

Title (en)

NOVEL HYDROGEN STORAGE MATERIALS AND METHOD OF MAKING BY DRY HOMOGENATION

Title (de)

WASSERSTOFFSPEICHERMATERIALIEN UND HERSTELLUNGSVERFAHREN DURCH TROCKENE HOMOGENISIERUNG

Title (fr)

NOUVEAUX MATERIAUX DE STOCKAGE DE L'HYDROGÈNE ET LEUR PROCÉDÉ DE FABRICATION PAR HOMOGENEISATION A SEC

Publication

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Application

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Abstract (en)

[origin: WO0007930A1] Dry homogenized metal hydrides, in particular aluminum hydride compounds, as a material for reversible hydrogen storage is provided. The reversible hydrogen storage material comprises a dry homogenized material having transition metal catalytic sites on a metal aluminum hydride compound, or mixtures of metal aluminum hydride compounds. A method of making such reversible hydrogen storage materials by dry doping is also provided and comprises the steps of dry homogenizing metal hydrides by mechanical mixing, such as by crushing or ball milling a powder, of a metal aluminum hydride with a transition metal catalyst. In another aspect of the invention, a method of powering a vehicle apparatus with the reversible hydrogen storage material is provided.

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