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(54) Title: SYSTEM AND METHOD FOR ENERGY AND RESOURCE EXTRACTION WITH REDUCED EMISSIONS

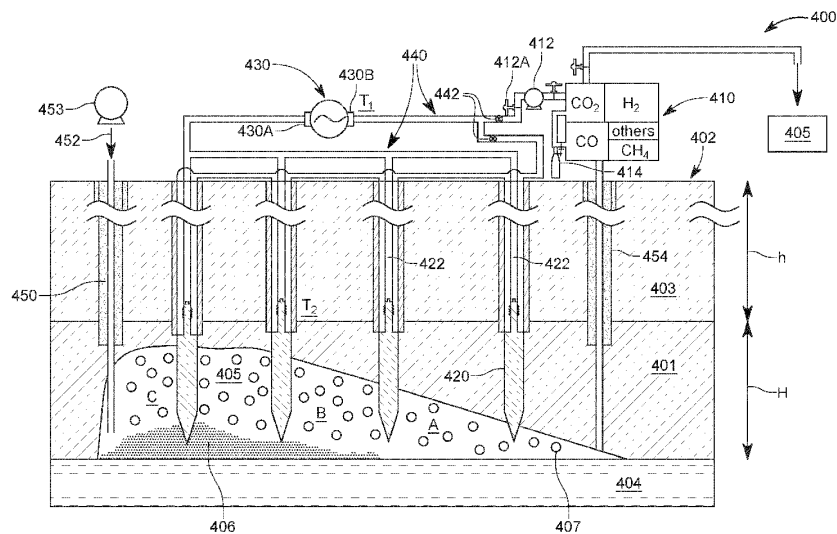


FIG. 4

(57) Abstract: A heat extraction system (400) for extracting heat from a reservoir, the system including a co-axial tool (420) configured to be placed underground, the co-axial tool (420) having an outer pipe (520) and an inner pipe (510) located within the outer pipe (520), each of the outer pipe (520) and the inner pipe (510) being connected to a shoe (530) so that a fluid flows through an annulus (512) defined by the inner and outer pipes, reaches the shoe (530), and flows through a bore (514) of the inner pipe (510); and a power generator (430) fluidly connected to a chemical processing unit (410) to receive a fluid (422), and also fluidly connected with a first port to the inner pipe (510) and with a second port to the outer pipe (520) of the co-axial tool (420). A temperature difference of the fluid (422) at the power generator (430) and at the co-axial tool (420) drives the power generator (430) to generate energy.

[Continued on next page]

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