

ABSTRACT

A solar cell includes: a substrate having front and back surfaces opposite to each other, the back surface includes first regions, second regions and gap regions, the first regions and the second regions are staggered and spaced from each other in a first direction, and each gap region is provided between one first region and one adjacent second region; a first conductive layer formed over the first region; a second conductive layer formed over the second region, the second conductive layer has a conductivity type opposite to the first conductive layer; a first electrode forming electrical contact with the first conductive layer; a second electrode forming electrical contact with the second conductive layer; and first pyramidal texture structures formed on the back surface corresponding to the gap regions. A curved interface region is formed between side wall of the first/second conductive layer and side wall of the adjacent gap region.

(Fig. 2)