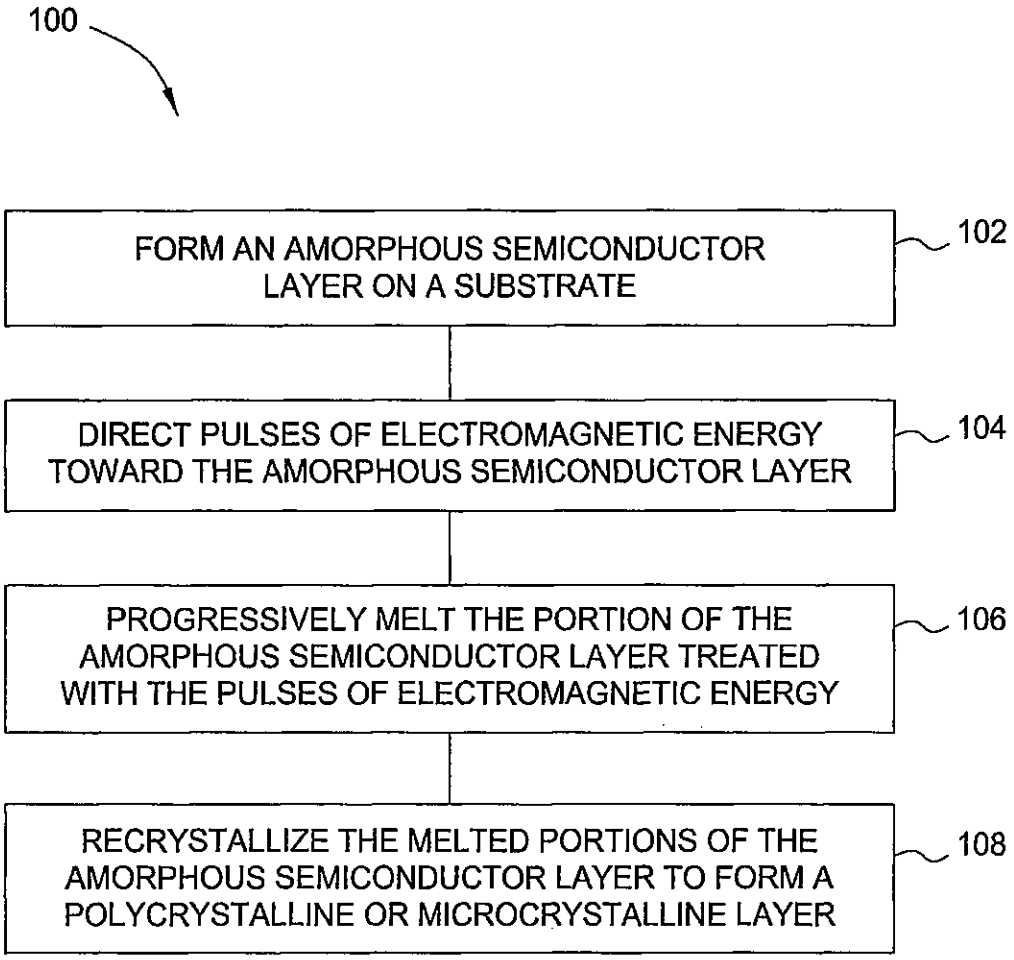

100
FORM AN AMORPHOUS SEMICONDUCTOR LAYER ON A SUBSTRATE
102
DIRECT PULSES OF ELECTROMAGNETIC ENERGY TOWARD THE AMORPHOUS SEMICONDUCTOR LAYER
104
PROGRESSIVELY MELT THE PORTION OF THE AMORPHOUS SEMICONDUCTOR LAYER TREATED WITH THE PULSES OF ELECTROMAGNETIC ENERGY
106
RECRYSTALLIZE THE MELTED PORTIONS OF THE AMORPHOUS SEMICONDUCTOR LAYER TO FORM A POLYCRYSTALLINE OR MICROCRYSTALLINE LAYER
108

