brushed. It is preferable that the zeta potential of the ultra-fine fibers be not more than -20 mV. It is preferable that the ultra-fine fibers comprise a polyamide or a polyester. It is preferable that the binder fibers be core-sheath composite fibers. It is preferable that the weight ratio of the ultra-fine fibers and the binder fibers (ultra-fine fibers/binder fibers) be in the range of 50/50 to 97/3.

[0012]

Furthermore, according to the present invention, "a method for the production of a polishing pad, comprising the steps of removing a sea component from a non-woven fabric comprising sea-island-type composite fibers having the sea component and an island component having an island diameter of 10 to 2500 nm, and binder fibers, and imparting an elastomer to the non-woven fabric" is provided.

[0012a]

Furthermore, according to the present invention, "a method for the production of a polishing pad, comprising the steps of removing a sea component from a from a non-woven fabric comprising sea-island-type composite fibers having the sea component and an island component having an island diameter of 10 to 2500 nm, and the non-woven fabric further comprising binder fibers, and imparting an elastomer to the non-woven fabric is provided.

[0013]

It is preferable that the single-fiber fineness ratio of the sea-island-type composite fibers and the binder fibers (sea-island-type composite fibers: binder fibers) be in the range of 1:0.49 to 1:0.70. It is preferable that the non-woven fabric be a needle punch non-woven fabric. It is preferable that the basis weight of the non-woven fabric be in the range of 300 to 600 g/m^2. It is preferable that the tensile strength of the non-woven fabric in the longitudinal or transverse direction be not less than 100 N/cm. It is preferable that the method further include brushing a surface.

[ADVANTAGEOUS EFFECTS OF INVENTION]

[0014]

According to the present invention, there is provided a polishing pad capable of achieving a high polishing rate and excellent workpiece flatness while having a long life and a production method therefor.

DESCRIPTION OF EMBODIMENTS

[0015]

The polishing pad of the present invention comprises ultra-fine fibers, binder fibers, and an elastomer. The ultra-fine fibers are preferably obtained by dissolving and removing the sea component from sea-island-type composite fibers having a soluble resin as the sea component.

[0016]

It is preferable that the zeta potential of the ultra-fine fibers be lower than the zeta potential of the polishing agent. Numerically, it is preferable that the ultra-fine fibers have a zeta potential of -20 mV or less, more preferably -40 to -80 mV. It is preferable that the zeta potential of the polishing agent be in the range of -40 to -80 mV. By using such ultra-fine fibers, it is easy

CLAIMS

[Claim 1]

A polishing pad, comprising ultra-fine fibers having a fiber diameter of 10 to 2500 nm, binder fibers, and an elastomer.

[Claim 2]

The polishing pad according to claim 1, having a porosity of not less than 50% and a flexural strength of not less than 5.0 N/mm^2.

[Claim 3]

The polishing pad according to claim 1 or claim 2, wherein a surface is brushed.

[Claim 4]

The polishing pad according to any one of claims 1 to 3, wherein the zeta potential of the ultra-fine fibers is not more than -20 mV.

[Claim 5]

The polishing pad according to any one of claims 1 to 4, wherein the ultra-fine fibers comprise a polyamide or a polyester.

[Claim 6]

The polishing pad according to any one of claims 1 to 5, wherein the binder fibers are core-sheath composite fibers.

[Claim 7]

The polishing pad according to any one of claims 1 to 6, wherein the weight ratio of the ultra-fine fibers and the binder fibers (ultra-fine fibers/binder fibers) is in the range of 50/50 to 97/3.

[Claim 8]

A method for the production of a polishing pad, comprising the steps of:

removing a sea component from a non-woven fabric comprising sea-island-type composite fibers having the sea component and an island component having an island diameter of 10 to 2500 nm, and the non-woven fabric further comprising binder fibers, and

imparting an elastomer to the non-woven fabric.

[Claim 9]

The method for the production of a polishing pad according to claim 8, wherein the single-fiber fineness ratio of the sea-island-type composite fibers and the binder fibers (sea-island-type composite fibers: binder fibers) is in the range of 1:0.49 to 1:0.70.

[Claim 10]

The method for the production of a polishing pad according to claim 8 or claim 9, wherein the non-woven fabric is a needle punch non-woven fabric.

[Claim 11]

The method for the production of a polishing pad according to any one of claims 8 to 10, wherein the basis weight of the non-woven fabric is in the range of 300 to 600 g/m^2.

[Claim 12]

The method for the production of a polishing pad according to any one of claims 8 to 11, wherein the tensile strength of the non-woven fabric in the longitudinal or lateral direction is not less than 100 N/cm.

[Claim 13]

The method for the production of a polishing pad according to any one of claims 8 to 12, further comprising brushing a surface.