ABSTRACT

An insulating film comprising an organic silicon material having a C-Si bond and a Si-O bond is used for a semiconductor integrated circuit, and for polishing of its surface, a polishing compound comprising water and particles of at least one specific rare earth compound selected from the group consisting of a rare earth oxide, a rare earth fluoride, a rare earth oxyfluoride, a rare earth oxide except cerium oxide and a composite compound thereof, or a polishing compound having the above composition and further containing cerium oxide particles, is used. It is possible to provide a high quality polished surface which is free from or has reduced defects such as cracks, scratches or film peeling.