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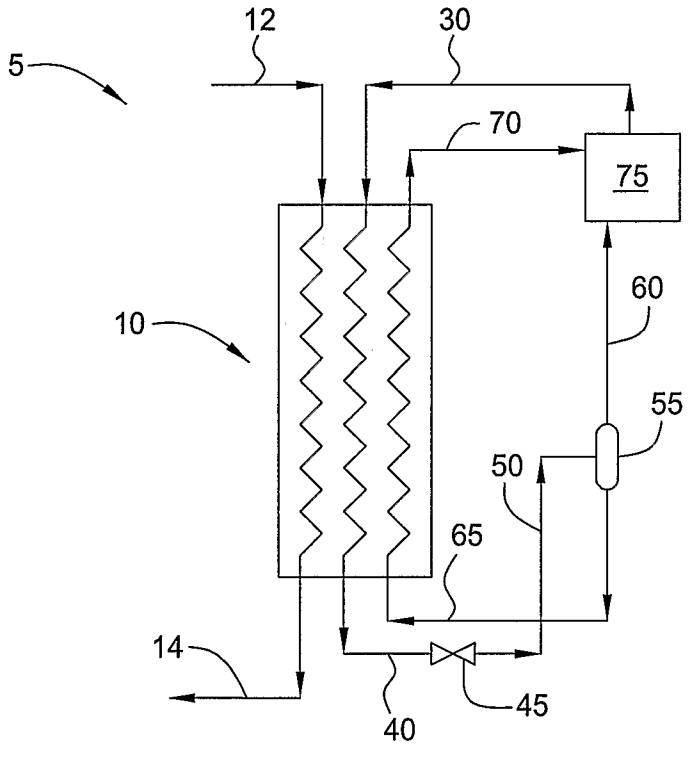
(54) Title: MIXED REFRIGERANT LIQUEFACTION PROCESS



(57) Abstract: A method for liquefying a natural gas stream is provided. In one embodiment, the method includes placing a mixed component refrigerant in a heat exchange area with a process stream; separating the mixed component refrigerant at one or more pressure levels to produce a refrigerant vapor and a refrigerant liquid; bypassing the refrigerant vapor around the heat exchange area to a compression unit; and passing the refrigerant liquid to the heat exchange area. In another embodiment, the method further includes partially evaporating the refrigerant liquid stream within the heat exchange area to retain a liquid fraction of at least 1% by weight.

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