Multistage Chemical Mechanical Polishing Process Applied To Materials Of The Semiconductor Industry

ABSTRACT

Process (100) for the polishing of a flat substrate (Waf) by means of a planarization and polishing machine comprising a support plate (Pl) provided with a polishing pad (Pol.Pad), a head (Cond.Head) for conditioning the polishing pad, and a head (Pol.Head) for holding the flat substrate (Waf) against the polishing pad, the process comprising a first stage (110) of a first conditioning of the polishing pad (Pol.Pad) by means of the conditioning head (Cond.Head), the flat substrate (Waf) not being subjected to a polishing operation; a second stage (120) of a first polishing of the flat substrate (Waf), the polishing pad not being subjected to a conditioning operation; and a third stage (130) in which (i) a second polishing of the flat substrate (Waf) is carried out and, simultaneously, (ii) a second conditioning of the polishing pad (Pol.Pad) is carried out.

Fig. 1