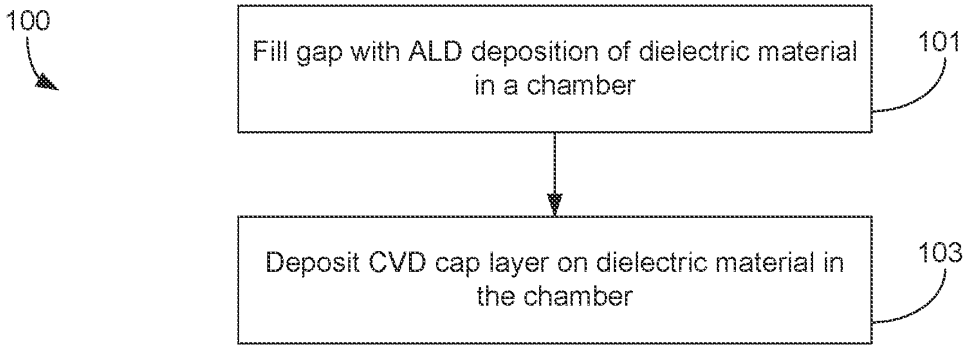

100
Fill gap with ALD deposition of dielectric material in a chamber
101
Deposit CVD cap layer on dielectric material in the chamber
103

FIG. 1

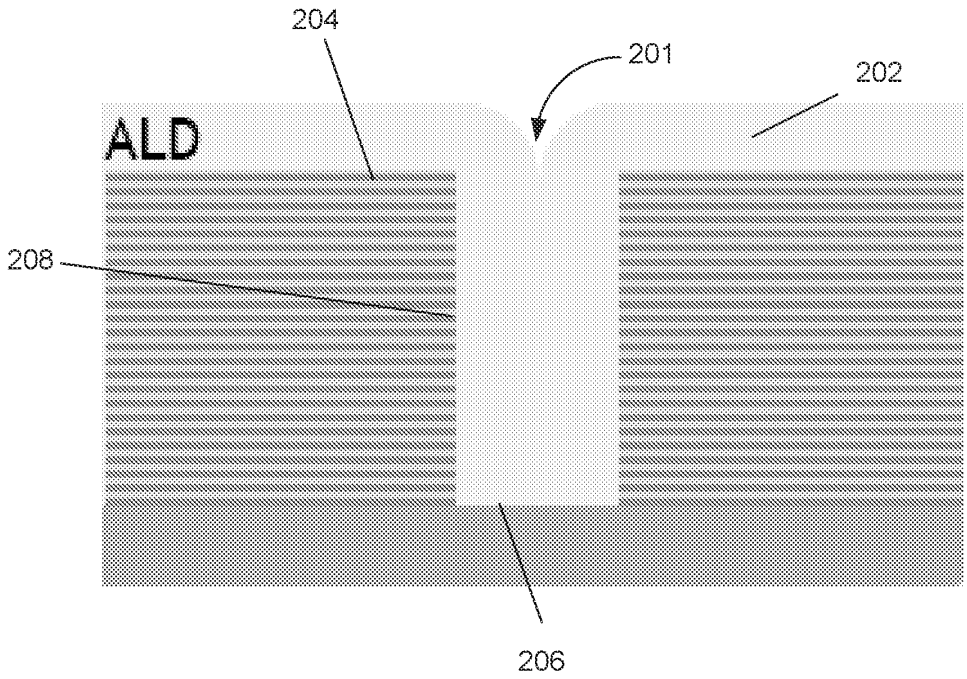


FIG. 2

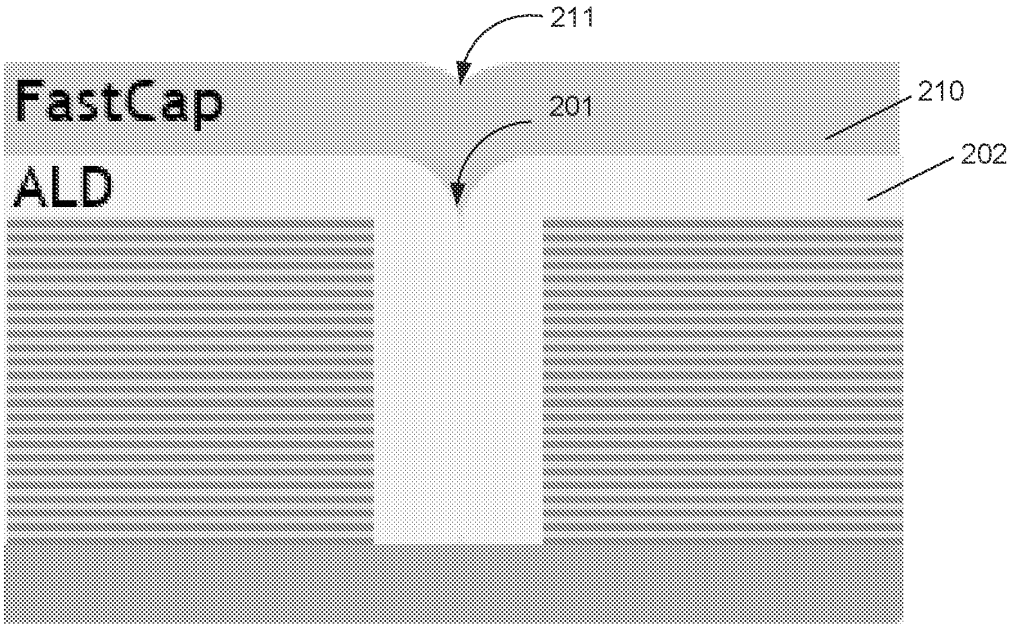


FIG. 3

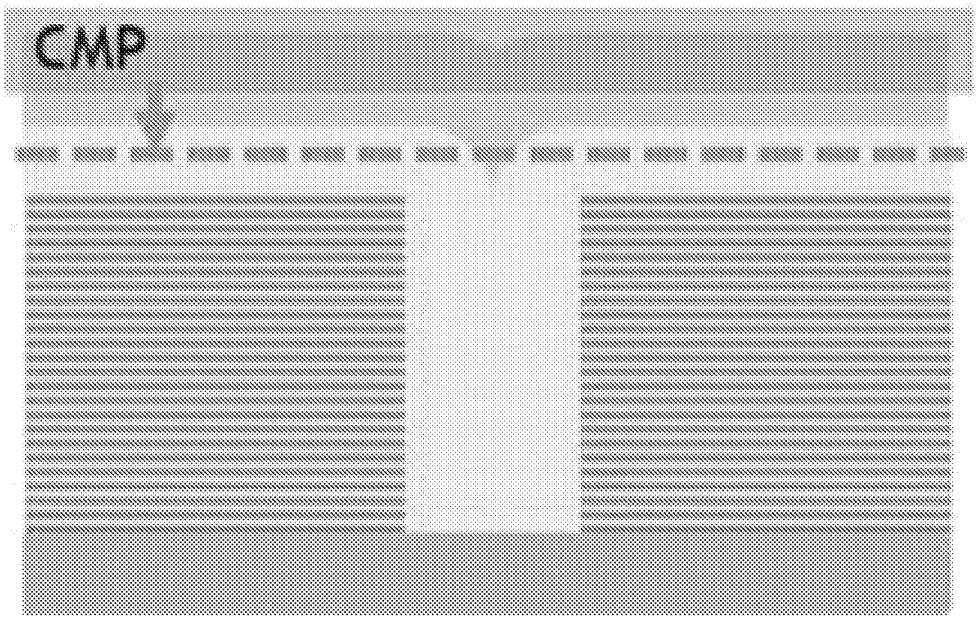


FIG. 4

