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(54) **Title:** LOW COMPLEXITY, HIGH YIELD CONVERSION OF HEAVY HYDROCARBONS

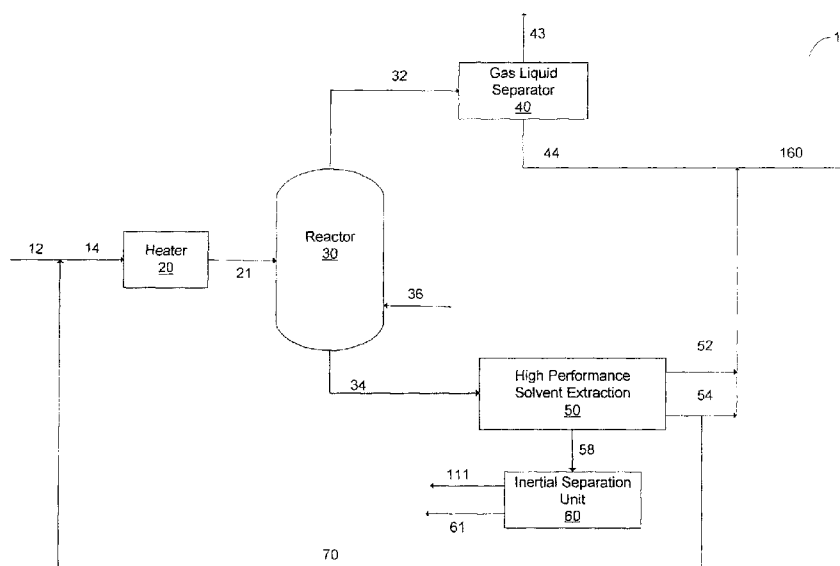


FIG. 1

(57) **Abstract:** A process for producing pipeline-ready or refinery-ready feedstock from heavy hydrocarbons using a high-performance solvent extraction process with high local solvent-to-process fluid ratios yet maintaining low overall solvent-to-process fluid ratios, by first performing mild thermal cracking on the heavy hydrocarbons and then separating asphaltene-rich fractions from a resulting thermally affected fluid so that the high solvent-to-oil ratio portion of the process acts only on those asphaltene-rich fractions, and producing a dry, solid asphaltene as an end-product.