a 2020 0023

The invention relates to power engineering and solar engineering, namely to photovoltaic thermal panels based on direct conversion of solar energy into electrical energy by means of photovoltaic cells, in particular to liquid heating devices.

The photovoltaic thermal panel comprises photovoltaic cells (3), fixed on a transparent surface (2) and placed on a plastic sheet (5), under which is placed an oilcloth (6) with capillary tubes of polymeric material (7), a cold water dispenser (8) and a hot water collector (9), all being fixed in a frame (1) with thermal insulation (10). Between the plastic sheet (5) and the oilcloth (6) is placed a paste layer (18) with high thermal conductivity, under which is placed a heat-insulating layer (19). The cold water dispenser (8) and the hot water collector (9) are placed side by side, on one side of the frame (1). Each tube (7) at one end (12) is connected to the cold water dispenser (8), at the other end (13) being connected to the hot water collector (9), with the formation of a loop (11) on the opposite side of the frame (1).

Claims: 1 Fig.: 2