FIG. 1A

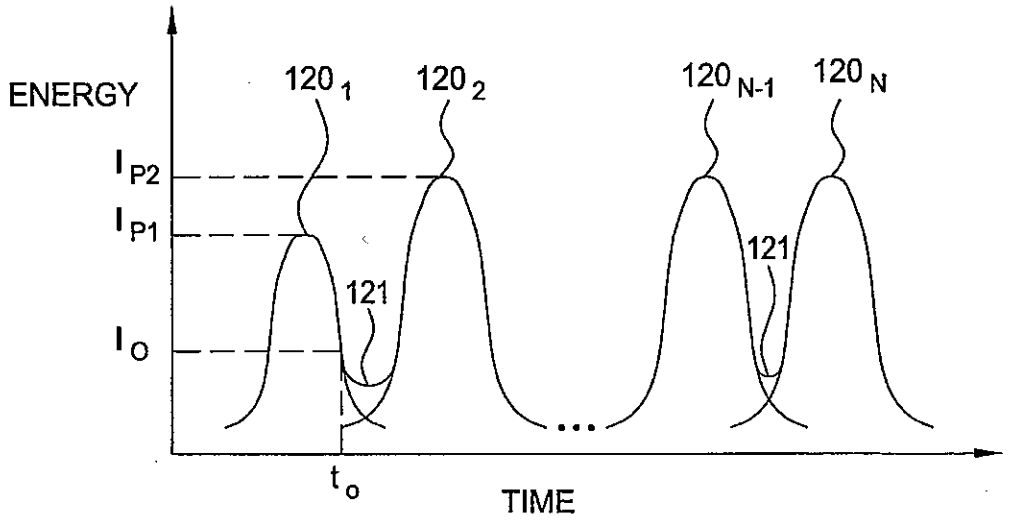


FIG. 1B

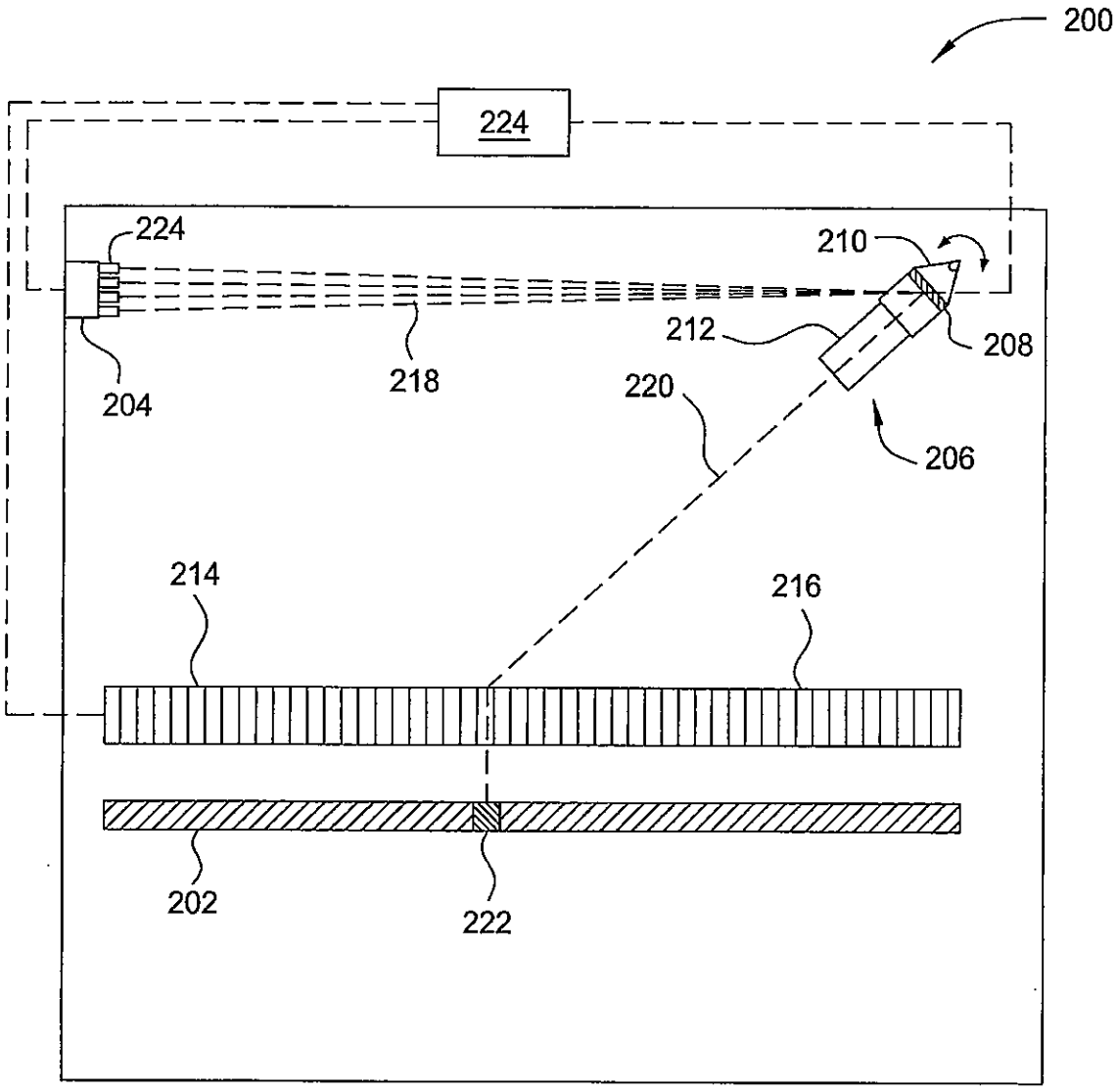


FIG. 2

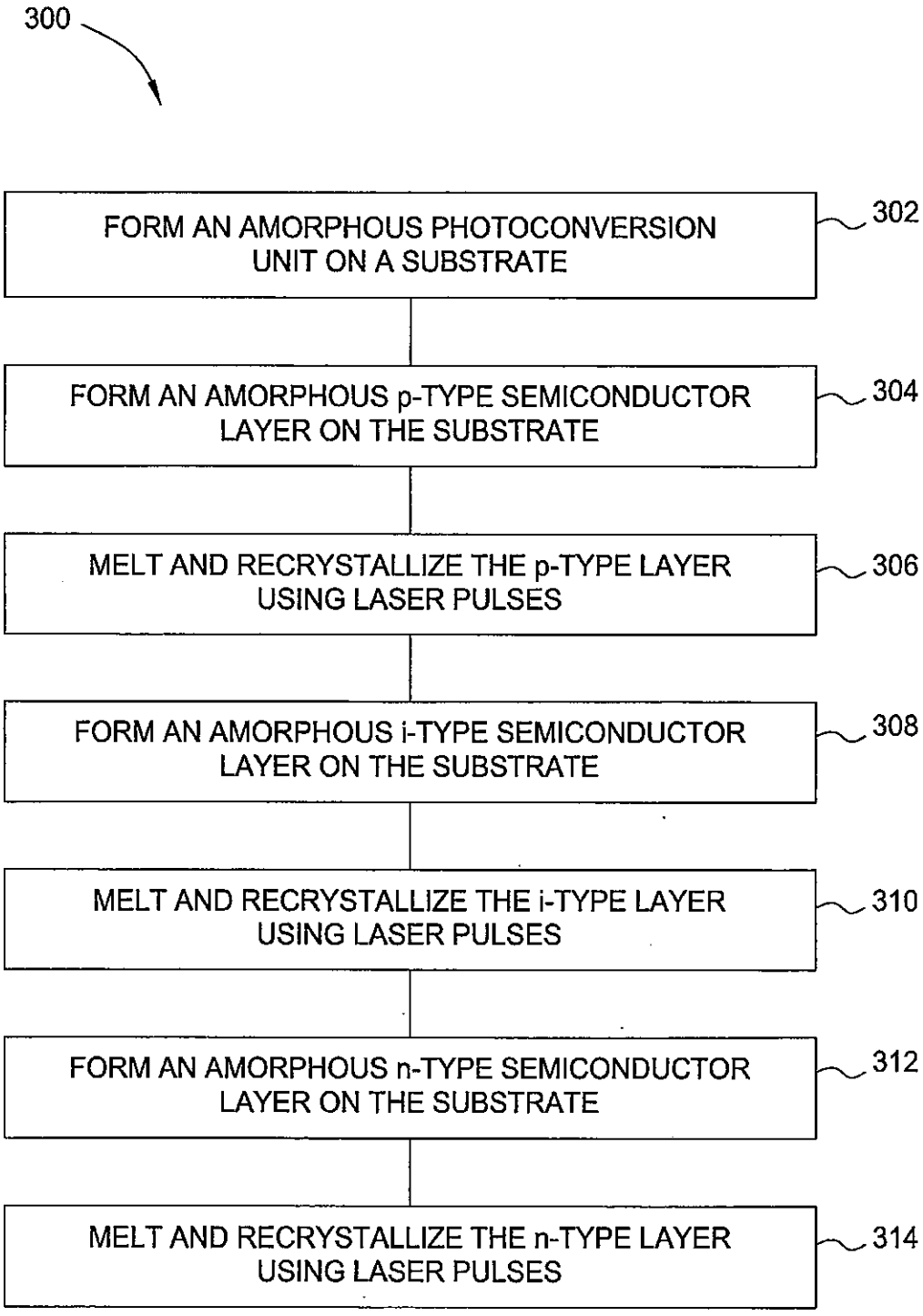

300
FORM AN AMORPHOUS PHOTOCONVERSION UNIT ON A SUBSTRATE
302
FORM AN AMORPHOUS p-TYPE SEMICONDUCTOR LAYER ON THE SUBSTRATE
304
MELT AND RECRYSTALLIZE THE p-TYPE LAYER USING LASER PULSES
306
FORM AN AMORPHOUS i-TYPE SEMICONDUCTOR LAYER ON THE SUBSTRATE
308
MELT AND RECRYSTALLIZE THE i-TYPE LAYER USING LASER PULSES
310
FORM AN AMORPHOUS n-TYPE SEMICONDUCTOR LAYER ON THE SUBSTRATE
312
MELT AND RECRYSTALLIZE THE n-TYPE LAYER USING LASER PULSES
314

