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(71) **Applicant (for all designated States except US):** **PLASCO ENERGY GROUP INC.** [CA/CA]; 1000 Innovation Drive, Suite 400, Kanata, Ontario K2K 3E7 (CA).

(72) **Inventors; and**

(75) **Inventors/Applicants (for US only):** **TSANGARIS, Andreas** [CA/CA]; 29 Confederation Private, Ottawa, Ontario K1V 9W6 (CA). **SWAIN, Margaret** [US/CA]; 270 Albert Street, 14th Floor, Ottawa, Ontario K1P 5G8 (CA).

(74) **Agents:** **LORENZ, David, J.** et al.; Powley & Gibson, P.C., 304 Hudson Street, 2nd Floor, New York, 10013 (US).

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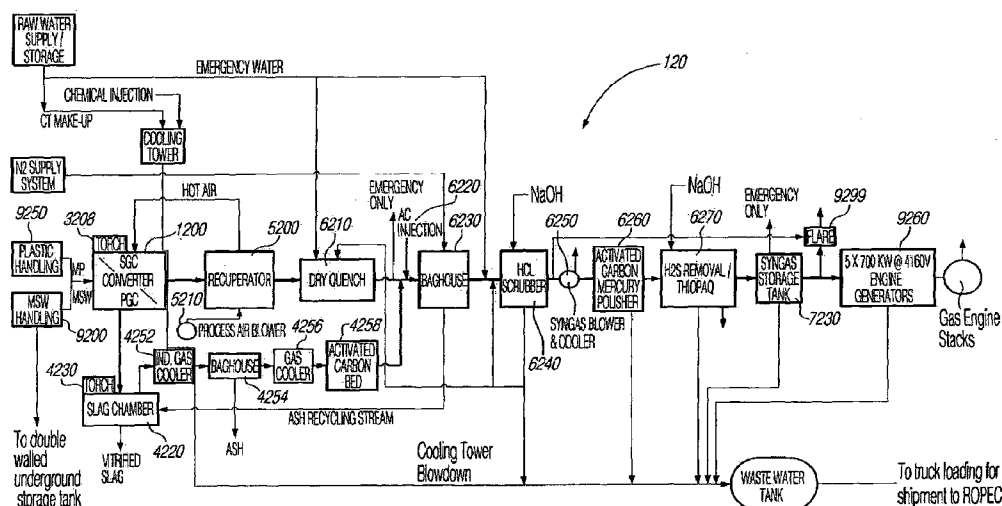
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(57) Abstract: A low-temperature gasification system comprising a horizontally oriented gasifier is provided that optimizes the extraction of gaseous molecules from carbonaceous feedstock while minimizing waste heat. The system comprises a plurality of integrated subsystems that work together to convert municipal solid waste (MSW) into electricity. The subsystems comprised by the low-temperature gasification system are: a Municipal Solid Waste Handling System; a Plastics Handling System; a Horizontally Oriented Gasifier with Lateral Transfer Units System; a Gas Reformulating System; a Heat Recycling System; a Gas Conditioning System; a Residue Conditioning System; a Gas Homogenization System and a Control System.