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(57) Abstract: The present invention relates to an apparatus for water descaling. The system comprises hydrodynamic cavitation reactors with a cavitator selected from the group consisting of an orifice plate, venturi and a rotating cavitator, in combination with an infrared radiation emitter. Combination of hydrodynamic cavitation reactor with infrared radiation achieves effective salt precipitation from the hard water with reduced pressure drop and reduced number of recirculation, resulting in higher savings due to reduced energy costs.



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