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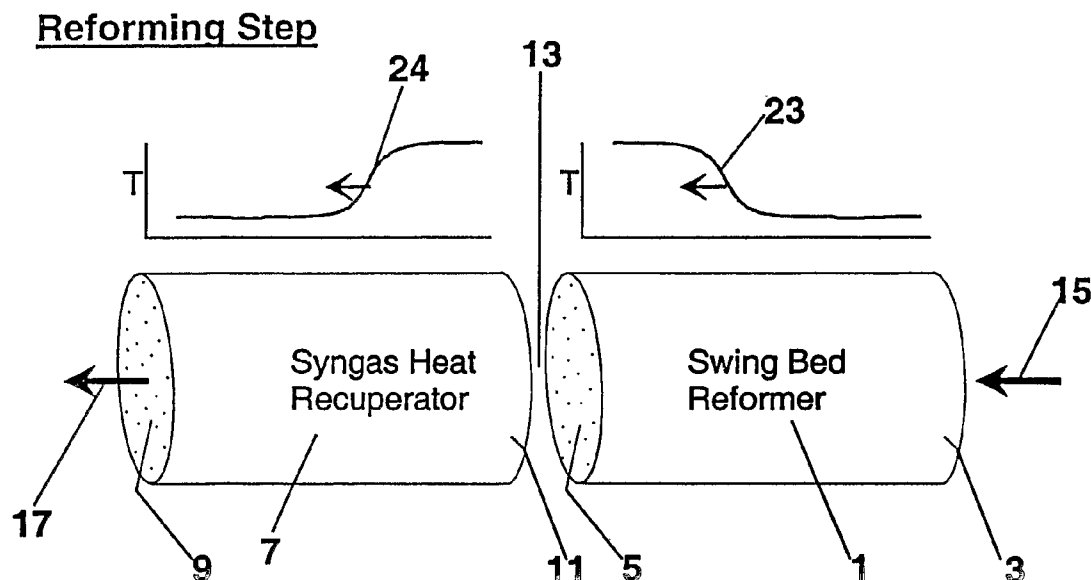
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(54) Title: PRESSURE SWING REFORMING FOR FUEL CELL SYSTEMS



(57) Abstract: The present invention provides an improvement in the process of producing hydrogen from hydrocarbon-containing streams. A cyclic reforming process, referred to as pressure swing reforming, provides an efficient means for producing a hydrogen containing synthesis gas for fuel cell applications. Pressure swing reforming may be integrated with shift reactions, preferential oxidation, and membrane separation, achieving thermal and material efficiencies relative to conventional hydrogen production. In one embodiment, at least some synthesis gas which is first produced in the pressure swing reforming process is combusted with air to provide the heat for the regeneration step of the pressure swing reforming process.

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