Claims

1. A photovoltaic device comprising:

- a first semiconducting area ~~(2)~~ made of N-doped silicon,
- a second semiconducting area ~~(3)~~ made of P-doped silicon and configured to form a PN or PIN junction with the first semiconducting area ~~(2)~~,

~~a device characterized in that~~wherein the first semiconducting area ~~(2)~~ comprises a concentration of P-type doping impurities that is at least equal to 20% of the concentration of N-type doping impurities.

2. The device according to claim 1, ~~characterized in that~~wherein the first ~~N-type~~ semiconducting area made of N-doped silicon ~~(2)~~ is doped by at least a first doping impurity chosen from Ga, In, Al, Ti, the first ~~N-type~~ semiconducting area made of N-doped silicon ~~(2)~~ being devoid of boron.

3. The device according to one of claims 1 and 2, ~~characterized in that~~wherein the first ~~N-type~~ semiconducting area made of N-doped silicon ~~(2)~~ is doped by at least a second doping impurity chosen from P, As, Sb, Li.

4. The device according to any one of claims 1 to 3, ~~characterized in that it comprises~~further comprising a monoblock semiconductor element inside which the first ~~N-type~~ semiconducting area made of N-doped silicon ~~(2)~~ and the second ~~P-type~~ semiconducting area made of P-doped silicon ~~(3)~~ are formed.

5. The device according to any one of claims 1 to 4, ~~characterized in that~~wherein the first ~~N-type~~ semiconducting area made of N-doped silicon ~~(2)~~ comprises one or more first portions ~~(2)~~ opening onto a surface and having a concentration of P-type doping impurities that is at least equal to 20% of the concentration of N-type doping impurities and one or more second doped portions ~~(4)~~ opening onto said

surface and having a concentration of P-type doping impurities that is less than 20% of the concentration of N-type doping impurities.

6. The device according to claim 5, ~~characterized in that~~wherein the concentration of P-type doping impurities is identical in the first and second portions ~~(2, 4)~~.