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(54) **Title:** HYDROCARBON GAS PROCESSING

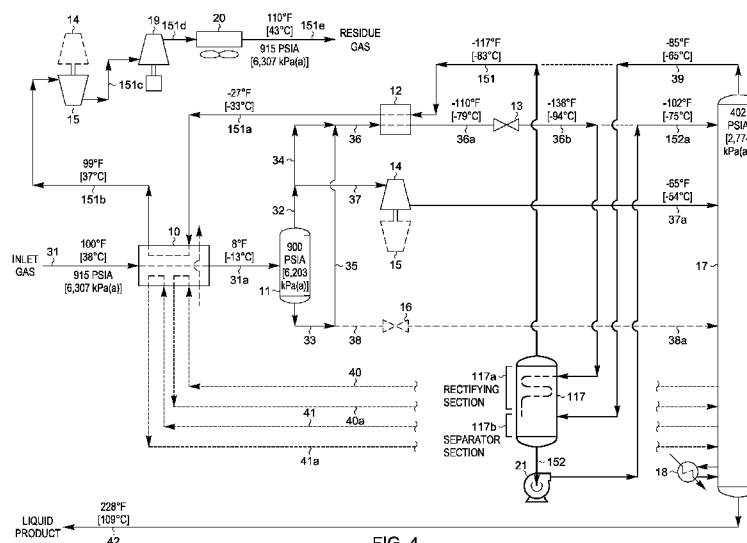


FIG. 4

- (57) **Abstract:** A process and an apparatus are disclosed for a compact processing assembly to improve the recovery of C₂ (or C₃) and heavier hydrocarbon components from a hydrocarbon gas stream. The preferred method of separating a hydrocarbon gas stream generally includes producing at least a substantially condensed first stream and a cooled second stream, expanding both streams to lower pressure, and supplying the streams to a fractionation tower. In the process and apparatus disclosed, the expanded first stream is heated to form a vapor fraction and a liquid fraction. The vapor fraction is combined with the tower overhead vapor, directed to a heat and mass transfer means inside a processing assembly, and cooled and partially condensed by the expanded first stream to form a residual vapor stream and a condensed stream. The condensed stream is combined with the liquid fraction and supplied to the tower at its top feed point.