FIG. 3A

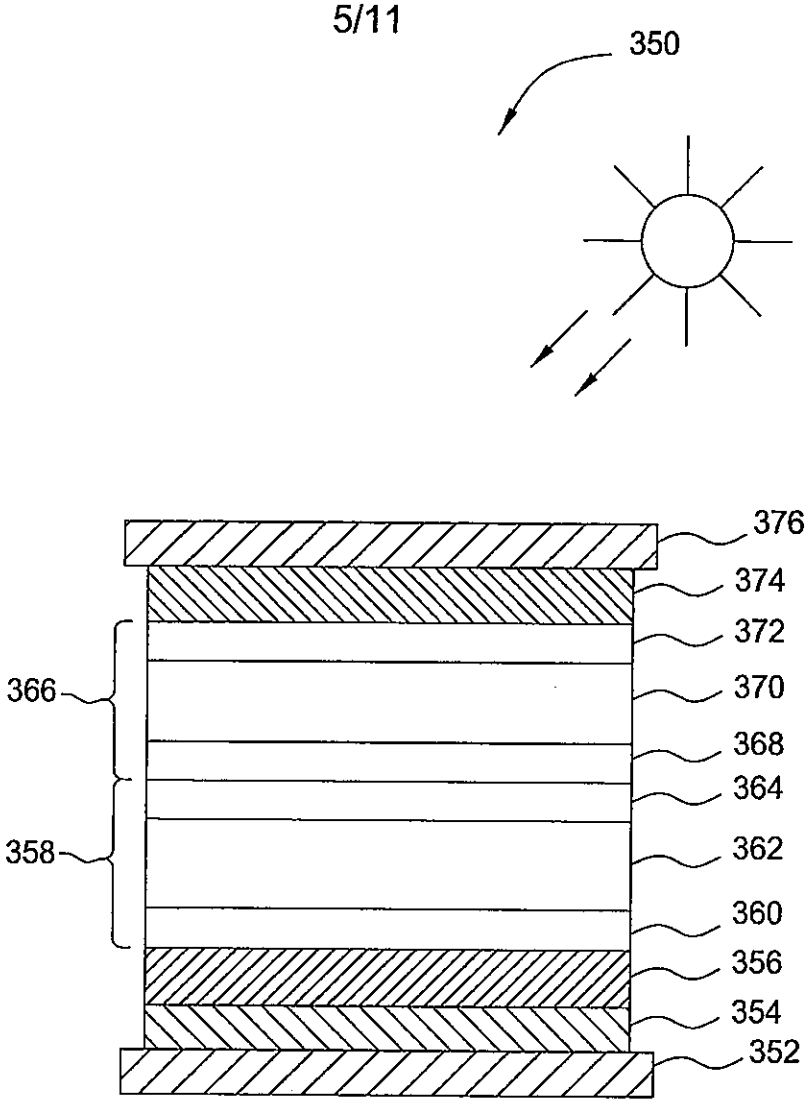


FIG. 3B

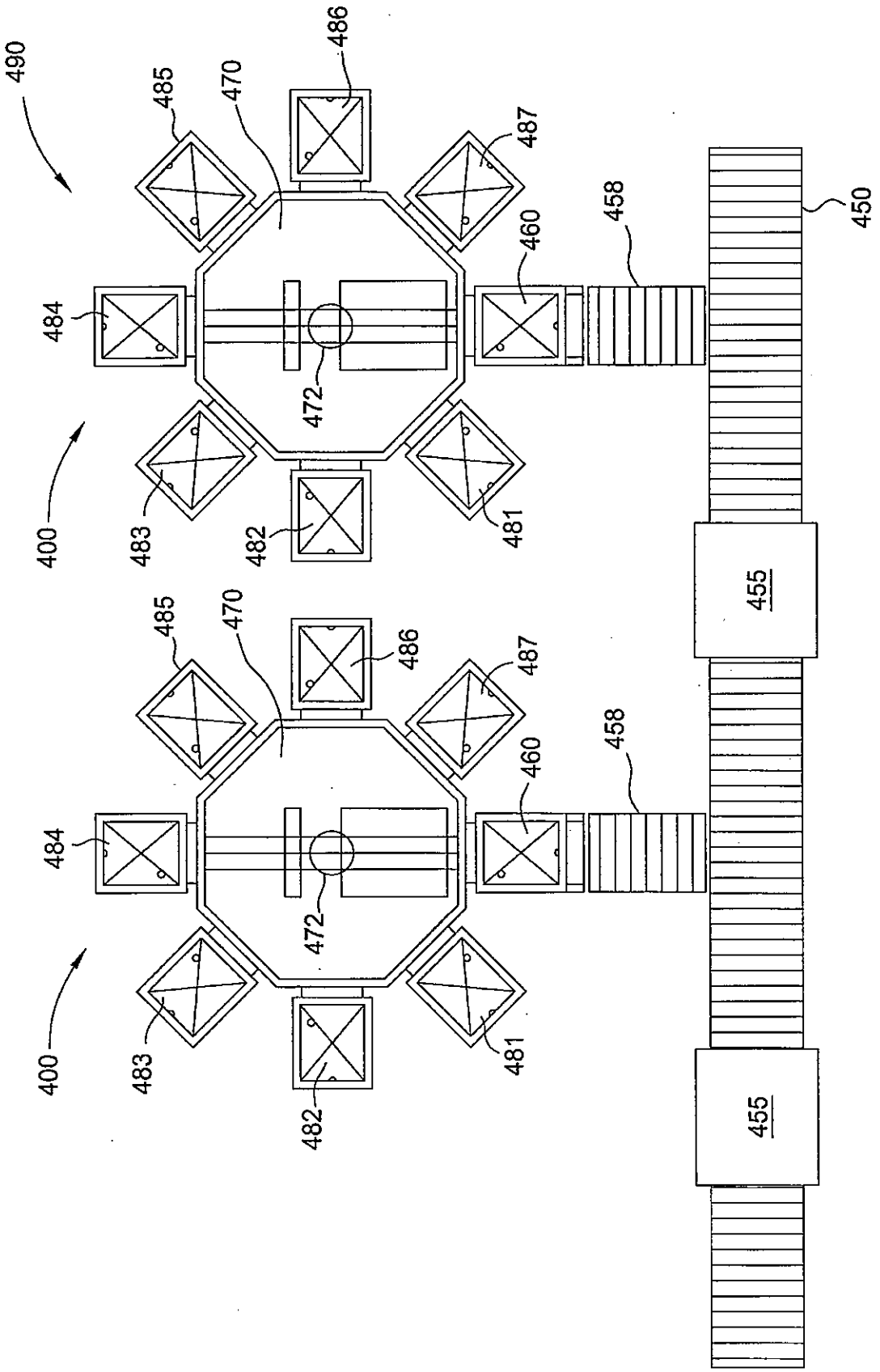

