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(54) Title: HIGH OXYGEN STORAGE CAPACITY CERIUM AND ZIRCONIUM CONTAINING OXIDE

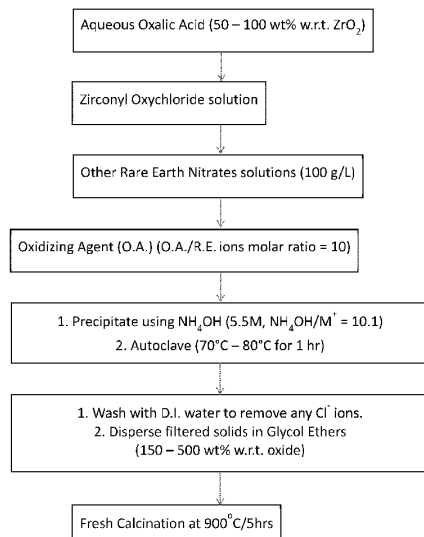


FIG. 2

(57) Abstract: Disclosed herein are compositions having enhanced oxygen storage capacity (OSC). The high OSC compositions contain zirconium oxide, cerium oxide, and optionally one or more rare earth oxides other than cerium. These optional additional rare earth oxides may be yttrium oxide, lanthanum oxide, neodymium oxide, praseodymium oxide, or mixtures thereof. These compositions have an oxygen storage capacity of about 40 $\mu\text{mol-O}_2/\text{g}$ to about 300 $\mu\text{mol-O}_2/\text{g}$ after calcining at a temperature of about 900°C in air for about 5 hours. Further disclosed are processes of producing these compositions having enhanced oxygen storage capacity (OSC). The compositions may be used as catalytic carriers or as part of a catalyst system.

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