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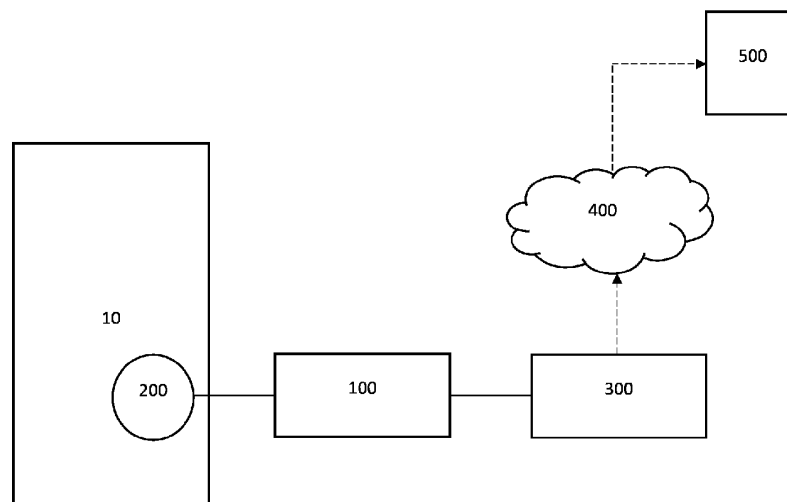


FIG. 1

(57) Abstract: Methods of monitoring water treatment systems by obtaining measurements of water treatment system parameters and transmitting the measurements to a local controller and cloud-based platform are disclosed. Systems for monitoring water treatment systems are also provided. The systems include at least one sensor positioned to measure a parameter of the water treatment system, a treatment module operably connected to the at least one sensor, and a local controller operably connected to the treatment module and a cloud-based platform. Methods of retrofitting water treatment systems by providing the treatment module and local controller are also disclosed.

[Continued on next page]

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