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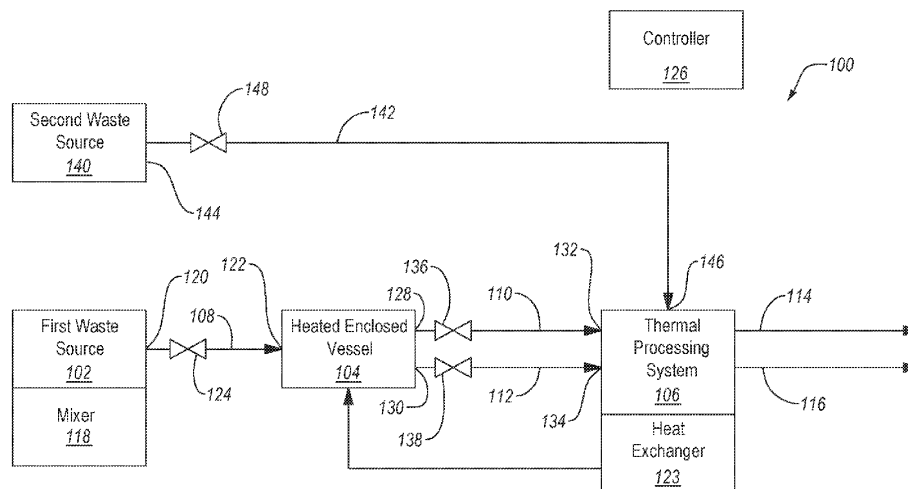


FIG. 1

(57) Abstract: An example gas product manufacturing system includes a first waste source, a heated enclosed vessel, and a thermal processing system (e.g., at least one gasifier). The first waste source is in fluid communication with the heated enclosed vessel and the heated enclosed vessel is in fluid communication with the thermal processing system. The first waste source is configured to provide a first waste product to the heated enclosed vessel. The heated enclosed vessel is configured to heat the first waste product to form a liquid phase and a vapor phase of the first waste product. The thermal processing system is configured to heat the liquid and vapor phases of the first waste product to form at least one gas product

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