Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology (Deemed to be University Estd. u/s 3 of UGC Act, 1956)

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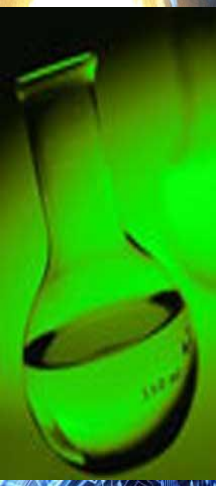
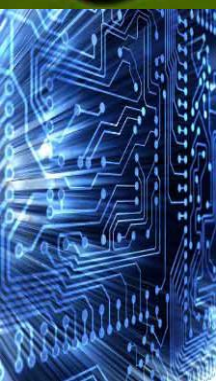

Avoidance of Fire Accident in Train Using RF Wireless Sensor Network

Seeking parties interested in licensing and commercializing of technology.

Applications:

- Timely detection of LPG or fire and cautioning the passengers with quick extinguishment of fire in running train.

Technology Description:

The system relates avoidance of fire accident in train using RF wireless sensor network, comprises an automatic fire sensor, a microcontroller, an LCD display, an encoder & a decoder, a relay circuit system. The IR photo sensor and the LPG gas sensor in the transmitter section with high sensitivity detects the fire and the LPG leakage in the locomotive coach respectively. The HT12E encoder is used for transmitting the information. Upon detecting fire, one of the two relay driver circuits turns ON the fire extinguisher (CO_2) and another opens the emergency doors. The said relays are powered by 12 v DC power supply. The receiver section further comprises of a 12^{12} Series of decoder used for decoding the received information and displays the text messages in the LCD displays about the fire.

Advantages of the Technology:

- Quick fire & LPG detection with highly sensitive and fast response sensors
- Acts both as a fire detector and as a fire extinguisher.

Development Status:

Patent Number:	400128
Application Number:	2104/CHE/2015
Filing Date:	April 24, 2015

Inventors:

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Technology Transfer from the institute:

For more details

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