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Leo [US/US]; 13217 Salvo Drive, Matthews, North Carolina 28105 (US).

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(74) Agent: MASON, J. Derek; OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 Duke Street, Alexandria, Virginia 22314 (US).

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(71) Applicant (for all designated States except US): XEBEC, INC. [CA/CA]; 730 Boul. Industriel, Blainville, Quebec J7C 3V4 (CA).

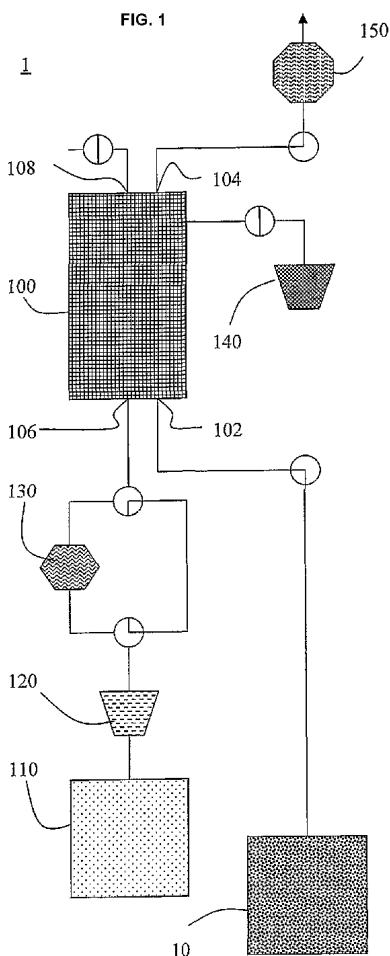
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(72) Inventor; and

(75) Inventor/Applicant (for US only): HIGGINS, Vincent

[Continued on next page]

(54) Title: SILOXANE REMOVAL PROCESS



(57) Abstract: Biogas released from landfills and sewage treatment plants is freed of siloxane contaminants by passing the biogas through a bed containing activated alumina, which absorbs the siloxanes. When the activated alumina becomes saturated with siloxanes, the absorption capability of the activated alumina can be recovered by passing a regeneration gas through the bed of activated alumina. A system containing two or more beds of activated alumina can use one bed to remove siloxanes from biogas while one or more of the other beds are being regenerated.

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FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,  
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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/10391

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC: **B01D 53/04** (2006.01)

USPC: 95/97,104,106,116,148;96/127,130

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. : 95/96-106, 116, 148; 96/126-128, 130, 146

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 2004/0118278 A1 (KAWAI et al) 24 June 2004 (24.06.2004), figures, paragraphs 35, 36, 52, 56	13, 14, 16 ----- 15, 17, 18, 20
Y	US 6,245,127 B1 (KANE et al) 12 June 2001 (12.06.2001), figure 5, col. 12, lines 49-66	15, 20
Y	US 4,430,306 A (NAMBA et al) 07 February 1984 (07.02.1984), figures, col. 1, lines 58-65	17, 18

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:		"T"
"A"	document defining the general state of the art which is not considered to be of particular relevance	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E"	earlier application or patent published on or after the international filing date	"X"
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	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
"O"	document referring to an oral disclosure, use, exhibition or other means	"Y"
"P"	document published prior to the international filing date but later than the priority date claimed	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
		"&"
		document member of the same patent family

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Name and mailing address of the ISA/US  
Mail Stop PCT, Attn: ISA/US  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
Facsimile No. (571) 273-3201

Authorized officer  
Frank M. Lawrence  
Telephone No. 571-272-0987



**INTERNATIONAL SEARCH REPORT**

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PCT/US06/10391

Continuation of B. FIELDS SEARCHED Item 3:  
DERWENT  
search terms: activated alumina, siloxane