WHAT IS CLAIMED IS:

1. A polishing pad comprising a polishing layer,

wherein the polishing layer contains: a plurality of micropores each having a shell; and an inorganic component,

wherein the shell is derived from an expandable solid foaming agent,

wherein the micropores of the polishing layer have a value of 0.7 to 0.8 as calculated according to the following Equation 2,

wherein the inorganic component is Mg and is contained in an amount of 0.01 to 1 ppm based on the total weight of the polishing layer:

[Equation 2]

$$\frac{D10}{D50}$$

wherein

D10 represents a diameter of pores in a 10% volume cumulative distribution, and

D50 represents a diameter of pores in a 50% volume cumulative distribution.

2. The polishing pad of claim 1, wherein the polishing layer satisfies the following Equation 1:

[Equation 1]

$$0 \leq \frac{DS \times D_{Mg}}{RR} \leq 1.5$$

wherein

DS represents the number of defects and scratches, measured after performing a polishing process on a silicon oxide layer using a CMP polishing apparatus under a polishing load of 4.0 psi for 60 seconds while injecting a calcined ceria slurry at a rate of 250 ml/min and rotating a surface plate having the polishing pad attached thereto at a speed of 150 rpm;

RR represents a removal rate (Å/min) of the silicon oxide layer during the polishing

process;

D_{Mg} is a content (ppm) of Mg based on the total weight of the polishing layer; and

$DS \times D_{Mg}/RR$ is a ratio between values excluding units.

3. The polishing pad of claim 1, wherein a standard deviation for measured values of D10 to D100 of the micropores in the polishing layer is 4 to 10.

4. The polishing pad of claim 1, wherein the solid foaming agent has a pH of 8 or less.

5. The polishing pad of claim 1, wherein the shell comprises at least one selected from the group consisting of a vinylidene chloride-based copolymer, an acrylonitrile-based copolymer, a methacrylonitrile-based copolymer, and an acrylic copolymer.

6. The polishing pad of claim 1, wherein, when a polishing process is performed on a silicon oxide layer using a CMP polishing apparatus under a polishing load of 4.0 psi for 60 seconds while injecting a calcined ceria slurry at a rate of 250 ml/min and rotating a surface plate having the polishing pad attached thereto at a rotating speed of 150 rpm, a removal rate of the silicon oxide layer by the polishing process is 2,000 to 4,000 Å/min.

7. A method for producing a polishing pad comprising steps of:

i) preparing a prepolymer composition;

ii) preparing a composition for producing a polishing layer containing the prepolymer composition, a foaming and a curing agent; and

iii) producing a polishing layer by curing the composition for producing a polishing layer,

wherein the polishing layer contains: a plurality of micropores each having a shell; and an inorganic component,

wherein the foaming agent is an expandable solid foaming agent and is expanded by the curing process of step iii) to form a plurality of pores.

wherein the micropores of the polishing layer have a value of 0.7 to 0.8 as calculated according to the following Equation 2,

wherein the inorganic component is Mg and is contained in an amount of 0.01 to 1 ppm based on the total weight of the polishing layer:

[Equation 2]

$$\frac{D10}{D50}$$

wherein

D10 represents a diameter of pores in a 10% volume cumulative distribution, and

D50 represents a diameter of pores in a 50% volume cumulative distribution.

8. A method for fabricating a semiconductor device comprising steps of:

1) providing a polishing pad comprising a polishing layer; and

2) polishing a semiconductor substrate while allowing the semiconductor substrate and the polishing layer to rotate relative to each other so that a polishing-target surface of the semiconductor substrate is in contact with a polishing surface of the polishing layer,

wherein the polishing layer contains: a plurality of micropores each having a shell; and an inorganic component,

wherein the shell is derived from an expandable solid foaming agent,

wherein the micropores of the polishing layer have a value of 0.7 to 0.8 as calculated according to the following Equation 2,

wherein the inorganic component is Mg and is contained in an amount of 0.01 to 1 ppm based on the total weight of the polishing layer:

[Equation 2]

$$\frac{D10}{D50}$$

wherein

D10 represents a diameter of pores in a 10% volume cumulative distribution, and

D50 represents a diameter of pores in a 50% volume cumulative distribution.