Title (en)

PHOTOSENSITIVE LACQUER FOR PROVIDING A COATING ON A SEMICONDUCTOR SUBSTRATE OR A MASK

Title (de)

PHOTOSENSITIVER LACK ZUR BESCHICHTUNG AUF EINEM HALBLEITER-SUBSTRAT ODER EINER MASKE

Title (fr)

VERNIS PHOTOSENSIBLE POUR ENDUIRE UN SUPPORT SEMI-CONDUCTEUR OU UN MASQUE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO03102694A1] The invention relates to a photosensitive lacquer (100) for providing a coating on a semiconductor substrate or a mask. The lacquer according to the invention comprises a photosensitive acidifier (D), a solvent (E) and at least two different base polymers. A first base polymer comprises cyclo-aliphatic basic structures (A) which substantially absorb light irradiated thereon at 248 nm and which are substantially transparent to light irradiated at 193 nm. A second base polymer comprises aromatic basic structures (B) which substantially absorb light irradiated thereon at 193 nm and which are substantially transparent to light irradiated at 248 nm. When such a lacquer (100) is applied to a substrate in a layer thickness of 50 to 400 nm and the percentage of the second base polymer comprising the aromatic basic structures is between 1 and 25 mole- %, and when exposed to a wavelength of 193 nm, a higher structure contrast and better etching stability is reached and defects are reduced. Exposure across the entire depth range of the lacquer (100) is likewise ensured.

IPC 1-7

G03F 7/039

IPC 8 full level

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