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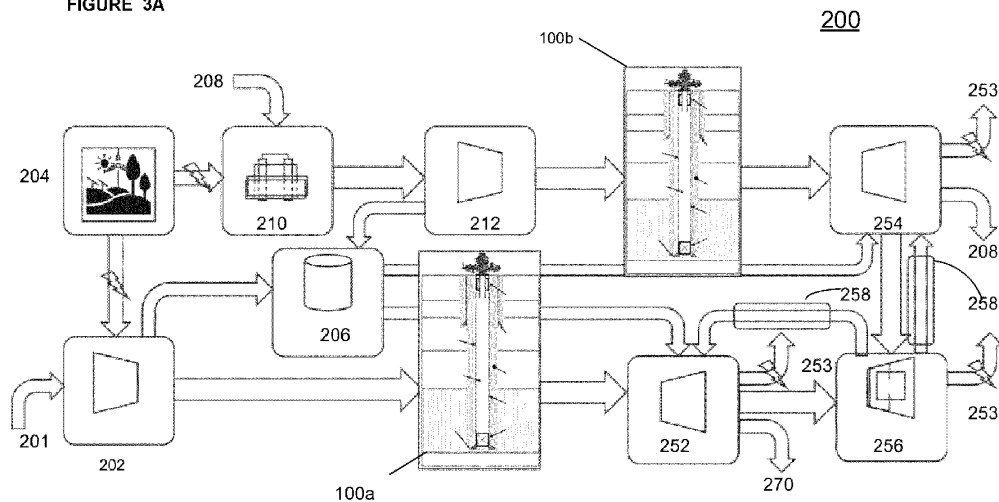


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(54) **Title:** COMPRESSED HYDROGEN AND AIR POWER SYSTEM

FIGURE 3A



(57) **Abstract:** A system for fluid storage includes a first cased-wellbore vessel (CWV) provided in a subsurface comprising surrounding rock formation, the surrounding rock formation having geomechanical properties that provide stiffness and in situ confining stress to the first CWV; and a fluid comprising compressed hydrogen gas or hydrogen liquid is stored in the first CWV. Furthermore, using the CWVs in a system for energy storage, energy recovery and generating electrical power for generating electrical power from a sequential expansion of the compressed air and the compressed hydrogen gas or ammonia fluid, and combustion of the compressed hydrogen gas or ammonia fluid.

[Continued on next page]

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