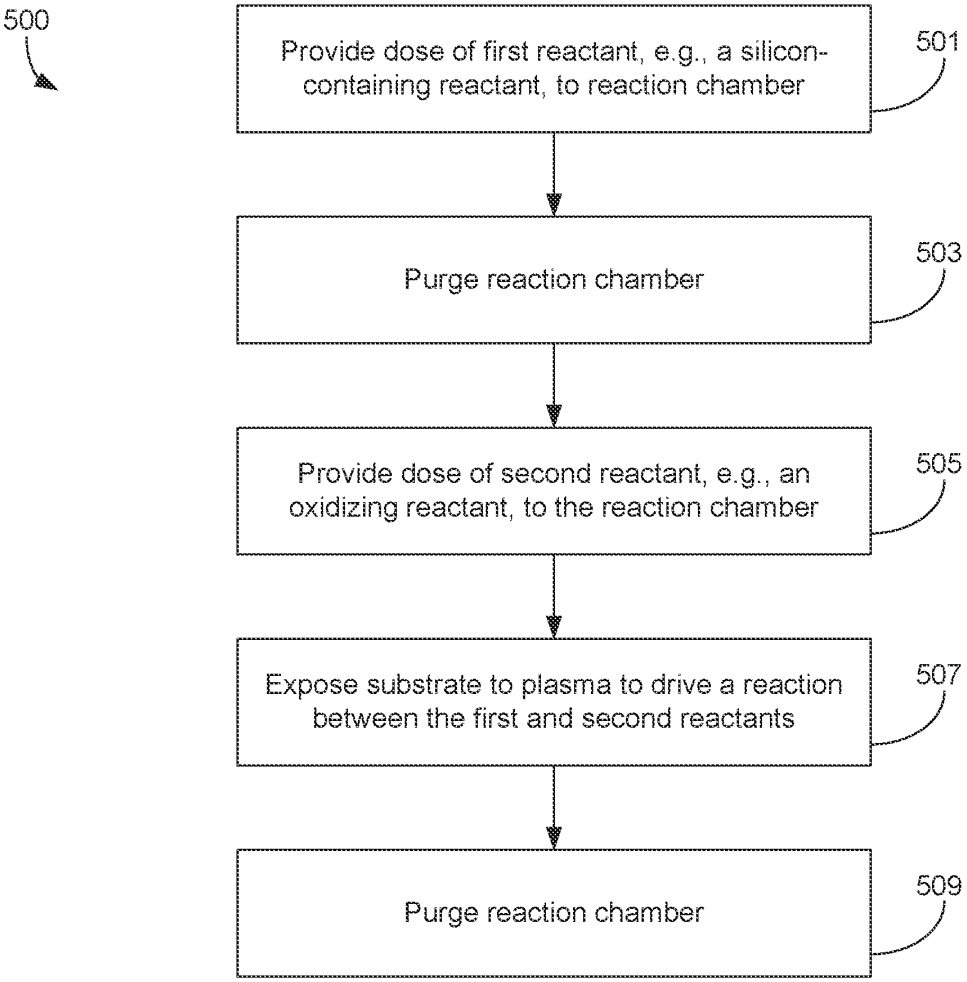

500
Provide dose of first reactant, e.g., a silicon-containing reactant, to reaction chamber
501
Purge reaction chamber
503
Provide dose of second reactant, e.g., an oxidizing reactant, to the reaction chamber
505
Expose substrate to plasma to drive a reaction between the first and second reactants
507
Purge reaction chamber
509

