Mask and Method to Pattern Chromeless Phase Lithography Contact Hole

Abstract

A chromeless phase shift mask and Method for making and using. The A chromeless phase shift mask is used to pattern contact holes. The chromeless phase shift mask preferably comprises: a first phase shift region and a second phase shfit region; the first region is comprised of a unit cell which is comprised of a rectangular center section and at least three rectangular sections (legs) outwards extending from the rectangular center section. The second region is adjacent to said first region. The interference between the first and second phase shift regions creates a contact hole pattern.

FIGURE 8A