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(57) Abstract

A self-cleaning based water cooler management system, comprising a sensing module 101 installed within a water cooler 115 for detecting presence of contaminants, turbidity, and pH of water stored within water cooler 115, a suction unit 102 for transferring water to a waste chamber 103, an electronic nozzle 104 with a vessel 106 for dispensing soap solution within water cooler 115 at high pressure, a plate 105 installed a telescopically operated rod 108 equipped with plurality of bristles 109 for cleaning of entire inner surface of water cooler 115, an electronic valve 110 with a water for dispensing water at high pressure to rinse water cooler 115, an ultrasonic sensor for detecting presence of a critter within drainage pipe, an artificial intelligence-based imaging unit 112 for confirming presence of critter, and a motorized iris lid 113 to prevent critter from entering drainage pipe.

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