

**A METHOD, PROGRAM PRODUCT AND APPARATUS FOR PERFORMING
DECOMPOSITION OF A PATTERN FOR USE IN A DPT PROCESS**

ABSTRACT

A method of decomposing a target pattern containing features to be printed on a wafer into multiple patterns. The method includes the steps of: (a) defining a region of influence which indicates the minimum necessary space between features to be imaged; (b) selecting a vertex associated with a feature of the target pattern; (c) determining if an edge of another feature is within the region of influence with respect to the vertex; and (d) splitting the another feature into two polygons if the edge of another feature is within the region of influence.