

ABSTRACT

A semiconductor component (50), in particular a solar cell, which has at least one semiconductor base material (40) consisting of a mono or a polycrystalline structure. The semiconductor base material (40) consists at least in part of pyrite with the chemical composition FeS_2 and which is cleaned for the purpose of achieving a defined degree of purity. Maximum benefit is drawn from the semiconductor base material (40) when it is produced from at least one layer of pyrite (51), at least one layer of boron (52) and at least one layer of phosphorous (53). An optimum type is derived from this semiconductor component when it is used as a solar cell.