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FIG. 4A

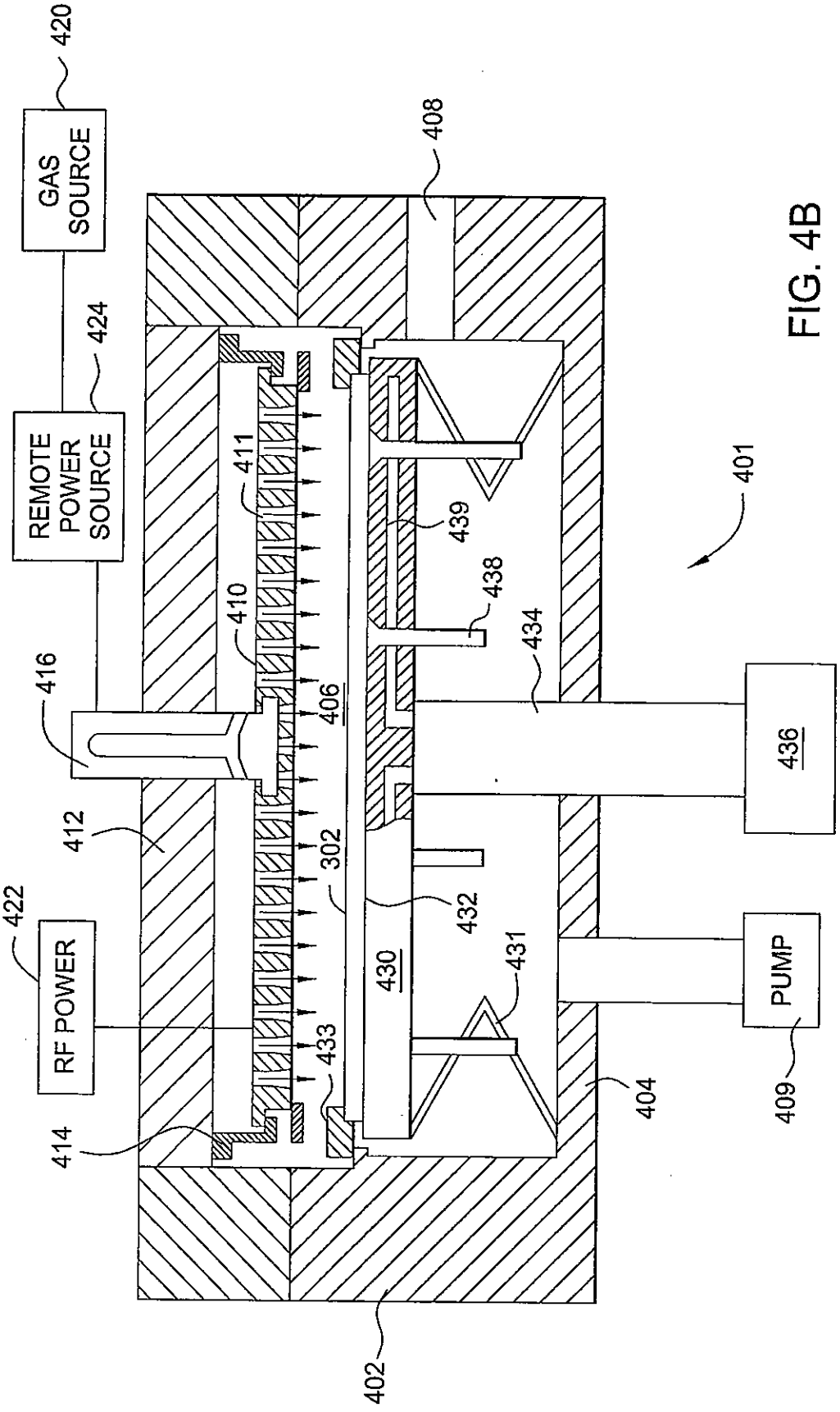

420
GAS SOURCE
424
REMOTE POWER SOURCE
422
RF POWER
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PUMP
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FIG. 4B

