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(54) Title: SILICON-BASED SELF-ASSEMBLING MONOLAYER COMPOSITIONS AND SURFACE PREPARATION USING
THE SAME

(57) Abstract: Disclosed is a SAM forming composition comprising a SAM monomer or precursor having a backbone with a surface reactive group, wherein the backbone contains no Si-C bonds and is selected from the group consisting of a Si-C bond-free polysilane and a trisilylamine. The surface reactive groups are disclosed for the surface to be covered being a dielectric surface and a metal surface, respectively. A process of forming a SAM on a surface and a process of forming a film on the SAM are also disclosed.

