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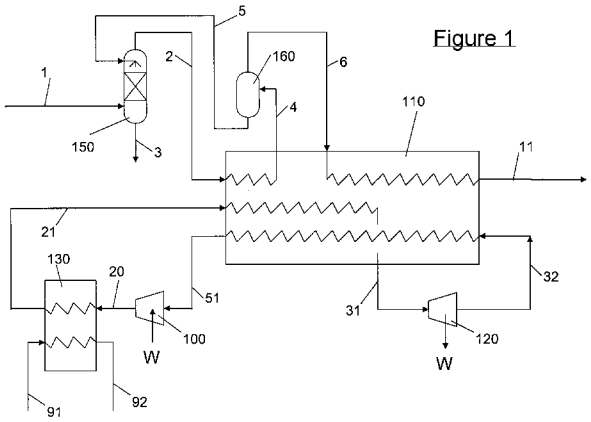
(54) **Title:** METHOD AND SYSTEM FOR PRODUCING LNG

Figure 1



(57) **Abstract:** A method is described for production of LNG from an incoming feed gas (1) on an onshore or offshore installation, and it is characterised by the following steps: 1) the feed gas is led through a fractionation column (150) where it is cooled and separated in an overhead fraction with a reduced content of pentane (C5) and heavier components, and a bottom fraction enriched with heavier hydrocarbons, 2) the overhead fraction from the fractionation column is fed to a heat exchanger system (110) and is subjected to a partial condensation to form a two-phase fluid, and the two-phase fluid is separated in a suitable separator (160) into a liquid (5) rich in LPG and pentane (C3-C5) which is re-circulated as cold reflux to the fractionation column (150), while the gas (6) containing lower amounts of C5 hydrocarbons and hydrocarbons heavier than C5 is exported for further processing in the heat exchanger system (110) for liquefaction to LNG with a maximum content of ethane and LPG 3) the cooling circuit for liquefaction of gas in the heat exchanger system comprises an open or closed gas expansion process with at least one gas expansion step. A system for carrying out the method is also described.

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