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(54) **SOLAR CELL AND PHOTOVOLTAIC
MODULE**

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(57)

ABSTRACT

The solar cell includes: a substrate, a tunneling dielectric layer disposed over the substrate and a doped conductive layer formed over the tunneling dielectric layer. The doped conductive layer includes main body portions and first connecting portions. Each of the main body portions extends in a first direction, and the main body portions are arranged at intervals along a second direction perpendicular to the first direction. At least one first connecting portion in the first connecting portions is located between every two adjacent main body portions and in contact with each of the two adjacent main body portions. The solar cell further includes first electrodes each extending in the first direction. The first electrodes respectively correspond to the main body portions and are arranged at intervals along the second direction, and each first electrode is disposed on and electrically connected to a corresponding one of the main body portions.

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