FIG. 5A

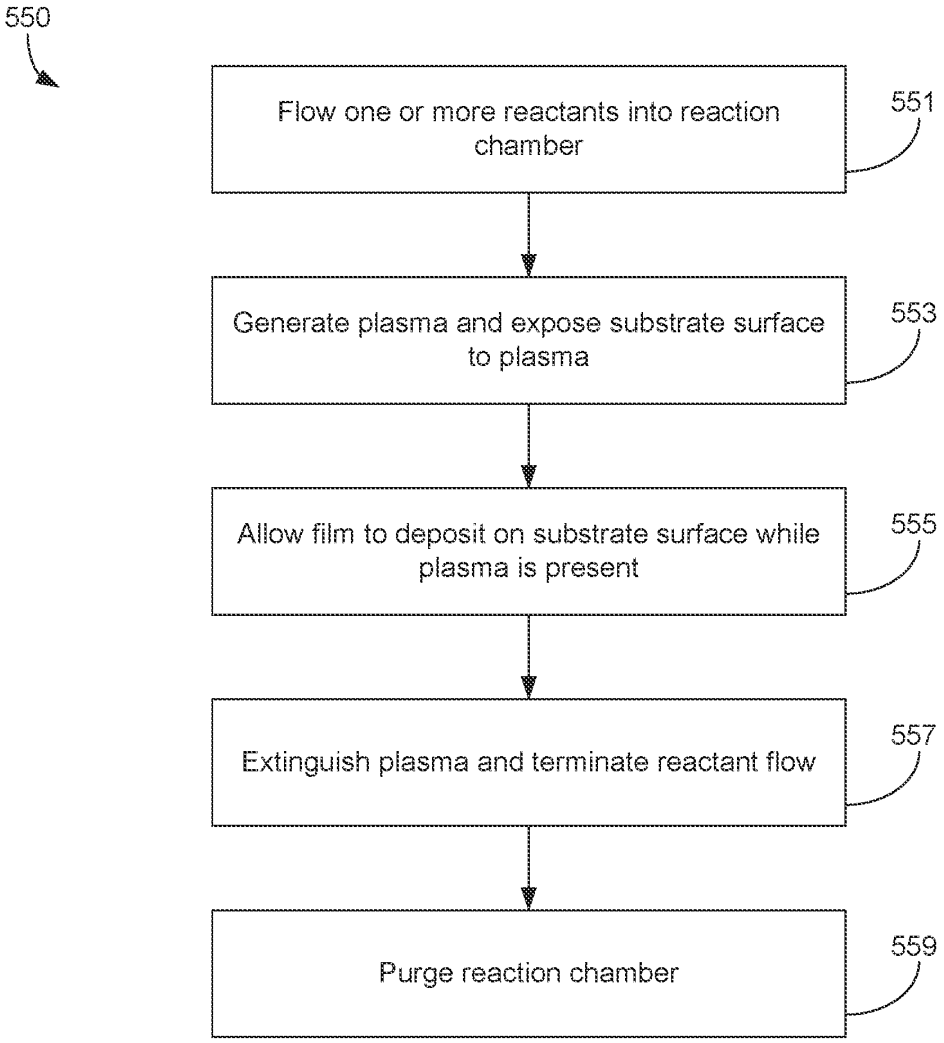

550
Flow one or more reactants into reaction chamber
551
Generate plasma and expose substrate surface to plasma
553
Allow film to deposit on substrate surface while plasma is present
555
Extinguish plasma and terminate reactant flow
557
Purge reaction chamber
559

