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(71) Applicant (for all designated States except US): **ES-TECH, LLC** [US/US]; 60 B Elm Street, Canal Winchester, OH 43110 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MICHALEK, Jan K.** [US/US]; 3762 Alward Road, Pataskala, OH 43062 (US). **THOMAS, Theodore J.** [US/US]; 864 Lookout Point Drive, Columbus, OH 43235 (US). **LEE, Leong Soon** [MY/US]; 4000 Silverglade Court, Columbus, OH 43230 (US).

(74) Agent: **GILCREST, Roger A.**; Schottenstein, Zox & Dunn Co., L.P.A., 250 West Street, Columbus, OH 43215-2538 (US).

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(54) Title: METHOD AND APPARATUS FOR TREATING WASTE INVOLVING CONTROL OF ENERGY INPUT TO ASSURE STERILIZATION

(57) Abstract: A method and apparatus for controlling the processing solid waste material in a vessel during a processing cycle, comprising: (1) loading the vessel with a charge of solid waste products, said vessel comprising: (a) a rotatably mounted cylindrical vessel having an interior surface and two ends, sealably closed to allow pressurization of said vessel; (b) a vessel steam inlet; (c) a thermometer adapted to monitor the processing temperature of the waste material placed into said vessel during an operational cycle; (d) a timer adapted to monitor the processing time of an operational cycle for the waste material placed into said vessel; (e) a microprocessor having processing instructions adapted to calculate the required processing time by integrating the function of the said processing temperature versus the processing time so as to be able to determine whether a predetermined energy input to the waste material has been attained.

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US 10/00149

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(8) - B02C 19/00 (2011.01)

USPC - 241/1; 241/65

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:241/1; 241/65

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

USPC:241/1,23,33,65,99; B02C 19/00

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

PubWEST:PGPB,USPT,EPAB,JPAB,DWPI,TDBD; Google Scholar

Search Terms: solid, waste, municipal, steam, vessel, kiln, rotate, autoclave, temperature, thermometer, timer, controller, microprocessor.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,306,248 B1 (Eley) 23 October 2001 (23.10.2001); entire document; especially fig 1-4; col 8, ln 25-37; Abstract	1-6
Y	US 6,345,981 B1 (Hansen et al.) 12 February 2002 (12.02.2012); entire document; especially col 4, ln 20-37	1-6

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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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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:  
Lee W. Young  
PCT Helpdesk: 571-272-4300  
PCT OSP: 571-272-7774