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(54) Title: SYSTEM AND METHOD FOR PRODUCING DAMPING POLYURETHANE CMP PADS

(57) Abstract: A solid product formed by polymerizing a urethane prepolymer in the presence of a curative has a Bashore rebound that is less than about 38%. Preferably, the urethane prepolymer is an aliphatic isocyanate polyether prepolymer and the curative includes an aromatic diamine and a triol. To form a microcellular polyurethane material, the urethane prepolymer is frothed with inert gas, in the presence of a surfactant, then cured. The polyurethane can be employed to form highly damping CMP pads that have low rebound and can dissipate irregular energy and stabilize polishing to yield improved uniformity and less dishing.



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