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(54) **METHOD OF MAKING IMPROVED GAS STORAGE CARBON WITH ENHANCED THERMAL CONDUCTIVITY**

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(58) **Field of Search** 264/29.6, 29.7, 264/87, 140; 502/416

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(57) **ABSTRACT**

A method of making an adsorbent carbon fiber based monolith having improved methane gas storage capabilities is disclosed. Additionally, the monolithic nature of the storage carbon allows it to exhibit greater thermal conductivity than conventional granular activated carbon or powdered activated carbon storage beds. The storage of methane gas is achieved through the process of physical adsorption in the micropores that are developed in the structure of the adsorbent monolith. The disclosed monolith is capable of storing greater than 150 V/V of methane [i.e., >150 STP (101.325 KPa, 298K) volumes of methane per unit volume of storage vessel internal volume] at a pressure of 3.5 MPa (500 psi).

16 Claims, 8 Drawing Sheets

