AlertCardio Wearable Arrhythmia Detector: Cardiologist-on-Chip

Claim:
Compact, low power, reliable ECG waveform analysis based on parallel delta modulator and artificial intelligent algorithm on integrated circuits for arrhythmia detection.

Novelties:
- Performs real-time signal processing and send alert immediately once arrhythmia was detected
- Reduces circuit complexity and power consumption through a non-conventional digital system

Features:
- Operates only in low speed and low data capacity, thus it will be a complement of current devices
- Technology is compatible with commercially available manufactures
- Circuit design simplicity provides competitive solution for wearable medical devices

Milestones to Date:
- Completed prototype, Dem-Val tested, and evaluated against current methods
- Completed literature review
- Academic research papers accepted

Potential Applications:
- Arrhythmia detection
- Heart failure prevention
- Immediate feedback for health monitoring
- Help caregivers

Industry Leaders and Potential Partners:
- Abbott
- Medtronic
- GE health care

INVENTOR(S) EXPERTISE
Wei Tang
Assistant Professor, Electrical Engineering
New Mexico State University

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For more information please contact:
Terry Lombard at 575.646.2791 or tlombard@nmsu.edu