

FIG. 1A

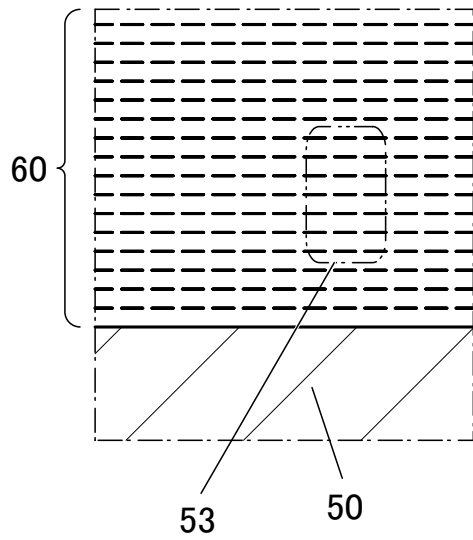


FIG. 1B

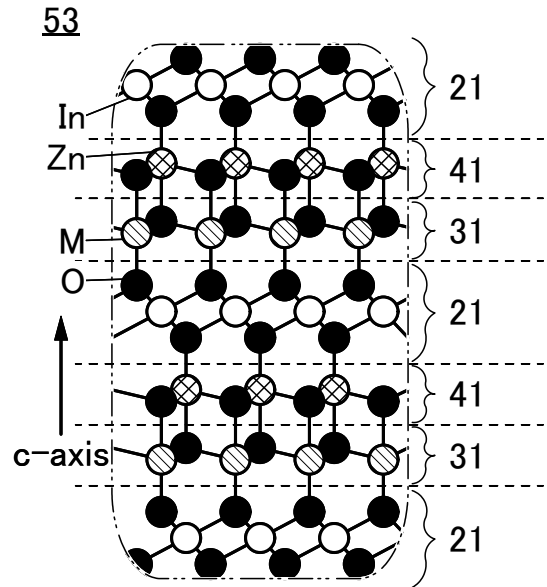


FIG. 1C

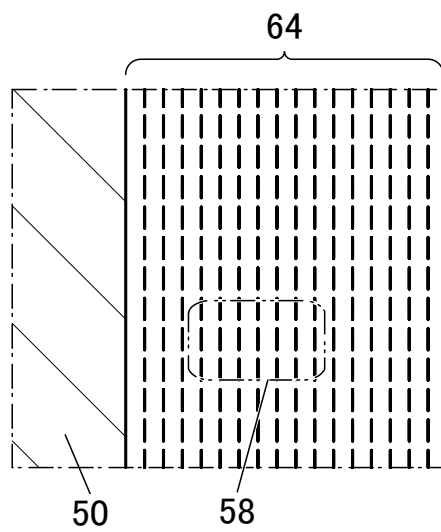


FIG. 1D

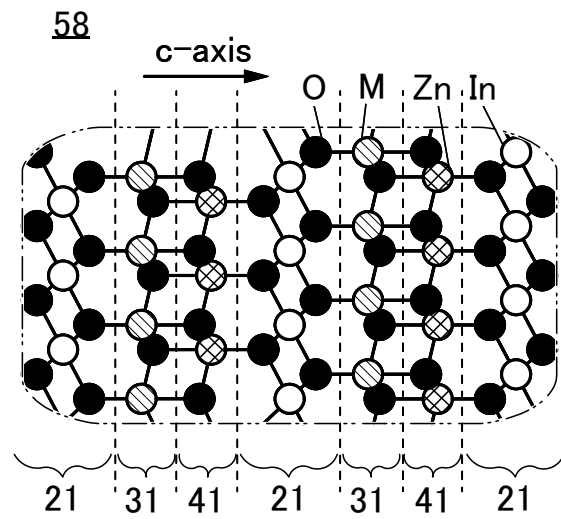


FIG. 2A

4000

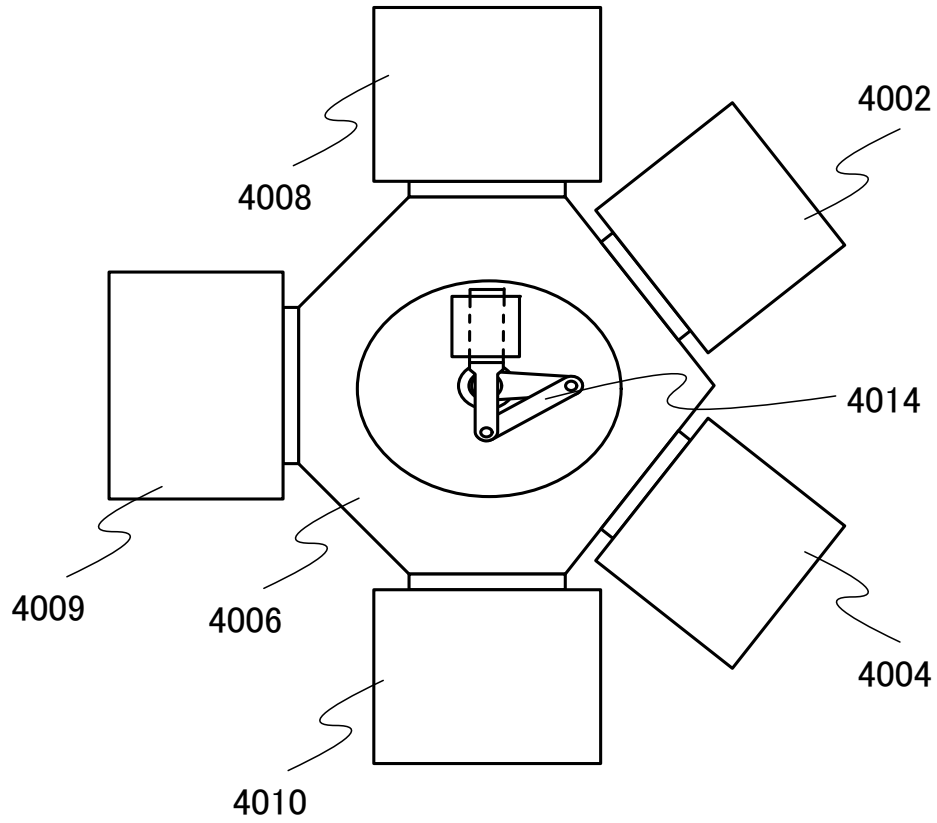


FIG. 2B

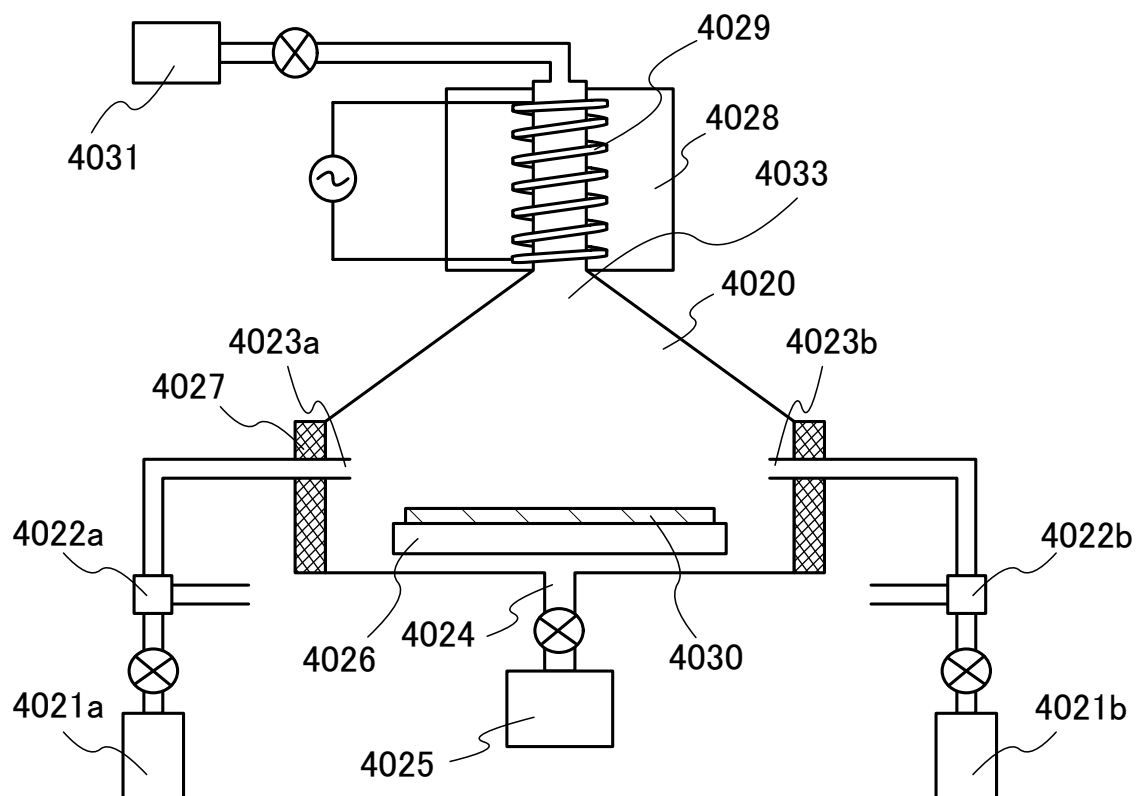


FIG. 3A

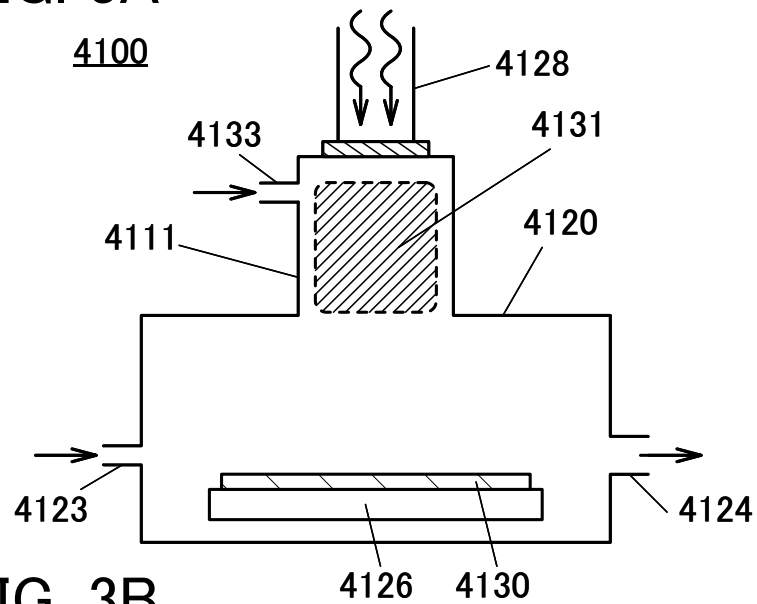


FIG. 3B

4200

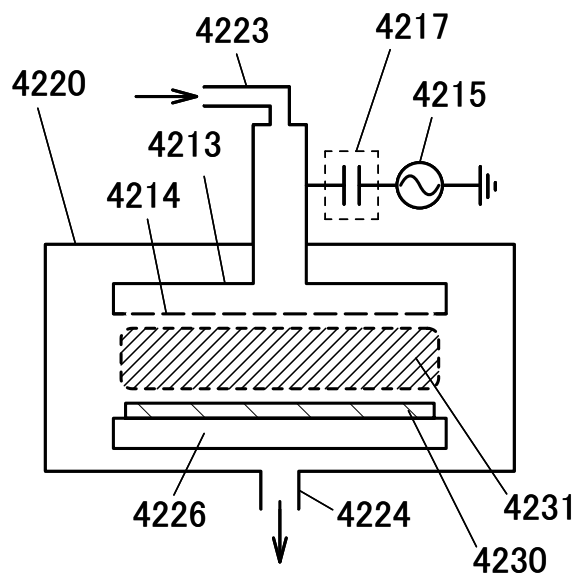


FIG. 3C

4300

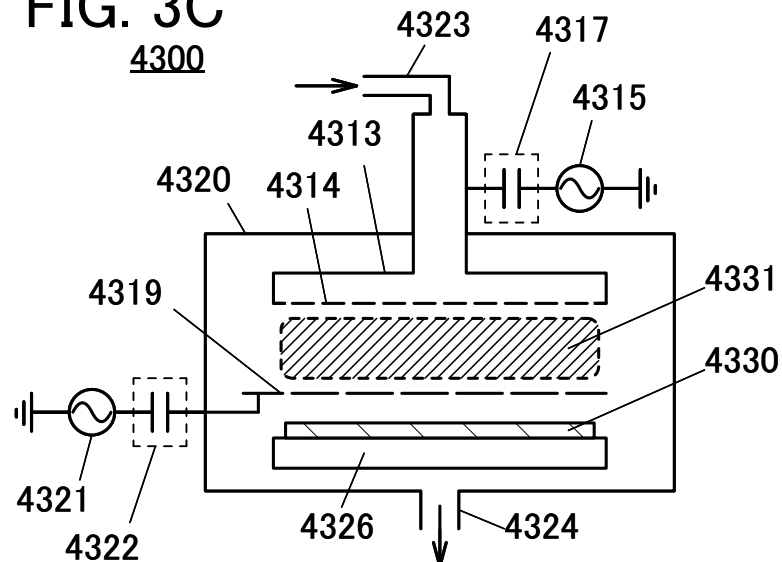


FIG. 4

2700

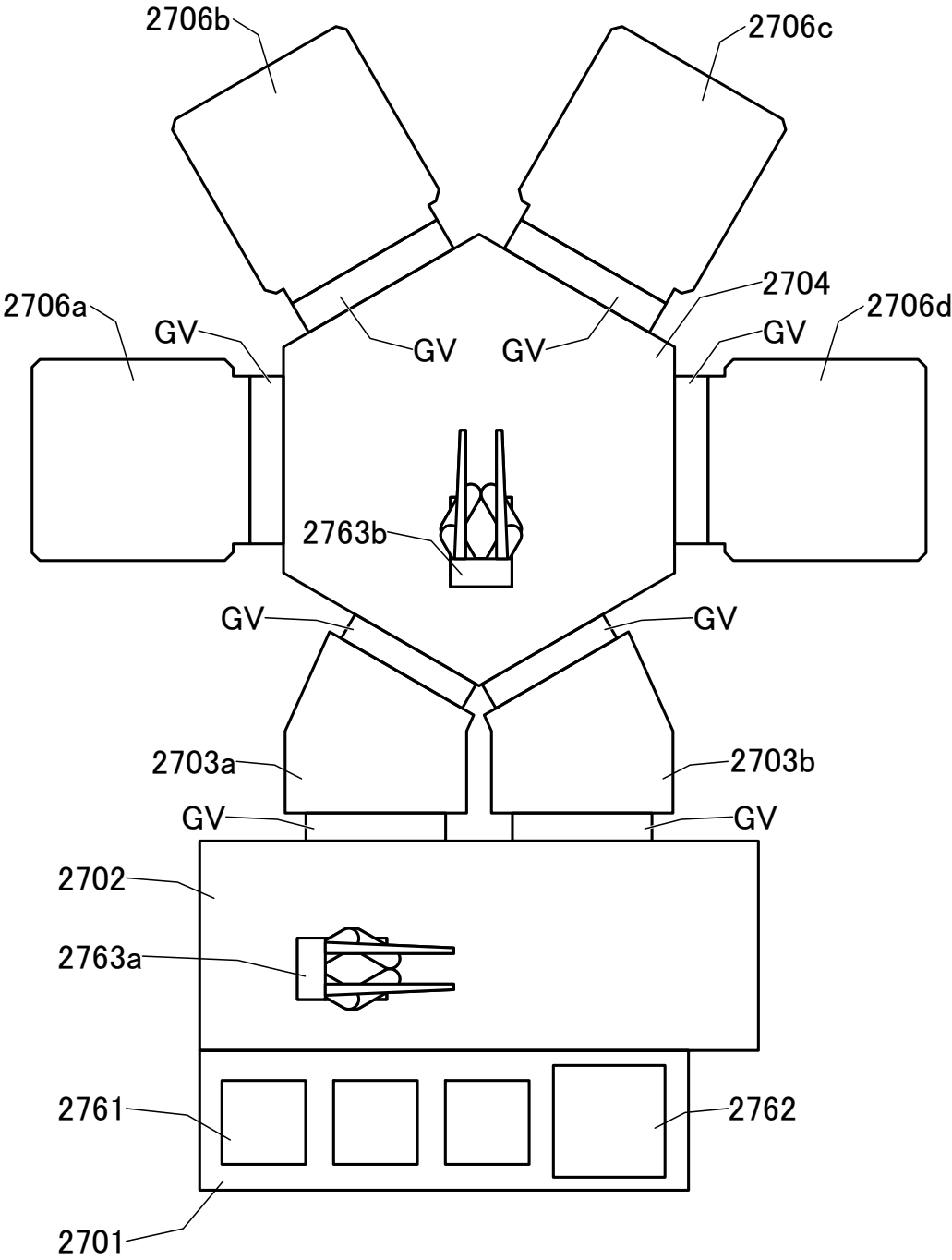


FIG. 5

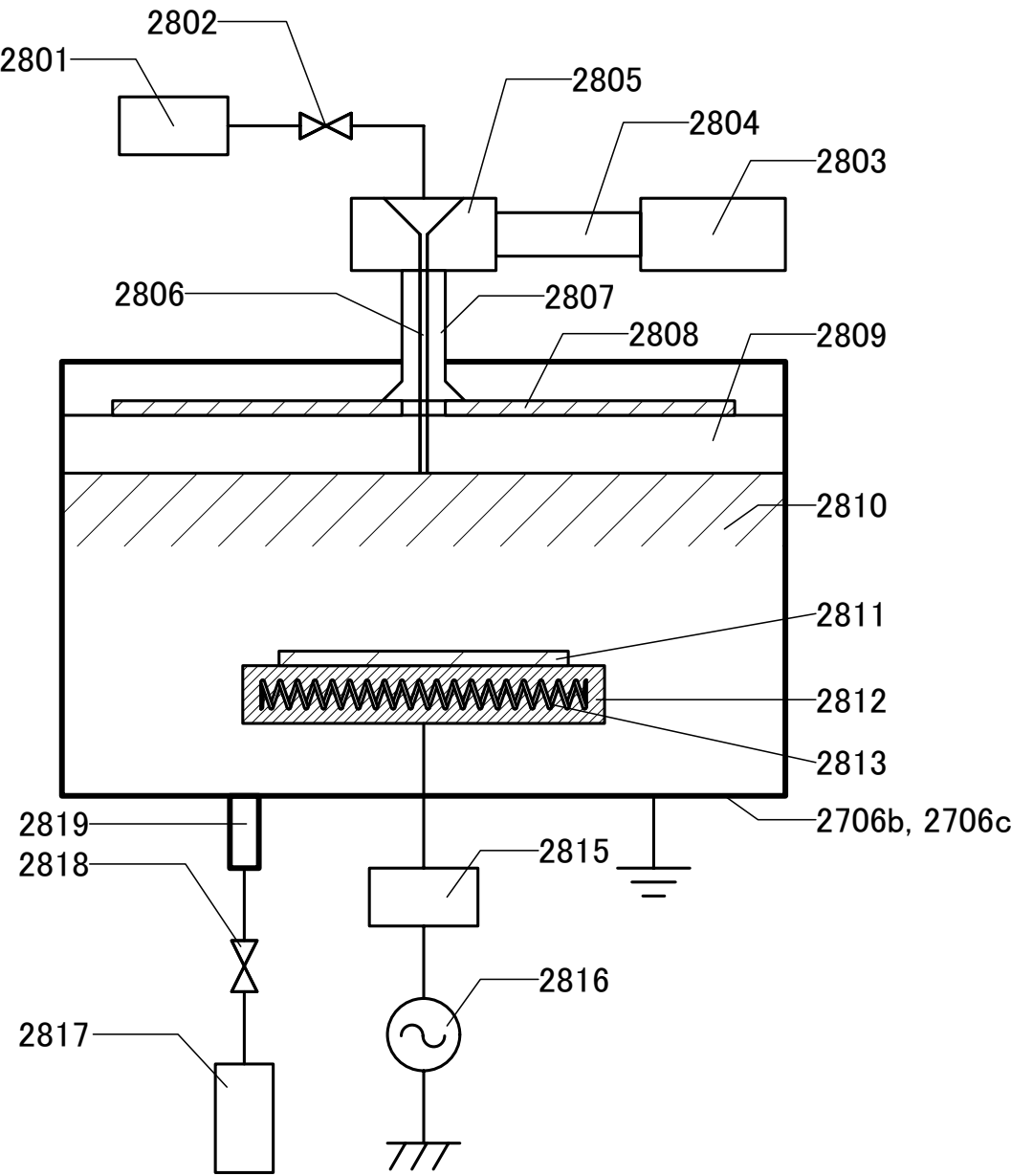


