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**SCIUTO et al.**(10) **Pub. No.: US 2023/0231062 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **SOLAR CELL AND SOLAR CELLS MODULE****Publication Classification**(71) Applicant: **ENEL GREEN POWER ITALIA**  
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(57) **ABSTRACT**

A solar cell including at least a first layer made of a semiconductor material for absorbing photons from light radiation and releasing charge carriers, and at least one conductive layer, overlapping the first layer, adapted to allow the light radiation to enter into the solar cell towards the first layer and to collect the charge carriers released by the first layer, the solar cell where the conductive layer includes at least three overlapped layers, including a transparent intermediate metal layer, made of metal, and two transparent oxide layers, made of a conductive oxide, where the two oxide layers are an inner oxide layer and an outer oxide layer surrounding the transparent intermediate metal layer to provide a low resistance path for the electrical charges and to maximize the amount of light radiation entering the solar cell. The embodiments also include a solar cells module including said solar cell.

