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(54) **METHOD OF STORING AND TRANSPORTING LIGHT GASES**

Publication Classification

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F17C 9/02 (2006.01)

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(57) **ABSTRACT**

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A method and system of storing and transporting gases comprising mixing the gases with liquid natural gas to form a mixture. The mixture is a liquid-liquid mixture or slurry, and is stored in vessel configured for maintaining the mixture at a first location. The mixture is transported to a second location for storage in vessel for maintaining the mixture. The mixture is removed from the second location storage vessel for separation and use in additional processes.



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(54) **METHODS AND SYSTEMS FOR STORING AND TRANSPORTING GASES**

Publication Classification

(75) **Inventors:** Edward R. Peterson, Pearland, TX (US); Thomas A. Rolfe, Toronto (CA)

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(73) **Assignee:** SYNFUELS INTERNATIONAL, INC., Dallas, TX (US)

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Related U.S. Application Data

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(57) **ABSTRACT**
A method and system of storing and transporting valuable gases comprising mixing the gases with liquid natural gas to form a mixture. The mixture is transported in vessel configured for cooling the mixture by boiling a portion of liquid natural gas. The transportation vessel is further configured to be cooled in the absence of valuable gases by a remaining portion of liquid natural gas. The method further comprises recycling liquid natural gas through the vessel for pre-cooling the vessel prior to loading the mixture of valuable gases and liquid natural gas.

