



- (51) International Patent Classification:  
*F03G 6/00* (2006.01)
- (21) International Application Number:  
PCT/IN2012/000171
- (22) International Filing Date:  
13 March 2012 (13.03.2012)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
766/CHE/2011 14 March 2011 (14.03.2011) IN
- (72) Inventor; and  
(71) Applicant : VALAGAM RAJAGOPAL, Raghunathan  
[IN/IN]; Old No: 6, New No: 72, 12th Avenue, Ashok  
Nagar, Chennai 600083, Tamil Nadu (IN).
- (74) Agent: JHABAKH, Kalyan; Surana & Surana Interna-  
tional Attorneys, International Law Center, 61-63, Dr.  
Radhakrishnan Salai, Mylapore, Chennai 600004, Tamil  
Nadu (IN).
- (81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,  
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO,  
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,

HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,  
KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,  
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,  
OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD,  
SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR,  
TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

- (84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ,  
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU,  
TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE,  
DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,  
LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,  
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- of inventorship (Rule 4.17(iv))

Published:

- with international search report (Art. 21(3))  
— before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments (Rule 48.2(h))

- (88) Date of publication of the international search report:  
7 November 2013

(54) Title: HERMITICALLY SEALED SOLAR WATER HEATER SYSTEM AND OPERATION METHOD FOR GENERATION OF ELECTRICITY FROM THERMAL POWER PLANT

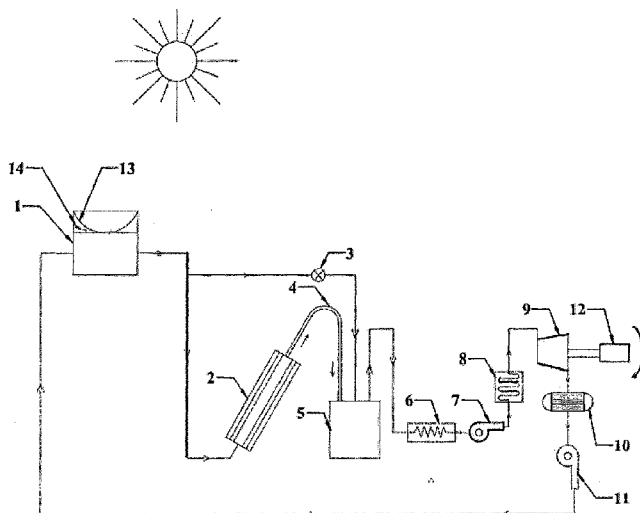


FIGURE 1

(57) Abstract: The present invention discloses a hermitically sealed solar water heater system and operation method for generation of electricity from thermal power plant. Water storage tank (1) is hermitically sealed by diaphragm (13) to prevent feed water contamination. Solar energy based water heater (2) preheats feed water and raises water temperature close to the boiling point. The feed water heater by trapping the waste heat from the exhaust gases further heats the feed water and is pumped to the boiler and where it is converted to steam. The steam impinging on the turbine blades drives it and generates power from the generator. The steam condenses in the condenser and the water coming out of condenser is pumped to the overhead water tank and the process of power generation is continues uninterrupted.

**INTERNATIONAL SEARCH REPORT**

International application No  
PCT/IN2012/000171

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. F03G6/00  
ADD.  
  
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)  
F03G

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)  
EPO-Internal, PAJ, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2009/229264 A1 (GILON YOEL [IL] ET AL) 17 September 2009 (2009-09-17) the whole document	1-12
A	DE 20 2009 002710 U1 (FELL MARKUS [DE]; SEMMLER MONIKA [DE]) 6 August 2009 (2009-08-06) the whole document	1-12
A	DE 20 2008 001187 U1 (ZABEL JUERGEN [DE]) 3 April 2008 (2008-04-03) the whole document	1-12

Further documents are listed in the continuation of Box C.

See patent family annex.

\* 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  9 September 2013	Date of mailing of the international search report  24/09/2013
---	--

Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  Giorgini, Gabriele
--	--

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IN2012/000171

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2009229264 A1	17-09-2009	NONE	
DE 202009002710 U1	06-08-2009	NONE	
DE 202008001187 U1	03-04-2008	NONE	