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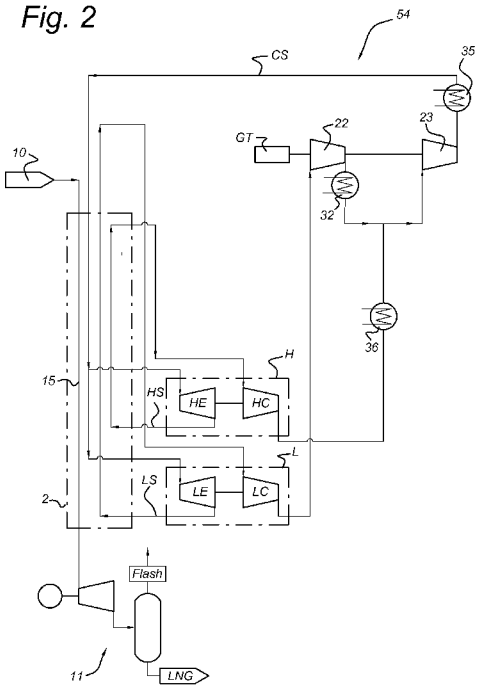
(54) **Title**: MULTI NITROGEN EXPANSION PROCESS FOR LNG PRODUCTION

Fig. 2



(57) **Abstract**: A method of natural gas liquefaction includes at least two nitrogen refrigerant streams. Each stream undergoes a cycle of compression, cooling, expansion and heating, during which each of the nitrogen streams is expanded to a different pressure other than for the others of the at least two nitrogen streams, and, the heating occurs in one or more heat exchangers. The expanded nitrogen streams are in a heat exchanging relationship with a stream of the natural gas and with the one or more compressed nitrogen streams in at least one of said one or more heat exchangers. At least one expanded nitrogen stream is compressed as a side stream in a stage of a main nitrogen compressor so as to combine the compressed side stream with another compressed nitrogen stream after passing said nitrogen compressor stage.

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