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Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

[Continued on next page]

(54) Title: SOLAR THERMAL COLLECTION APPARATUS AND METHODS

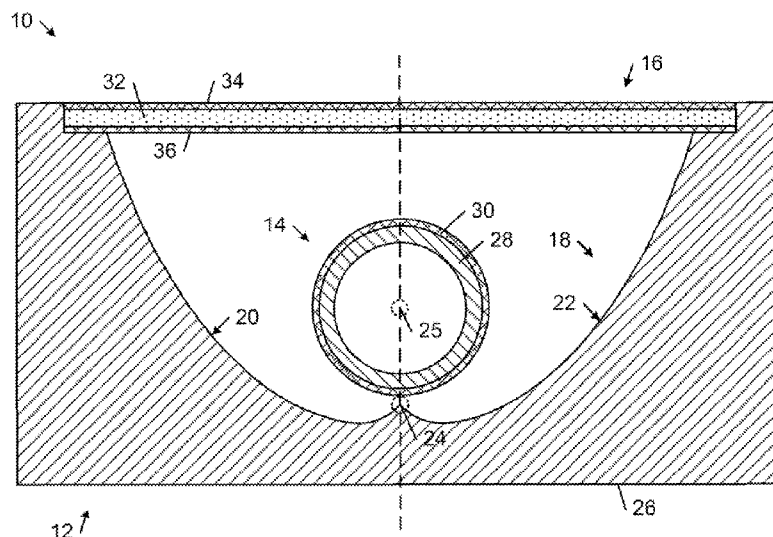


FIG. 1A

(57) Abstract: A solar thermal collector (10) includes a receptacle (12) and a fluid conduit (14). The receptacle (12) is evacuated to a subatmospheric pressure. The receptacle (12) includes a window (16) and a reflector (18) facing the window (16). The window (16) and the reflector (18) are exposed to the subatmospheric pressure in the receptacle (12). The fluid conduit (14) extends through the receptacle (12) between the window and the reflector (18). The reflector (18) concentrates solar radiation passing through the window (16) onto the fluid conduit (14).

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INTERNATIONAL SEARCH REPORT

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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)

F24J 2/04; B32B 9/00; F24J 2/24; F24J 3/02; F24J 2/10; B65B 31/04

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords:solar, reflector, evacuate, vacuum, coating

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 2002-0007830 A1 (FUKUTAKE et al.) 24 January 2002 See abstract, paragraphs [0018]-[0021] and figures 1, 4.	1-12, 20-24, 27 13-19, 25, 26, 28-30
Y	US 7575809 B2 (GLAUBITT et al.) 18 August 2009 See abstract, column 1 line 27 and figure 1.	13-15
Y	US 04474170 A (MCCONNELL et al.) 02 October 1984 See abstract, column 5 lines 55-58 and figures 1-5.	16, 17
Y	US 2009-0173337 A1 (TAMAURA YUTAKA et al.) 09 July 2009 See abstract, paragraph [0144], claim 40 and figure 7.	18, 19, 25, 28-30
Y	US 2003-0010395 A1 (SAKAMOTO et al.) 16 January 2003 See abstract and claim 1.	26



Further documents are listed in the continuation of Box C.



See patent family annex.

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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

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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