FIG. 5B

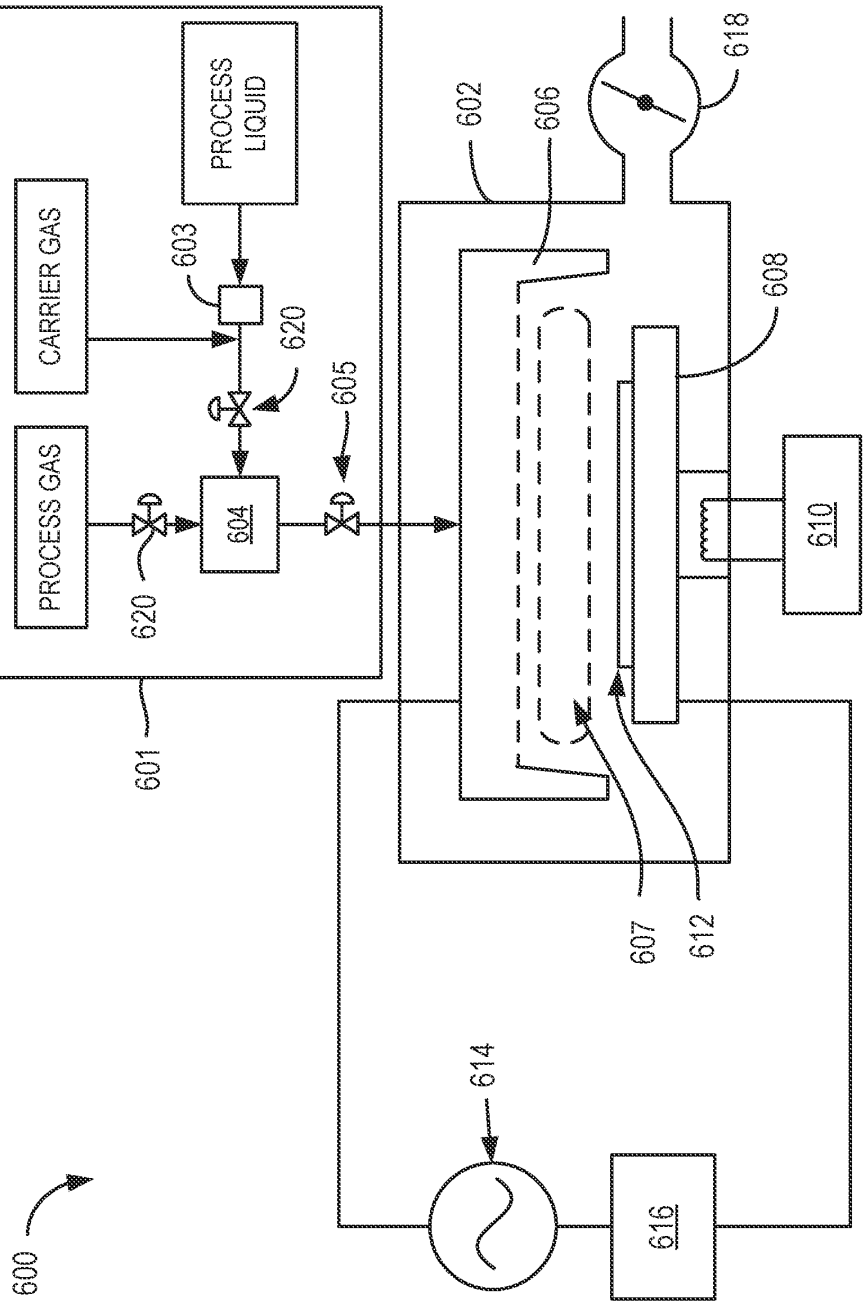

PROCESS LIQUID
CARRIER GAS
PROCESS GAS
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FIG. 6