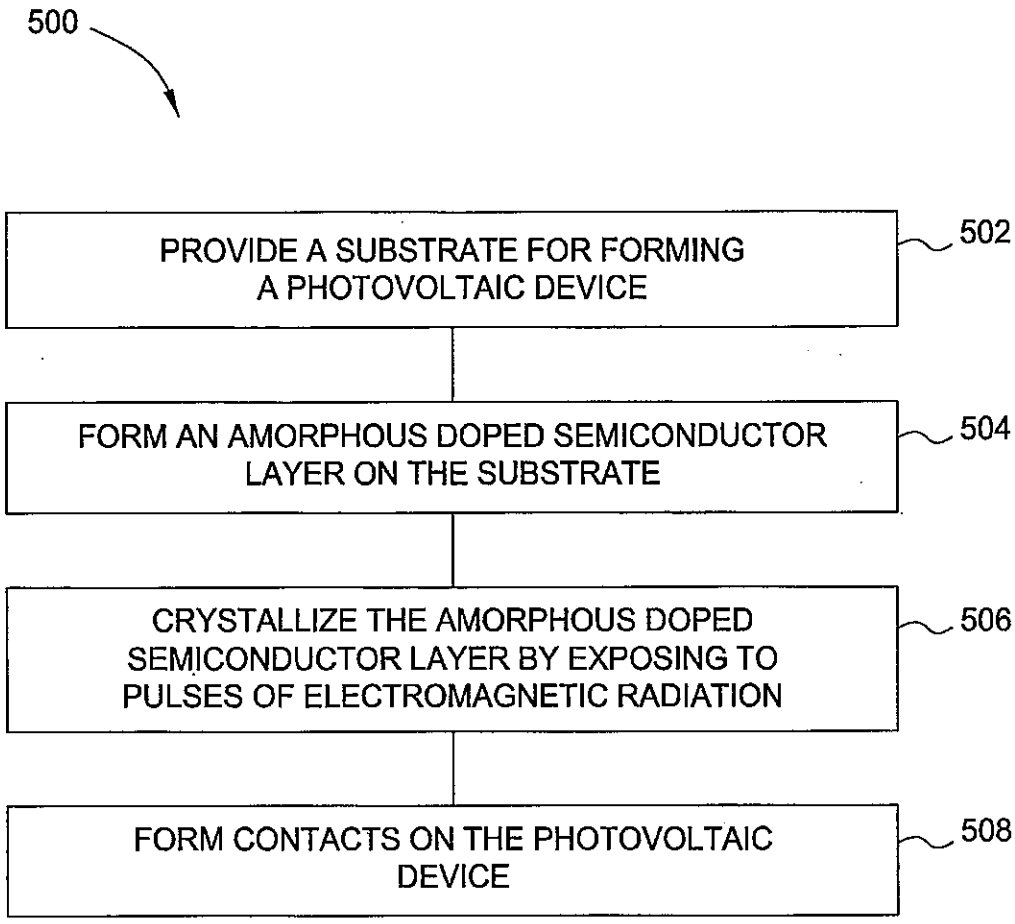

500
PROVIDE A SUBSTRATE FOR FORMING A PHOTOVOLTAIC DEVICE
502
FORM AN AMORPHOUS DOPED SEMICONDUCTOR LAYER ON THE SUBSTRATE
504
CRYSTALLIZE THE AMORPHOUS DOPED SEMICONDUCTOR LAYER BY EXPOSING TO PULSES OF ELECTROMAGNETIC RADIATION
506
FORM CONTACTS ON THE PHOTOVOLTAIC DEVICE
508

