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(54) Title: FRACTIONATION FOR POLYMERIZATION REACTOR EFFLUENT

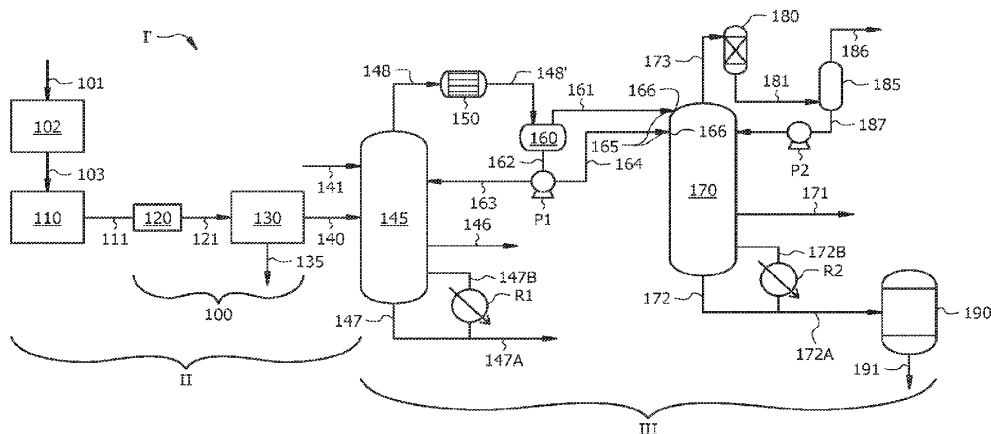


FIG. 1A

(57) Abstract: A method including recovering a polymerization reactor effluent stream from one or more polymerization reactors, flashing the polymerization reactor effluent stream to form a flash gas stream, separating, in a first column, the flash gas stream into a first column overhead stream, a first column side stream, and a first column bottoms stream, separating the first column overhead stream into a gas stream and a liquid stream, and introducing a feed comprising the gas stream and at least a portion of the liquid stream to a second column to produce a second column overhead stream, a second column side stream, and a second column bottoms stream. A second column bottoms stream flow rate can comprise less than or equal to about 25 vol% of a total flow rate and a second column side stream flow rate can comprise greater than or equal to about 75 vol% the total flow rate.

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