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(54) Title: NOVEL COPOLYMER, PHOTORESIST COMPOSITIONS THEREOF AND DEEP UV BILAYER SYSTEM THEREOF

(57) Abstract: Novel copolymers suitable for forming the top layer photoimagable coating in a deep UV, particularly a 193 nm and 248 nm, bilayer resist system providing high resolution photolithography. Chemically amplified photoresist composition an organosilicon moieties suitable for use in the binder resin for photoimagable etching resistant photoresist composition that is suitable as a material for use in ArF AND KrF photolithography using the novel copolymer. Novel copolymer include a first repeating unit of one or more units represented by Structure (IA) or Structure (IB) or Structure (IC).