FIG. 5A

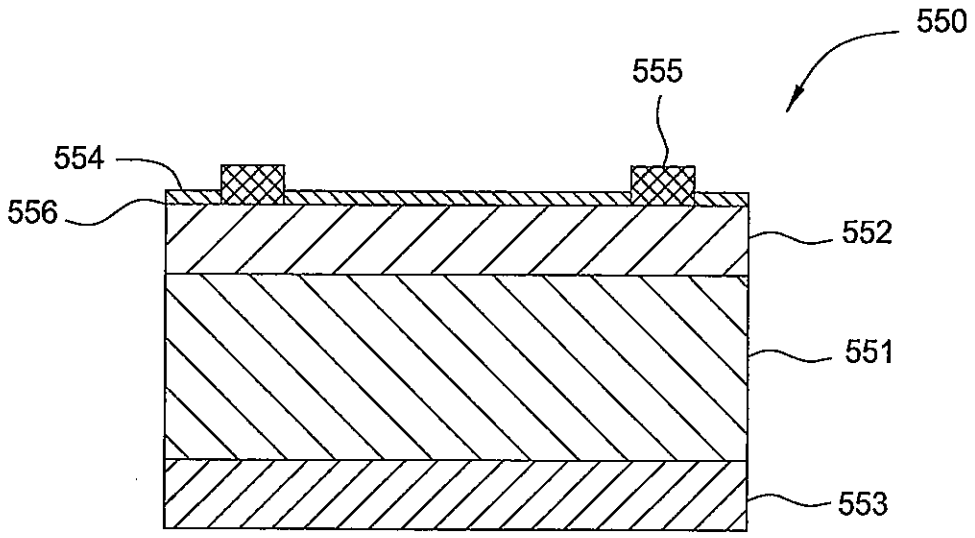


FIG. 5B

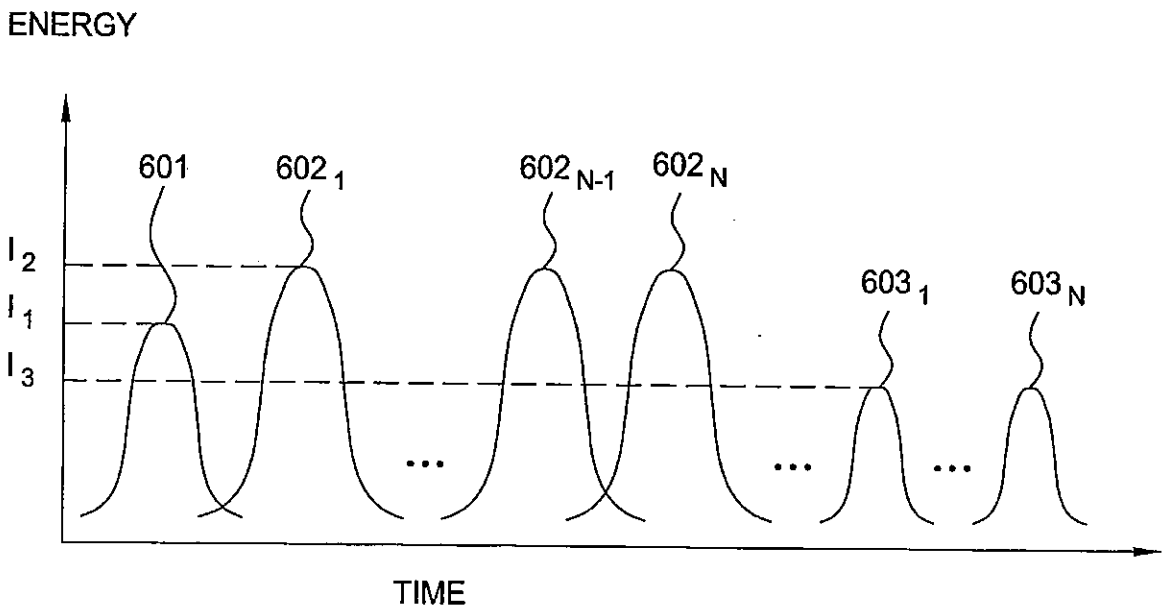


FIG. 6

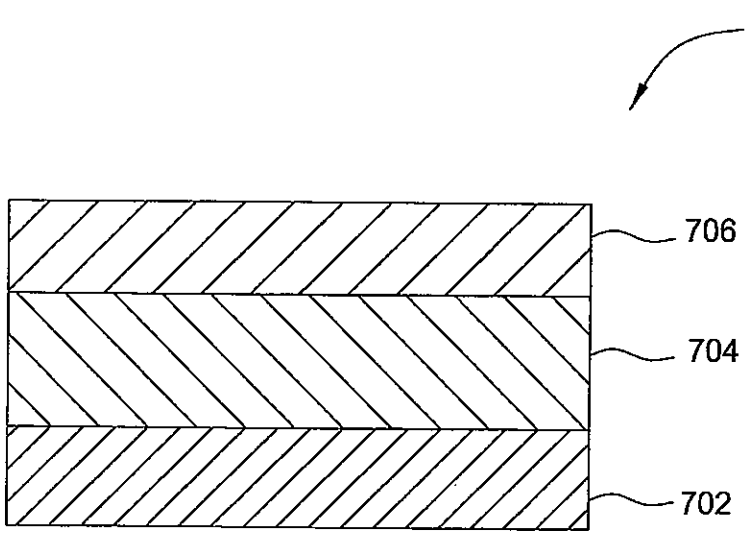


FIG. 7