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(57) Abstract :

The present disclosure pertains to an automatic desludging and cleaning system. The system includes a first set of sensors to sense impurities inside a water source and a second set of sensors to sense water level, a set of motors configured with one or more fins, a controller, a set of sprayers, a set of inlets and a set of outlets, and a thermoelectric regulator. The controller is configured to actuate the set of motors upon identification of the impurities and accordingly activates the set of outlets and the set of inlets to drain impure water and refill fresh water. The controller is configured to activate the thermoelectric regulator to regulate temperature inside the water source and helps in avoiding accumulation of algae or similar biological contaminants.. Further, the controller is configured to transmit status of the impurities inside the water source to mobile computing devices, where the set of motors is controlled through the mobile computing devices.

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