11. Title: Pollution monitoring system

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Key Words: Pollution monitoring, Air purification, Sensor

Domain: Environment

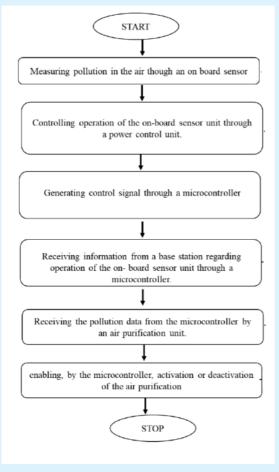


Diagram: Flow chart of working of pollution monitoring system

Summary: A pollution monitoring system is developed. The system comprises of an onboard sensor unit having a plurality of sensors configured to measure pollution data in the air. It further comprises a power control unit, a microcontroller, an air purification unit. The activation/deactivation of the air purification unit is enabled based on pollution data. A global positioning system (GPS) module is provided to track the location of pollution monitoring system. The system produces purified air.

Advantages:

» Energy efficient and simple system architecture as compared to existing art

Applications: In air purification units in cities, indoor scenario, heating ventilation and air conditioning system, semiconductor fabrication industry, and cleanrooms etc.

Scale of Development: A prototype is developed and tested in the IIT Delhi laboratory.

Technology Readiness Level: 4

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