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(71) Applicant (for all designated States except US): **THE REGENTS OF THE UNIVERSITY OF MICHIGAN** [US/US]; 3003 S. State Street, Ann Arbor, Michigan 48109 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **YAGHI, Omar, M** [US/US]; 435 Dale Hurst Avenue, Los Angeles, California 90024 (US).

(74) Agents: **PROSCIA, James, W.** et al.; Brooks Kushman, 1000 Town Center, Twenty-Second Floor, Southfield, Michigan 48075 (US).

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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

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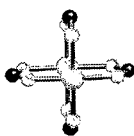
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HIGH GAS ADSORPTION IN A MICROPOROUS METAL-ORGANIC FRAMEWORK WITH OPEN-METAL SITES



(57) Abstract: A gas storage material contains a metal-organic framework that includes a plurality of metal clusters and a plurality of charged multidentate linking ligands that connect adjacent metal clusters. Each metal cluster includes one or more metal ions and at least one open metal site. The metal-organic framework includes one or more sites for storing molecular hydrogen. A hydrogen storage system using the hydrogen storage material is provided.



WO 2006/110740 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 06/13468

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - B01J 2/22 (2007.01)

USPC - 502/401; 502/526

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B01J 2/22 (2007.01)

502/401; 502/526

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DB=PGPB,USPT,USOC,EPAB,JPAB

search terms: metal organic framework, Omar Yaghi (inventor name)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2004/0265670 A1 (Muller et al.) 30 December 2004 (30.12.2004), entire document, especially Abstract, Claim 9, para [0007, 0041-0068].	1-48
Y	WO 2002/088148 A1 (Yaghi et al.) 07 November 2002 (07.11.2002), entire document, especially page 3, lines 25-30; page 10, lines 1-13; page 11, lines 6-28; and page 13, lines 5-7; page 15, line 22-page 16, line 15; and page 16, line 24-page 19, line 22.	1-48

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the international search

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Authorized officer:

Lee W. Young

PCT Helpdesk: 571-272-4300

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