CLAIMS

1. A method of manufacturing a solar cell, the method comprising, in the order:

   forming a tunnel oxide over, at least, one surface of a semiconductor substrate;

   forming a layer doped with a first-type conductive dopant over the tunnel oxide;

   forming a mask on the doped layer; and

   performing, in a gas atmosphere containing a second-type conductive dopant, doping at least one first region of the doped layer using a laser.

2. The method according to claim 1, comprising forming trenches extending in the mask, the tunnel oxide and the doped layer, after the formation of the mask.

3. The method according to claim 2, wherein the trenches separate the first regions of the doped layer from second regions of the doped layer.

4. The method according to claim 2 or 3, comprising forming a passivation film over the doped layer, the passivation layer recovering the inside of trenches.

5. The method according to any of claims 1 to 4, wherein the gas includes phosphoryl chloride.

6. The method according to any of claims 1 to 5, comprising texturing of the semiconductor substrate on another surface.

7. An IBC solar cell obtained by the method according to anyone of claims 1 to 6.

A solar panel comprising IBC solar cells according to claim 7.