

CLAIM(S):

1. A polishing pad for chemical-mechanical polishing comprising a porous polymeric material, wherein the polishing pad comprises closed pores and wherein the polishing pad has a void volume fraction of 70% or more.
2. The polishing pad of claim 1, wherein the polishing pad has a void volume fraction of 80% or more.
3. The polishing pad of claim 1, wherein the porous polymeric material is formed from a polymer resin having a Shore D hardness according to ASTM D2240 of 15D to 75D.
4. The polishing pad of claim 3, wherein the porous polymeric material is formed from a polymer resin having a Shore D hardness according to ASTM D2240 of 25D to 72D.
5. The polishing pad of claim 1, wherein the pores have an average pore size of about 5 μm to 200 μm .
6. The polishing pad of claim 1, wherein the polishing pad has a compressibility of 5% or more.
7. The polishing pad of claim 1, wherein the polishing pad has a storage modulus of elasticity of 1 MPa or less.
8. The polishing pad of claim 1, wherein the polishing pad comprises a polymer resin selected from the group consisting of thermoplastic elastomers, thermoplastic polyurethanes, polyolefins, polycarbonates, polyvinylalcohols, nylons, elastomeric rubbers, styrenic polymers, polyaromatics, fluoropolymers, polyimides, cross-linked polyurethanes, cross-linked polyolefins, polyethers, polyesters, polyacrylates, elastomeric polyethylenes, polytetrafluoroethylenes, polyethyleneterephthalates, polyimides, polyaramides, polyarylenes, polystyrenes, polymethylmethacrylates, copolymers and block copolymers thereof, and mixtures and blends thereof.
9. The polishing pad of claim 8, wherein the polymer resin is a thermoplastic polyurethane.