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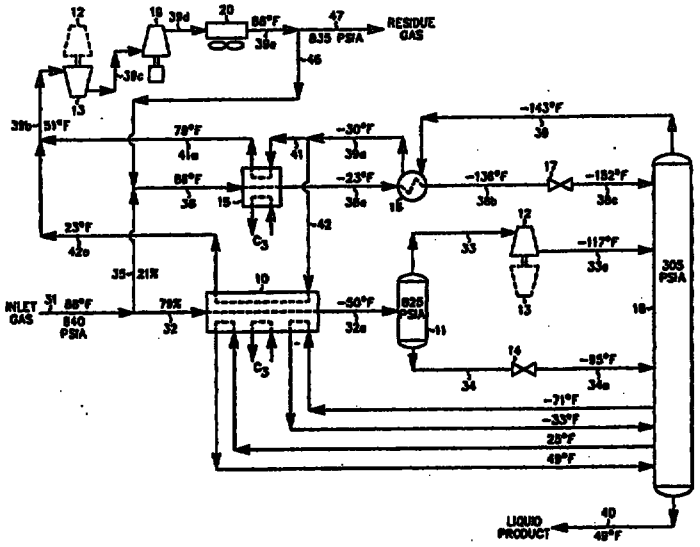
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(54) Title: PROCESS FOR SEPARATING HYDROCARBON GAS CONSTITUENTS



(57) Abstract

A process for the recovery of ethane, ethylene, propane, propylene and heavier hydrocarbon components from a hydrocarbon gas stream is disclosed. The stream is divided into first (35) and second (32) streams, and the second stream (32) is expanded to the fractionation tower pressure and supplied to the column (18) at a mid-column feed position (33a, 34a). A recycle stream (39) is withdrawn from the tower overhead after it has been warmed and compressed, and is combined with the first stream (35). The combined stream (38) is cooled to condense substantially all of it, and is thereafter expanded to the fractionation tower (18) pressure and supplied to the fractionation tower at a top column feed position (38c). The pressure of the compressed recycle stream and the quantities and temperatures of the feeds to the column are effective to maintain the column overhead temperature at a temperature whereby the major portion of the desired components is recovered.