

CLAIMS

1. A seal assembly for arrangement between a first and a second photovoltaic panel, the first and the second photovoltaic panel having a first side edge, and a second side edge opposite to the first side edge, and comprising an upper layer and a lower layer, wherein

the upper layer is offset with respect to the lower layer at the first and second side edges, such that the upper layer of the first photovoltaic panel at its second side edge partially overlaps the lower layer of the second photovoltaic panel at its first side edge, and the seal assembly comprising:

an upper abutment part for abutting the upper layers of the first and second photovoltaic panels,

a lower abutment part for abutting the lower layers of the first and second photovoltaic panel, and

an intermediate part connecting the upper abutment part with the lower abutment part and configured for being arranged between the upper layer of the first photovoltaic panel and the lower layer of the second photovoltaic panel.

2. The seal assembly according to claim 1, wherein a top edge of the upper abutment part is substantially level with a top surface of the first photovoltaic panel and a top surface of the second photovoltaic panel.

3. The seal assembly according to claim 1 or 2, wherein a lower edge of the intermediate part comprises a plurality of protrusions to form a labyrinth seal.

4. An array of photovoltaic panels comprising a first photovoltaic panel and a second photovoltaic panel having a first side edge, and a second side edge opposite to the first side edge, wherein

the first and the second photovoltaic panels have an upper layer and a lower layer, wherein

the upper layer is offset with respect to the lower layer at the first and second side edges, such that the upper layer of the first photovoltaic panel partially overlaps the lower layer of the second photovoltaic panel, and the array further comprising

the seal assembly according to any of claims 1 – 3 arranged between the first and second photovoltaic panels.

5. The array of photovoltaic panels according to claim 4, wherein a length of the seal assembly is larger than a length of the first side edge of the first and second photovoltaic panels.

6. The array of photovoltaic panels according to claim 4 or 5, wherein the first and second photovoltaic panels further comprise a third side edge and a fourth side edge opposite to the third side edge, wherein

the upper layer and the lower layer of the first photovoltaic panel at the third and fourth side edges are not offset, and wherein

the upper layer and the lower layer of the second photovoltaic panel at the third and fourth side edges are not offset.

7. The array of photovoltaic panels according to any of claims 4 - 6, wherein the upper layer of the first and second photovoltaic panels comprises a glass plate.

8. The array of photovoltaic panels according to any of claims 4 – 7, wherein the lower layer of the first and second photovoltaic panels comprise a solar back sheet.

9. The array of photovoltaic panels according to any of claims 4 – 8, wherein the first and the second photovoltaic panels comprise a plurality of photovoltaic cells encapsulated in a polymer matrix.

10. The array of photovoltaic panels according to claim 9, wherein the photovoltaic cells are crystalline cells.

11. The array of photovoltaic panels according to claim 9 or 10, wherein the polymer matrix comprises Ethylene-vinyl acetate (EVA).

12. The array of photovoltaic panels according to any of claims 9 – 11, wherein the encapsulated photovoltaic cells are arranged between the upper and the lower layer.

13. A roof structure for a building comprising
a supporting framework, and
the array of photovoltaic panels according to any of claims 4 – 12.
14. The roof structure according to claim 13, wherein the supporting framework
comprises a top beam, a bottom beam, a plurality of vertical beams extending between
the top beam and the bottom beam, and a plurality of lateral beams which are arranged
substantially in parallel with the top beam and the bottom beam, and
wherein the first and second photovoltaic panels are attached to one or more of
the beams of the supporting framework, specifically
wherein the first and second photovoltaic panels are attached to one of the
lateral beams.
15. The roof structure according to claim 14, wherein the first and second
photovoltaic panels are attached to one of the beams of the supporting framework with
one or more metal brackets.