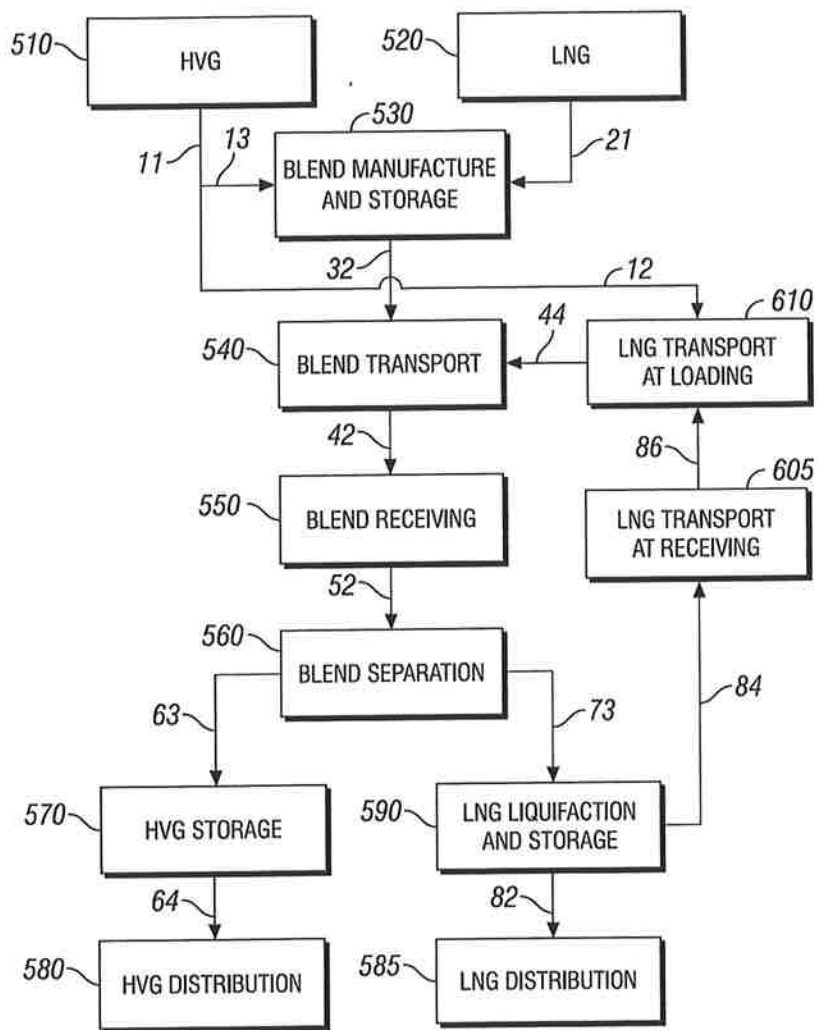


FIG. 1

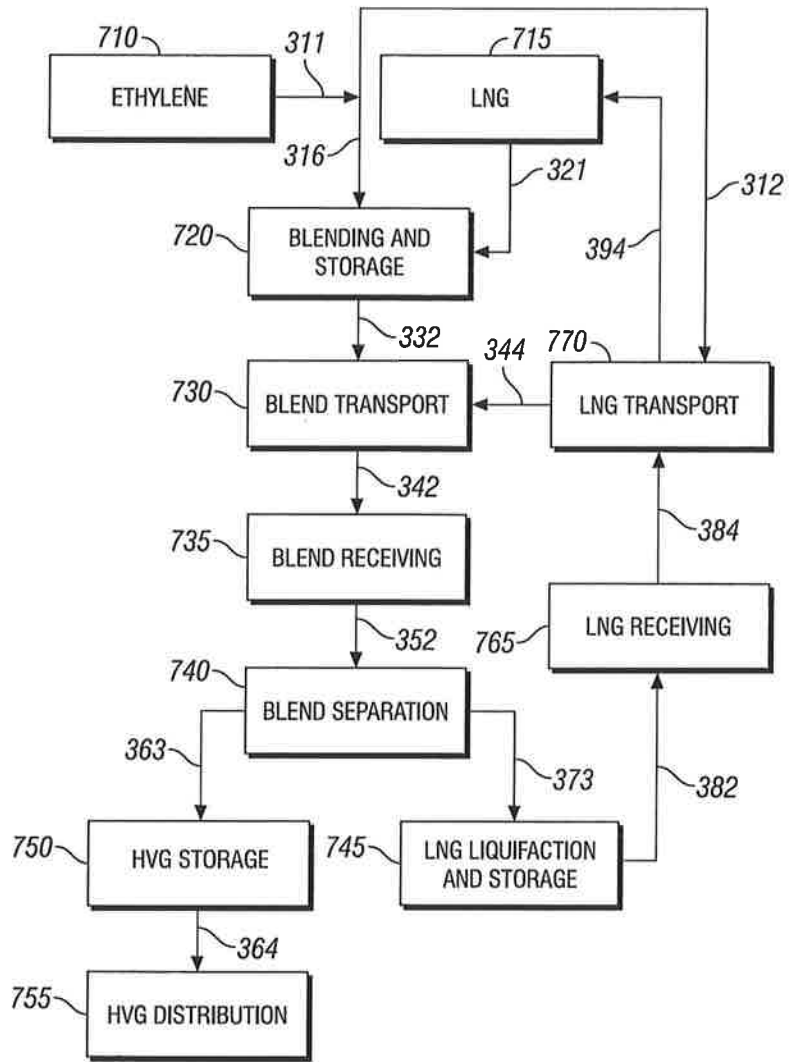


