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(54) Title: SYSTEM AND METHOD OF COOLING OF PHOTOVOLTAIC PANEL AND METHOD OF INSTALLATION OF SYSTEM

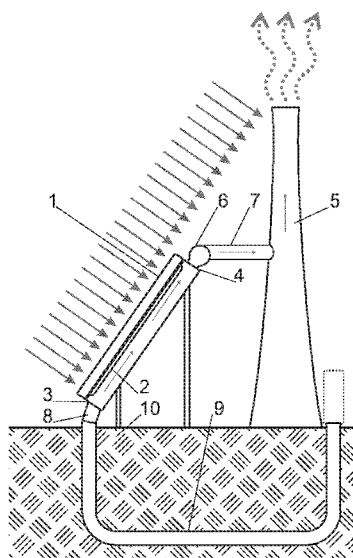


Fig. 3

(57) **Abstract:** A heat is taken from a photovoltaic panel (1) using air that flows through the photovoltaic panel (1) unit with an air cooler (2). The unit has an air intake opening (3) and an outtake vent (4) and the air flow is enforced by a natural draft of a chimney (5), to which the photovoltaic panel (1) unit is connected to. At least a part of the chimney (5) is exposed to solar radiation. Outtake vents (4) of several photovoltaic panel (1) units can lead to one chimney (5), preferably through thermal collectors (6) and piping. The air in the chimney is warmed up by solar radiation, the air ascends towards the chimney (5) mouth and the chimney (5) natural draft created in this way enforces air flow within the photovoltaic panel (1) unit. Even the air cooler (2) of the sucked air can form part of the system - preferably in the form of a ground-coupled heat exchanger (9). The chimney (5) can be equipped with heat-absorbing surface and it can also have a supporting wind device transforming wind energy into a natural draft within the chimney (5).

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER

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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)
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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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	----- DE 10 2010 033560 A1 (BORST PETER [DE]; PRETTL ROLF [DE]) 2 February 2012 (2012-02-02) figures	1-10
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☒ See patent family annex.

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INTERNATIONAL SEARCH REPORT

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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