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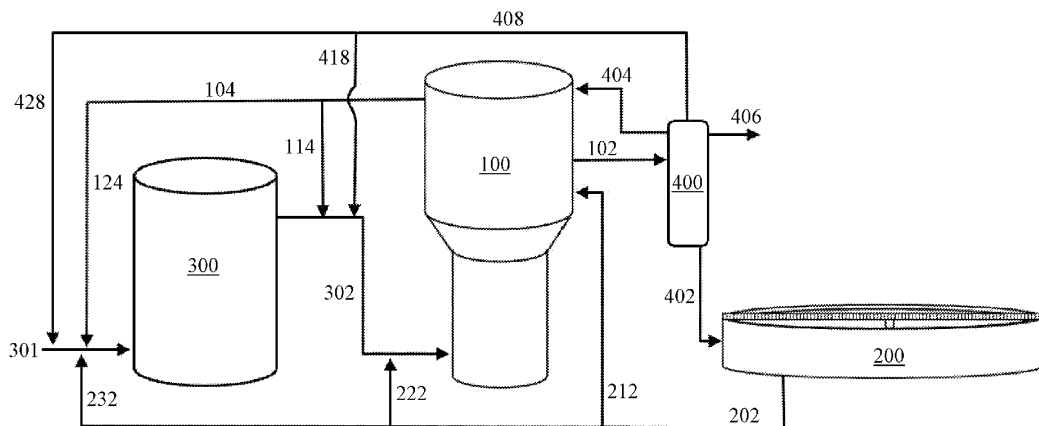


FIG. 1

(57) Abstract: The invention provides for the integration of a gas fermentation process with a gasification process whereby effluent downstream from the gas fermentation process is recycled to the gasification process. The invention is capable of recycling one or more effluents including biogas generated from a wastewater treatment process, tail-gas generated from the fermentation process, unused syngas generated by the gasification process, microbial biomass generated from the fermentation process, microbial biomass generated from a wastewater treatment process, crude ethanol from the product recovery process, fusel oil from the product recovery process, microbial biomass depleted water, wastewater generated from the fermentation process, and clarified water from a wastewater treatment process to a gasification process.

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