FIG. 6

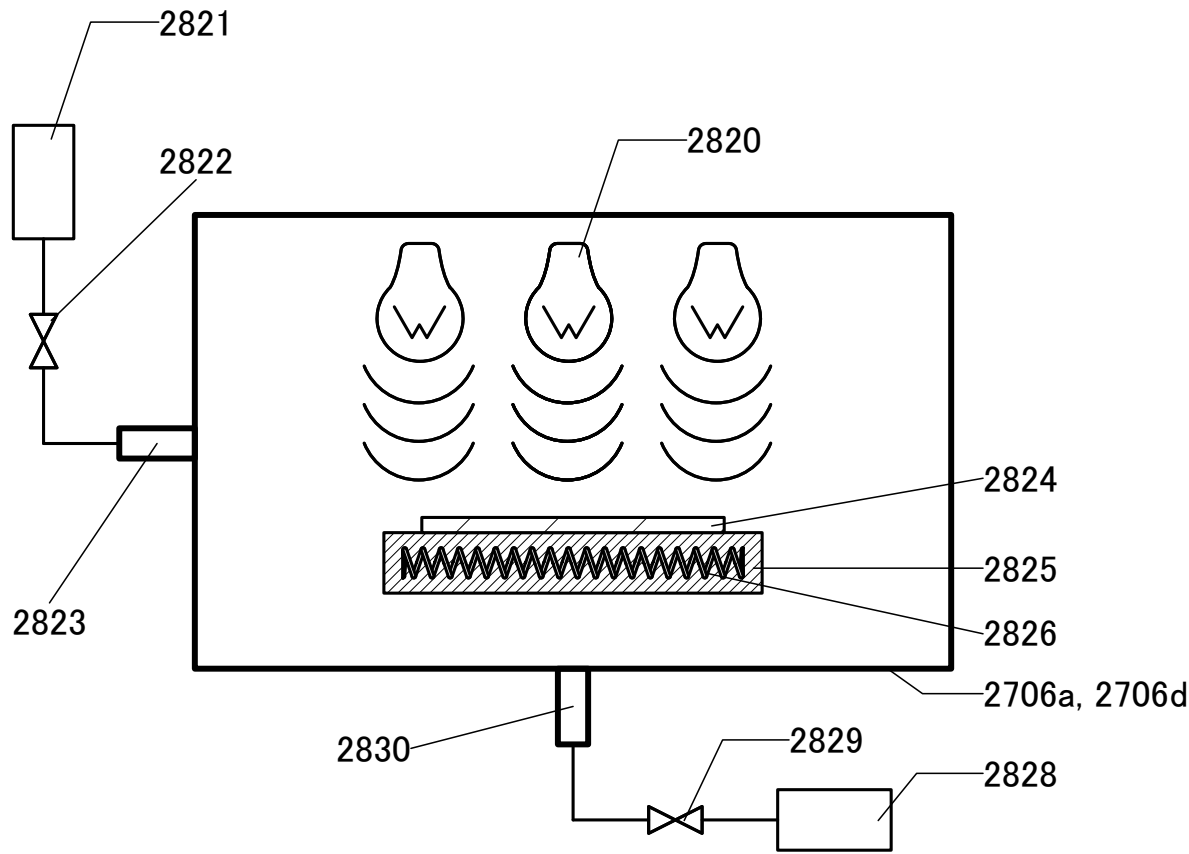


FIG. 7

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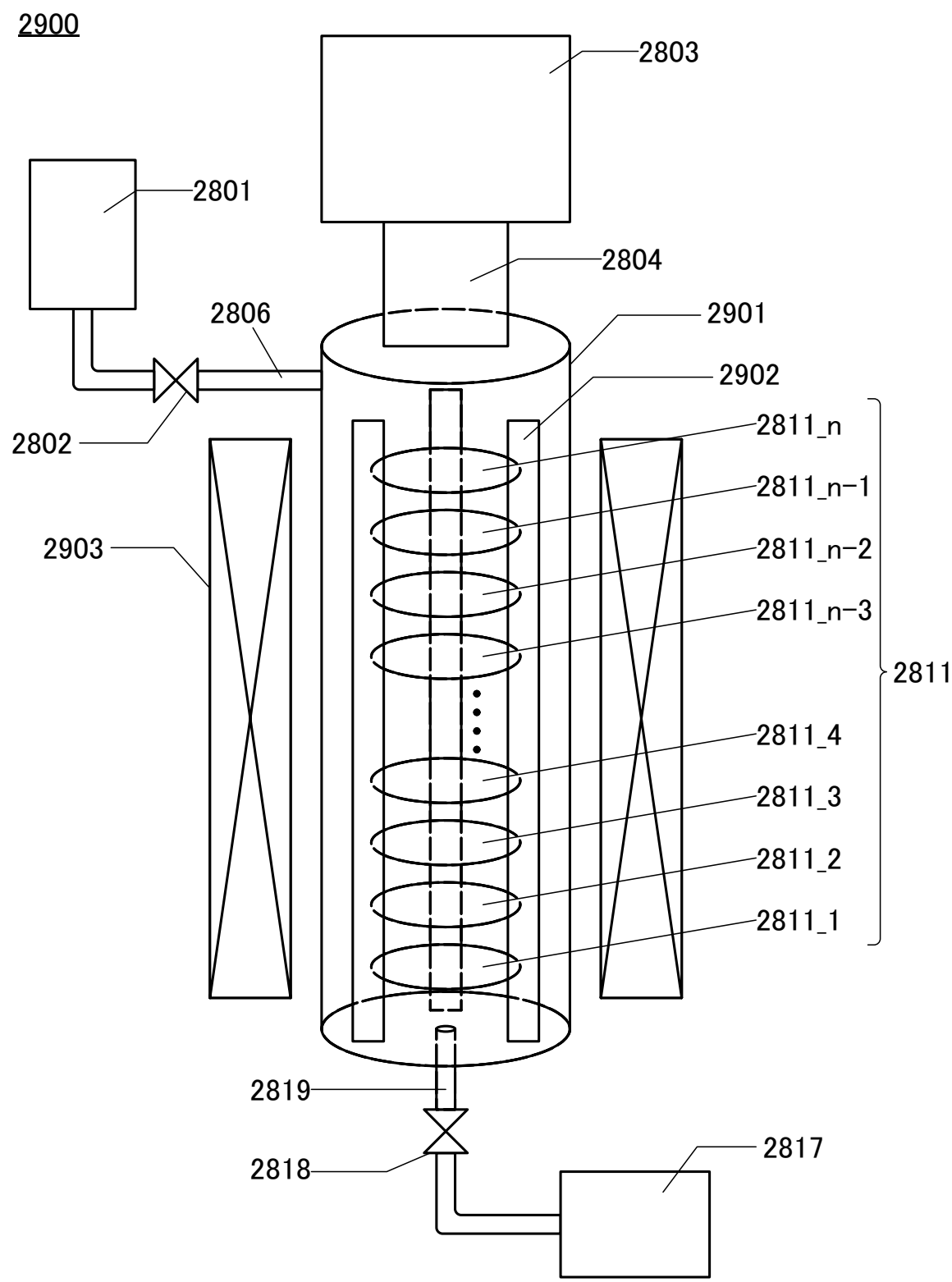


FIG. 8A

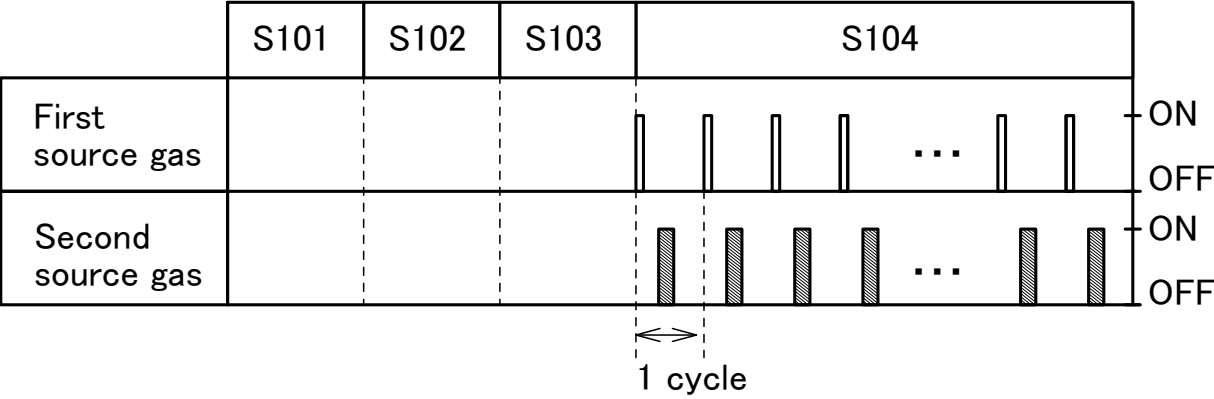


FIG. 8B

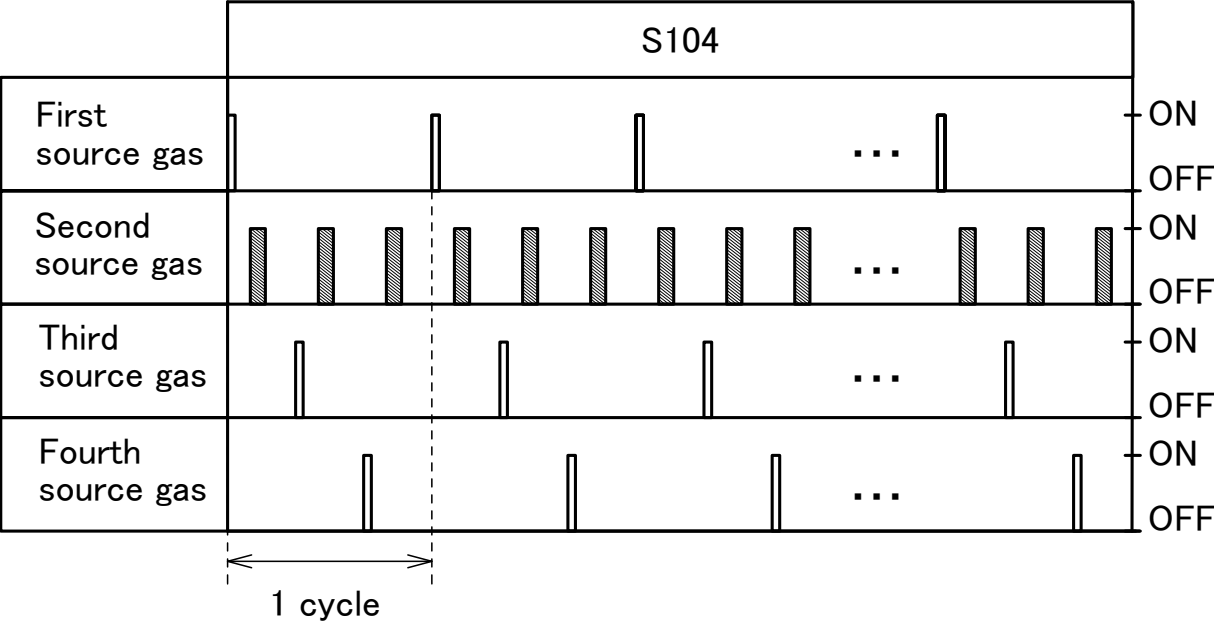


FIG. 9A

Intermediate state

New crystalline phase

Amorphous	Crystalline	Crystal
▪completely amorphous	▪CAAC ▪nc ▪CAC excluding single crystal and poly crystal	▪single crystal ▪poly crystal

FIG. 9B

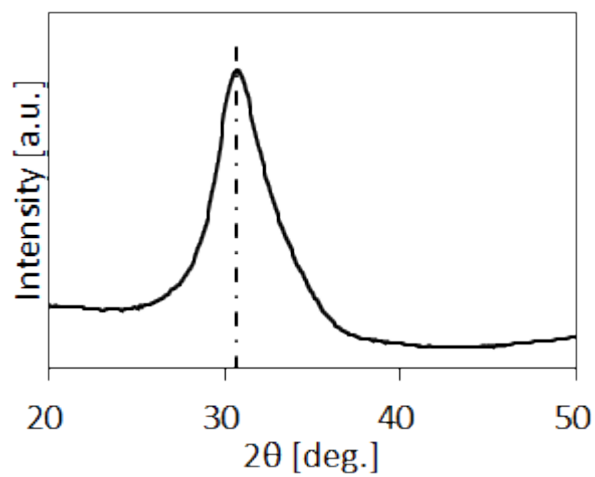
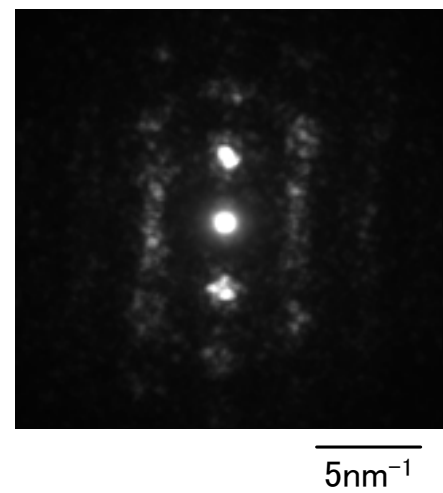
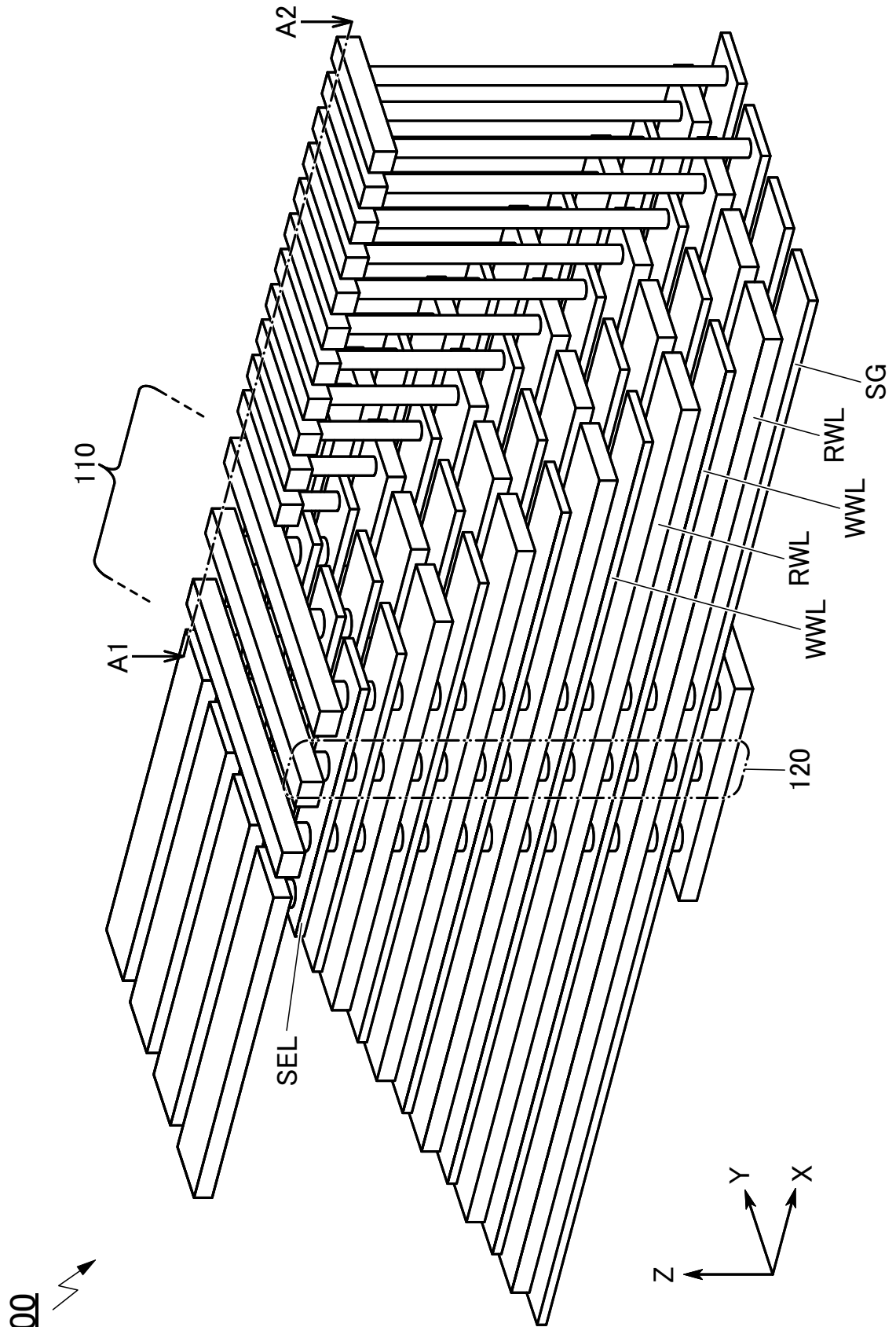


