Claims

1. A semiconductor substrate cleaning method comprising applying an adhesive composition onto the semiconductor substrate to thereby form an adhesive layer, and removing the adhesive layer provided on the semiconductor substrate by use of a remover composition, wherein

the adhesive composition contains an adhesive component (S), and the adhesive component (S) comprises a siloxane adhesive containing a polyorganosiloxane component (A) which is curable through hydrosilylation;

the remover composition contains a solvent but no salt;

the solvent comprises one or more species selected from among di(n-butyl) ether, n-decane, di(n-pentyl) ether, 1-amino-n-pentane, p-menthane, butyl acetate, cyclohexane, di(n-propyl) sulfide, pentyl acetate, di(n-butyl) sulfide, mesitylene, limonene, and p-cymene; and

the remover composition exhibits a contact angle smaller than 31.5° with respect to the adhesive layer.

2. A semiconductor substrate cleaning method according to claim 1, wherein the adhesive composition which contains an adhesive component (S) further comprises at least one species selected from among an acrylic resin adhesive, an epoxy resin adhesive, a polyamide adhesive, a polystyrene adhesive, a polyimide adhesive, and a phenolic resin adhesive.

3. A processed semiconductor substrate production

method comprising:

a first step of producing a laminate having a semiconductor substrate, a support substrate, and an adhesive layer formed from an adhesive composition which is applying onto the semiconductor substrate or the support substrate, and adhering the semiconductor substrate to the support substrate by the mediation of the adhesive layer;

a second step of processing the semiconductor substrate of the produced laminate;

a third step of separating the semiconductor substrate and the adhesive layer from the support substrate; and

a fourth step of removing the adhesive layer on the semiconductor substrate by use of a remover composition, wherein

the adhesive composition contains an adhesive component (S), and the adhesive component (S) comprises a siloxane adhesive containing a polyorganosiloxane component (A) which is curable through hydrosilylation;

the remover composition contains a solvent but no salt;

the solvent comprises one or more species selected from among di(n-butyl) ether, n-decane, di(n-pentyl) ether, 1-amino-n-pentane, p-menthane, butyl acetate, cyclohexane, di(n-propyl) sulfide, pentyl acetate, di(n-butyl) sulfide, mesitylene, limonene, and p-cymene; and

the remover composition exhibits a contact angle smaller than 31.5° with respect to the adhesive layer.

4. A processed semiconductor substrate production

method according to claim 3, wherein the adhesive component (S) further comprises at least one species selected from among an acrylic resin adhesive, an epoxy resin adhesive, a polyamide adhesive, a polystyrene adhesive, a polyimide adhesive, and a phenolic resin adhesive.