

ABSTRACT

A polishing pad suitable for polishing at least one of semiconductor, optical, magnetic or electromechanical substrates comprises: a polishing layer including a polyurethane wherein the polyurethane has phase separated silicon-rich domains surrounded by polyurethane regions wherein the phase separated silicon-rich domains comprise silicone-based oligomeric repeat units that are covalently bonded to the polyurethane. Polishing using this pad can achieve higher removal rate and/or lower defect than when polishing with a pad which is similar but which lacks the phase separated silicon-rich domains.

FIG. 1