FIG. 9C





100



110

SEL

120

120

RWL

RWL

/

/

1

K

K

K

FIG. 11

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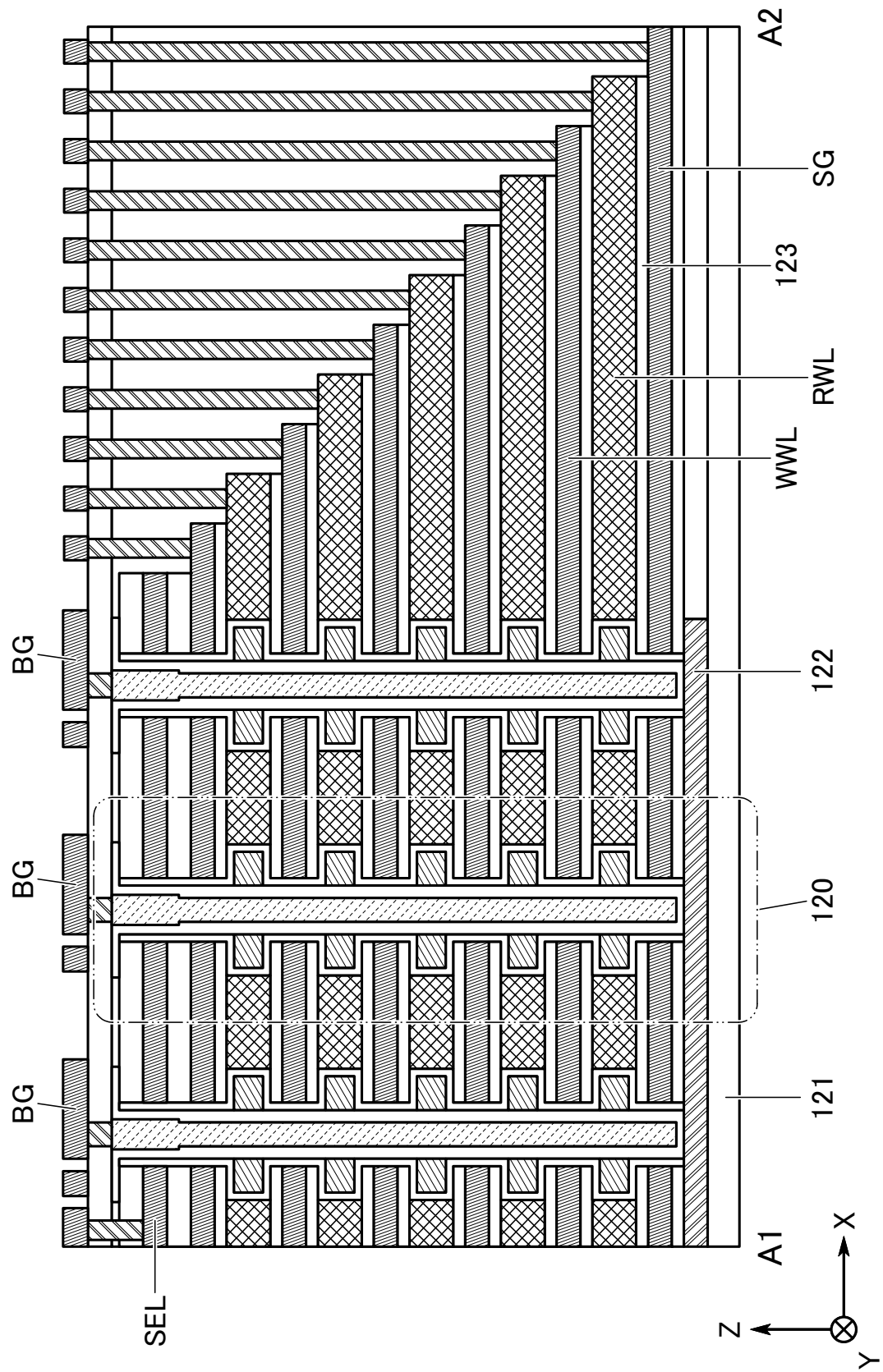


