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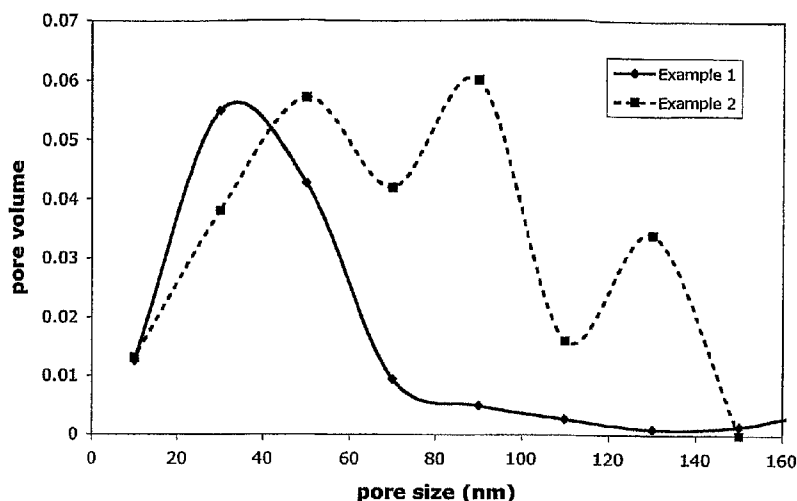
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(54) Title: METHOD FOR MAKING METAL OXIDES



Pore size distributions for the metal oxides produced in examples 1 and 2.

(57) Abstract: A method of producing porous complex oxides includes the steps of providing a mixture of a) precursor elements suitable to produce the complex oxide; or b) one or more precursor elements suitable to produce particles of the complex oxide and one or more metal oxide particles; and c) a particulate carbon-containing pore-forming material selected to provide pore sizes in the range of approximately 7 nm to 250 nm, and treating the mixture to (i) form the porous complex oxide in which two or more of the precursor elements from (a) above or one or more of the precursor elements and one or more of the metals in the metal oxide particles from (b) above are incorporated into a phase of the complex metal oxide and the complex metal oxide has grain sizes in the range of about 1 nm to 150 nm; and (ii) remove the pore-forming material under conditions such that the porous structure and composition of the complex oxide is substantially preserved. The method may be used to produce non-refractory metal oxides as well.



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