FIG. 2

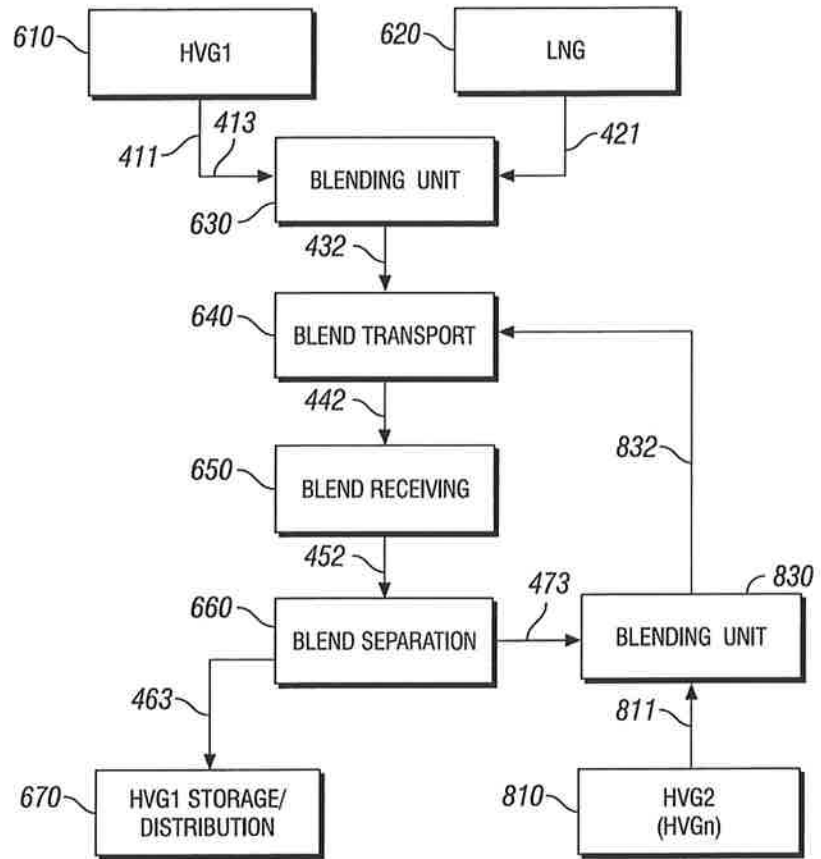


FIG. 3

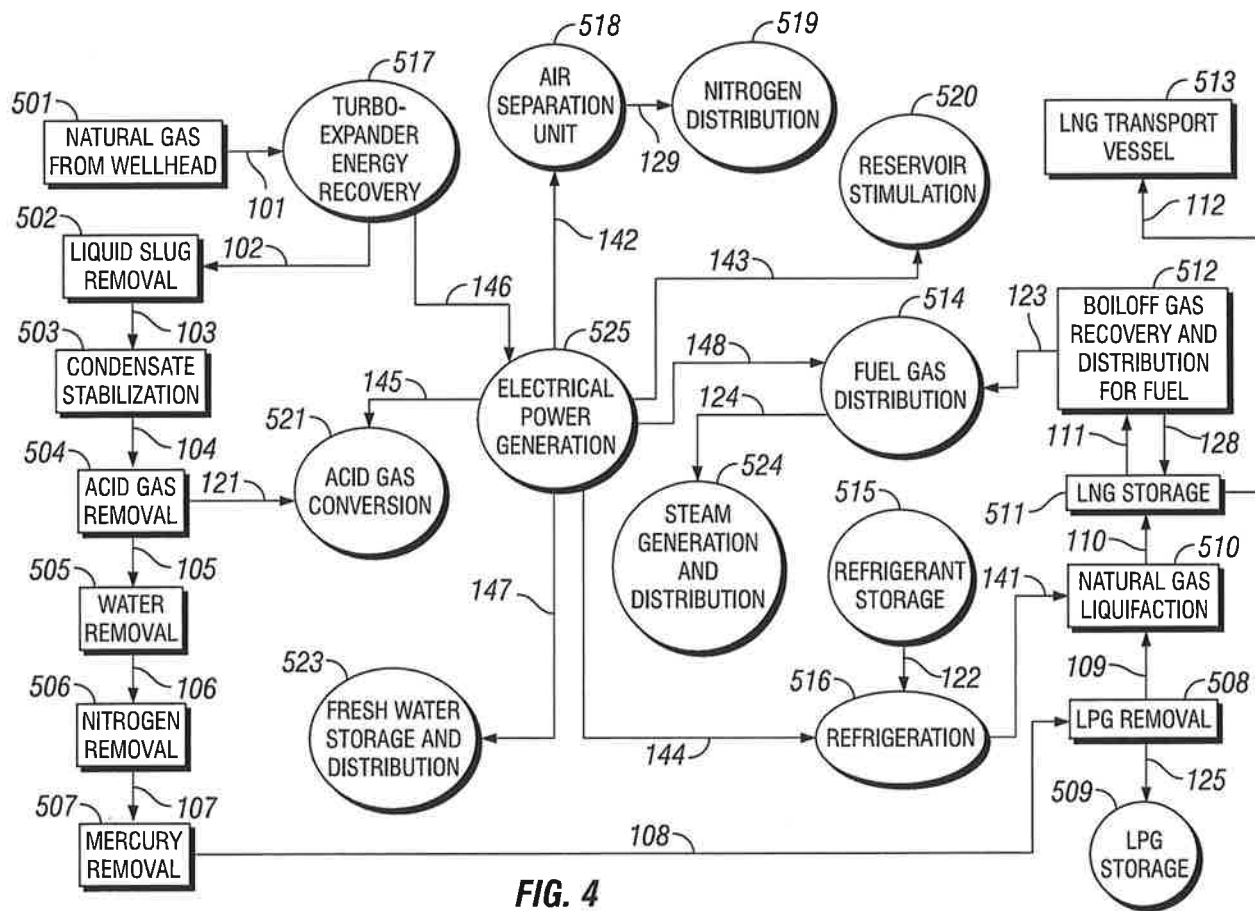


