

MATERIALS, COMPONENTS, AND METHODS FOR USE WITH EXTREME ULTRAVIOLET RADIATION IN LITHOGRAPHY AND OTHER APPLICATIONS

ABSTRACT

Nano structured photonic materials and associated components for use in devices and systems operating at ultraviolet (UV), extreme ultraviolet (EUV), and/or soft Xray wavelengths are described. Such a material may be fabricated with nanoscale features tailored for a selected wavelength range, such as at particular UV, EUV, or soft Xray wavelengths or wavelength ranges. Such a material may be used to make components such as mirrors, lenses or other optics, panels, lightsources, masks, photoresists, or other components for use in applications such as lithography, wafer patterning, biomedical applications, or other applications.

[Fig. 5]