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[Continued on next page]

(54) Title: CONTINUOUS MOVING BED SOLAR STEAM GENERATION SYSTEM

(57) Abstract: A continuous moving bed solar steam generation and storage system is provided to generate steam for production processes after loss or reduction of received solar energy. The system includes a receiver 10 that receives a flowing stream of particulate material 30 that absorbs solar radiant energy 15 as it passes through beams of the energy 15 received from collectors 14. The heated stream of material 30 passes into a first chamber 40 to heat a tube bundle 42 therein. Heat from the particulate material 30 is transferred to the bundle 42, evaporating the water to generate, reheat (RH) and/or superheat (SH) steam 46. The cooled material 30 passes to a second chamber 60. The material 30 is drained from the second chamber 60 and carried to a cyclone 80 in the receiver 10. The material 30 drains from the cyclone 80 to complete the flow cycle.

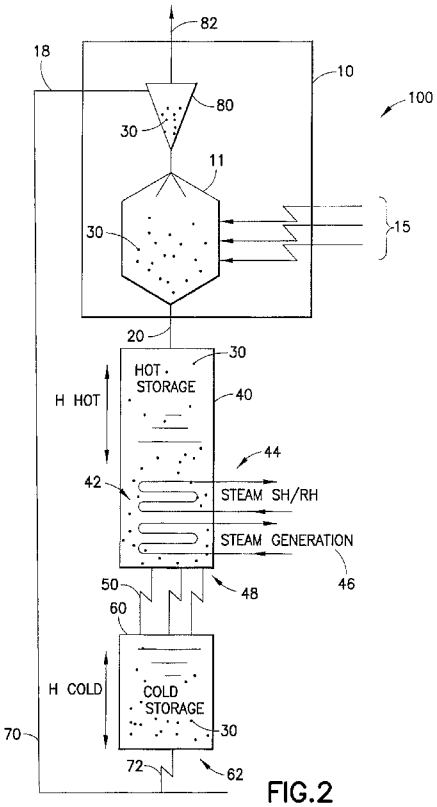

FIG.2

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