have the particle size of 20 to 90 mm, and the content ratio of the polycrystalline silicon powder having the particle size of 500 to 1000 μm is 0.5 to 25 ppmw, and further the content ratio of the silicon dust having a particle size of less than 500 μm is 5 to 50 ppmw.

[0027]

Also, for example a surface contamination by a metal of said polycrystalline silicon fragment may be 0.5 to 50 ppbw, and said the metal of the surface contamination may include at least one from the group consisting of Na, Cr, Fe, Ni, Cu, Zn, Co and W.

[0028]

The polycrystalline silicon block fracture device according to the present invention comprises

a fracturing part mechanically fracturing a polycrystalline silicon block material introduced from a material introduction port by a movement of an outside force loading member to produce a polycrystalline silicon fragment including a polycrystalline silicon powder having a particle size of 500 to 1000 μm then discharging from discharging port,

a falling movement part continuous with a downstream of said fracturing part allowing said polycrystalline silicon fragment discharged from the discharging port to fall by gravity,

a receiver part positioned at downstream of said falling movement part and receives said polycrystalline silicon fragment after falling through said falling movement part; and

said falling movement part comprises a suction removing part in which at least part of said polycrystalline silicon powder included in said polycrystalline silicon fragment is removed by suctioning to a different direction from said falling direction; and said suction removing part suctions at a suction rate of 1 to 20m^3/min.

[0029]