FIG. 12

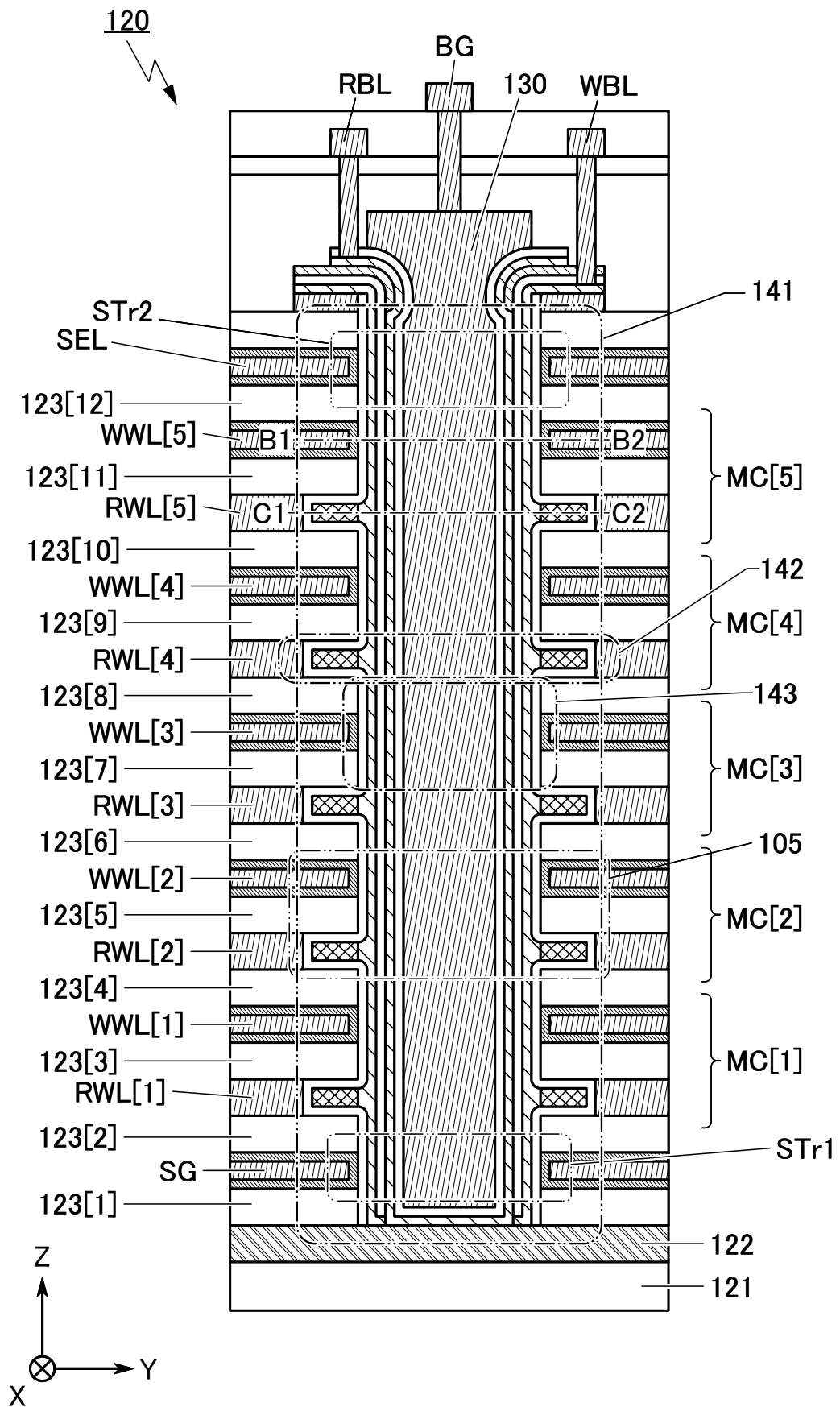


FIG. 13A

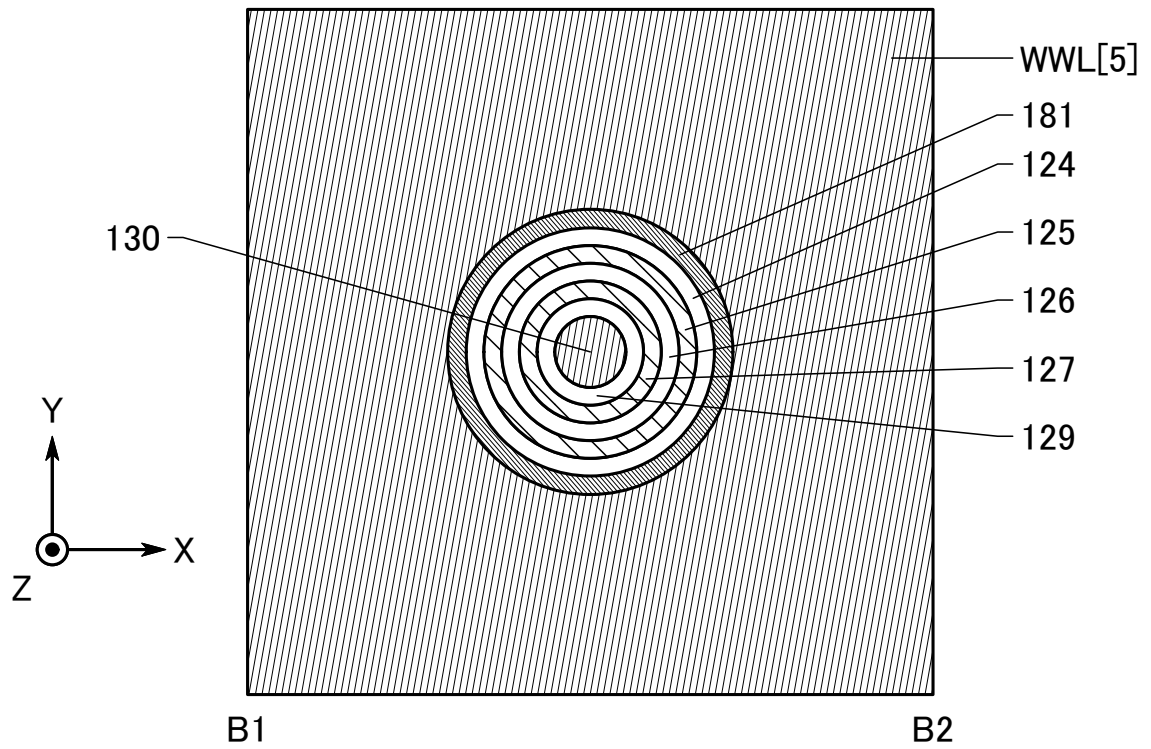


FIG. 13B

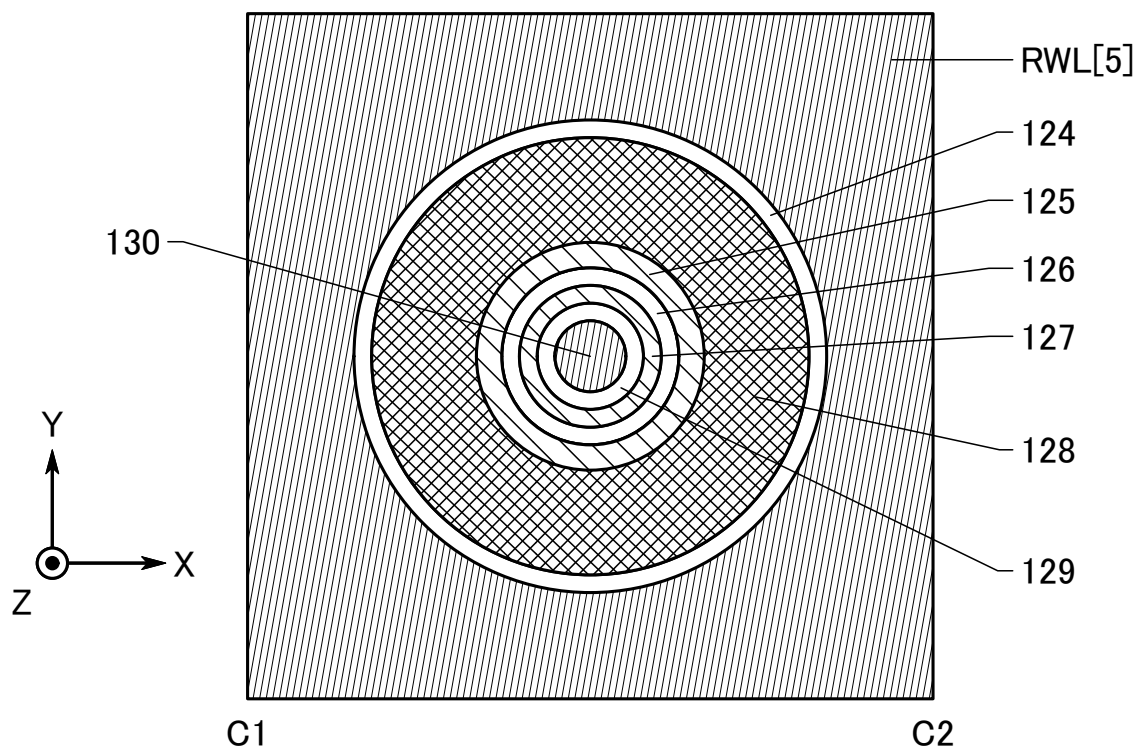


FIG. 14

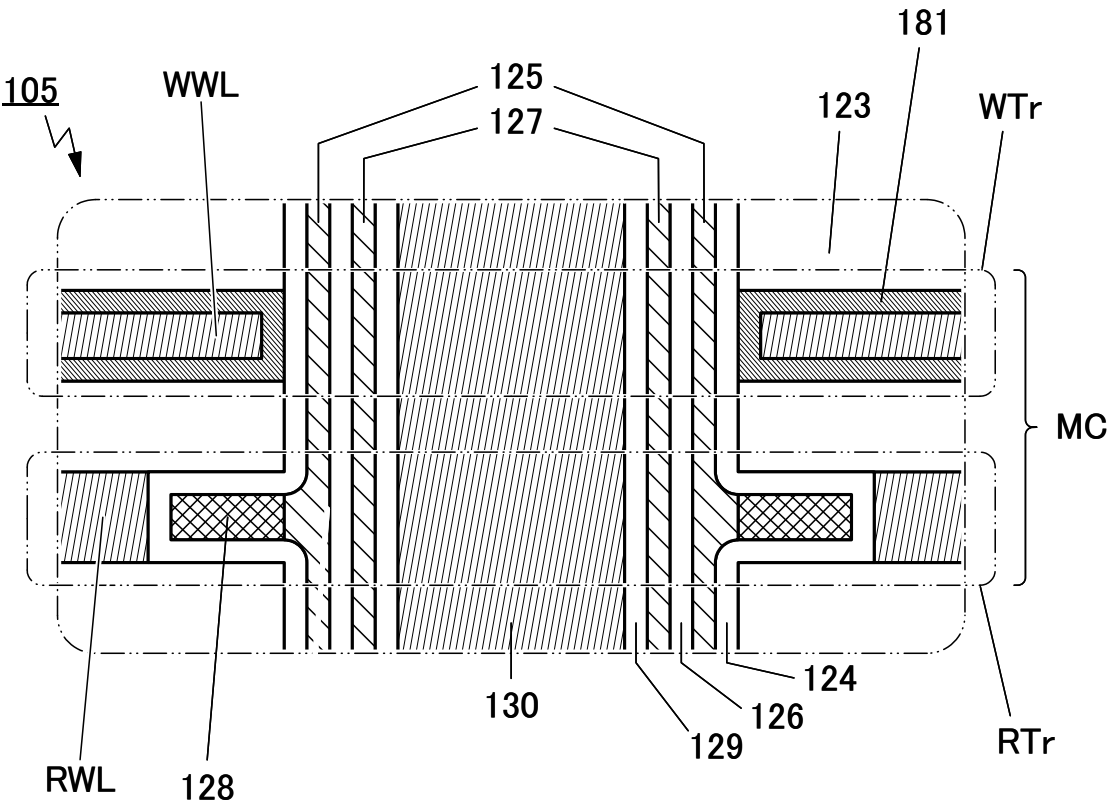


FIG. 15

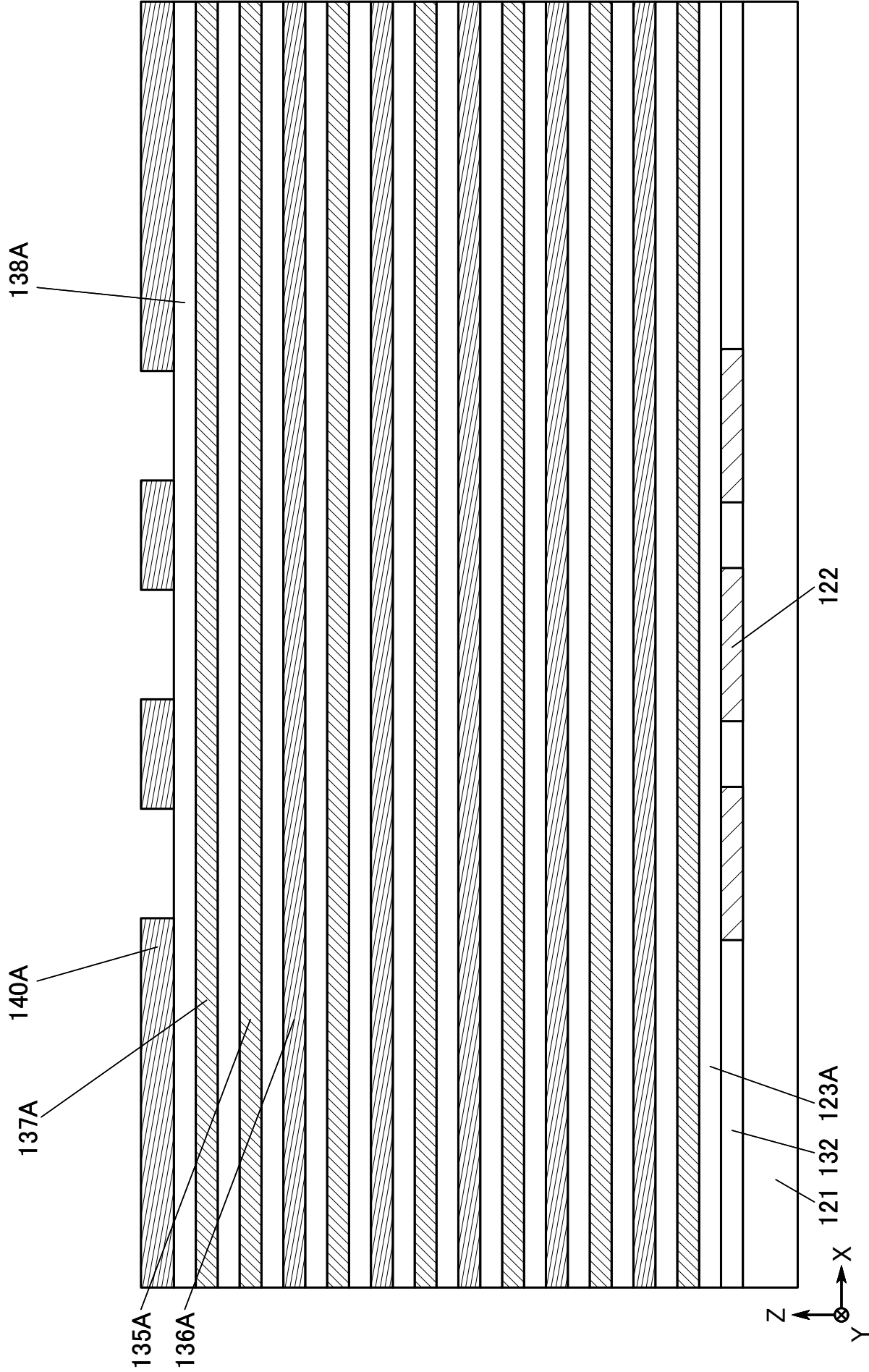


FIG. 16

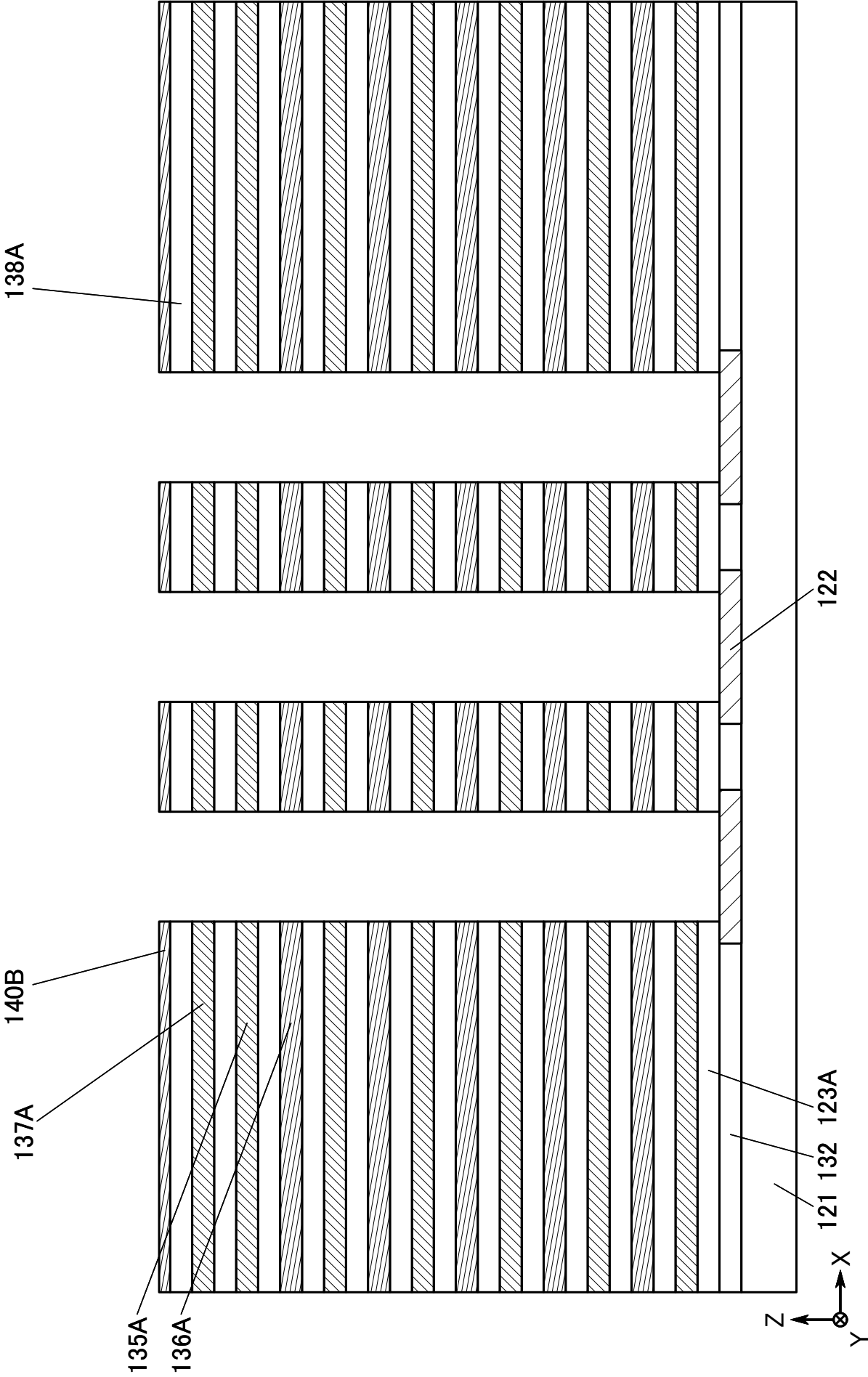


