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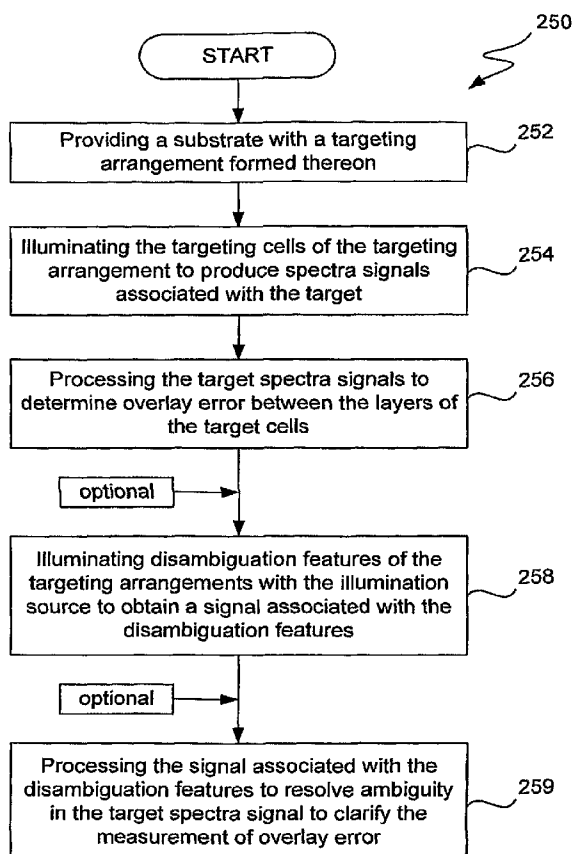
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(54) Title: APPARATUS AND METHOD FOR DETECTING OVERLAY ERRORS USING SCATTEROMETRY



(57) Abstract: Embodiments of the invention include a scatterometry target for use in determining the alignment between substrate layers. A target arrangement is formed on a substrate and comprises a plurality of target cells. Each cell has two layers of periodic features constructed such that an upper layer is arranged above a lower layer and configured so that the periodic features of the upper layer have an offset and/or different pitch than periodic features of the lower layer. The pitches are arranged to generate a periodic signal when the target is exposed to an illumination source. The target also includes disambiguation features arranged between the cells and configured to resolve ambiguities caused by the periodic signals generated by the cells when exposed to the illumination source.

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
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Search Terms: scatterometry, scatterometer

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2005/0195398 A1 (ADEL et al.) 8 September 2005 (08.09.2005), Para [0055], [0056], [0069], [0151], [0178]-[0186], [0193]-[0195], [0212]-[0239], [0263], [0269], [0314], Fig 5E, 9A, 9B, 11A, 12, 16, 21.	1-26

Further documents are listed in the continuation of Box C.

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