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(54) Title: A PROCESS FOR PREPARING A DIELECTRIC INTERLAYER FILM CONTAINING SILICON BETA ZEOLITE

(57) Abstract: A process for forming a zeolite beta dielectric layer onto a substrate such as a silicon wafer has been developed. The zeolite beta is characterized in that it has a Si/Al of at least 25 and has crystallites from 5 to 40 nanometers. The process involves first dealuminating a starting zeolite beta, then preparing a slurry of the dealuminated zeolite beta followed by coating a substrate, e.g. silicon wafer with the slurry, heating to form a zeolite beta film and treating the zeolite beta with a silylating agent.



WO 2006/065591 A3