



ABSTRACT OF THE DISCLOSURE

HYDROGEN STORAGE USING CARBON-METAL HYBRID COMPOSITIONS

5 A process is provided for the transport and storage of hydrogen by reversible sorption and containment within carbon-metal hybrid materials. The process comprises contacting a carbon-metal hybrid composition with a hydrogen-containing gas at conditions of temperature and pressure whereby the carbon-metal hybrid composition sorbs the hydrogen gas. The hydrogen that is sorbed in the carbon-metal composition is
10 subsequently released by lowering the H_2 pressure and/or increasing the temperature to levels which cause desorption of the hydrogen gas.

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