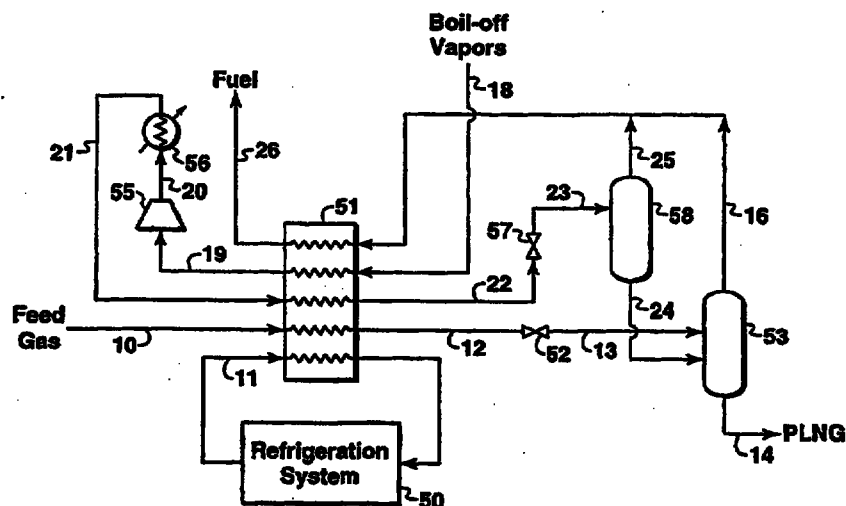




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(54) Title: RELIQUEFACTION OF BOIL-OFF FROM PRESSURE LNG



(57) Abstract

A process is disclosed for reliquefying boil-off gas produced by pressurized liquid natural gas. In this process, refrigeration duty is provided to a heat exchanger (51) by means of a refrigeration cycle (50). Pressurized natural gas (10) is cooled by the heat exchanger (51) and then expanded (52) to a lower pressure to produce a liquid stream that is passed to a first phase separator (53). A boil-off vapor is passed through the heat exchanger (51) and it is then compressed (55) and cooled (56) before being recycled back through the heat exchanger (51). The compressed, cooled boil-off gas is then expanded (57) and passed to a second phase separator (55). A vapor stream (25) produced by the second separator (55) is removed from the process. A liquid stream produced by the second phase separator is passed to the first phase separator (53) to produce a pressurized liquid having a temperature above about -112°C and a pressure sufficient for the liquid to be at or below its bubble point.