ABRASIVE COMPOSITION AND METHOD FOR MANUFACTURING SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE

ABSTRACT

The present invention relates to a polishing composition used in a step of polishing until a barrier layer adjacent to a copper layer is exposed, in a pattern formation of polishing the copper layer provided on an insulating layer through the barrier layer thereby alternately forming a copper embedded wiring and the insulating layer, the polishing composition including: an alicyclic resin acid; a colloidal silica in which a content thereof in the polishing composition is from 0.1 to 1.5% by mass, an average primary particle size thereof is from 10 to 40 nm, an average secondary particle size thereof is from 30 to 80 nm, and (the average secondary particle size × the content) is in a range of from 10 to 40; and tetramethylammonium ion.

Figure 1