Abstract: An air heating system is for use with a mechanism for flowing air. The system includes a plenum and a solar absorber. The solar absorber defines a first boundary of the plenum. The solar absorber is permeable to air. The mechanism for flowing air is for pulling air into the plenum through the permeable solar absorber. The plenum has an axial direction, wherein along a cross section of said plenum normal to the axial direction the permeable absorber has an average shape that is substantially convex when the permeable absorber is viewed from outside of the plenum.
Published:

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A. CLASSIFICATION OF SUBJECT MATTER

F24J 2/04(2006.01)i, F24J 2/16(2006.01)i, F24J 2/24(2006.01)i, F24J 2/06(2006.01)i, G02B 5/08(2006.01)i

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; E04D 13/18; E04B 1/74; F24J 2/48; F24J 2/42; F24J 3/02

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, absorber, reflector, transpired, permeable, air heating

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tr>
<td>A</td>
<td>US 05092491A A (CHRISTENSEN: CRAIG B. et al.) 02 December 1997&lt;br&gt;See the abstract, column 3 line 15-30, column 5 line 44 - column 6 line 56 and FIGS. 1-2</td>
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<td>A</td>
<td>JP 2007-132024 A (DAIWA HOUSE IND CO LTD) 31 May 2007&lt;br&gt;See the abstract, paragraph 0022 and FIG.1</td>
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<td>A</td>
<td>US 03875925A A (JOHNSTON JOHN G.) 08 April 1975&lt;br&gt;See the abstract, column 3 line 8-25 and FIG.2</td>
<td>1-42</td>
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□ Further documents are listed in the continuation of Box C.  □ See patent family annex.

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Date of the actual completion of the international search 29 JULY 2011 (29.07.2011)

Date of mailing of the international search report 02 AUGUST 2011 (02.08.2011)

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<td>JP 54-010137 B</td>
<td>01.05.1979</td>
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