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**(88) Date of publication of the international search report:**

17 January 2008

*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.*

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/08897

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - F23D 11/00 (2007.10)  
USPC - 431/159

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)

USPC -- classes 44, 431, 34, 588  
431/159

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)

Pub WEST -- PGPB,USPT,USOC,EPAB,JPAB; Dialog Classic Files 351,155, 6, 35, 65, 6; Google Patents, Google Scholar, USPTO Web Page Search terms -- biomass converter, gasifier, furnace, conveyor, pipes, conduits, auger, air pump, inlet, outlet, cap, pressure wheel, vacuum, downdraft, boot, rods, axle, platforms

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/0095866 A1 (HASSETT) 25 July 2002 (25.07.2002) para [0010], [0015], [0017], [0033], [0035], [0045], [0046], [0053], [0056], [0057], Fig 1, 3, 7.	1-9
Y	US 2005/0217134 A1 (LASONDE) 06 October 2005 (06.10.2005) para [0005], [0008], [0017], [0026], [0055], [0057], [0088], [0098], [0104], [0116].	1-9
Y	US 2002/0069798 A1 (AGUADAS ELLIS) 13 June 2002 (13.06.2002) para [0003], [0011], [0033], [0034], [0046], Fig 2.	4, 7
Y	US 2004/0060236 A1 (Yoshikawa et al.) 01 April 2004 (01.04.2004) para [0013], [0024], [0026], [0036], [0037], Fig 2.	1-6, 9
Y	US 2005/0234199 A1 (TANIGUCHI et al.) 20 October 2005 (20.10.2005) para [0002], [0005], [0242].	1-6, 9
Y	US 2003/0066638 A1 (QU et al.) 10 April 2003 (10.04.2003) para [0005], [0290], [1152], [1267], [1500], [1516], Fig 12, 15c.	1-6, 9
Y	US 5,685,153 A (DICKINSON et al.) 11 November 1997 (11.11.1997) col 1, ln 32-36, col 7, ln 49-52.	2

Further documents are listed in the continuation of Box C.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"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)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" 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

"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

"Y" 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

Date of the actual completion of the international search

08 October 2007 (08.10.2007)

Date of mailing of the international search report

05 NOV 2007

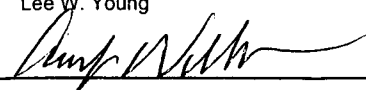
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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/08897

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2003/0226561 A1 (DARBONNE) 11 December 2003 (11.12.2003) para [0060], [0065], Fig 13.	9