FIG. 17

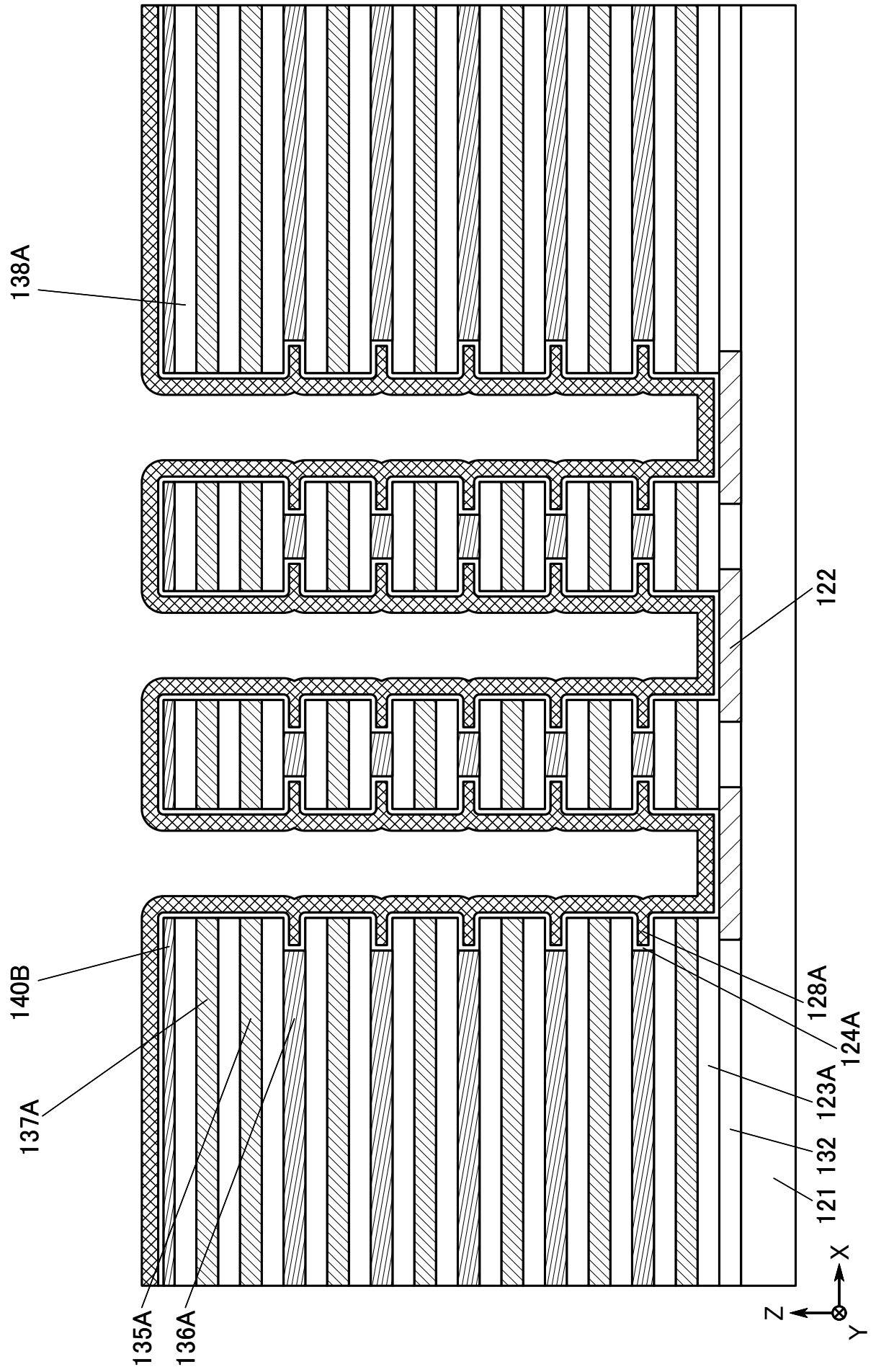


FIG. 18

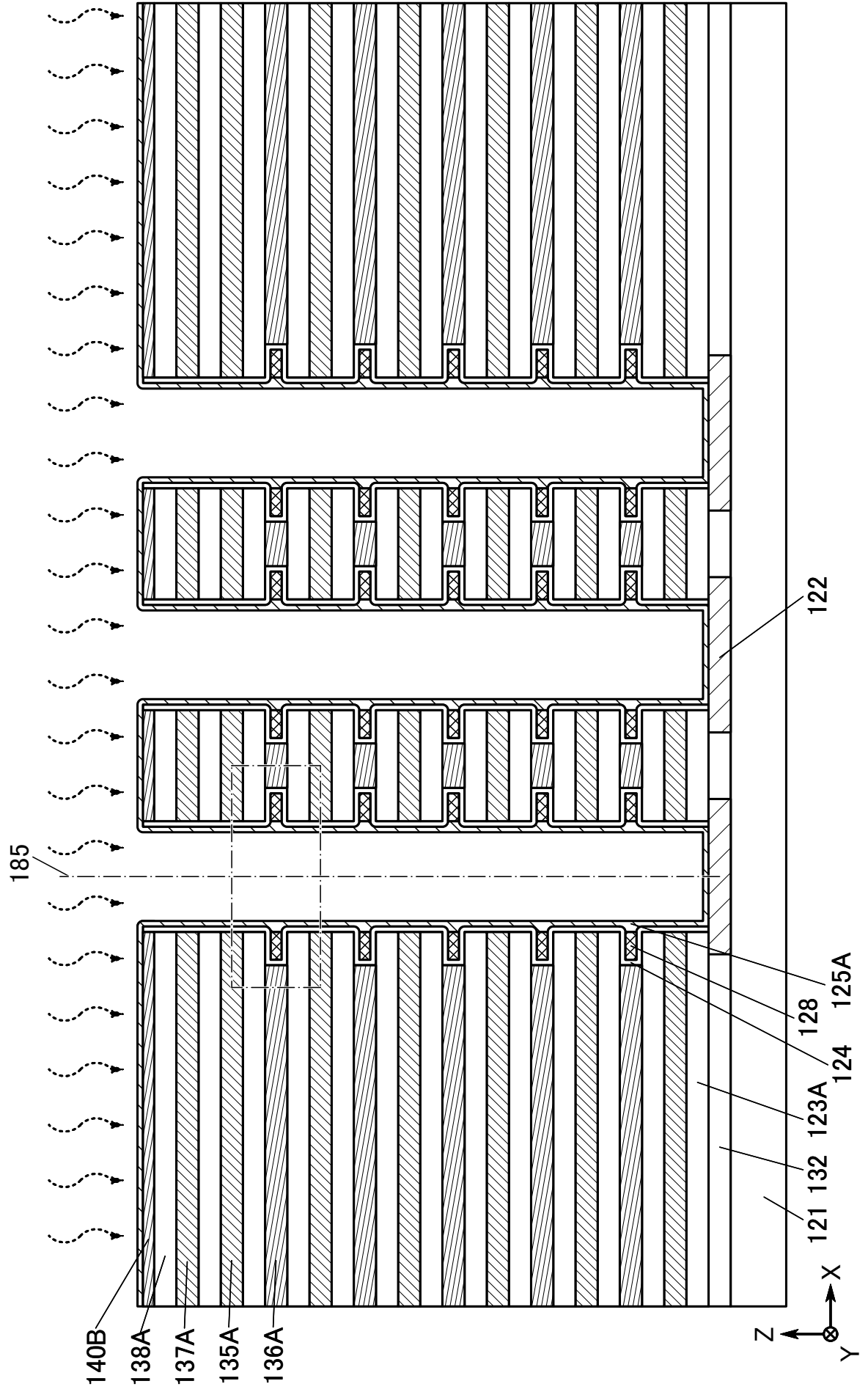


FIG. 19A

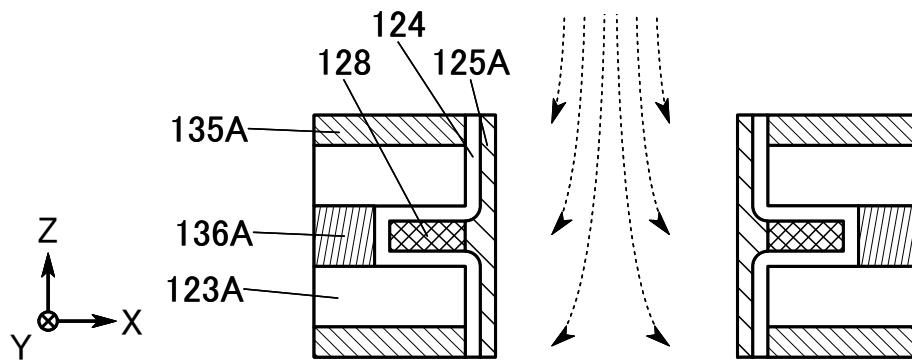


FIG. 19B

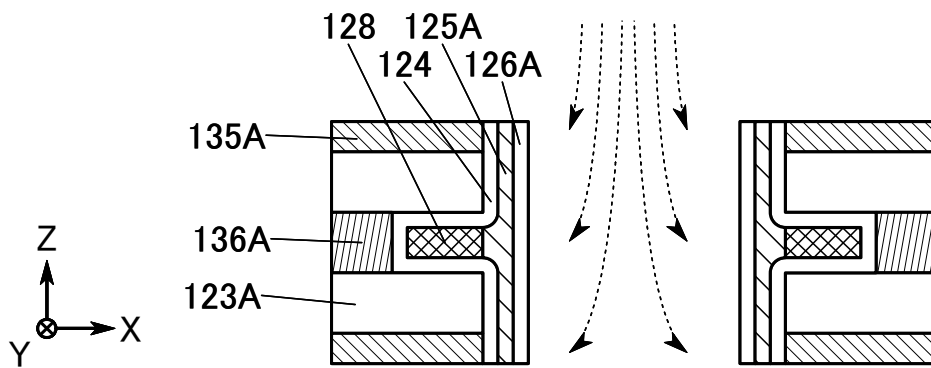


FIG. 20

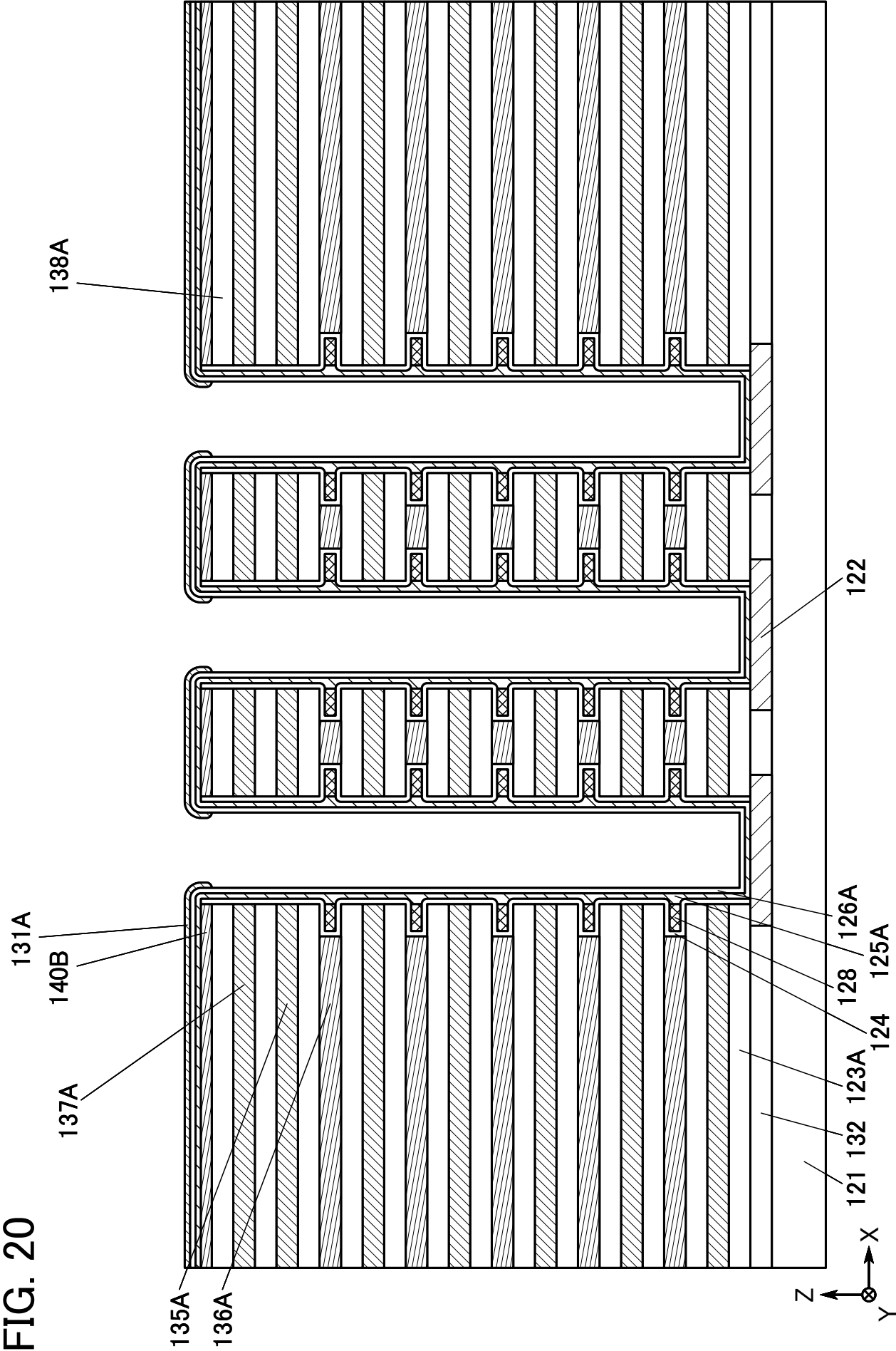
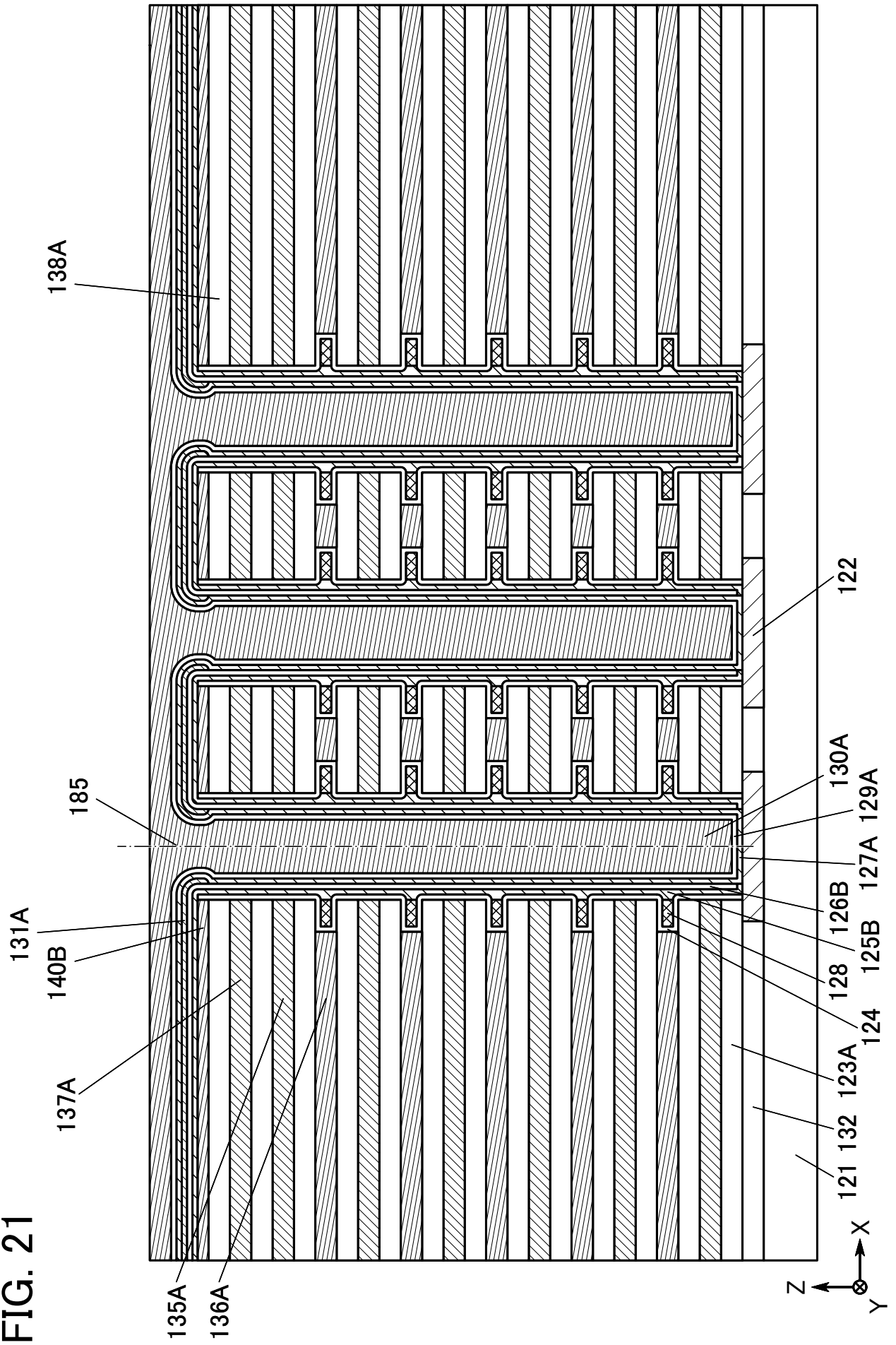


