CLAIMS

1. A cleaning composition for a hard disk substrate comprising a polymer (component A),

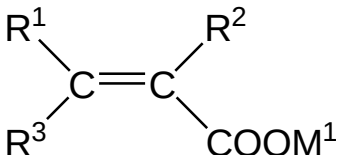
the polymer (component A) comprising:

a constituent unit (a1) derived from a monomer a1 expressed by General Formula (I) below or an anhydride thereof: and

a constituent unit (a2) derived from at least one monomer a2 selected from a monomer expressed by General Formula (II) below and a monomer expressed by General Formula (III) below,

wherein the component A has a weight average molecular weight of 15000 or more and 200000 or less and a pH of 8 or higher,

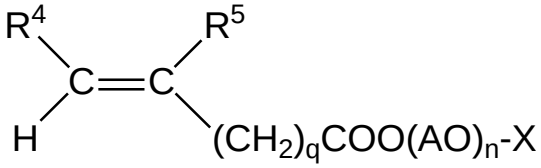
wherein



(I)

in General Formula (I), R^1, R^2 and R^3 independently represent a hydrogen atom, a methyl group, or $-(CH_2)_pCOOM^2$; M^1 and M^2 independently represent a hydrogen atom, an alkali metal, an alkaline-earth metal (1/2 atom), an organic ammonium group, or an ammonium group; and p represents an integer of 0 to 2,

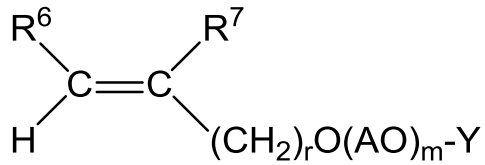
wherein



(II)

in General Formula (II), R^4 and R^5 independently represent a hydrogen atom or a methyl group; q represents an integer of 0 to 2; AO represents an alkyleneoxy group with 2 or 3 carbon atoms; n is an average number of added moles of AO and represents a number of 4 to 300; and X represents a hydrogen atom or an alkyl group with 1 to 3 carbon atoms, and

wherein



(III)

in General Formula (III), R^6 and R^7 independently represent a hydrogen atom or a methyl group; r represents an integer of 0 to 2; AO represents an alkyleneoxy group with 2 or 3 carbon atoms; m is an average number of added moles of AO and represents a number of 4 to 300; and Y represents a hydrogen atom or an alkyl group with 1 to 3 carbon atoms.

2. The cleaning composition according to claim 1, wherein the component A has a weight average molecular weight of 20000 or more and 80000 or less.

3. The cleaning composition according to claim 1 or 2, further comprising an alkali agent (component B).

4. The cleaning composition according to claim 3, wherein the component B is at least one selected from alkali metal hydroxides, hydroxyalkylamines, and quaternary ammonium salts.

5. The cleaning composition according to any of claims 1 to 4, wherein a content of the component A in the cleaning composition for use in cleaning is 0.001% by mass or more and 10% by mass or less.

6. A method for cleaning a substrate, comprising a cleaning process of cleaning a substrate to be cleaned with the cleaning composition according to any of claims 1 to 5,

wherein the substrate to be cleaned is a substrate that has been polished with a polishing composition.

7. The method for cleaning a substrate according to claim 6, wherein the substrate is a Ni-P-plated aluminum alloy substrate.

8. The method for cleaning a substrate according to claim 6 or 7, wherein the polishing composition is a polishing composition containing silica abrasive grains.

9. A method for producing a hard disk substrate, comprising a cleaning process

of cleaning a substrate to be cleaned with the cleaning composition according to any of claims 1 to 5,

wherein the substrate to be cleaned is a substrate that has been polished with a polishing composition.