Abstract: In this paper,the transport rule of detrapped charges(either negative surfacecharges or positive surface and bulk charges)in the bulk of the silicon dioxidefilm electrets was systematically studied. The discharge behavior of silicon dioxideeIectret,the influence of chemical surface treatment on charge stability and theshift of charge layer in the bulk for SiO_2 were investigated. The mean chargedepth can be shifted from the near free surface into the bulk of SiO_2 by control-ling the ageing temperature. The negative charges in the bulk of silicon dioxidehave excellent stability,which is a very lmportant result for the study being doneabout the improvement of quality for SiO_2 micro-sensors.