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(54) Title: DOPED REGION STRUCTURE AND SOLAR CELL COMPRISING THE SAME, CELL ASSEMBLY, AND PHOTO-VOLTAIC SYSTEM

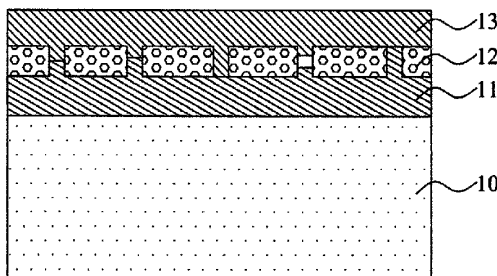


FIG. 1

(57) Abstract: The disclosure relates to the technical field of solar cells, and provides a solar cell and a doped region structure thereof, a cell assembly, and a photovoltaic system. The doped region structure includes a first doped layer, a passivation layer, and a second doped layer that are disposed on a silicon substrate in sequence. The passivation layer is a porous structure having the first doped layer and/or the second doped layer inlaid in a hole region. The first doped layer and the second doped layer have a same doping polarity. By means of the doped region structure of the solar cell provided in the disclosure, the difficulty in production and the limitation on conversion efficiency as a result of precise requirements for the accuracy of a thickness of a conventional tunneling layer are resolved.

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