FIG. 21



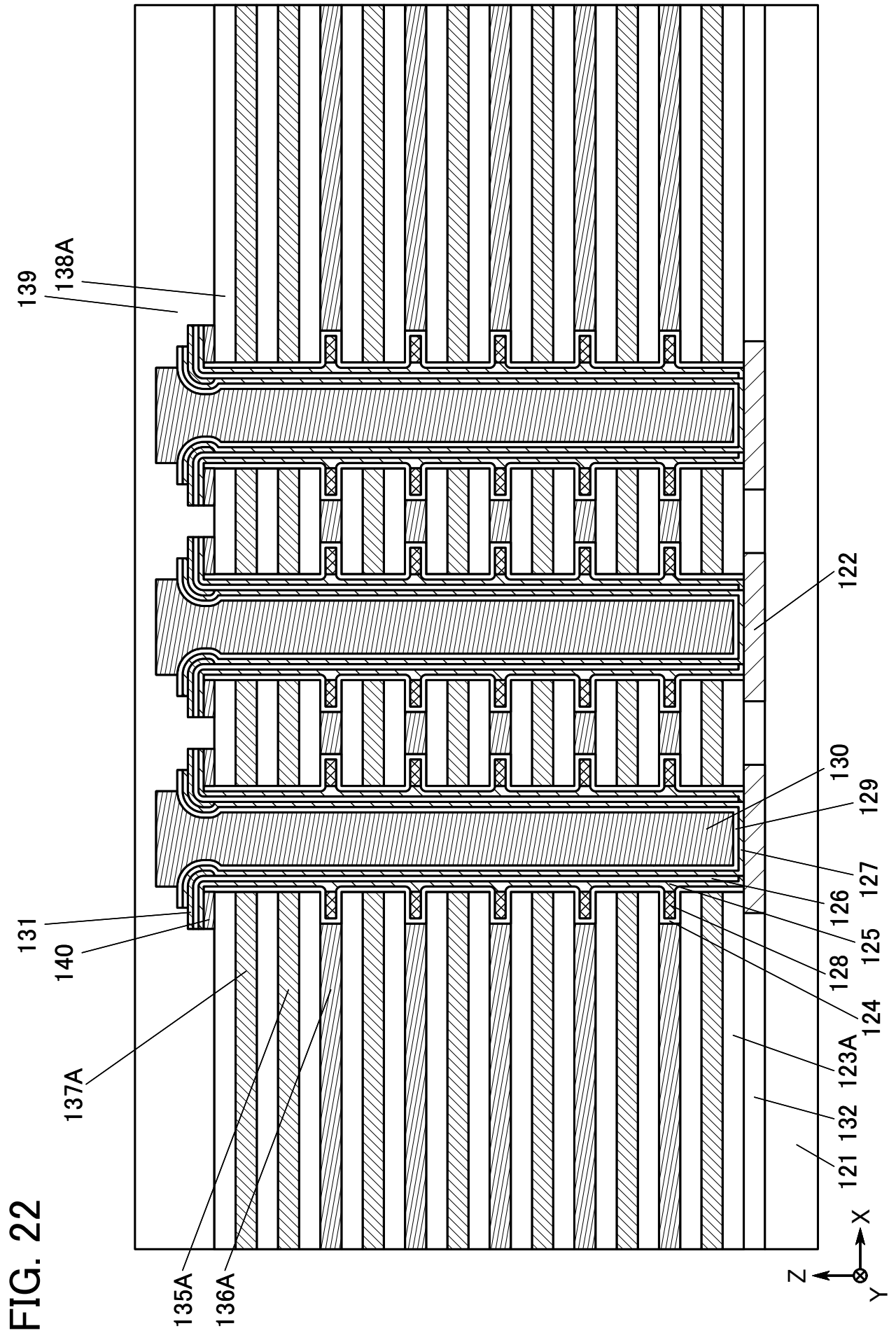


FIG. 23

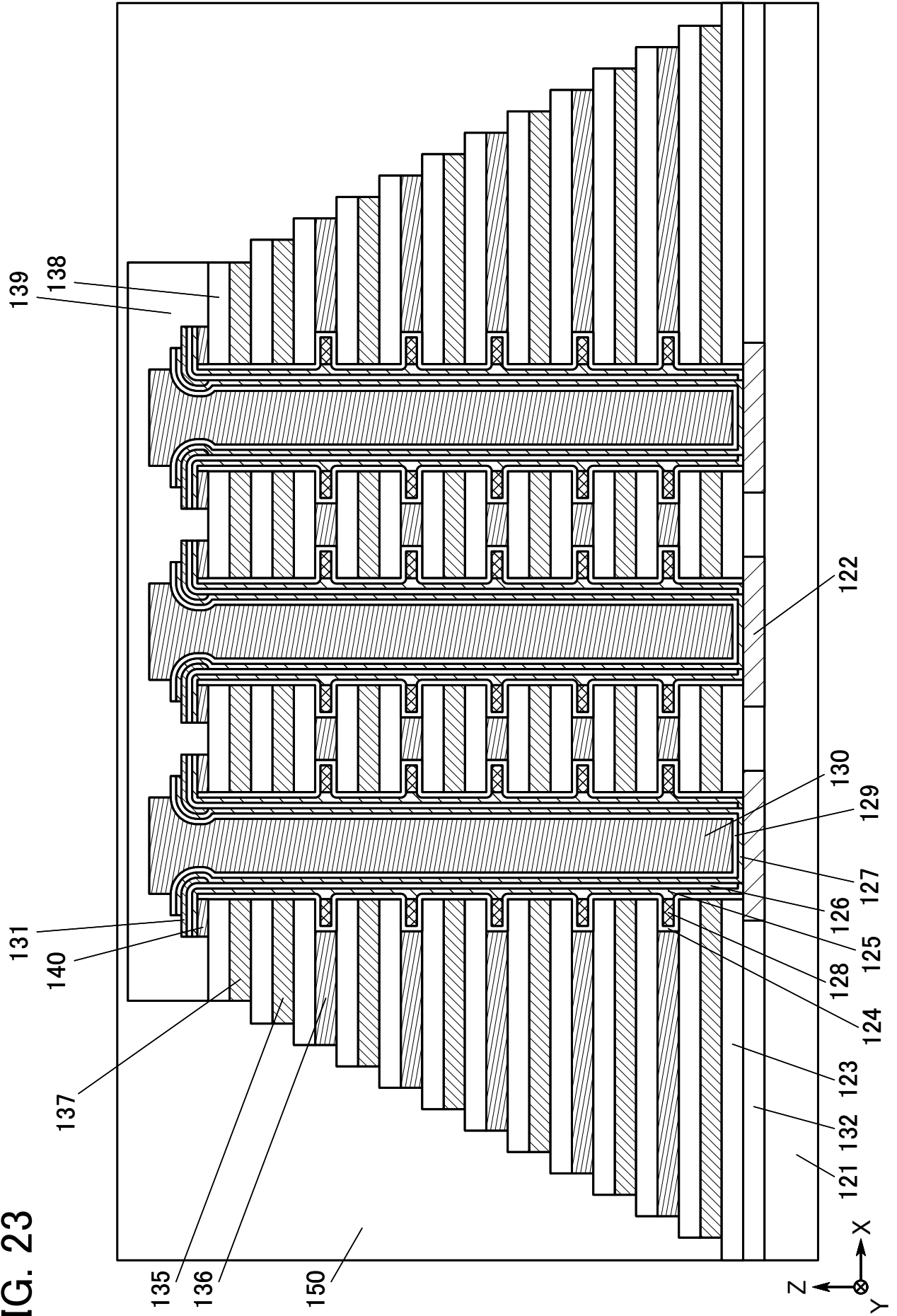


FIG. 24

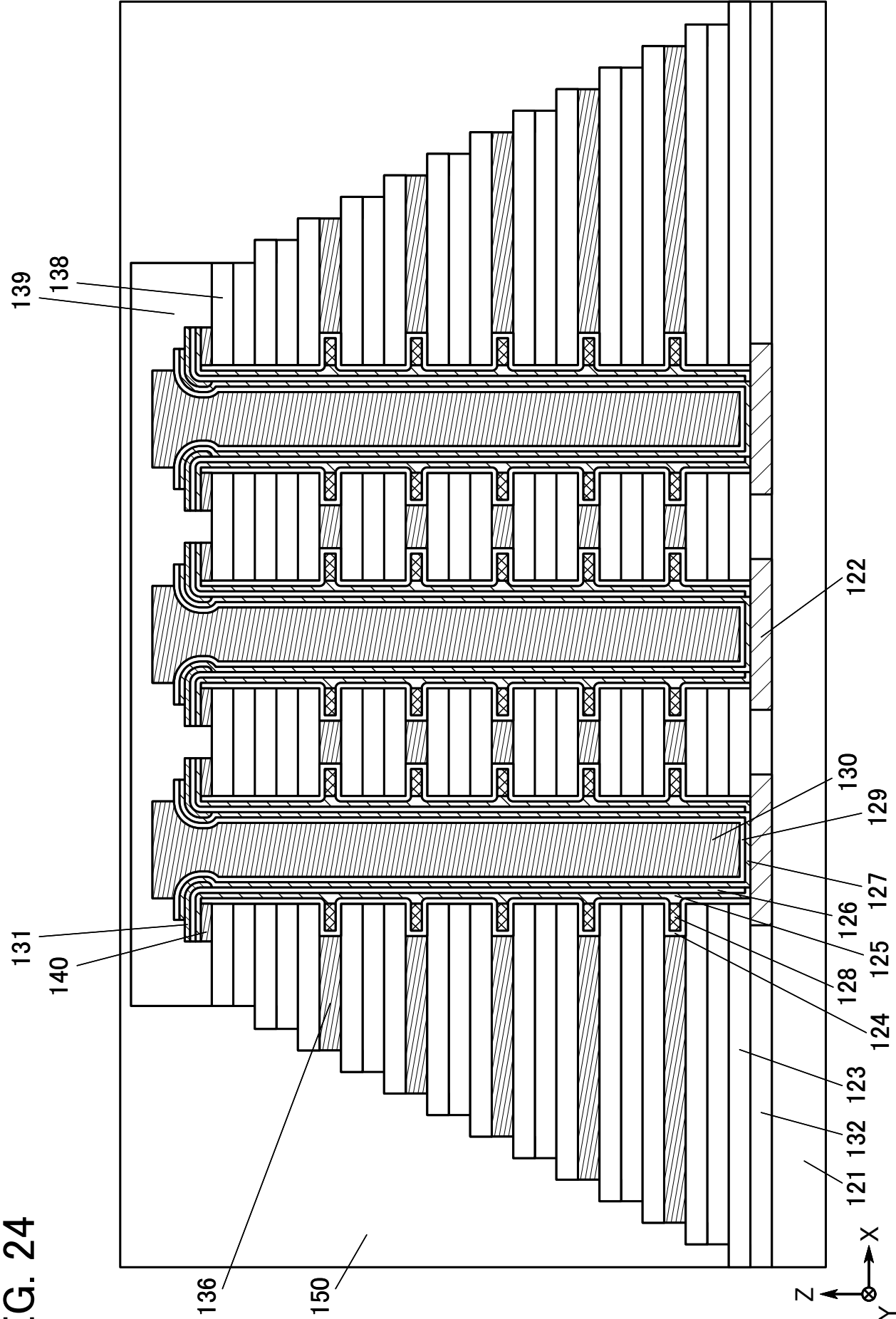


FIG. 25

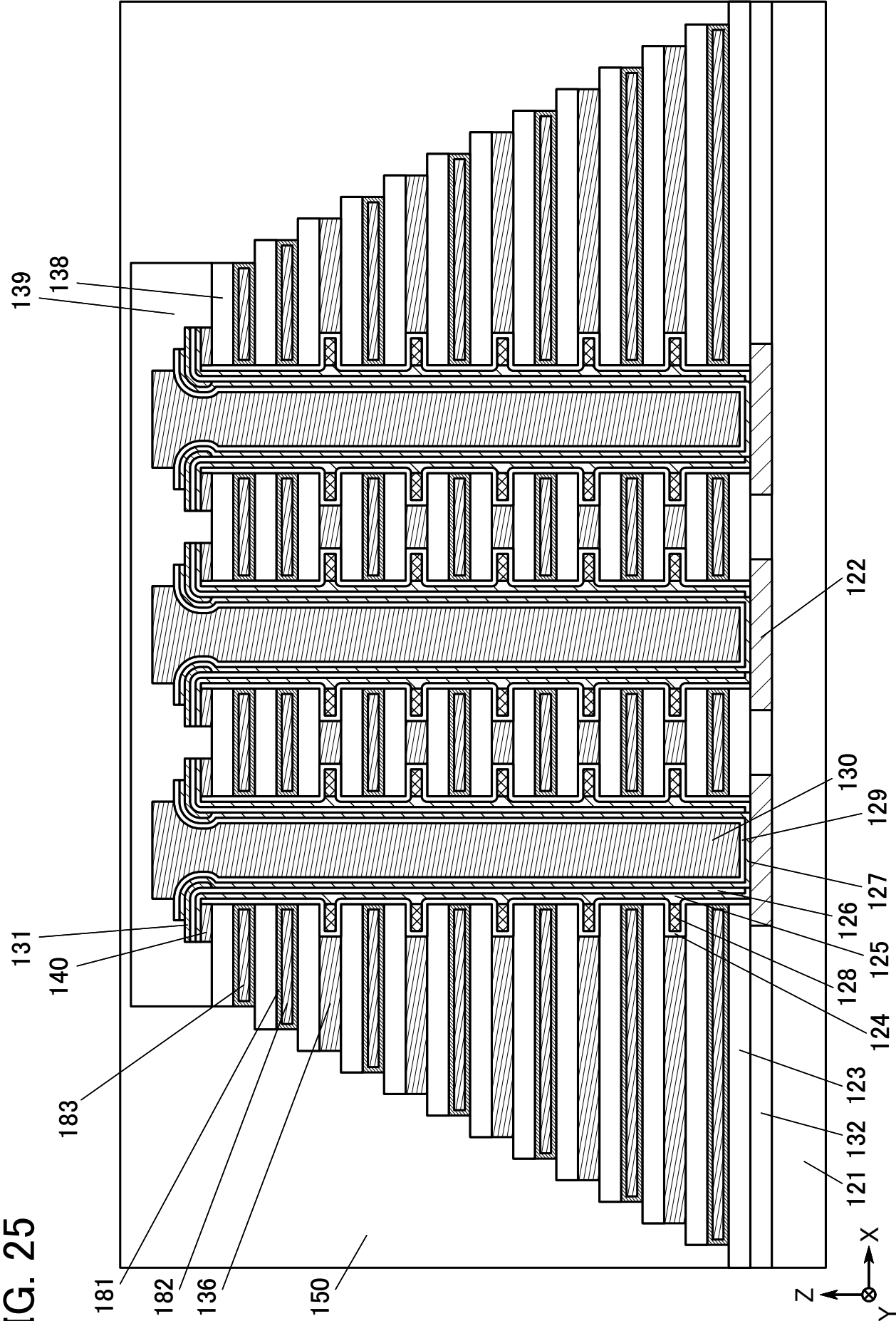


FIG. 26

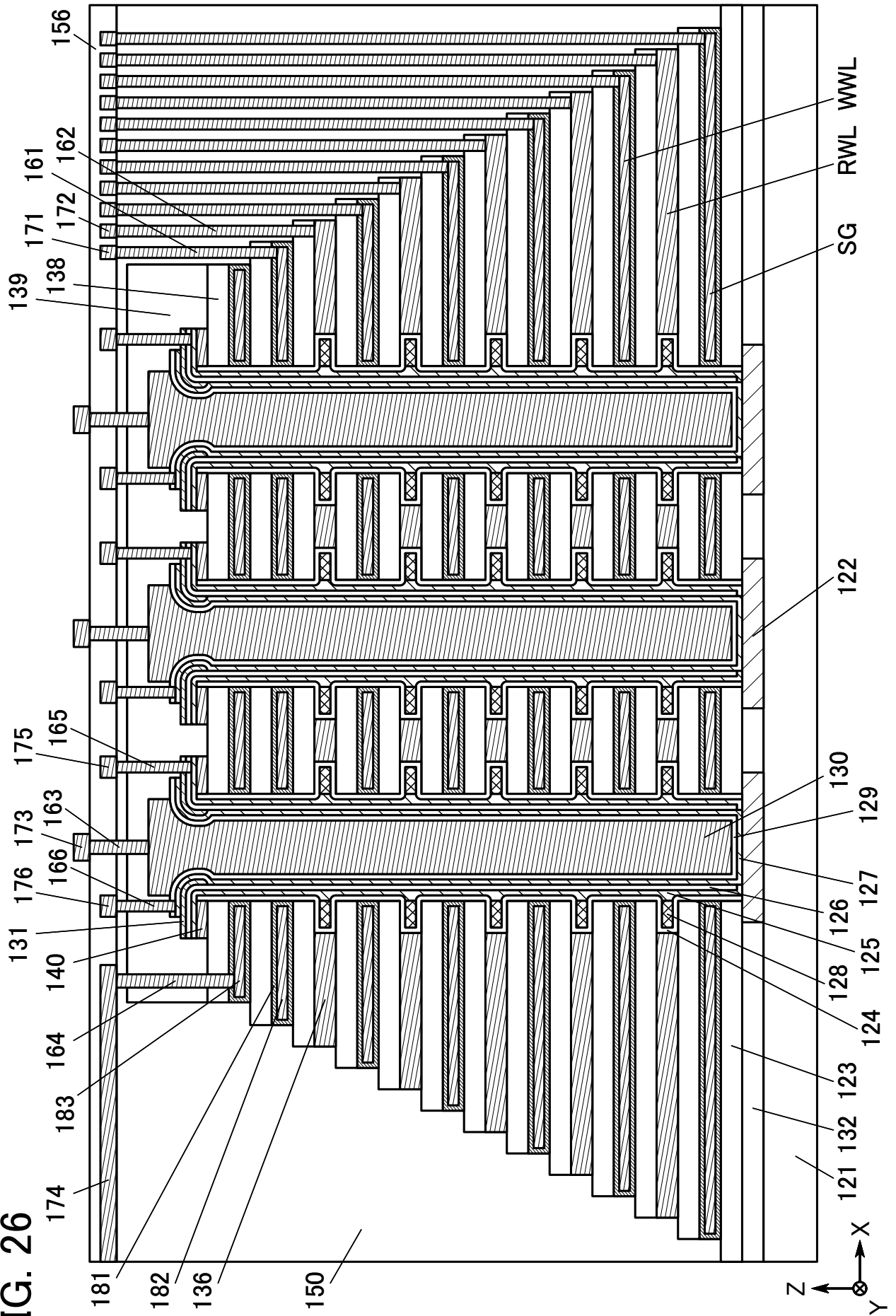


FIG. 27

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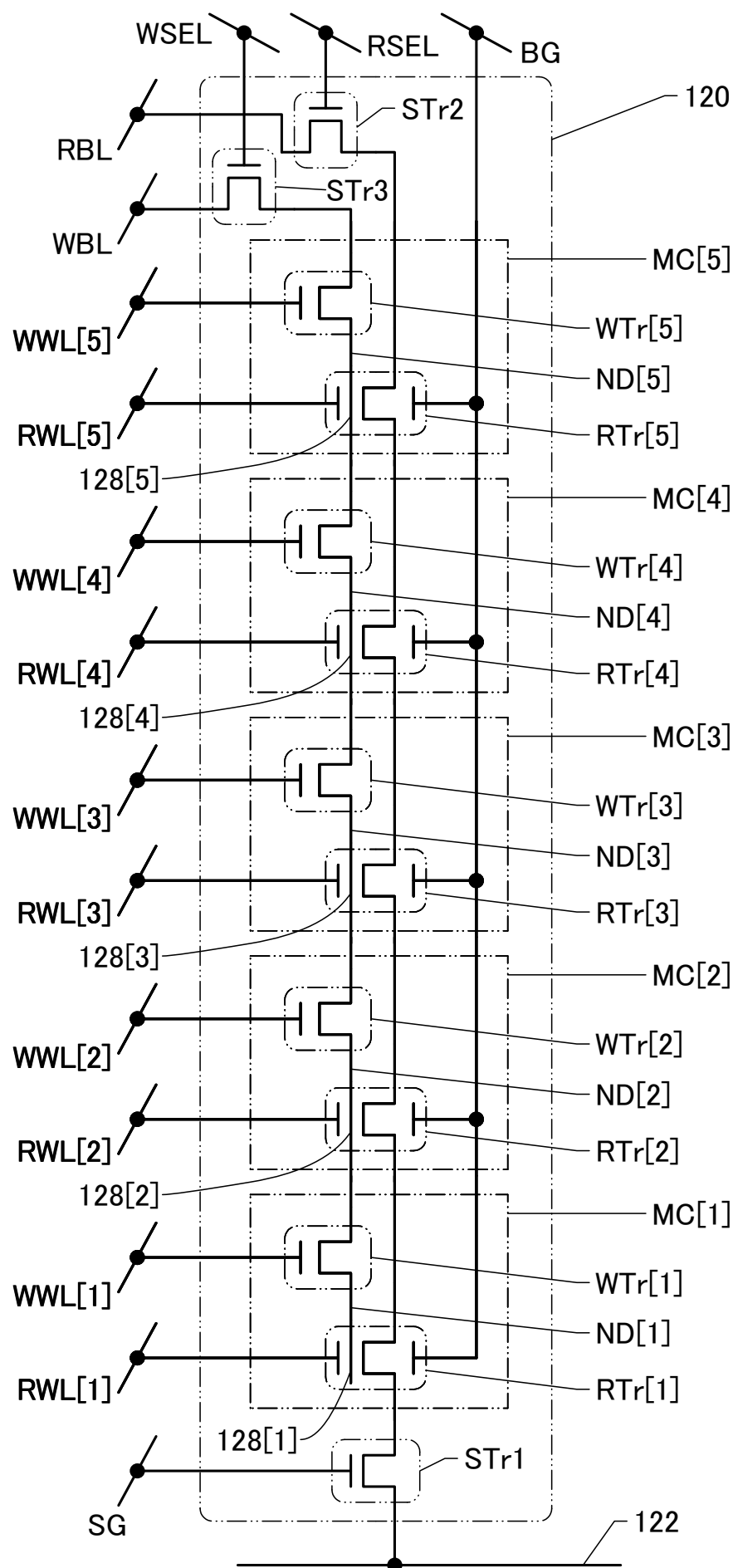


FIG. 28

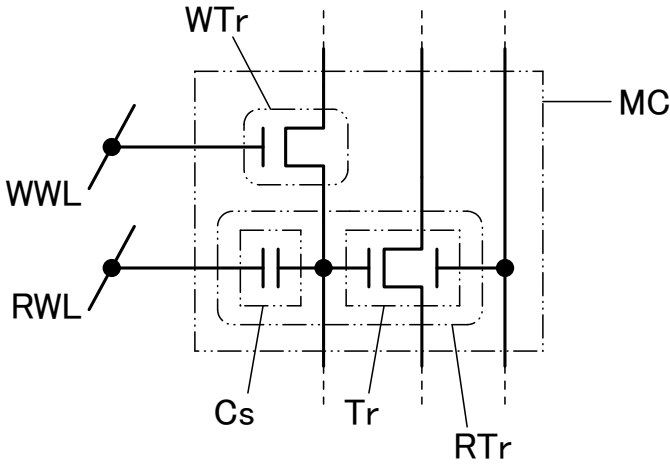


FIG. 29

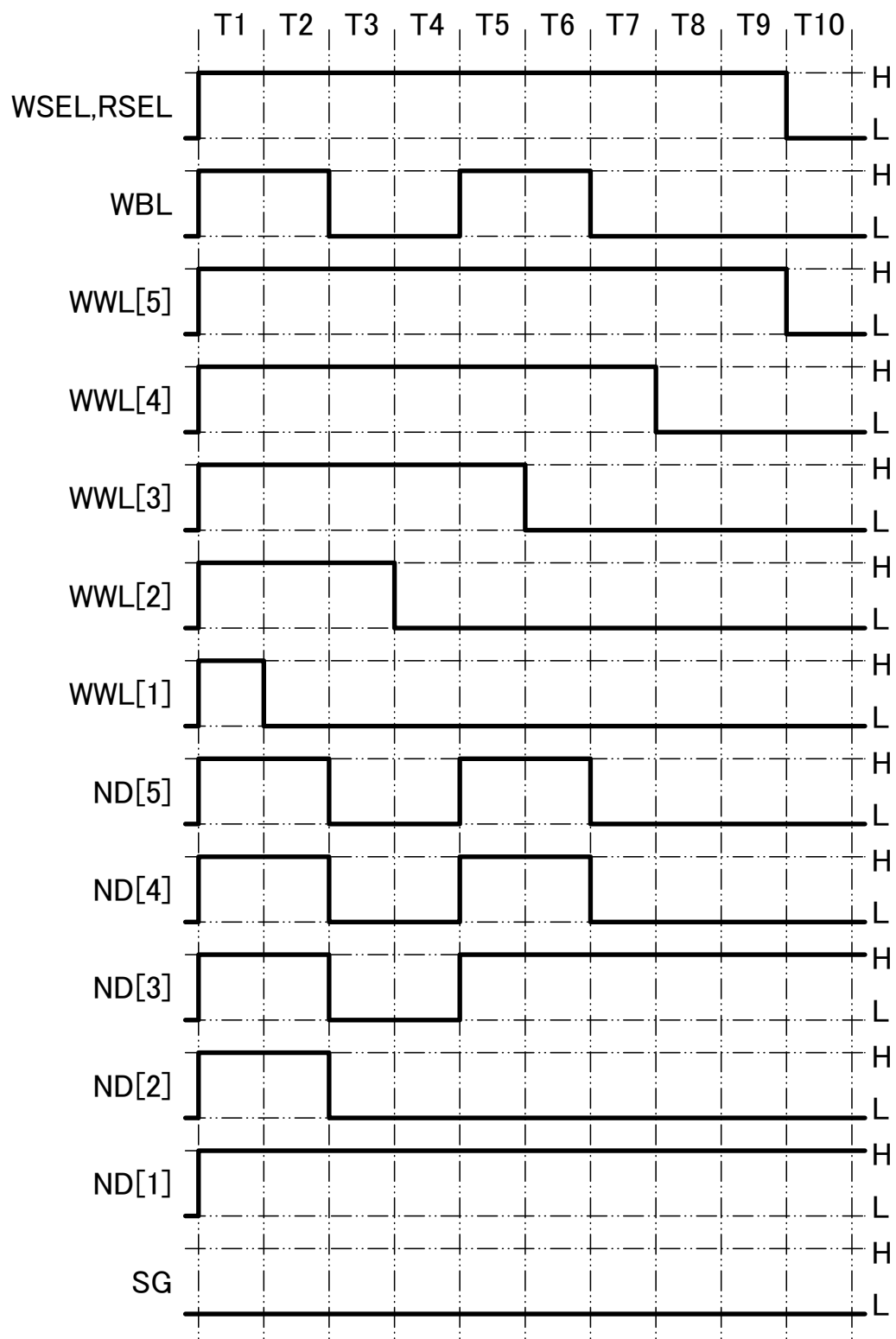
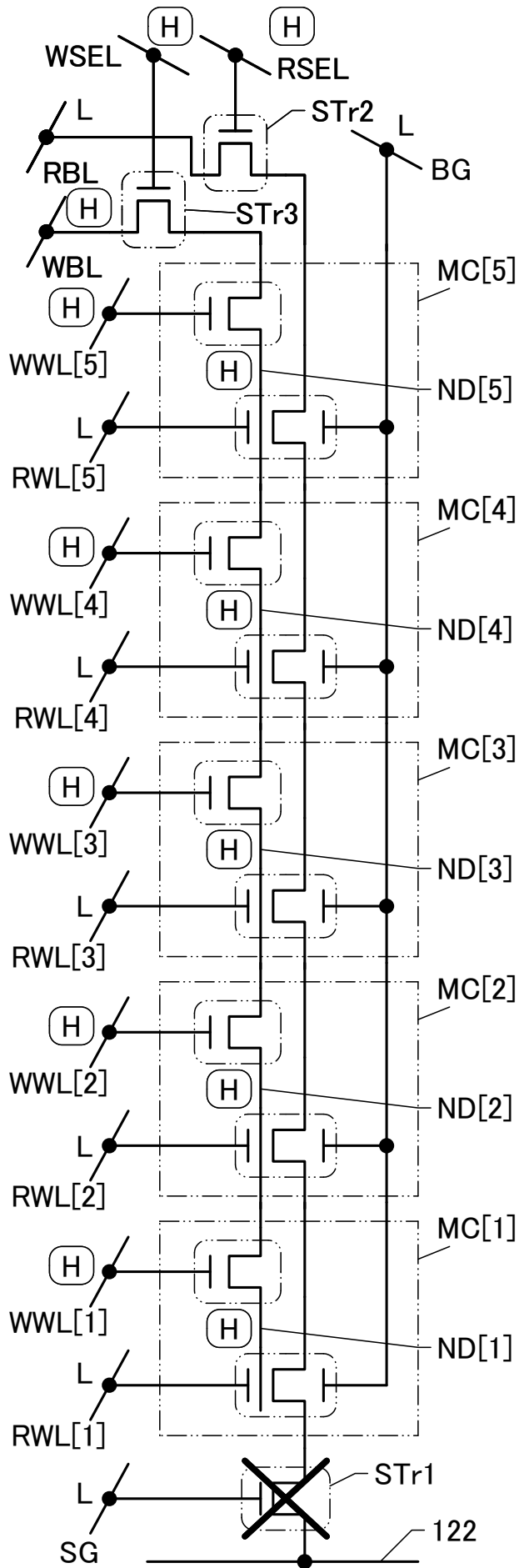


