WHAT IS CLAIMED IS:

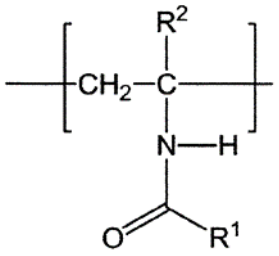
1. A surface treatment composition comprising:

a polymer having a constituent unit represented by Formula (1) below;

a water-soluble polymer having a constituent unit derived from glycerol, and

water,

the surface treatment composition being used for treating a surface of a polishing object after polishing,



(1)

wherein, in Formula (1) above, R^1 is a hydrocarbon group having 1 to 5 carbon atoms and R^2 is a hydrogen atom or a hydrocarbon group having 1 to 3 carbon atoms.

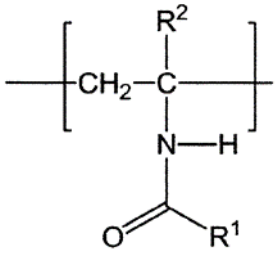
2. A surface treatment composition comprising:

a polymer having a constituent unit represented by Formula (1) below;

an ionic dispersant which is a high molecular weight compound having a sulfonic acid group, and

water,

the surface treatment composition being used for treating a surface of a polishing object after polishing,



(1)

wherein, in Formula (1) above, R^1 is a hydrocarbon group having 1 to 5 carbon atoms and R^2 is a hydrogen atom or a hydrocarbon group having 1 to 3 carbon atoms.

~~2~~3. The surface treatment composition according to Claim 1 or 2, wherein

a pH is 5 or less.

~~3~~4. The surface treatment composition according to any one of Claims 1 ~~or~~to ~~2~~3, wherein

a pH is 3 or less.

~~4. The surface treatment composition according to any one of Claims 1 to 3 further comprising:~~

~~a water-soluble polymer having a constituent unit derived from glycerol.~~

~~5. The surface treatment composition according to any one of Claims 1 to 4 further comprising:~~

~~an ionic dispersant.~~

~~6. The surface treatment composition according to Claim 5, wherein~~

~~the ionic dispersant is a high molecular weight compound having a sulfonic acid (salt) group.~~

~~7~~5. The surface treatment composition according to any one of Claims 1 to ~~6~~4, wherein

the surface treatment composition is substantially free from an abrasive.

~~8~~6. The surface treatment composition according to any one of Claims 1 to ~~7~~5, wherein

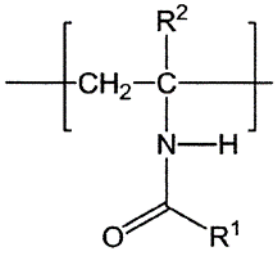
the polishing object after polishing contains polysilicon.

~~9~~7. The surface treatment composition according to any one of Claims 1 to ~~8~~6, wherein

a weight average molecular weight of the polymer is 50,000 or more and 900,000 or less.

~~10~~8. A method for producing a surface treatment composition comprising:

mixing a polymer having a constituent unit represented by Formula (1) below, a water-soluble polymer having a constituent unit derived from glycerol, and water,

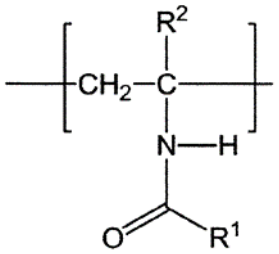


(1)

wherein, in Formula (1) above, R^1 is a hydrocarbon group having 1 to 5 carbon atoms and R^2 is a hydrogen atom or a hydrocarbon group having 1 to 3 carbon atoms.

9. A method for producing a surface treatment composition comprising:

mixing a polymer having a constituent unit represented by Formula (1) below, an ionic dispersant which is a high molecular weight compound having a sulfonic acid group, and water,



(1)

wherein, in Formula (1) above, R^1 is a hydrocarbon group having 1 to 5 carbon atoms and R^2 is a hydrogen atom or a hydrocarbon group having 1 to 3 carbon atoms.

~~11~~10. A surface treatment method comprising:

surface-treating a polishing object after polishing using the surface treatment composition according to any

one of Claims 1 to ~~9~~ 7 to reduce an organic residue on a surface of the polishing object after polishing.

~~12~~11. The surface treatment method according to Claim ~~11~~10, wherein

the surface treatment includes rinse polishing or cleaning.

~~13~~12. A method for producing a semiconductor substrate comprising:

a surface treatment step of reducing an organic residue on a surface of a polishing object after polishing by the surface treatment method according to Claim ~~11~~ 10 or ~~12~~11, wherein

the polishing object after polishing is a semiconductor substrate after polishing.