FIG. 4

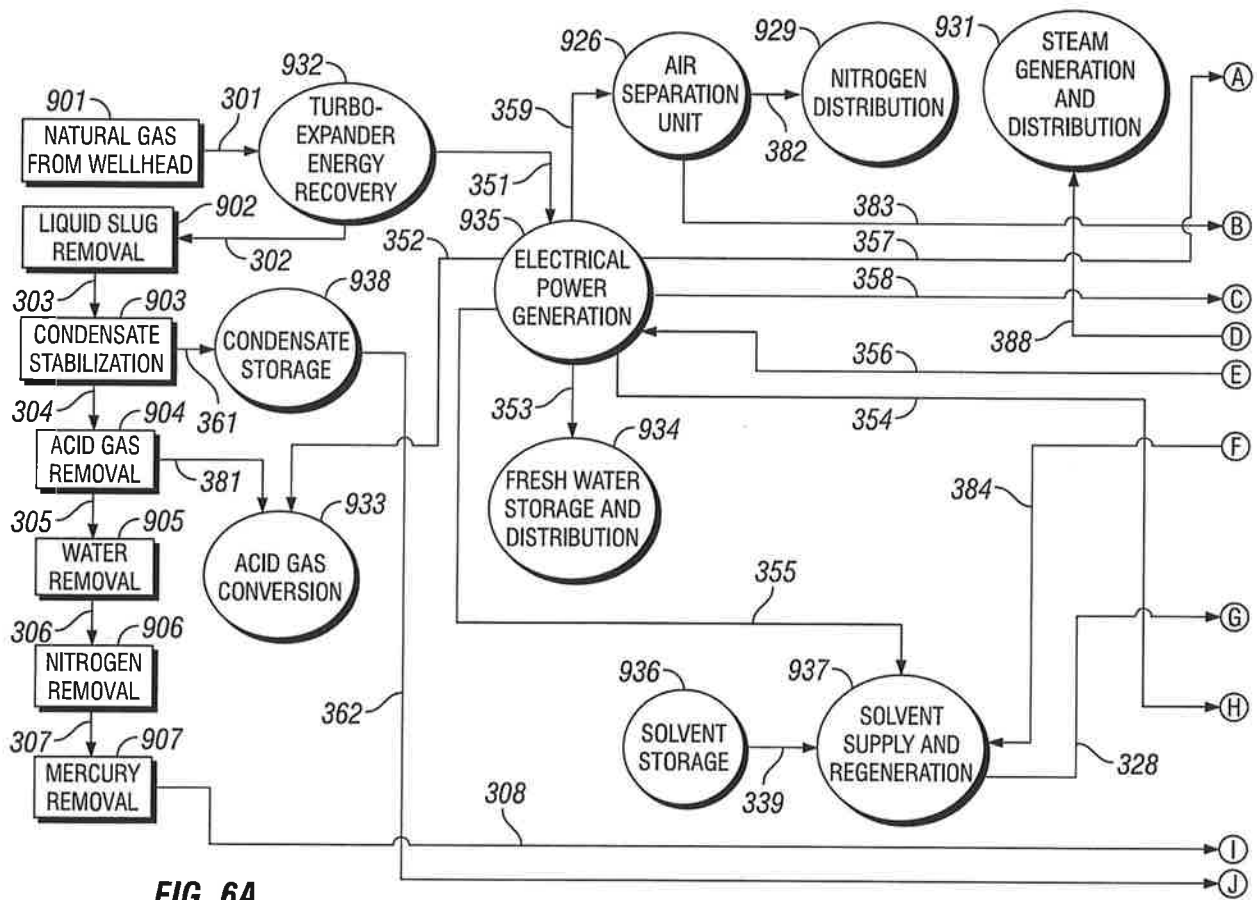


FIG. 6A

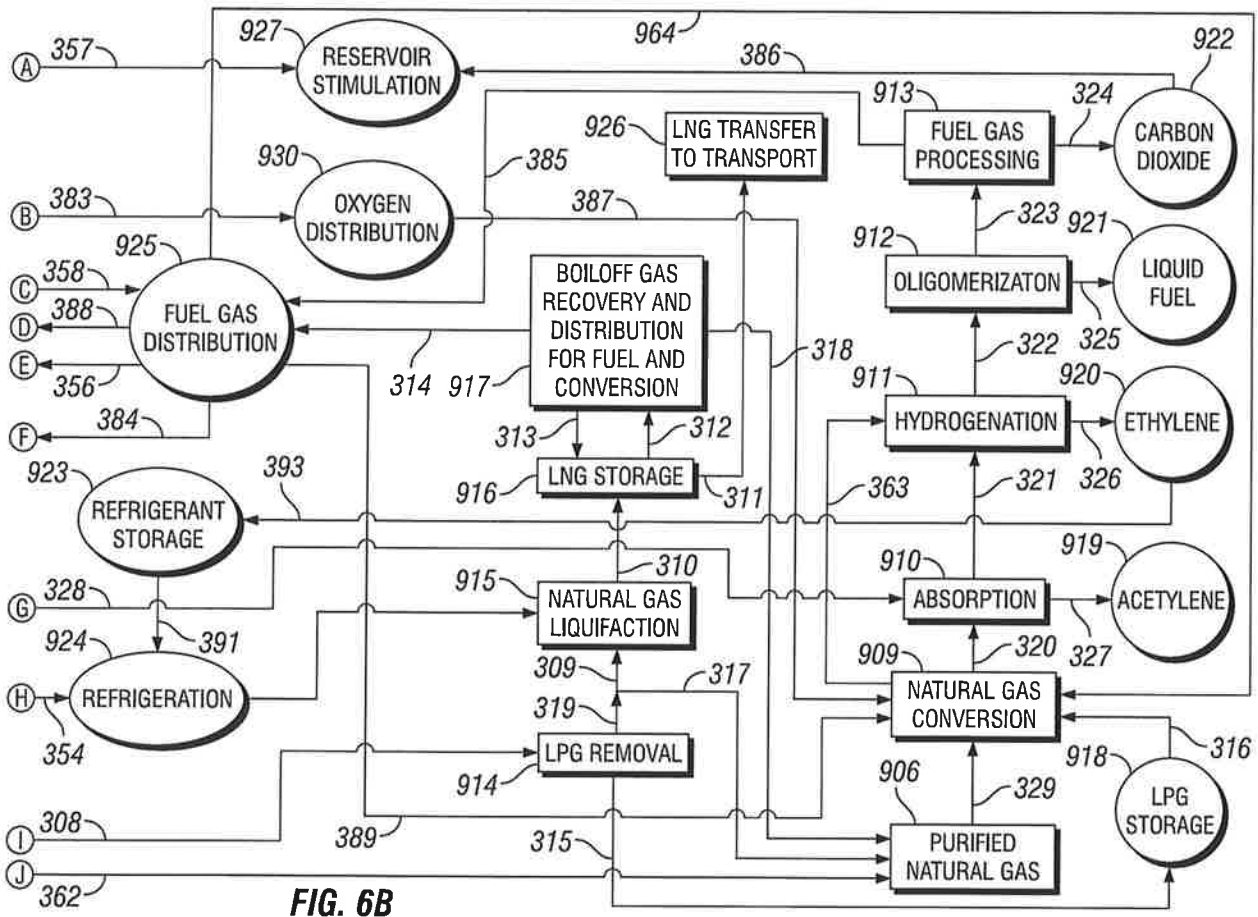


