

Photomask Blank and Making Method

ABSTRACT

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A photomask blank is processed into a transmissive photomask for use in photolithography for forming a pattern on a recipient using exposure light. The photomask blank comprises a transparent substrate, a first film of a material which is etchable by chlorine/oxygen-based dry etching, and a second film of a silicon-containing material.

10 The second film includes a layer having a refractive index n of at least 1.6 or an extinction coefficient k of at least 0.3 with respect to the wavelength of inspection light which is longer than the exposure light.

Fig. 1