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(54) Title: SILICA-ALUMINA COMPOSITION COMPRISING FROM 1 TO 30 WT.% OF CRYSTALLINE AMMONIUM ALUMINUM CARBONATE HYDROXIDE AND METHOD FOR MAKING THE SAME

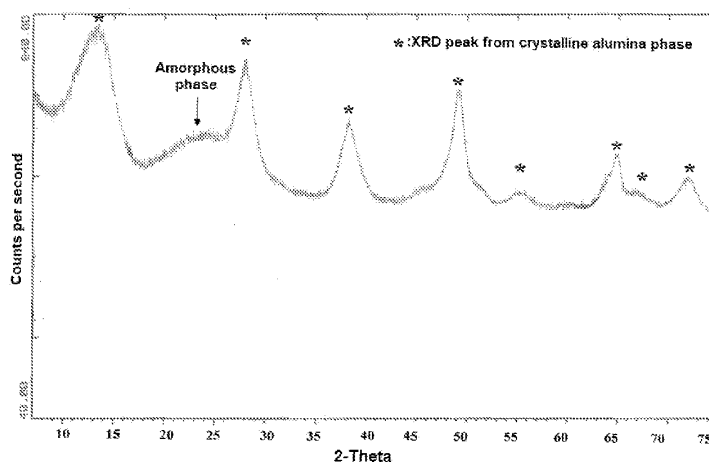


FIG. 1

(57) Abstract: A process of making a silica-alumina composition having improved properties is provided. The process includes (a) mixing an aqueous solution of a silicon compound and an aqueous solution of an aluminum compound and an acid, while maintaining a pH of the mixed solution in a range of 1 to 3, and obtaining an acidified silica-alumina sol; (b) adding an aqueous solution of a base precipitating agent to the acidified silica-alumina sol to a final pH in a range of 5 to 8, and co-precipitating a silica-alumina slurry, wherein the base precipitating agent is selected from ammonium carbonate, ammonium bicarbonate, and any combination thereof; (c) optionally, hydrothermally aging the silica-alumina slurry to form a hydrothermally aged silica-alumina slurry; and (d) recovering a precipitate solid from the silica-alumina slurry or the hydrothermally aged silica-alumina slurry, wherein the precipitate solid comprises

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the silica-alumina composition.