FIG. 30A



30/49 FIG. 30B

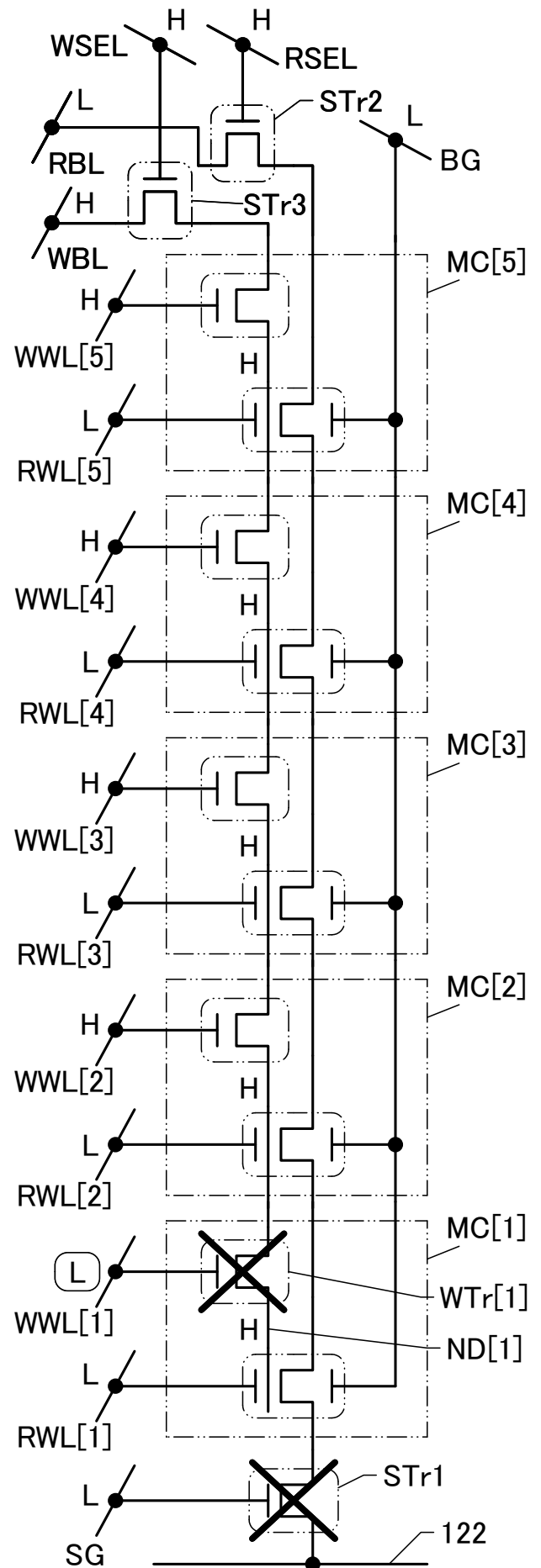


FIG. 31B

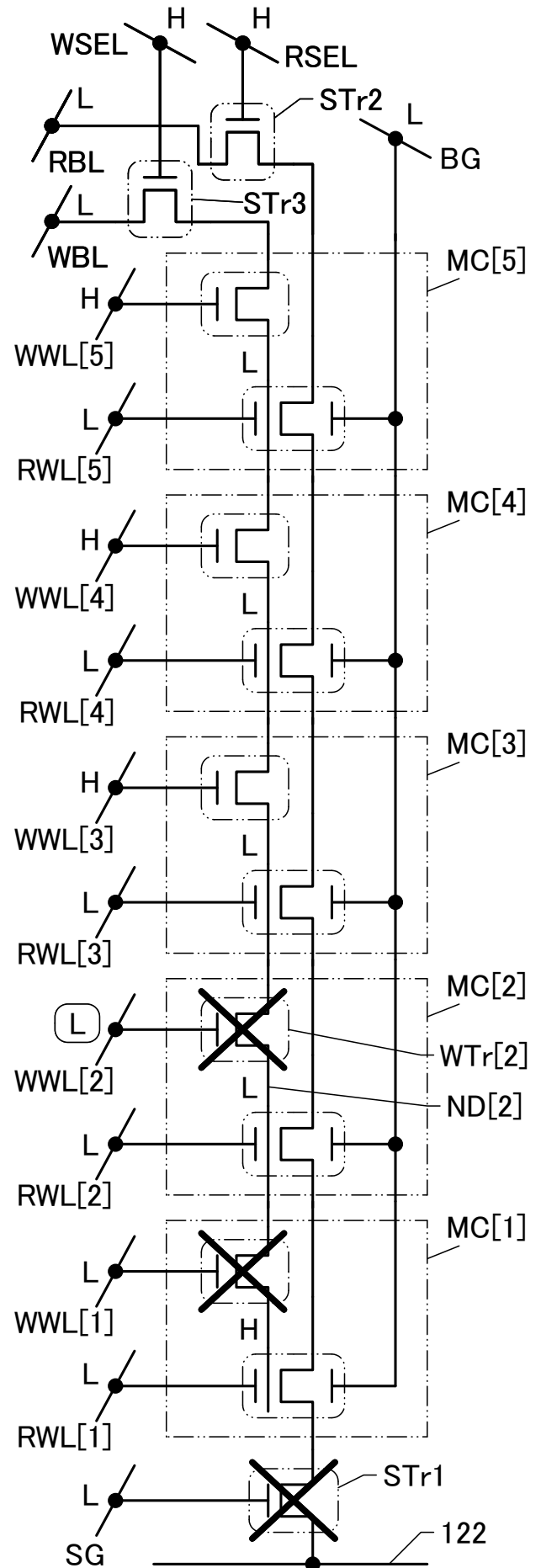


FIG. 32A

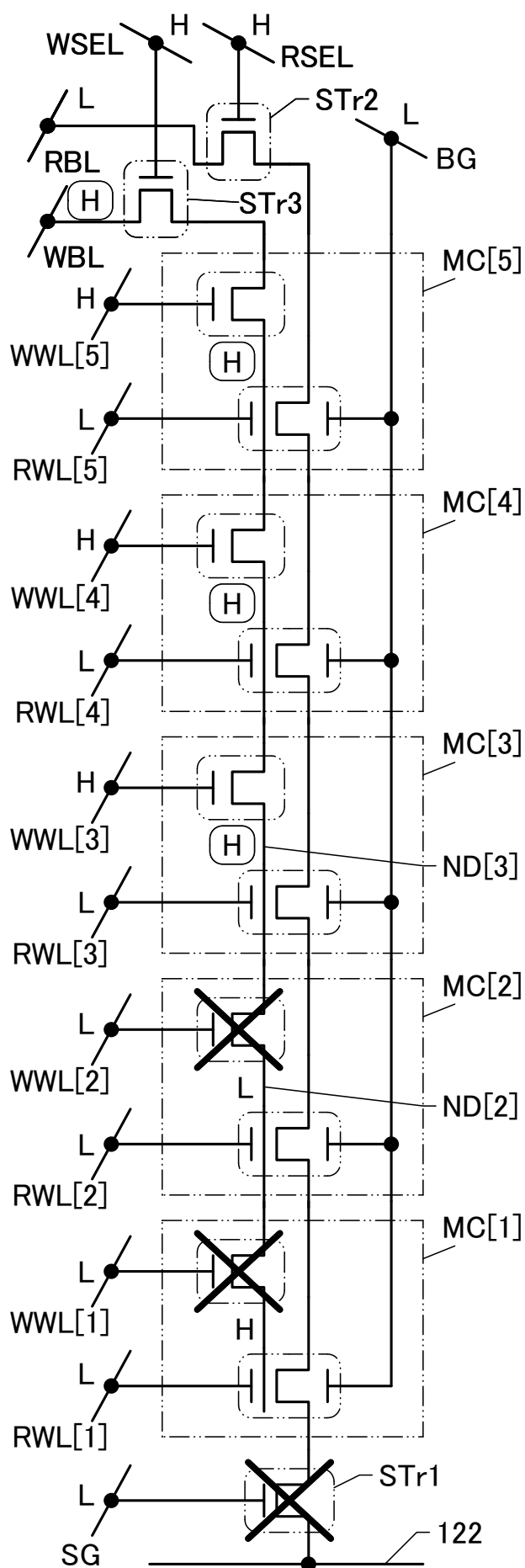


FIG. 32B

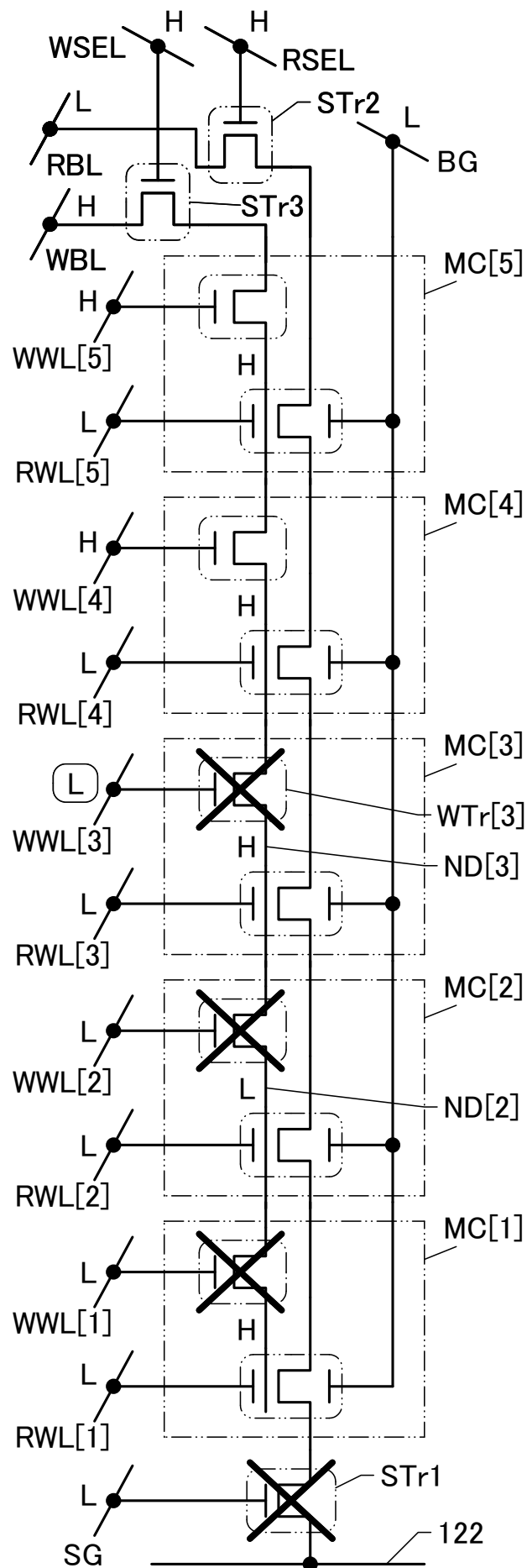


FIG. 33B

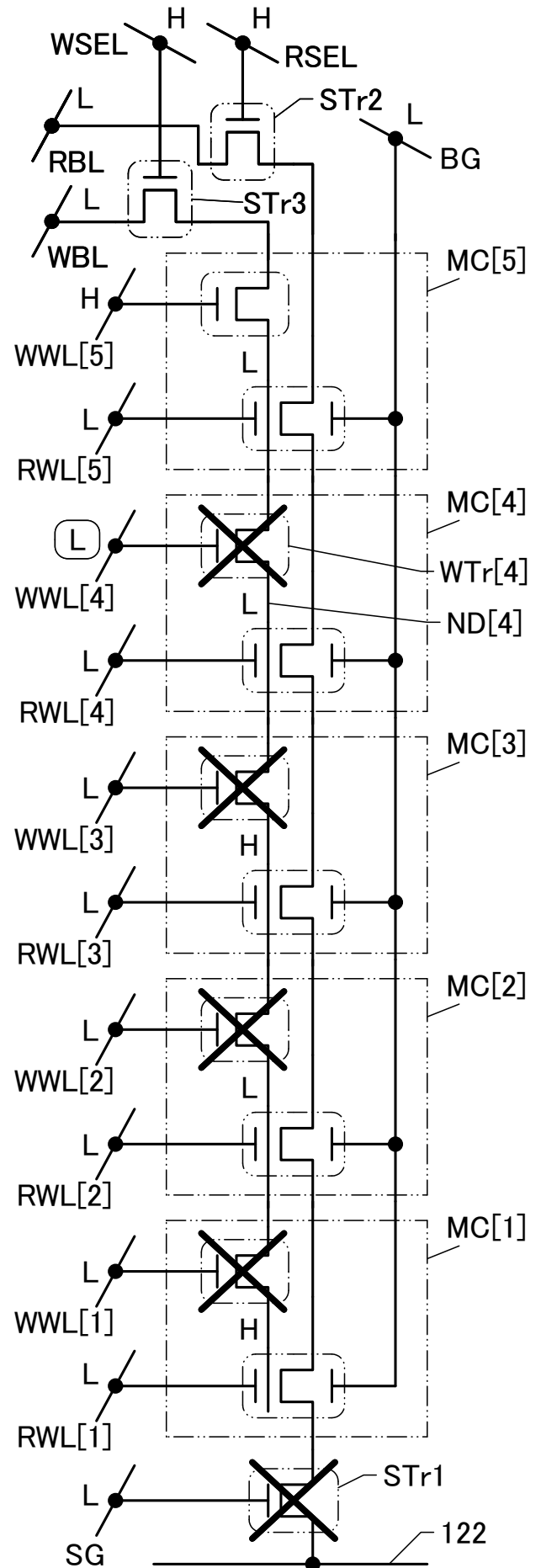
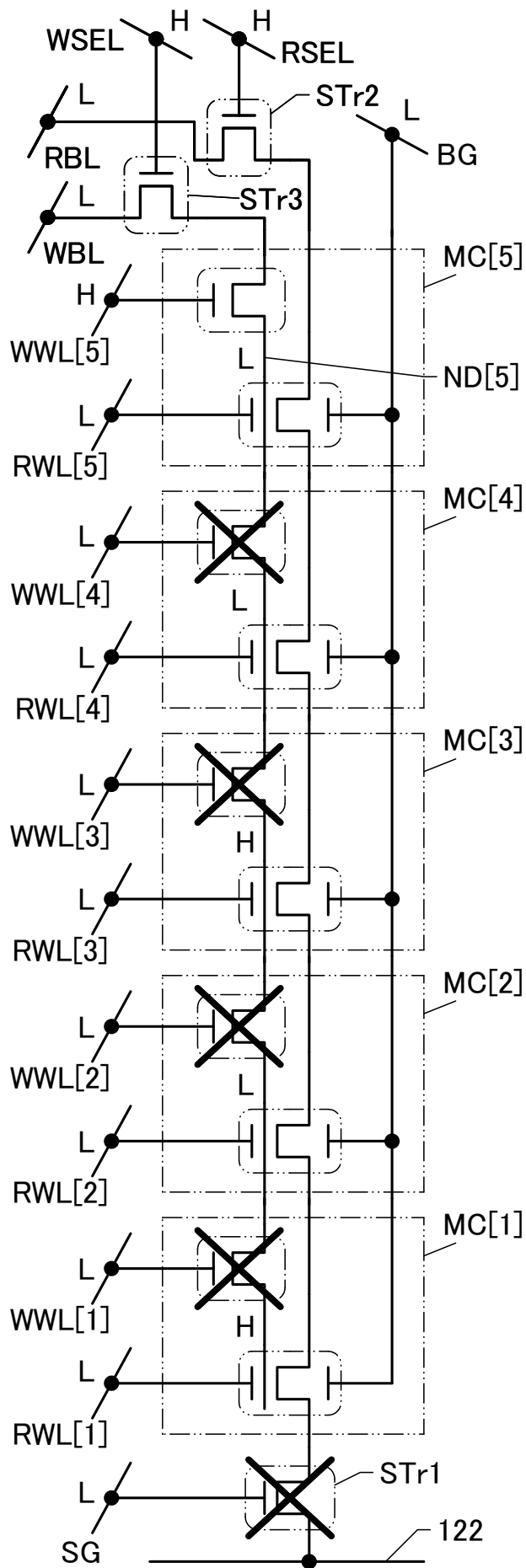