FIG. 6B

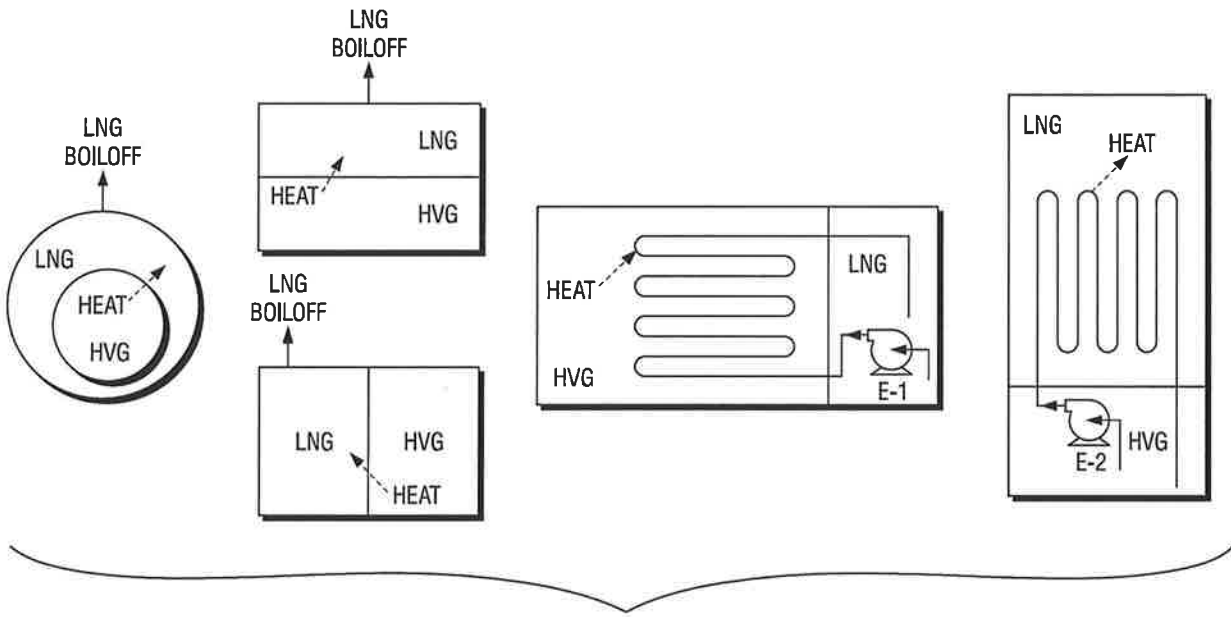


FIG. 7

