## Patent Search

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**Abstract:**

The purpose of this invention is to design a system which monitors and controls the water flow to an irrigation system using Mobile Phone through WI-FI and monitoring temperature and humidity. This can be achieved by the use of soil moisture sensor, which senses the water content in the soil. This sensor output is given to a Microcontr based control system for further data processing. This also consists of IoT module for remote monitoring and control of water supply to irrigation system. Whenever the s moisture content goes below some predefined level, and then this information is sent through WI-FI. Based on the command received from IoT the Microcontroller switch or OFF the electrical water pump. The design of this system is very much sensitive and should be handled with utmost care because the microcontroller is a 5 volts device employed to monitor the operation of high voltage water motor. So, every small parameter should be given high importance while designing the interfacing circuit betwee controller and the water motor

Complete Specification

Description:The main Aim of this invention is to monitor moisture level and humidity in the soil of the agriculture farm and updating through internet of things. If the moisture level in the soil is inadequate, then the microcontroller switches ON the motor pump and if the moisture level in the soil is adequate then it turns OFF the motor pump thus stops watering the fields which results in the less requirement of water. All sensors integrated controlling module ARDUINO and post the data into LCD module which can make the data into server for easy of data transfer.

Microcontroller is the integrated of all input and out modules to process the data of every individual sensor finds the respective parameter of data gives to the controller like humidity sensor is used to measure the humidity, moisture sensor is used to measure the wetness of the farming field. All the data given to the Arduino UNO, it processes data by using programming code and displays in LCD module as well as in IOT server.

The implementation of the proposed Intelligent IoT Irrigation system is shown in figure.1 which describes about the interfacing of various sensors and IoT with ARDUINO and in figure.2 the schematic representation of the ARDUINO microcontroller.

We can conveniently check the temperature, humidity in the fields, moisture level of the soil and water

View Application Status