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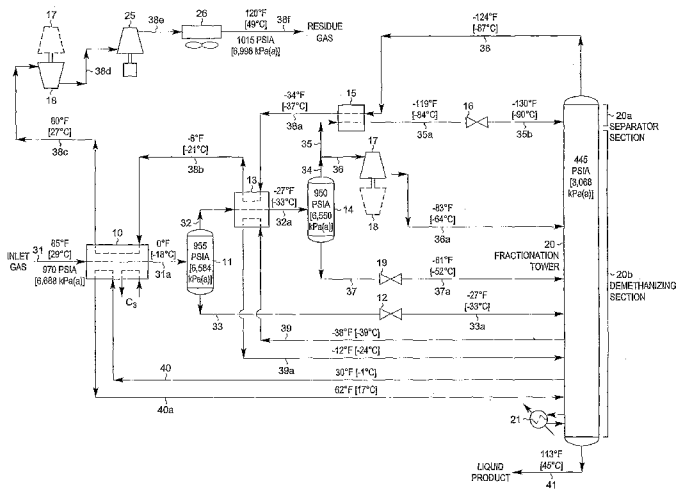
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(54) Title: HYDROCARBON GAS PROCESSING




(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 cooled and divided into first and second streams. The first stream is further cooled to condense substantially all of it and is thereafter expanded to the fractionation tower pressure and supplied to the fractionation tower at a first mid-column feed position. The second stream is expanded to the tower pressure and is then supplied to the column at a second mid-column feed position. A distillation stream is withdrawn from the column below the feed point of the second stream and is then directed into heat exchange relation with the tower overhead vapor stream to cool the distillation stream and condense at least a part of it, forming a condensed stream. At least a portion of the condensed stream is directed to the fractionation tower as its top feed. The quantities and temperatures of the feeds to the fractionation tower are effective to maintain the overhead temperature of the fractionation tower at a temperature whereby the major portion of the desired components is recovered.

WO 2004/076946 A2

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