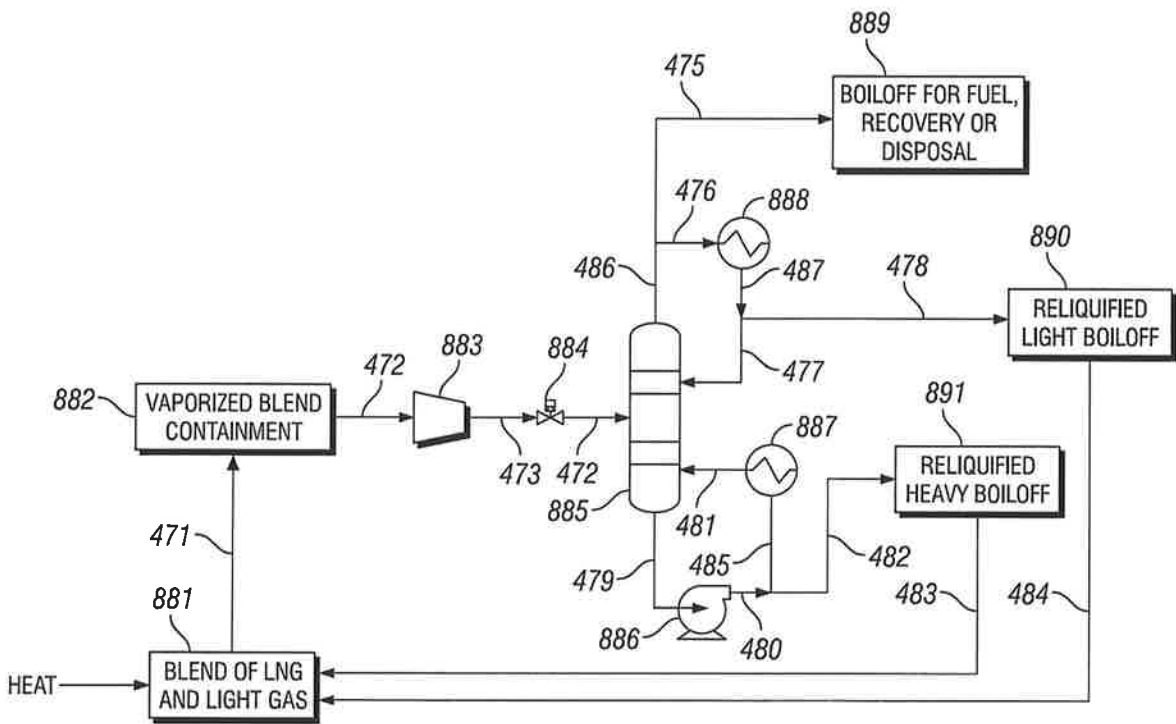


FIG. 8

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