layout cells 401" and 402" respectively corresponding to the plurality of initial layout cells 401 and 402. Please refer to Fig._5, which shows an inversed layout from the initial layout. The inversed layout cells 401" and 402" have different patterns, but the initial layout cells they respectively correspond to are in the same group. In order to make the inversed layout cells in ~~a~~ the same respective group identical, the inversed layout cells in the same respective group must be inspected to find out any variant inversed layout cell therefrom, i.e. any different pattern in the same inversed layout cell group. Then all the inversed layout cells in the group can be caused to be identical (shape and size) to each other by replacing the variant ones with a selected one according to a result of the inspection. Then, the replaced inversed layout can be taken for a photomask layout.

[0061] According to the above embodiment, the combination of at least two patterns can be defined as a layout cell. The layout cells in a group have ~~not only~~ the same combinations, each of the same combinations includes a plurality of patterns ~~but also~~; and the distances among these patterns are identical to those in each of the other layout cells in the group. Please refer to Fig._8, which shows layout cells having a plurality of patterns, wherein the initial layout cells 803, 804 and 805 each having a plurality of patterns are categorized into a group.

Change(s) applied to document, /M.M.C./ 3/20/2012

Please replace paragraphs [00~~64~~63]-[00~~66~~65] with the following amended paragraphs:

1759360-1

Change(s) applied to document, /M.M.C./ 3/20/2012

Please replace paragraphs [0057]-[0061] with the following amended paragraphs:

[0057] Please refer to Fig._9, which shows a flow chart of the second preferable embodiment to make inversed layout cells in the group identical for shape and size. The method is usually executed by a prior computer program as follows.

[0058] Firstly, provide a layout having a plurality of patterns which may be different (shape or size) or the same (shape and size). Please refer to Fig._4, which shows a layout.

[0059] Then, analyze the layout by a method, specially a hierarchical method, to obtain a hierarchical structure having the plurality of initial layout cells. The purpose of using the hierarchical method is to categorize ones of the plurality of initial layout cells having (or consisting of) ~~a~~ the same specific patterns into a group. In Fig._4, the initial layout cells 401 and 402 have the same patterns. In order to make the layout and the photomask layout be inspected conveniently and match with each other, ones of the plurality of initial layout cells having (or consisting of) ~~a~~ the same specific patterns are categorized into a group. By the same way, the initial layout cells 411, 412 ,413 and 414 are categorized into a group.

[0060] Afterward, inverse the layout by a method, especially an inverse lithography method, to obtain an inversed layout having a plurality of inversed

[0036] Fig._2(A) shows a prior design layout;

[0037] Fig._2(B) shows a photomask layout produced by a prior flow;

[0038] Fig._3 shows a flow chart of the first preferable embodiment;

[0039] Fig._4 shows a layout;

[0040] Fig._5 shows an inversed layout from the initial layout;

[0041] Fig._6 shows a photomask layout ~~form~~ from the inversed layout;

[0042] Fig._7 shows an assimilated photomask layout from the photomask layout;

[0043] Fig._8 shows layout cells having a plurality of patterns;

[0044] Fig._9 shows a flow chart of the second preferable embodiment; and

[0045] Fig._10 shows a replaced photomask.

Change(s) applied to document, /M.M.C./ 3/20/2012

Please replace paragraphs [00~~48~~47]-[00~~53~~52] with the following amended paragraphs:

[0048] Then, analyze the layout by a method, especially a hierarchical method, to obtain a hierarchical structure having the plurality of initial layout cells. The purpose of using the hierarchical method is to categorize ones of the plurality of initial layout cells having (or consisting of) ~~a~~ the same specific patterns into a group. In Fig._4, the initial layout cells 401 and 402 have the same patterns. In order to make the layout and the photomask layout be inspected conveniently and match with each other, ones of the plurality of initial layout cells having (or consisting of) ~~a~~ the same specific patterns are categorized into a group. By the same

and the yield will increase.

Change(s) applied to document, /M.M.C./ 3/20/2012

Please replace paragraph [0028] with the following amended paragraph:

[0028] According to one aspect of the present invention, replaced photomask is provided. A replaced photomask comprising: a substrate; and a plurality of etched patterns formed on the substrate according to a photomask layout which has a plurality of photomask layout patterns categorized into a plurality of first groups, each of which the first groups includes a plurality of identical initial layout patterns, and each of the first groups is reproduced from an initial layout having a plurality of initial layout patterns categorized into a plurality of second groups to which the plurality of first groups respectively correspond, wherein the plurality of photomask layout patterns respectively correspond to the plurality of initial layout patterns and at least one of the plurality of the photomask layout patterns is replaced by a standardized photomask layout pattern.

Please replace paragraph [0031] with the following amended paragraph:

[0031] Preferably, the replaced photomask is provided, wherein each of the plurality of first groups each of which consists of a plurality of identical initial layout patterns.

Please replace paragraphs [0035]-[0045] with the following amended paragraphs:

[0035] Fig._1 shows a flow chart of a prior inverse lithography;

1759360-1