US007824473B2

(12) **United States Patent**
Mirkin et al.

(10) **Patent No.: US 7,824,473 B2**
(45) **Date of Patent: Nov. 2, 2010**

(54) **METAL-ORGANIC FRAMEWORK MATERIALS BASED ON ICOSAHEDRAL BORANES AND CARBORANES**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 285 days.

(21) Appl. No.: **12/180,074**

(22) Filed: **Jul. 25, 2008**

(65) **Prior Publication Data**

US 2009/0025556 A1 Jan. 29, 2009

Related U.S. Application Data

(60) Provisional application No. 60/962,195, filed on Jul. 27, 2007.

(51) **Int. Cl.**
B01D 53/04 (2006.01)
C08G 79/08 (2006.01)

(52) **U.S. Cl.** **95/116**; 95/900; 502/526; 528/4

(58) **Field of Classification Search** 95/90, 95/116, 900, 902; 96/108; 423/248, 648.1, 423/658.2; 502/526; 206/0.7; 528/4
See application file for complete search history.

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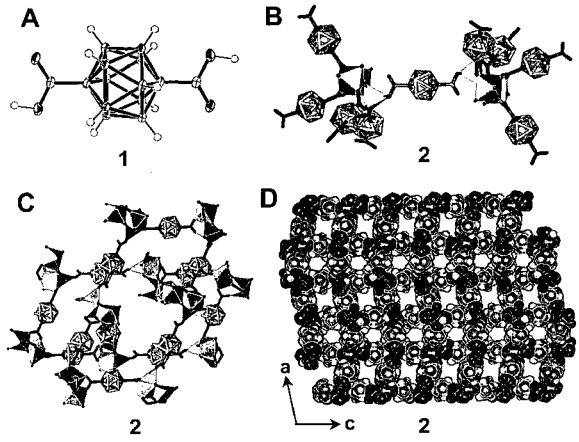
(57) **ABSTRACT**

Disclosed herein are metal-organic frameworks of metals and boron rich ligands, such as carboranes and icosahedral boranes. Methods of synthesizing and using these materials in gas uptake are disclosed.

32 Claims, 6 Drawing Sheets