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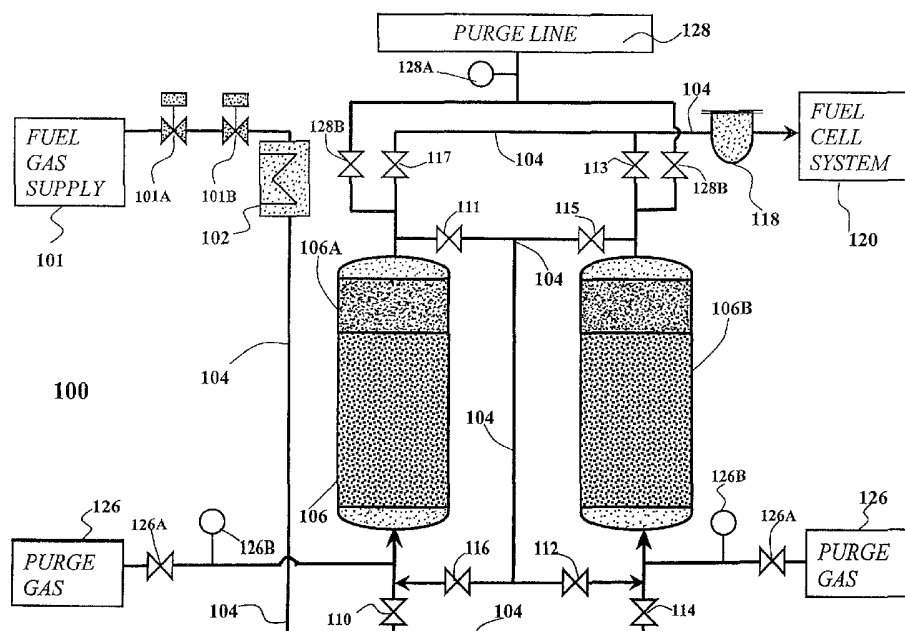
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(54) Title: HIGH-CAPACITY SULFUR ADSORBENT BED AND GAS DESULFURIZATION METHOD



(57) Abstract: A fuel processing system and method for processing fuel for a fuel cell having a first adsorbent bed (106) for adsorption of high molecular weight organic sulfurcontaining compounds and inorganic sulfur-containing compounds, and a second adsorbent bed (106A) for adsorption of low molecular weight organic sulfur-containing compounds, where the adsorbent beds are arranged such that the fuel to be processed passes through one of the adsorbent beds and, thereafter through the other adsorbent bed.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/23210

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B01D 53/04

US CL : 95/135; 96/132; 585/822

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)

U.S. : 95/135, 136; 96/131, 132, 133, 135, 153; 585/822; 423/230, 242.1; 208/243, 245, 246

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)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 6,074,459 A (GINGRICH et al) 13 June 2000 (13.06.2000), col. 2, lines. 21-40, col. 3, lines 17-45	1-3, 19-22, 30-33, 35-37 ----- 4-9, 23, 24, 34, 38, 39
X --- Y	US 2003/0113598 A1 (CHOW et al) 19 June 2003 (19.06.2003), abstract, paragraphs 40-51	1-3, 11-14, 19-22, 25, 26, 30-33, 35-37 ----- 4-9, 23, 24, 27, 28, 34, 38, 39
Y	US 5,948,398 A (HANAMOTO et al) 07 September 1999 (07.09.1999), abstract, col. 1, lines 44-67, col. 4, lines 37-45	4-9, 23, 24, 27, 28, 34, 38, 39
A	US 5,114,689 A (NAGJI et al) 19 May 1992 (19.05.1992)	1-39
A	JP 2003-020489 A (TOKYO GAS CO LTD) 01 January 2003 (01.01.2003)	1-39

☐ Further documents are listed in the continuation of Box C.

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PCT/US04/23210

Continuation of B. FIELDS SEARCHED Item 3:

DERWENT

search terms: desulfurization