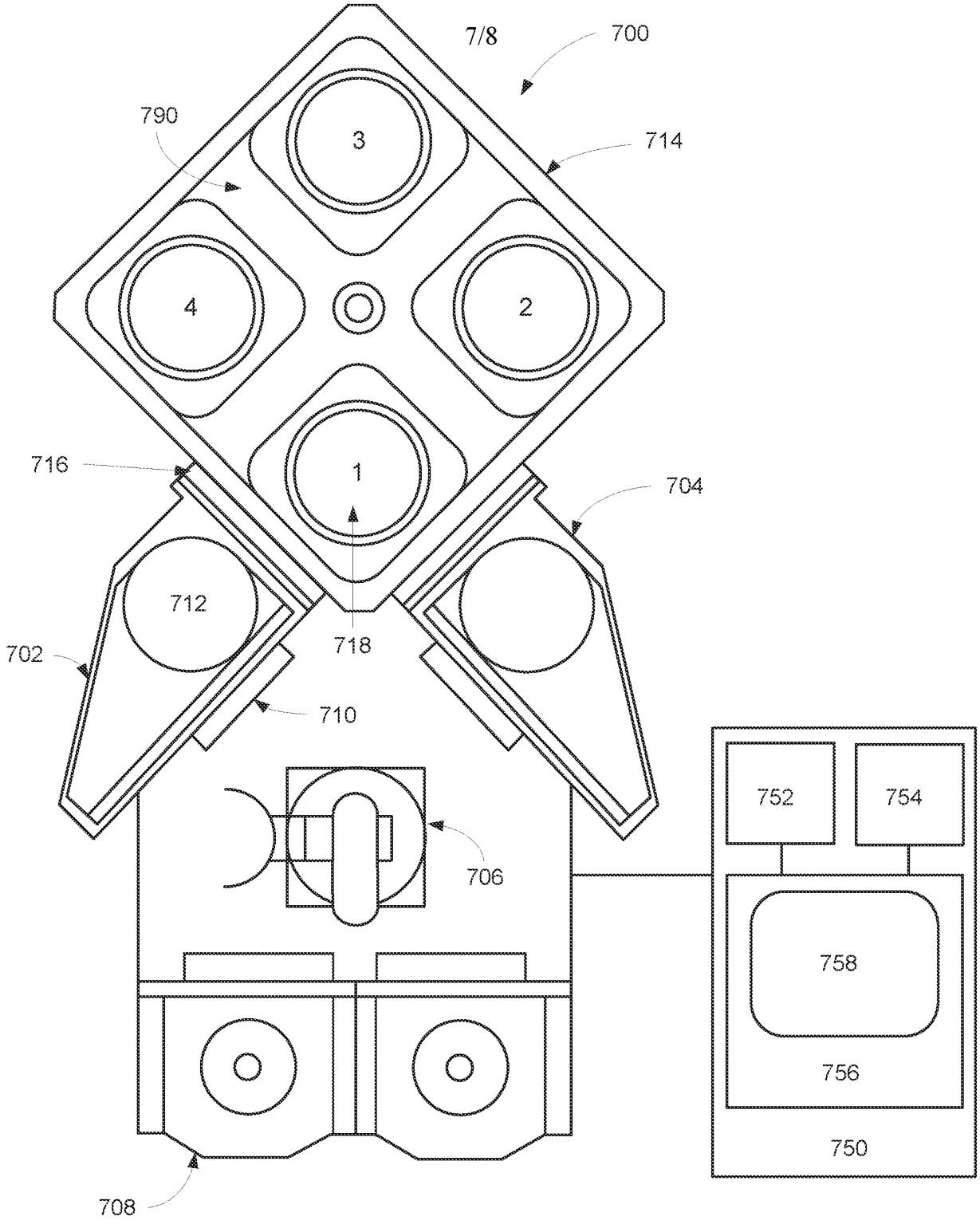

700
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758
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750
708

