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(54) Title: HIGH-TEMPERATURE TREATMENT OF HYDROUS MINERALS

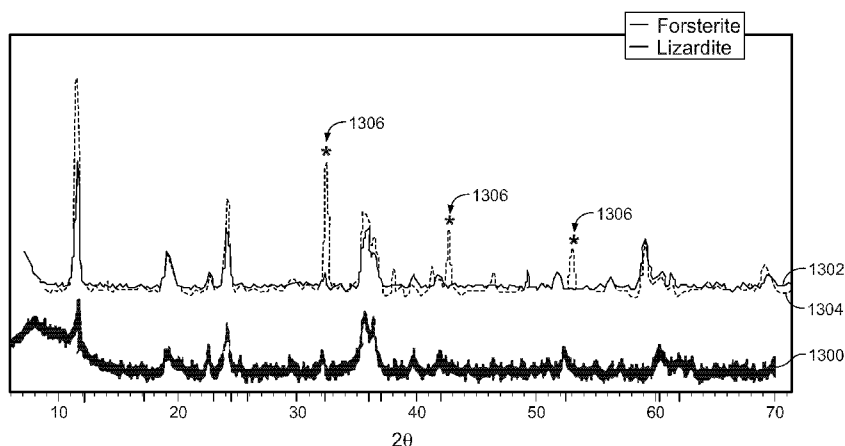


FIG. 13

(57) Abstract: Increasing the activity of a hydrous magnesium silicate with respect to sequestration of carbon dioxide by mineral carbonation includes rapid heating of the hydrous magnesium silicate. Rapid heating of the hydrous magnesium silicate includes heating a quantity of particles of hydrous magnesium silicate with flame conditions to substantially dehydroxylate the particles. The dehydroxylated particles can be contacted with carbon dioxide in a sequestration process to form magnesium carbonate.