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(54) Title: MODULE, REACTOR, SYSTEM AND METHOD FOR TREATING WATER

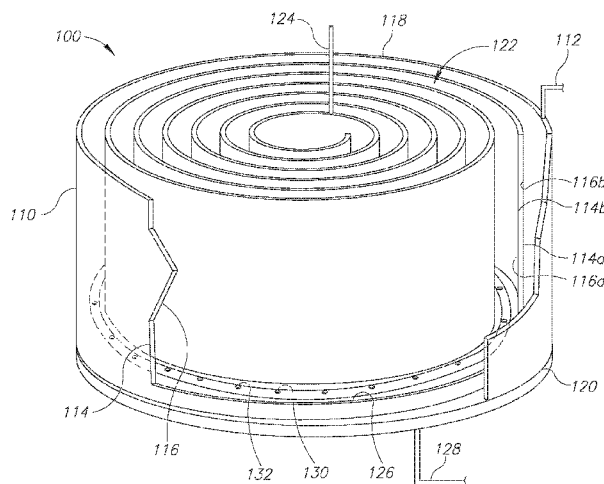


Figure 1

(57) Abstract: The present disclosure provides a water treatment module, a bioreactor comprising one or more of such modules and a receptive water treatment system. Also provided herein is a method making use of the above module, bioreactor and system. The water treatment module comprises (i) at least one elongated gas enclosure comprising a gas inlet and two vertical walls, at least one vertical wall comprising a water-impermeable and gas-permeable membrane having a water-facing side and a gas-facing side, the two vertical walls separating between water external to said enclosure and gas within said enclosure, the gas enclosure being in a rolled or folded configuration to thereby define a convoluted horizontal path and one or more water-treatment spaces formed between opposite water-facing sides of the enclosure; and (ii) a diffuser arrangement comprising gas diffusers configured for introducing a stream of gas into the one or more water treatment spaces.

