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Maimon et al.(10) **Pub. No.: US 2024/0213916 A1**(43) **Pub. Date: Jun. 27, 2024**(54) **CONJOINED SOLAR MODULE, AND A
JOINING UNIT FOR CONJOINING
MULTIPLE SOLAR PANELS**(71) Applicant: **SOLARPAINT LTD., YOKNEAM
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(2013.01); *H02S 30/20* (2014.12)(57) **ABSTRACT**

Conjoined solar module, and a joining unit for conjoining multiple solar panels. A mechanical joining unit has two back-to-back elongated rails. The first elongated rail has an elongated hollow cavity, and receives therein a set of beads or mushroom-shaped protrusions or lollipop-shaped protrusions that are connected to an edge of a first solar panel. Similarly, the second elongated rail has an elongated hollow cavity, and receives therein a set of beads or mushroom-shaped protrusions or lollipop-shaped protrusions that are connected to an edge of a second solar panel. Optionally, the mechanical joining unit has an additional elongated rail that defines an elongated cavity for storing metal wires that transport electricity generated by the solar panels. Optionally, each solar panel is flexible or rollable.

