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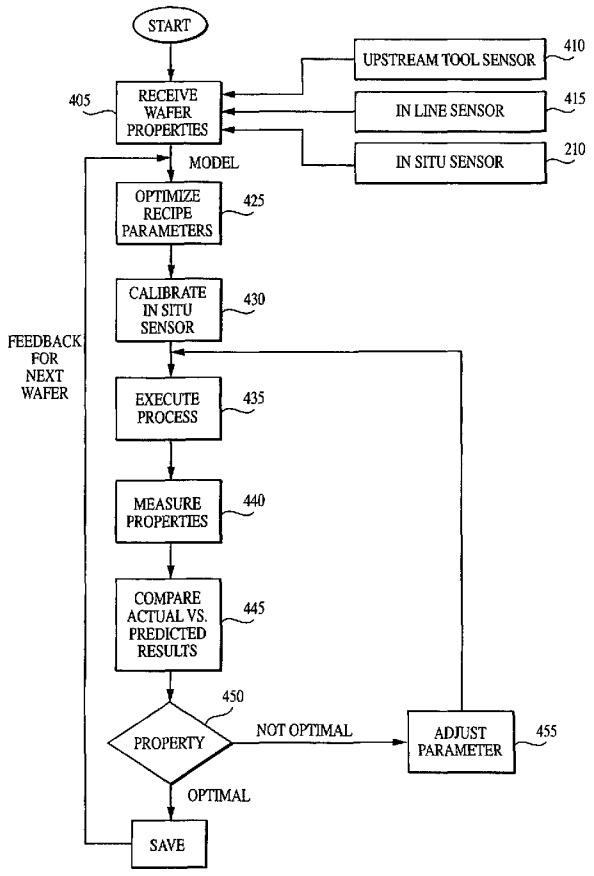
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(54) Title: IN SITU SENSOR BASED CONTROL OF SEMICONDUCTOR PROCESSING PROCEDURE



(57) Abstract: A wafer property is controlled by a semiconductor processing tool using data collected from an in situ sensor. Initially, data relating to the wafer property is collected by the in situ sensor during a process executed according to a wafer recipe parameters. Subsequently, the process may be adjusted by modifying the recipe parameters according to comparisons between the data collected by the in situ sensor relating to the wafer property and the results predicted by a process model used to predict wafer outputs. A subsequent process utilizing the data collected by the in situ sensor is then executed. In at least some embodiments of the present invention the data may be used for run-to-run control on subsequent wafers processed by the tool.

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