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(71) Applicant: **LAM RESEARCH CORPORATION**
[US/US]; 4650 Cushing Parkway, Fremont, California
94538 (US).

(72) Inventors: **VARNELL, Jason Alexander**; 4650 Cushing
Parkway, Fremont, California 94538 (US). **AUSTIN,
Dustin Zachary**; 4650 Cushing Parkway, Fremont, Cali-
fornia 94538 (US). **RAMASAGARAM, Praneeth**; 4650
Cushing Parkway, Fremont, California 94538 (US). **BART**

J., Van Schravendijk; 4650 Cushing Parkway, Fremont,
California 94538 (US). **PETRAGLIA, Jennifer Leigh**;
4650 Cushing Parkway, Fremont, California 94538 (US).
AGNEW, Douglas Walter; 4650 Cushing Parkway, Fre-
mont, California 94538 (US). **GUPTA, Awnish**; 4650
Cushing Parkway, Fremont, California 94538 (US). **LIU,
Pei-Chi**; 4650 Cushing Parkway, Fremont, California
94538 (US). **AGARWAL, Pulkit**; 4650 Cushing Parkway,
Fremont, California 94538 (US).

(74) Agent: **TSAL, Patricia** et al.; WEAVER AUSTIN VIL-
LENEUVE & SAMPSON LLP, P.O. Box. 70250, Oakland,
California 94612-0250 (US).

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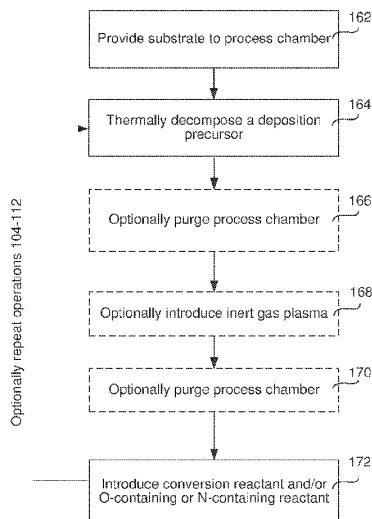


FIG. 1D

(57) Abstract: Methods and apparatuses for depositing superconformal dielectric material using thermal chemical vapor deposition-enhanced atomic layer deposition are provided. Methods and apparatuses for depositing material using modified atomic layer deposition integrating pyrolyzing a deposition precursor such as an aminosilane during dose to form a pyrolyzed layer, optional inert gas plasma for densification, and an oxygen-containing or nitrogen-containing plasma to convert the pyrolyzed layer into an oxygen-containing or nitrogen-containing material.

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