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(71) Applicant: **SUMCO Corporation**
**Tokyo 105-8634 (JP)**

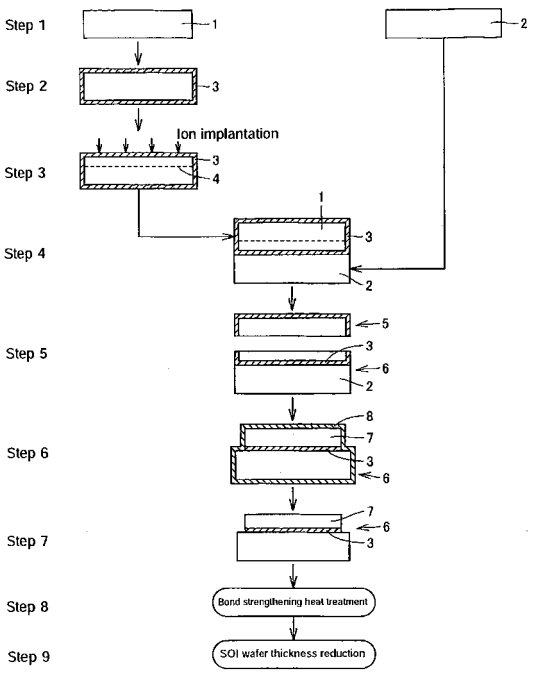
(72) Inventors:
- **Murakami, Satoshi**
  **Tokyo 105-8634 (JP)**
- **Ono, Toshiaki**
  **Tokyo 105-8634 (JP)**
- **Endo, Akihiko**
  **Tokyo 105-8634 (JP)**

(74) Representative: **Albrecht, Thomas et al**
**Kraus & Weisert,**
**Thomas-Wimmer-Ring 15**
**80539 München (DE)**

(54) **SOI wafer production method**

(57) By using, in the so-called Smart Cut process comprising the steps of bonding an ion-implanted active layer wafer to a base wafer and later splitting off the base wafer to produce a SOI wafer, a wafer doped with C in a single crystal ingot growing process (desirably to a carbon concentration of not lower than 1 x $10^{16}$ atoms/$cm^3$) as the active layer wafer, it becomes possible to exhibit the effect of inhibiting agglomeration of interstitial Si atoms and prevent development of stacking faults even when the SOI wafer is subjected to thermal oxidation treatment. Furthermore, the technique of sacrificial oxidation can be applied to production of SOI wafers and, thus, a damaged layer formed on the SOI layer surface can be removed and surface roughness can be improved without impairing crystalline integrity and, further, SOI layer thickness can be efficiently reduced.

FIG. 2

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