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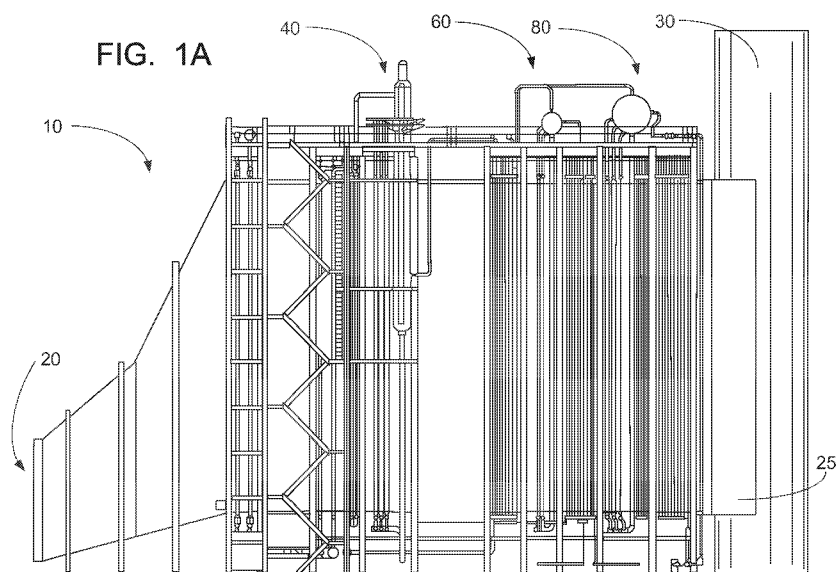
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(54) Title: RAPID STARTUP HEAT RECOVERY STEAM GENERATOR



(57) Abstract: A rapid startup heat recovery steam generator (HRSG) comprises a gas inlet, a high pressure section, an optional intermediate pressure section, an optional low pressure section, and a gas outlet. The high pressure section comprises a high pressure steam-water separator and a plurality of high pressure evaporator tubes in fluid communication with the high pressure steam-water separator. At least one of the pressure sections includes a vertical steam separator.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2013/045533

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - F22B 37/26 (2013.01)

USPC - 122/488

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)

IPC(8) - F22B 1/18,35/00,37/26; F22D 1/00,7/00 (2013.01)

USPC - 60/39.12,106; 122/1A,1B,1C,1R,6A,7R,401,406S,406.1,406.5,470,488

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

CPC - F22B 1/18,35/00,37/26; F22D 1/00,7/00 (2013.01)

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

PatBase, Google Patents

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,336,429 B1 (WIENER et al) 08 January 2002 (08.01.2002) entire document	1,2,13-21,23-25
Y		3-12,22,26-28
Y	US 4,944,252 A (MOTAI et al) 31 July 1990 (31.07.1990) entire document	3-12,22,28
Y	EP 1 684 011 B1 (PEREGO et al) 16 December 2009 (16.12.2009) entire document	26,27

☐ 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

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

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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

"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

18 November 2013

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