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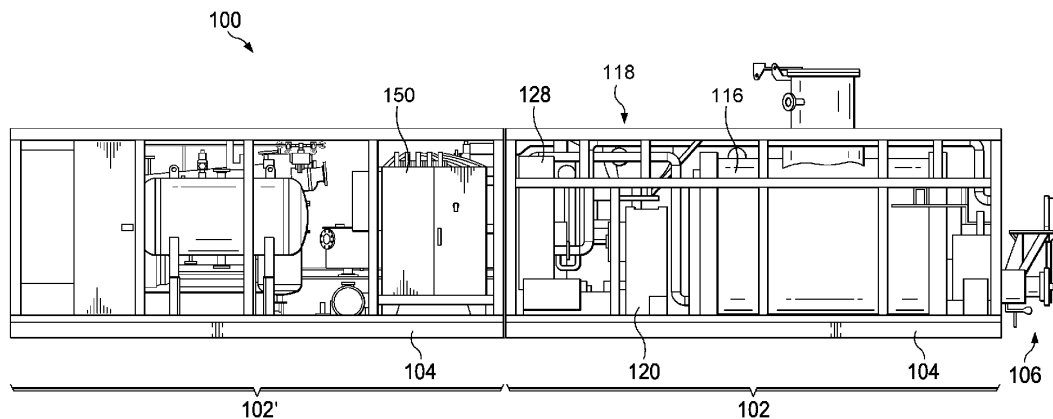


FIG. 1

(57) Abstract: A fuel production system includes a first modular unit and a second modular unit. The first modular unit includes a first housing, a process vessel, an agitator rotor assembly, a first drivetrain, an extrusion screw, a second drivetrain, a first separation vessel, and a product shaping system. The second modular unit includes a second housing, a thermal fluid heater system, a condenser, a second separation vessel, and a vacuum pump. The second modular unit is configured to be coupled to the first modular unit. At least a portion of each of the process vessel, the agitator rotor assembly, the first drivetrain, the extrusion screw, the second drivetrain, the first separation vessel, and the product shaping system are contained in the first housing. At least a portion of each of the thermal fluid heater system, the condenser, the second separation vessel, and the vacuum pump are contained in the second housing.

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