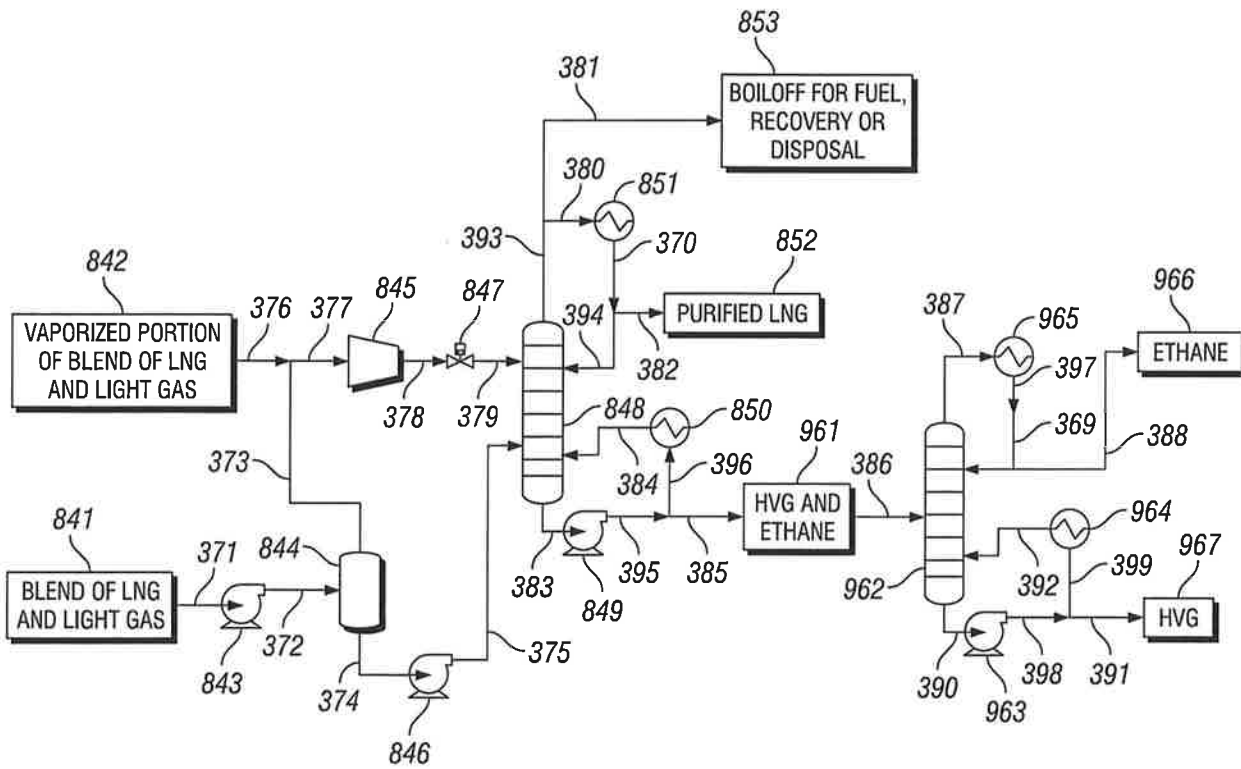


FIG. 9

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