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Patent Search

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Abstract:

The present invention discloses a wearable, autonomous women security system integrating GPS and GSM technologies for rapid emergency response. The device comprises a microcontroller connected to a GPS module for acquiring real-time location coordinates and a GSM/GPRS module for transmitting distress messages to predefined contacts. Activation of a panic switch immediately triggers retrieval of geolocation data, automated SMS transmission, a high-decibel alarm, and a self-defense electric shock mechanism. An LCD display provides operational status, while a compact power supply enables continuous wearable use. The system functions independently of smartphones or external applications, thereby offering reliable, immediate, and multi-layered protection during distress situations. The invention significantly enhances personal safety through automated alerting, location reporting, and active deterrence.

Complete Specification**Description: FIELD OF THE INVENTION**

[001] The present invention relates generally to the field of embedded electronic safety systems, smart wearable technology, and automated personal security devices. More particularly, the invention pertains to an intelligent women security system incorporating Global Positioning System (GPS) technology for real-time geolocation tracking and a Global System for Mobile Communications (GSM) module for automated distress messaging. The invention further concerns panic-triggered emergency response mechanisms integrated into a compact wearable form factor, enabling instantaneous location reporting, alarm activation, and self-defense functionality without reliance on manual mobile phone operation.

BACKGROUND OF THE INVENTION

[002] Incidents of harassment, assault, and threats to women's safety have highlighted the inadequacy of conventional protection mechanisms, many of which rely heavily on manual intervention or smartphone-based applications. Existing mobile applications for emergency alerting and location sharing require the victim to unlock the device, access the app, and initiate a distress signal—actions which are often impractical or impossible during sudden or high-stress attack situations. Such solutions therefore fail to provide an immediate, automatic, or reliable response when physical mobility or reaction time is severely restricted. Furthermore, these applications depend on the smartphone's battery, network stability, and application responsiveness, all of which can limit reliability under real-world conditions.

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