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## Patent Search

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#### Abstract:

Industrialization increases the degree of automation and so it increases pollution by releasing pollutants into the atmosphere. There should be a system to monitor the industrial pollution. Specific attention is given to the factors which affects the health of living organisms and Ecosystem. Industrial pollution monitoring is the collection of information at different locations of industries and at regular intervals of time in order to provide the data which may be used to define current conditions. Due to the large variations are found between different industries. The proposed system aims in building a robust system that can measure the industrial pollution to reduce it and to decrease human interference in monitoring the industrial pollution and provide a healthy environment for the workers to work in. The system evaluates industrial pollution continuously and indicates when there is an increase in the emissions and takes action to control it using wireless technology (i.e) Internet of Things.

#### Complete Specification

##### Description: FIELD OF INVENTION

The objective of the study is to develop a system that will monitor smoke stack emissions by incorporating low powered devices in a microcontroller including nitric dioxide, carbon monoxide, particulate matter, and sulfur dioxide sensors.

##### BACKGROUND OF INVENTION

Industrialization is inevitable in a progressive country. As the Philippines makes its way to finally realize a booming economy, the need to industrialize to comply with global standards is a complete requisite. This requisite entails innovation of new technology, commencing manufacturing corporations and building a housing a den of factories and industrial plants. However, complex changes in the process to elevate and revolutionize things around could also mean complex changes with respect to materials utilization, natural resources and the environment. Industrial plants and factories emit dangerous smoke and chemicals into the atmosphere causing harm to the environment. With all of these complex changes, there should be a complete balance between industrialization and environmental protection. Several policies and environmental protection procedures that may vary from country to country have been implemented around the world. These are enacted as laws and some are set as a global standard. Clean Air Act is one of these laws which is mandated to be complied as part of Industrial Regulations. Manufacturing companies and factories employ different technologies to help them comply with the acts pertaining to environmental compliance. Pocket-sized environmental sensors can now be conveyed, observing the airborne quality, radiation, water quality, hazardous airborne chemicals and numerous other environment markers. This is where Internet of things (IoT) can create huge opportunities in creating solution to improve industrial processes that will have a great impact to the environment. Internet of Things or more accurately the internet of devices can help in commencing solution that will let devices and sensors

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