Claims

1. Device for depositing an epitaxial layer on a front side of a wafer having an orientation notch, comprising
a mechanism for holding and rotating a susceptor having a susceptor support shaft and susceptor support arms; and
a ring which is held by the susceptor support arms and has inwardly pointing projections; and
the susceptor, comprising a susceptor ring having a resting face for resting the wafer in the edge region of a back side of the wafer and a stepped outer boundary of the susceptor ring that is adjacent to the resting face,
the resting face having an inwardly pointing projection and the stepped outer boundary that is adjacent to the resting face having an inwardly pointing bulge at the same azimuthal position,
characterized in that a projection of the ring is made from a material which selectively reduces intensity of thermal radiation passing through it, the result being that first subregions on the edge of a wafer rested on the susceptor, in which a growth rate of the epitaxial layer at uniform temperature of the wafer is greater because of the orientation of the monocrystalline material, are heated more weakly than in adjacent second subregions.

2. Device according to Claim 1, characterized in that the ring consists of quartz glass.

3. Device according to Claim 1 or Claim 2, characterized in that the ring has two or four projections.

4. Method for depositing an epitaxial layer on a front side of a wafer composed of monocrystalline material, comprising
providing the wafer having an orientation notch;
arranging the wafer on a device according to Claims 1 to 3, with the result that the orientation notch of the wafer has the same azimuthal position as a projection of the ring;
heating the wafer to a deposition temperature by means of thermal radiation which is directed towards a front side and towards a back side of the wafer;
conducting a deposition gas across the front side of the wafer; and
selectively reducing the intensity of a portion of the thermal radiation which is

directed towards the back side of the wafer, the result being that first subregions on the edge of the wafer, in which a growth rate of the epitaxial layer at uniform temperature of the wafer is greater because of the orientation of the monocrystalline material, are heated more weakly than in adjacent second subregions, characterized in that

the intensity of the portion of the thermal radiation is selectively reduced by arranging material having low transmittance in the IR region of the spectrum in the beam path of the thermal radiation.