[CLAIMS]

[Claim 1] A polyurethane for use in a polishing layer, comprising a monomer unit having a carboxylic acid ester group,

wherein the polyurethane comprises at least a chain extender unit (a), a polymer polyol unit (b), and an organic diisocyanate unit (c),

wherein the chain extender unit (a) has the carboxylic acid ester group, and

wherein the chain extender unit (a) includes a monomer unit derived from at least one compound selected from the group consisting of a tartaric acid diester, 1-(tert-butoxycarbonyl)-3-pyrrolidinol, and methyl 2,4-dihydroxybenzoate.

[Claim 2] The polyurethane for use in a polishing layer according to claim 1,

wherein the polyurethane is a thermoplastic polyurethane.

[Claim 3] A polishing layer comprising

the polyurethane for use in a polishing layer according to claim 1 or 2.

[Claim 4] The polishing layer according to claim 3,

wherein the polishing layer is an unfoamed molded body of the polyurethane for use in a polishing layer.

[Claim 5] A method for modifying a polishing layer, comprising the steps of:

preparing the polishing layer according to claim 3 or 4; and

hydrolyzing the carboxylic acid ester group of the polyurethane, to produce a carboxyl group.

[Claim 6] A polishing layer comprising a molded body of a thermoplastic polyurethane having a carboxyl group,

wherein the polishing layer has a zeta potential at a pH of 3.0 to 8.0, of -1.0 mV or less.

[Claim 7] The polishing layer according to claim 6,

wherein the polishing layer has a contact angle with water of 80 degrees or less.

[Claim 8] A polishing pad comprising

the polishing layer according to claim 3,4,6 or 7.