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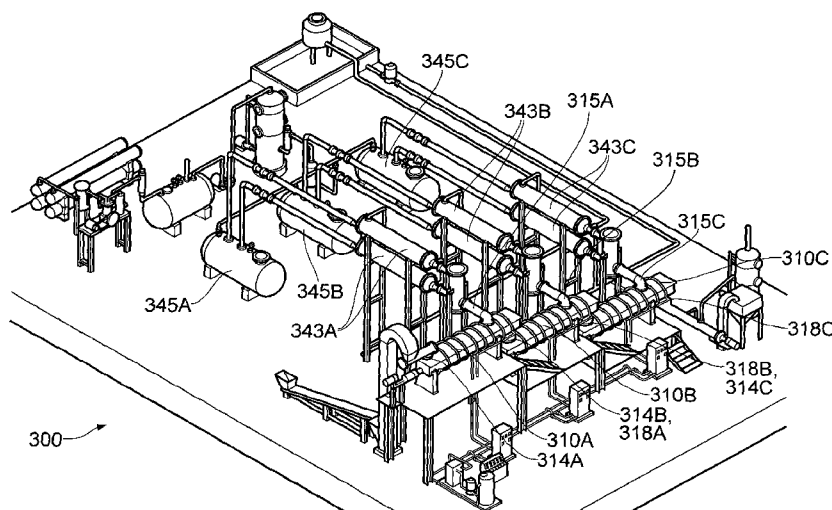


FIG. 5

(57) Abstract: Embodiments of the present invention provide apparatus for extracting hydrocarbons from hydrocarbon-containing material by pyrolysis, the apparatus comprising: a first reactor arranged to heat the material to a first temperature, the apparatus being operable to extract from the first reactor gaseous hydrocarbons evolved from the material therein; and a second reactor having an inlet coupled to an outlet of the first reactor wherein material in the first reactor may be transferred to the second reactor substantially without exposure to oxygen, the second reactor being arranged to receive material heated in the first reactor and to heat the material to a second temperature greater than the first temperature, the apparatus being operable to extract from the second reactor gaseous hydrocarbons evolved from the material therein.