

Abstract of the Disclosure

**APPARATUS, METHOD AND COMPUTER PROGRAM PRODUCT FOR
PERFORMING A MODEL BASED OPTICAL PROXIMITY CORRECTION
FACTORING NEIGHBOR INFLUENCE**

Model Based Optical Proximity Correction (MOPC) biasing techniques may be utilized for optimizing a mask pattern. However, conventional MOPC techniques do not account for influence from neighboring features on a mask. This influence may be factored in the following manner – first, generating a predicted pattern from a target pattern and selecting a plurality of evaluation points at which biasing may be determined. Next, a set of multivariable equations are generated for each evaluation point, each equation representing influence of neighboring features on a mask. The equations are solved to determine that amount of bias at each evaluation point, and the mask is optimized accordingly. This process may be repeated until the mask pattern is further optimized.