FIG. 7

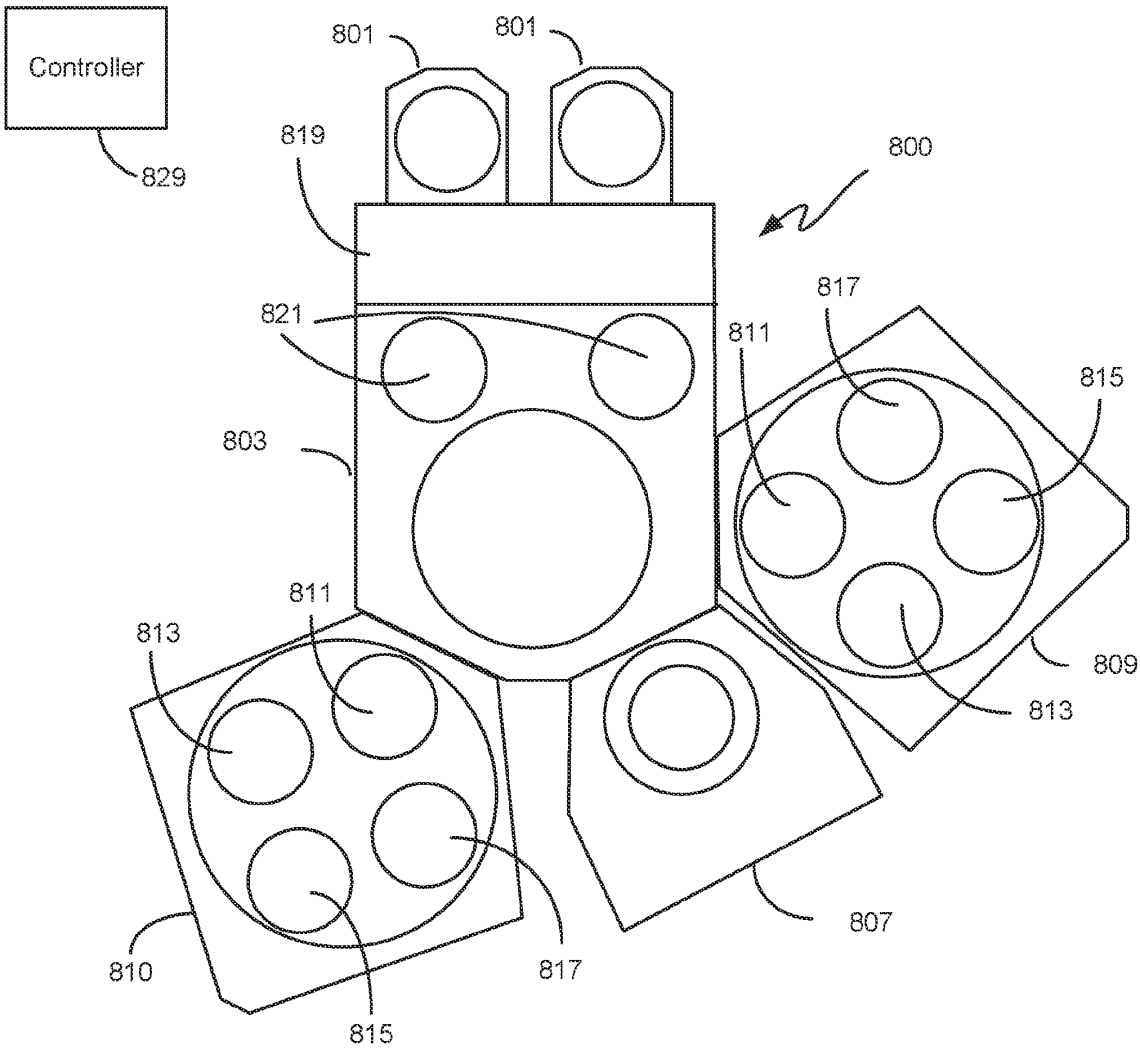

Controller
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FIG. 8