple patients wireless ECG monitoring system is proposed, which is based on wireless link through network and emerging standards for low rate personal area networks (LR-WPANS) such as IEEE 802.15.4 and zigbee. The system includes an ECG signal acquisition board (110) transmitting the signals to a sensor module with wireless transmitter, that is worn by a patient. A wireless multi-patient receiver is remotely located and connected to a computer for access of the data, analysis and display. Also proposed is a reliable, scalable and energy aware

multi-tree routing (EAMTR) for increasing the network lifetime and performance in the LR-WPANS. A light-weight algorithm for ECG feature extraction and automatic cardiac arrhythmia detection with alarm system is proposed.

CONTACT US!

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