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(71) Applicant: PROGRAM MANAGEMENT COMPANY [US/US]; Suite 201, 835 Springdale Drive, Exton, PA 19341-2859 (US).

(72) Inventor: ROZICH, Alan; 5 Amanda Lane, West Chester, PA 19380 (US).

(74) Agents: GARBELL, Jason, I. et al.; Lerner, David, Littenberg, Krumholz & Mentlik, LLP, 600 South Avenue West, Westfield, NJ 07090-1497 (US).

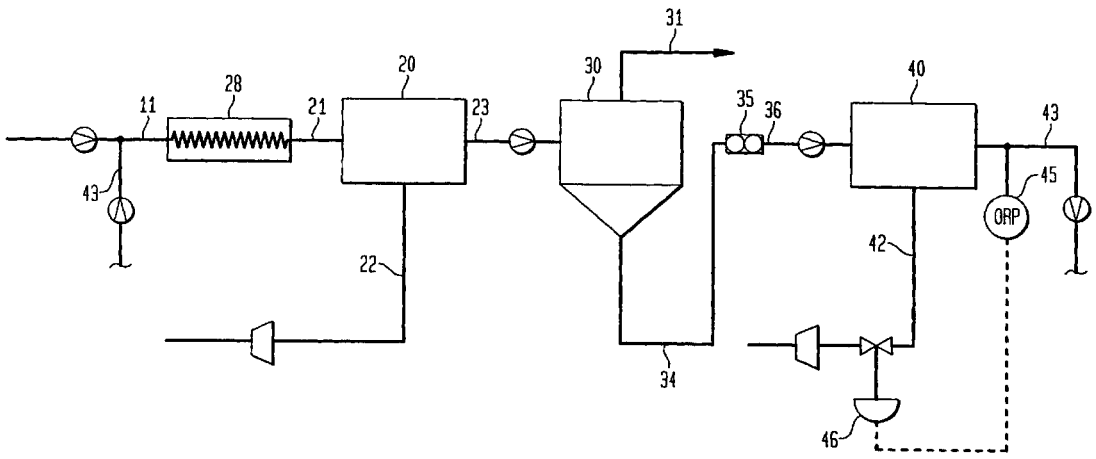
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(54) Title: WASTE TREATMENT PROCESS



(57) Abstract: An integrated process for the treatment of organic waste comprising the steps of subjecting organic waste to biological digestion in a bioreactor (20); contacting the resulting mixture of biosolids and unconverted organic material with one or more oxidizing agents (42) in a chemical treatment unit (40); monitoring the oxidation-reduction potential (ORP) of the mixture of biosolids and unconverted organic material in the chemical treatment unit (40) and adjusting the concentrations of the oxidizing agents (42) to maintain the ORP within a selected range greater than 0 mV to condition the mixture so that it is more amenable to biodegradation; and returning the conditioned effluent to the biological reactor (20). The combined effects of improving biodegradability through chemical conditioning act and controlled recycle of biosolids act to reduce net biosolids production to nearly zero.

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