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(54) Title: CASCADE HEAT EXCHANGER AND GAS KNOCKOUT FOR METAL AIR

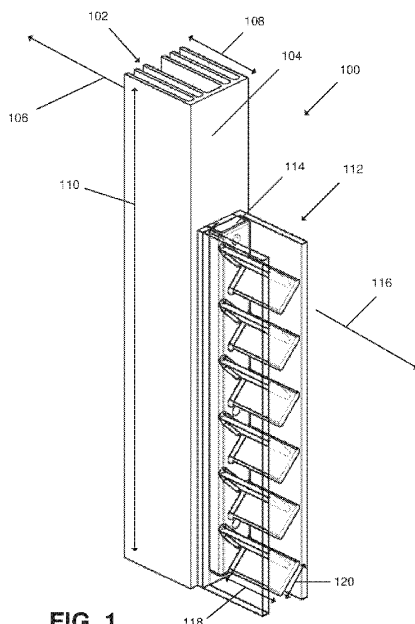


FIG. 1

(57) Abstract: A metal air battery with a heat exchanger. The heat exchanger has air-side fins directly connected to a backplate and liquid-side fins thermally connected to the backplate. The liquid-side fins receive liquid electrolyte from an overflow port, pass the liquid electrolyte over the liquid-side fins and into a liquid electrolyte compartment. The liquid-side fins have alternating, adjacent fins that are at an angle (θ) to one another and are separated by a gap such that liquid electrolyte cascades over adjacent fins. The heat exchanger simultaneously degasses the electrolyte and removes excess heat therefrom.



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