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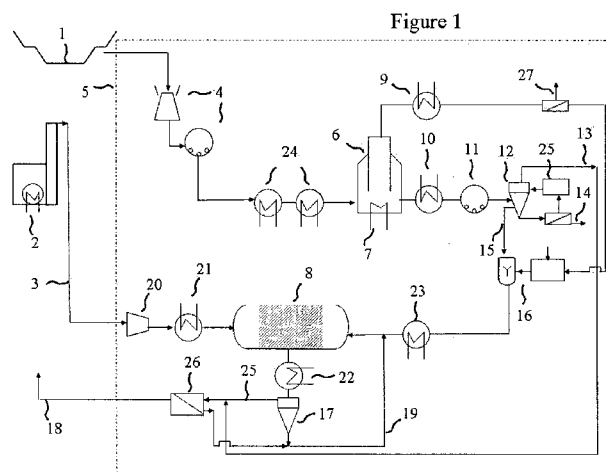
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(54) Title: IMPROVED INTEGRATED CHEMICAL PROCESS



(57) Abstract: A process for converting carbon dioxide into solid material, which process comprises the steps of: (a) direct thermal activation of magnesium silicate hydroxide mineral feedstock by combustion of fuel to produce an activated feedstock; (b) separation from the activated feedstock of metal oxides at least substantially excluding magnesium oxide and magnesium silicate to produce a residual activated feedstock; (c) before or after said separation step suspension of the activated feedstock in a solvent to form a slurry; and (d) contacting the slurry of residual activated feedstock with carbon dioxide to convert the carbon dioxide into magnesium carbonate.