

List of Pillar's Patents

No	# of Patent	Date of filing	Country	Name
1	26948	02.02.1999	Ukraine	Method to obtain monocrystalline silicon ingots in cases of loss of monocrystalline structure in the course of ingot growing
2	26951	29.12.1999	Ukraine	Method of processing grown monocrystalline silicon ingots
3	26952	29.12.1999	Ukraine	Method to identification of dislocation-free zone of monocrystalline silicon ingots
4	46145	15.05.2002	Ukraine	Device for iterative material charging into crucible
5	49103	21.08.2000	Ukraine	Method of identification of a part of monocrystalline silicon ingot with preset carbon content
6	49104	21.08.2000	Ukraine	Method of controlling monocrystalline silicon ingot diameter grown out of silicon melt
7	70313	21.08.2000	Ukraine	Method of monocrystalline silicon growing out of silicon melt
8	70408	01.10.2002	Ukraine	Method of wafer production from multicrystalline silicon ingots for solar cells
9	72795	10.09.2002	Ukraine	Device for growing monocrystalline silicon ingots, shielding device for it and method of growing monocrystalline silicon ingots by Czochralski method
10	74660	08.01.2004	Ukraine	Method of wafer production out of multicrystalline silicon ingots for solar cells
11	77594	21.06.2005	Ukraine	Method of crucible preparation for monocrystalline silicon ingot growing by Czochralski method
12	77874	01.06.2005	Ukraine	Method of production of silicon gallium dopant
13	87525	27.07.2009	Ukraine	Device for silicon growing out of melt with signaling about silicon spills and devise to silicon spill signal device
14	43896	10.09.2009	Ukraine	Method to obtain monocrystalline silicon wafers.

15	2186887	31.01.2000	Russia	Method of processing of grown monocrystalline silicon ingots
16	2189406	01.11.2000	Russia	Method of controlling monocrystalline silicon ingot diameter grown out of silicon melt
17	2189407	31.01.2000	Russia	Method of receiving monocrystalline silicon in cases of loss of monocrystalline growth
18	2189408	31.01.2000	Russia	Method of identification of monocrystalline defect-free zone
19	2190047	31.01.2000	Russia	Device for iterative charging of material into crucible
20	2193611	01.11.2000	Russia	Method of identification of a part of monocrystalline silicon ingot with preset carbon content
21	2200775	01.11.2000	Russia	Method of monocrystalline silicon growing out of silicon melt
22	2231582	10.09.2002	Russia	Device for growing monocrystalline silicon ingots, shielding device for it and method of growing monocrystalline silicon ingots by Czochralski method
23	2231867	01.10.2002	Russia	Method of wafer production out of multicrystalline silicon ingots for solar cells
24	2286407	21.06.2005	Russia	Method of crucible preparation for monocrystalline silicon ingot growing by Czochralski method
25	Application № 200906955	03.07.2009	Ukraine	Method for preparing of quartz crucible for formation of solid silicon ingot from the melt