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Road, Wilmington, Massachusetts 01887 (US). **VAGOS, Pedro**; 16 Jonspin Road, Wilmington, Massachusetts 01887 (US).

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(74) Agent: **HALBERT, Michael**; Paradise & Li, 1630 S. Delaware St., Suite 5086, San Mateo, California 94402 (US).

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(71) Applicant: **ONTO INNOVATION INC.** [US/US]; 16 Jonspin Road, Wilmington, Massachusetts 01887 (US).

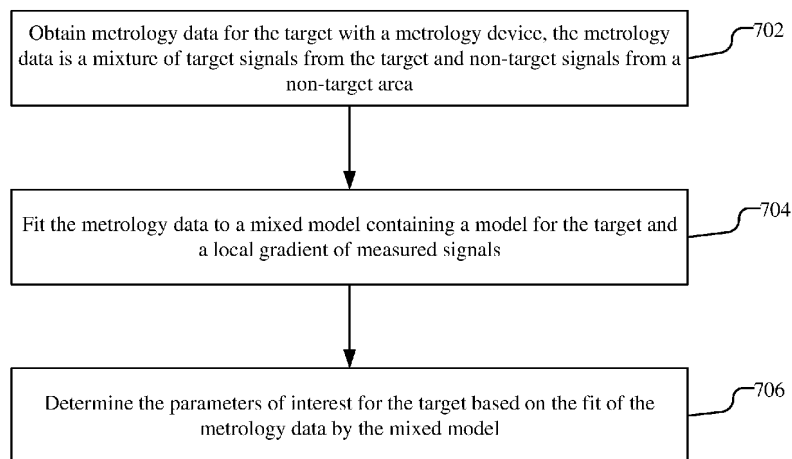
(72) Inventors: **SHI, Jingsheng**; 16 Jonspin Road, Wilmington, Massachusetts 01887 (US). **LIU, Yiliang**; 16 Jonspin Road, Wilmington, Massachusetts 01887 (US). **LI, Jie**; 16 Jonspin

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(54) Title: MEASUREMENTS OF STRUCTURES IN PRESENCE OF SIGNAL CONTAMINATIONS

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FIG. 7



(57) Abstract: Contamination of metrology data by non-target signals caused by the measurement spot being incident on target and non-target areas may be reduced or eliminated using local gradient based mixed modeling or a machine learning model. The local gradient based mixed modeling approach uses a mixed model based on a model of the target region and a term of the local gradient of measured signals, which may be determined from scan data. The machine learning approach obtains mixed metrology data from a plurality of locations with respect to the target. The mixed metrology data is a mixture of target signals from the target and non-target signals from a non-target area and is used by a trained machine learning model to determine target metrology data that includes target signals from the target without the non-target signals and is used to determine parameters of interest for the target.

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