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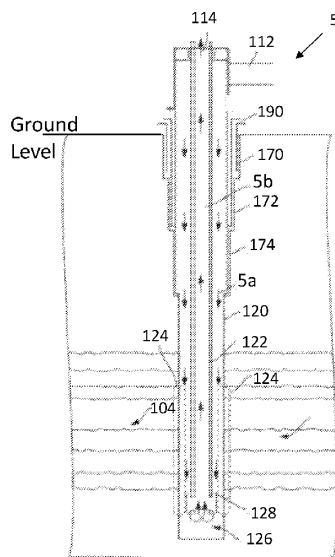
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(54) Title: A GEOTHERMAL HYDROGEN PRODUCTION SYSTEM

FIGURE 3A



(57) Abstract: The present disclosure is directed to a geothermal hydrogen production 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 first mechanical output; and a second turbine driven by the heated liquid to produce a second mechanical output, wherein the first mechanical output drives an electrical generator, configured to power an electrolyser generating hydrogen via electrolysis of fresh water, and the second mechanical output drives an air compressor to provide a compressed air supply.

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