

ABSTRACT

The purpose of the present invention is to provide: a cleaning agent for a semiconductor substrate superior in corrosion resistance of a tungsten wiring or a tungsten alloy wiring, and superior in removal property of polishing fines (particle) such as silica or alumina, remaining at surface of the semiconductor substrate, in particular, at surface of a silicon oxide film such as a TEOS film, after a chemical mechanical polishing process; and a method for processing a semiconductor substrate surface. The present invention relates to a cleaning agent for a semiconductor substrate to be used in a post process of a chemical mechanical polishing process of the semiconductor substrate having a tungsten wiring or a tungsten alloy wiring, and a silicon oxide film, comprising (A) a phosphonic acid-based chelating agent, (B) a primary or secondary monoamine having at least one alkyl group or hydroxyalkyl group in a molecule and (C) water, wherein a pH is over 6 and below 7; and a method for processing a semiconductor substrate surface.