

**Claims**

1. Solar cell string (1) for use in a photovoltaic module comprising
  - (i) a string of at least two solar cells (2a, 2b, 2c) facing each other in opposite polarity, and shingled in string direction with or without partial overlap of solar cells (2a, 2b, 2c);
  - (ii) at least one elongated electrically conducting interconnect (3a, 3b), optionally wire, ribbon or busbar, extending in string direction from one side of one solar cell to the opposite side of the next solar cell (2a, 2b, 2c) for mechanically and electrically connecting the positive and negative electrodes of the shingled solar cells (2a, 2b, 2c) in string direction on the alternating top and bottom sides of the solar cells; and
  - (iii) at least two adhesives (4a, 4b), optionally thermoadhesive foils, covering the at least one elongated interconnect (3a, 3b) and at least part of the top or bottom side of each solar cell that comprises the elongated interconnect;with the proviso that (a) there is no horizontal gap between shingled solar cells, (b) the adhesives (4a, 4b) do not contact each other, do not extend beyond one solar cell, do not extend into the optional partial overlap of solar cells (2a, 2b, 2c), and at least partially cover and mechanically fixate the at least one interconnect (3a, 3b) to the solar cells (2a, 2b, 2c).
2. The solar cell string (1) of claim 1, wherein the shingled solar cells overlap at least partially and the interconnect (3a, 3b) is not fixated to at least one or both of the solar cells in the overlap region.
3. The solar cell string (1) of claim 1, wherein the shingled solar cells do not overlap.
4. The solar cell string (1) of any of claims 1 to 3, wherein the at least one elongated interconnect (3a, 3b), optionally a wire, ribbon or bus bar, further connects all contact structures, optionally contact fingers on each solar cell.

5. The solar cell string (1) of any of claims 1 to 4, wherein the height or diameter of the at least one elongated interconnect (3a, 3b) determines the minimum vertical offset, optionally gap (5) of neighboring solar cells in the solar cell string (1).
6. The solar cell string (1) of any of claims 1 to 5, wherein the at least one interconnect (3a, 3b) is selected from the group consisting of bus bars, ribbons and metal wires, optionally metal wires coated with solderable material, optionally with Ag-, Cu-, Bi-, In-, Pb-, Sn- and combinations thereof- comprising solder, optionally SnBi- or In-comprising solder.
7. The solar cell string (1) of any of claims 1 to 6, wherein the interconnect (3a, 3b) mechanically and electrically contacts a conductive layer on the solar cell
8. The solar cell string (1) of any of claims 1 to 7, wherein the adhesive foils (4a, 4b) are or comprise a polymer foil, optionally selected from the group consisting of duroplasts, optionally EVAs (ethylene vinyl acetates), TPSEs (thermoplastic silicone elastomers), TPUs (thermoplastic polyurethanes), PETs (polyethylene terephthalates), TPOs (thermoplastic polyfin elastomers), ionomers, thermoplasts; optionally PVBs (polyvinylbutyrals), silicones, polyolefins (PO), PPs (polypropylenes); and combinations of thermoduroplasts, optionally a polymer foil thermoadhesive at temperatures in the range of 50 to 250 °C, optionally in the range of 60 to 200 °C, optionally in the range of 75 to 175 °C.
9. A photovoltaic module comprising a solar cell string (1) according to any of claims 1 to 8.