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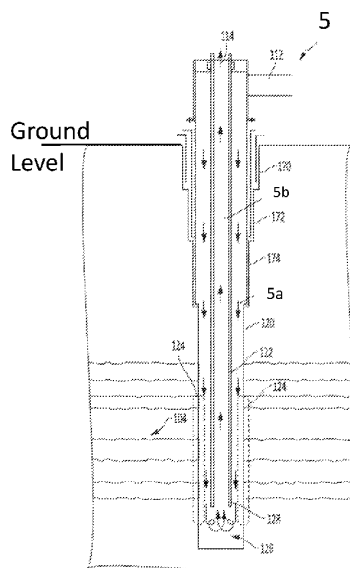
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(54) Title: A GEOTHERMAL DESALINATION AND PUMPING SYSTEM

FIGURE 3A



(57) Abstract: The present disclosure is directed to a geothermal desalination system, comprising: a primary liquid circuit circulating a liquid into a geothermal well and returning heated liquid from a well head of the geothermal well, the primary liquid circuit passing through a desalination plant; a first turbine driven by the heated liquid to produce a mechanical output; and an air compressor driven from the mechanical output to provide a first compressed air supply and a second compressed air supply, wherein the first compressed air supply drives a supply pump to supply salt water to the desalination plant, and the second compressed air supply drives a start-up pump to initiate circulation in the primary liquid circuit.