particles, calcium chloride particles, calcium bromide particles, calcium oxide particles, calcium carbonate particles, calcium sulfate particles, calcium nitrate particles, calcium hydroxide particles, strontium fluoride particles, barium fluoride particles, lanthanum fluoride particles, and the content of the inorganic particles (C) is 15% by weight or more based on the whole solid content excluding a solvent in the photosensitive resin composition.

2. The photosensitive resin composition according to claim 1, wherein the inorganic particles (C) are silica particles.

3. The photosensitive resin composition according to claim 1 or 2, further comprising at least any one selected from (B1) a photoacid generator, (B2) a photobase generator, (B3) a thermal acid generator, and (B4) a thermal base generator.

4. The photosensitive resin composition according to any one of claims 1 to 3, further comprising (D) a naphthoquinone diazide compound.

5. The photosensitive resin composition according to any one of claims 1 to 4, further comprising a compound selected from (E1) a photopolymerization initiator and (E2) a photosensitizer.

6. The photosensitive resin composition according to any one of claims 1 to 3 and 5, further comprising (F) a photopolymerizable compound.

7. The photosensitive resin composition according to any one of claims 1 to 6, wherein the acidic group of the organosilane unit is selected from a carboxy group and an acid anhydride group.

8. A method for producing a semiconductor device, which comprises

steps of forming a pattern of the photosensitive resin composition according to any one of claims 1 to 9 on a semiconductor substrate; firing the pattern of the resin composition to obtain a fired pattern; implanting ions into the region of the semiconductor substrate where the fired pattern does not exist, using the fired pattern as an ion implantation mask; and removing the ion implantation mask.

9. The method for producing a semiconductor device according to claim , wherein the step of implanting ions is performed at 200 to 1,000°C.

10. The method for producing a semiconductor device according to claim 8 or 9, wherein the semiconductor substrate is a silicon carbide substrate, a gallium nitride substrate, or a diamond substrate.