FIG. 34A



34/49 FIG. 34B

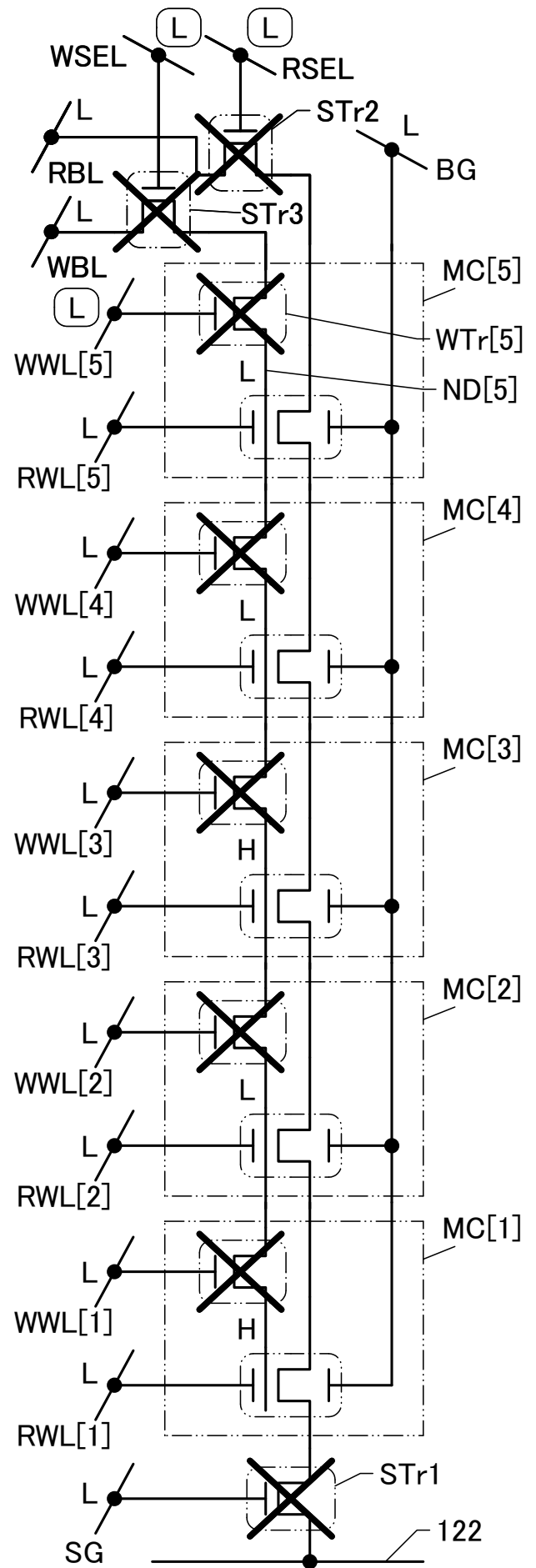


FIG. 35A

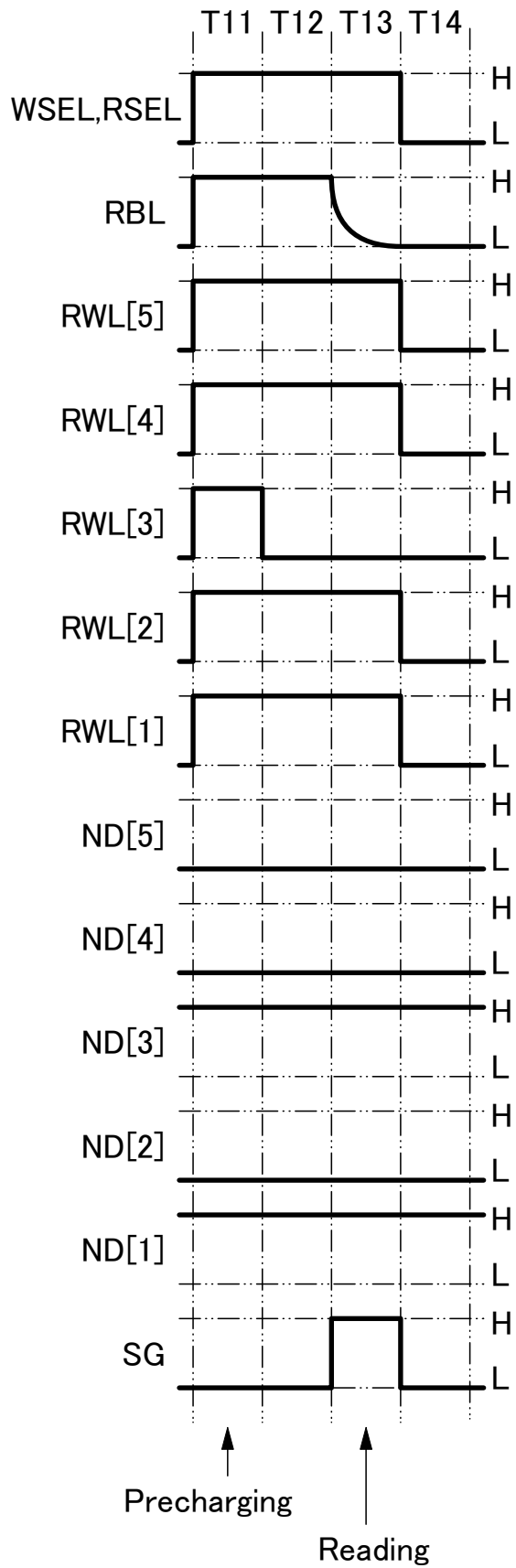


FIG. 35B

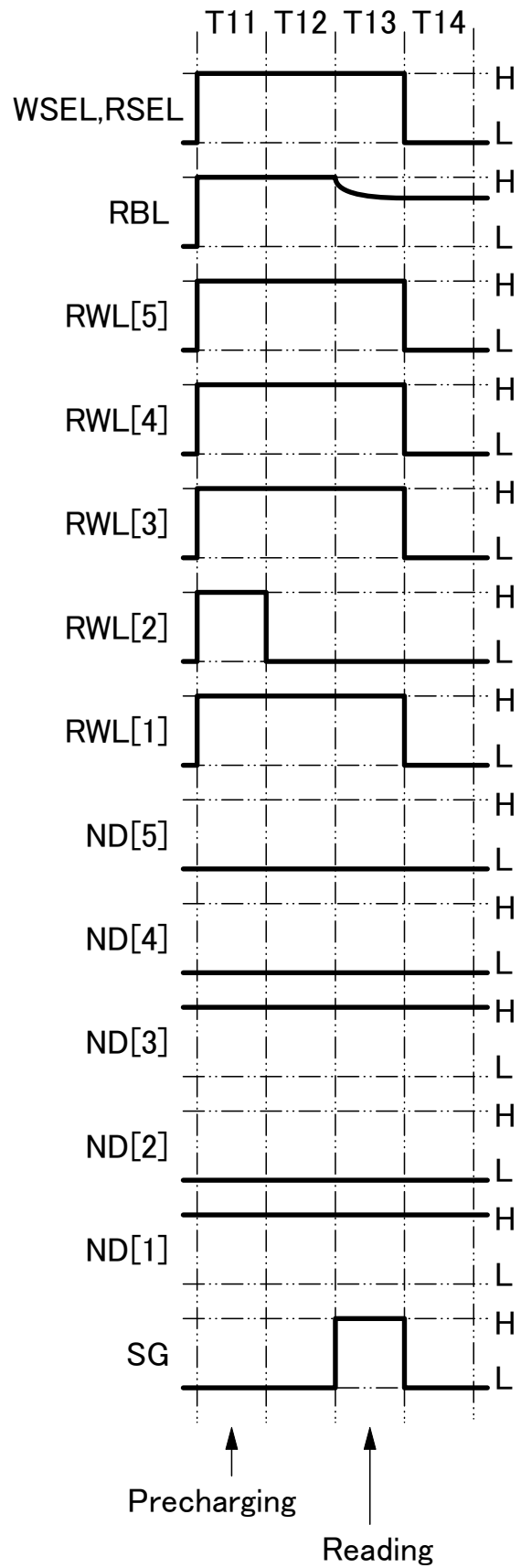


FIG. 36A

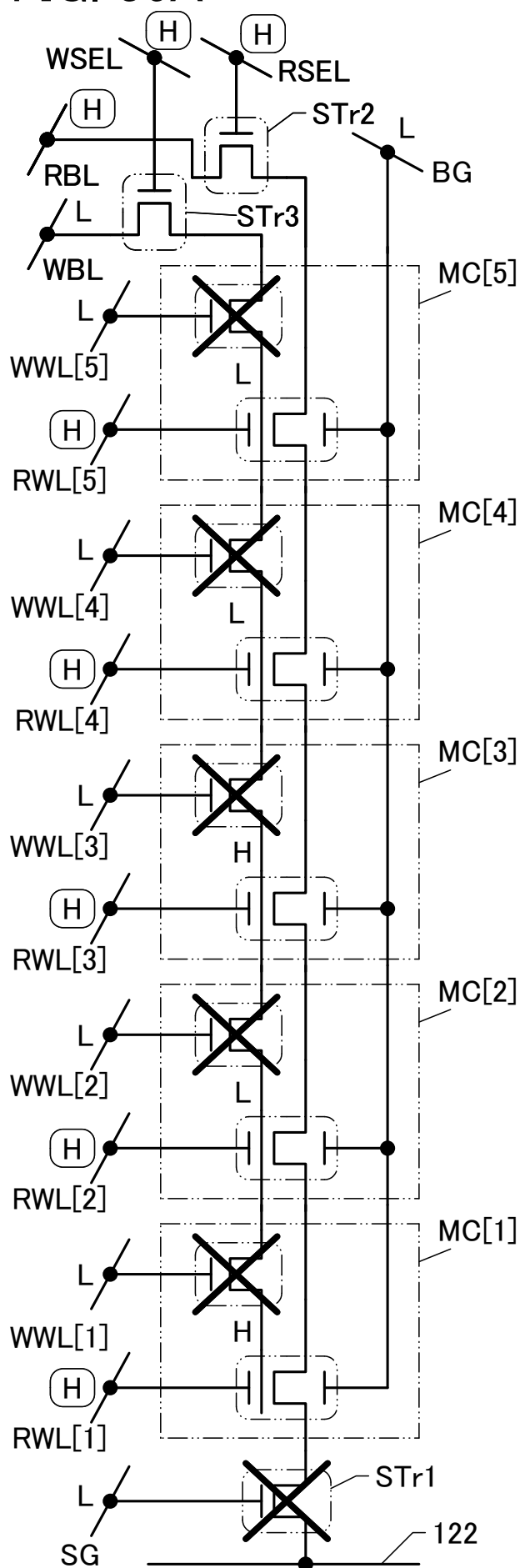


FIG. 36B

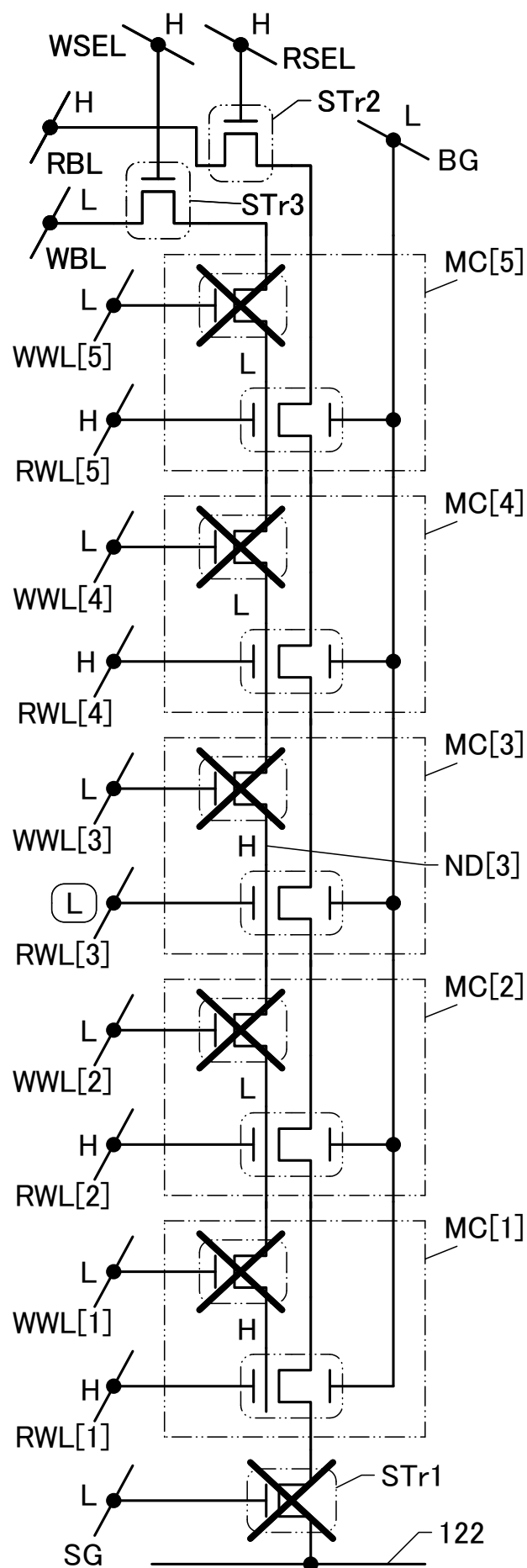
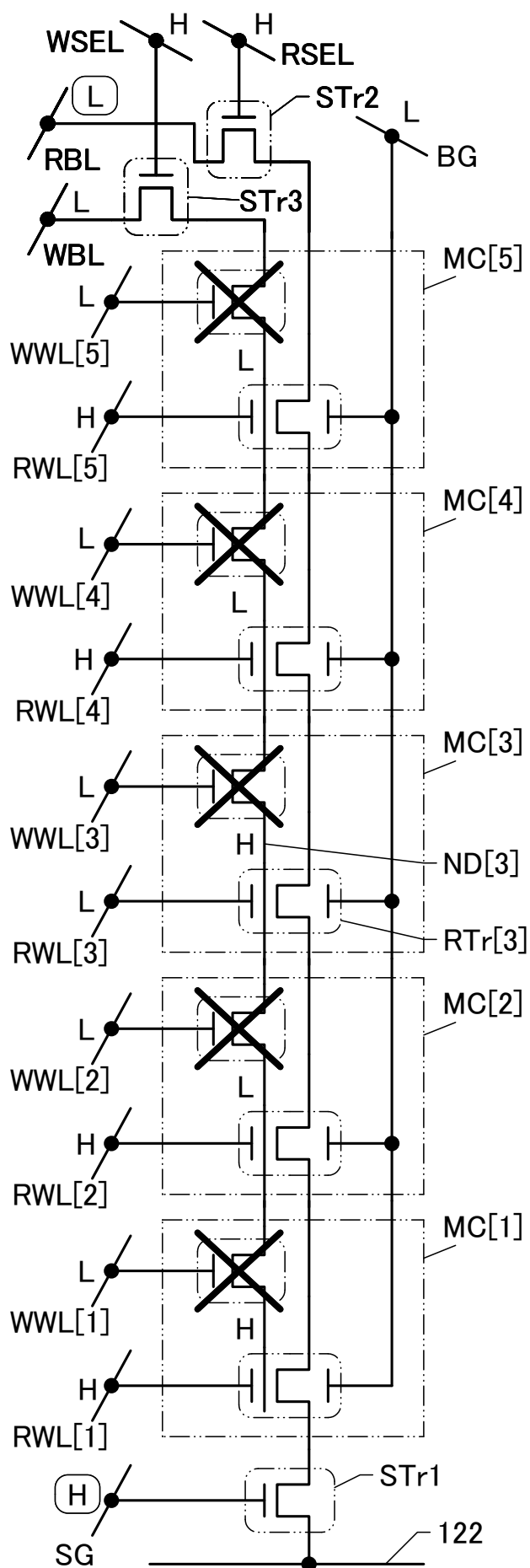


FIG. 37A



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FIG. 37B

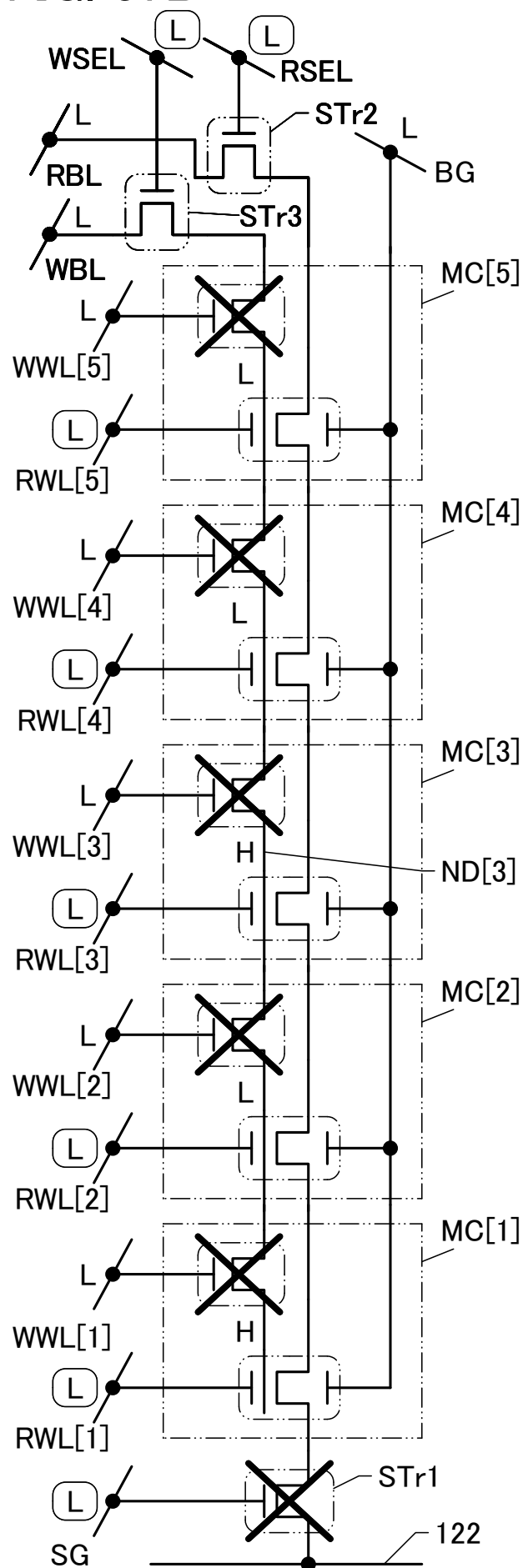


FIG. 38A

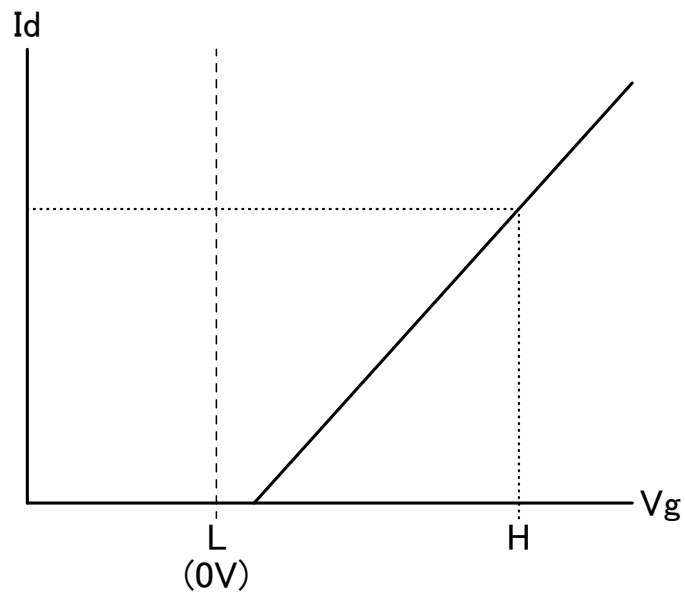


FIG. 38B

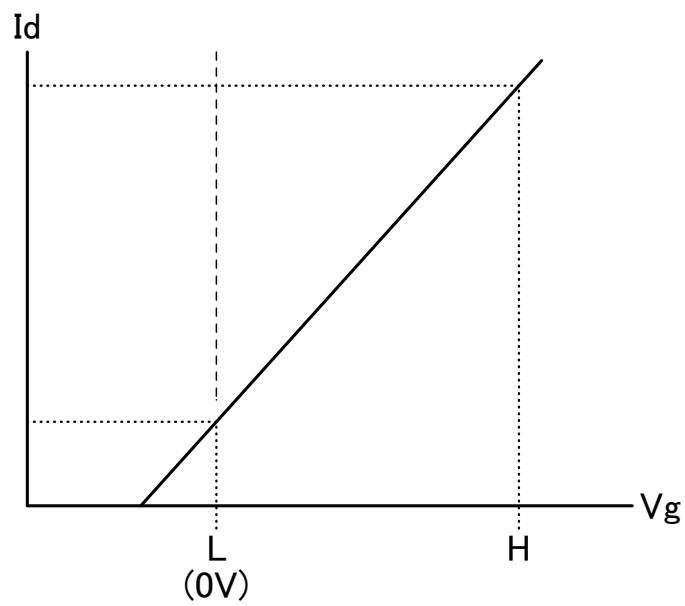


FIG. 39

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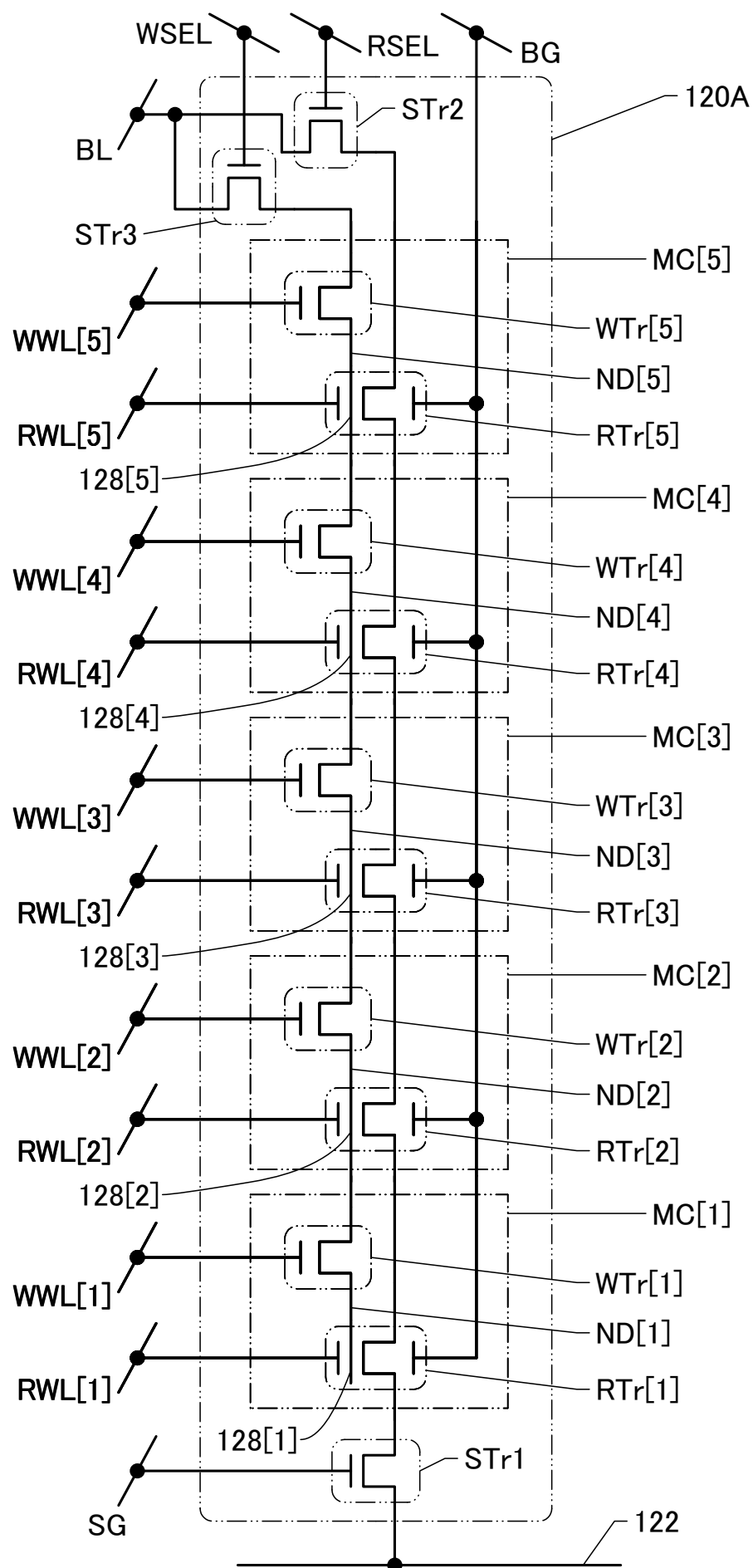


FIG. 40

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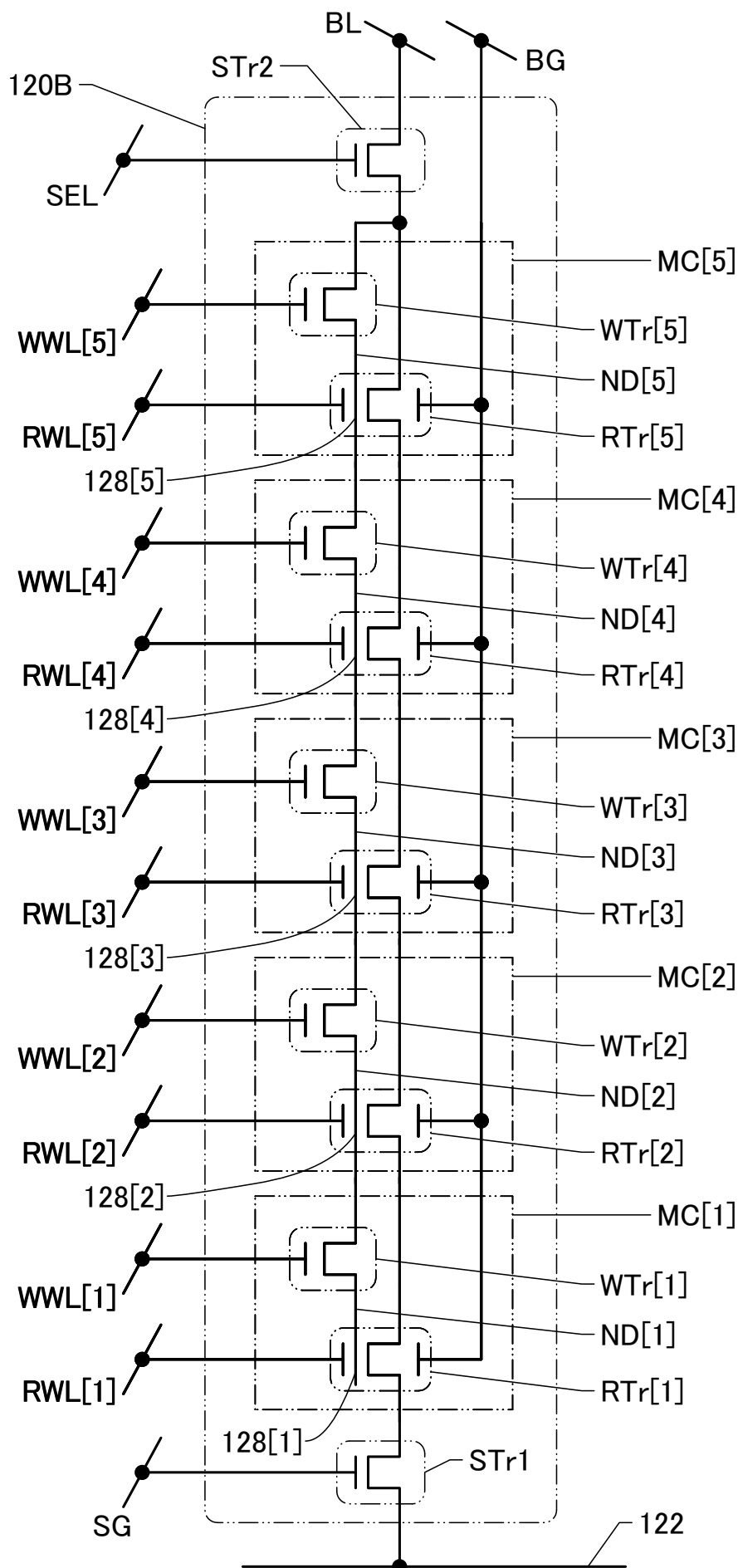


FIG. 41

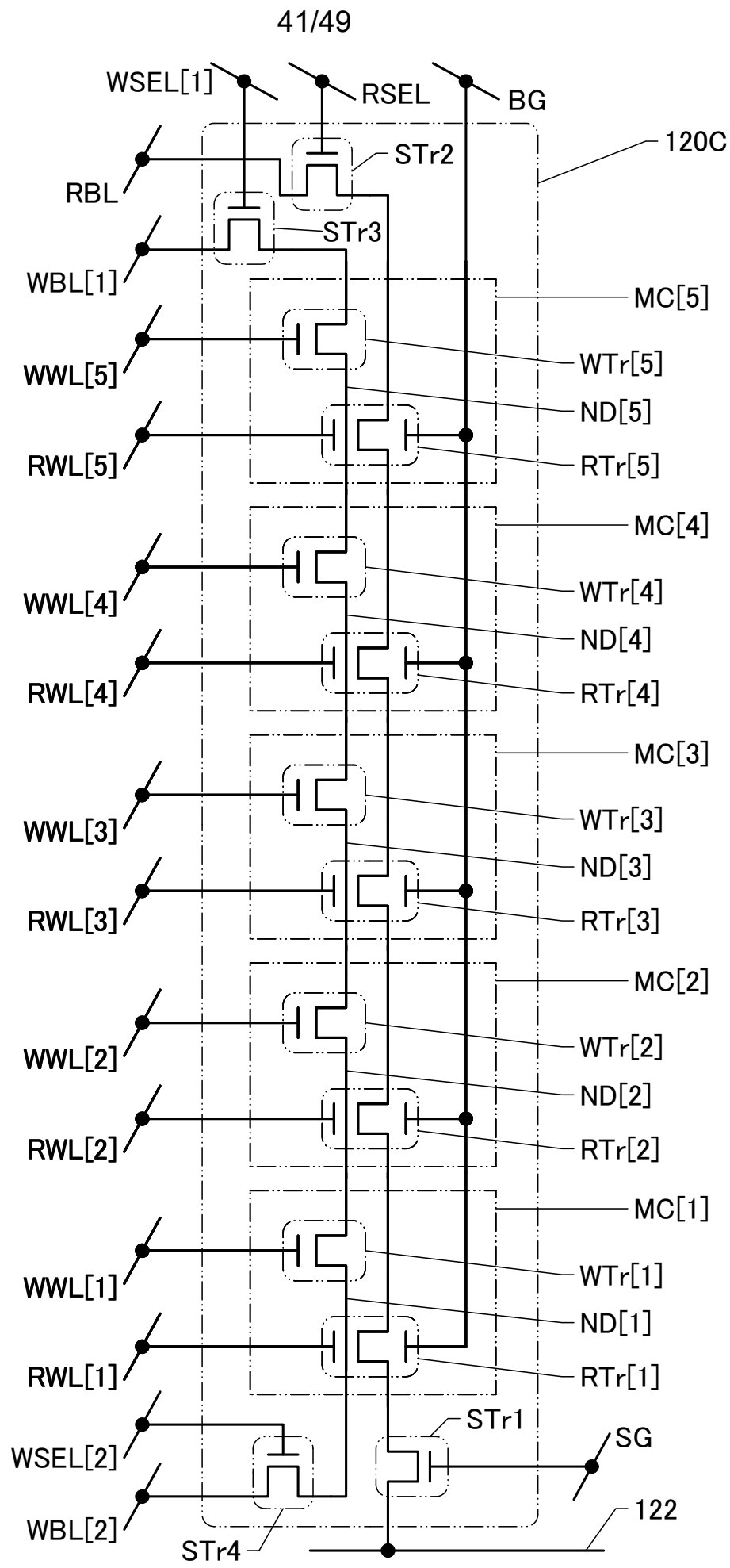


FIG. 42

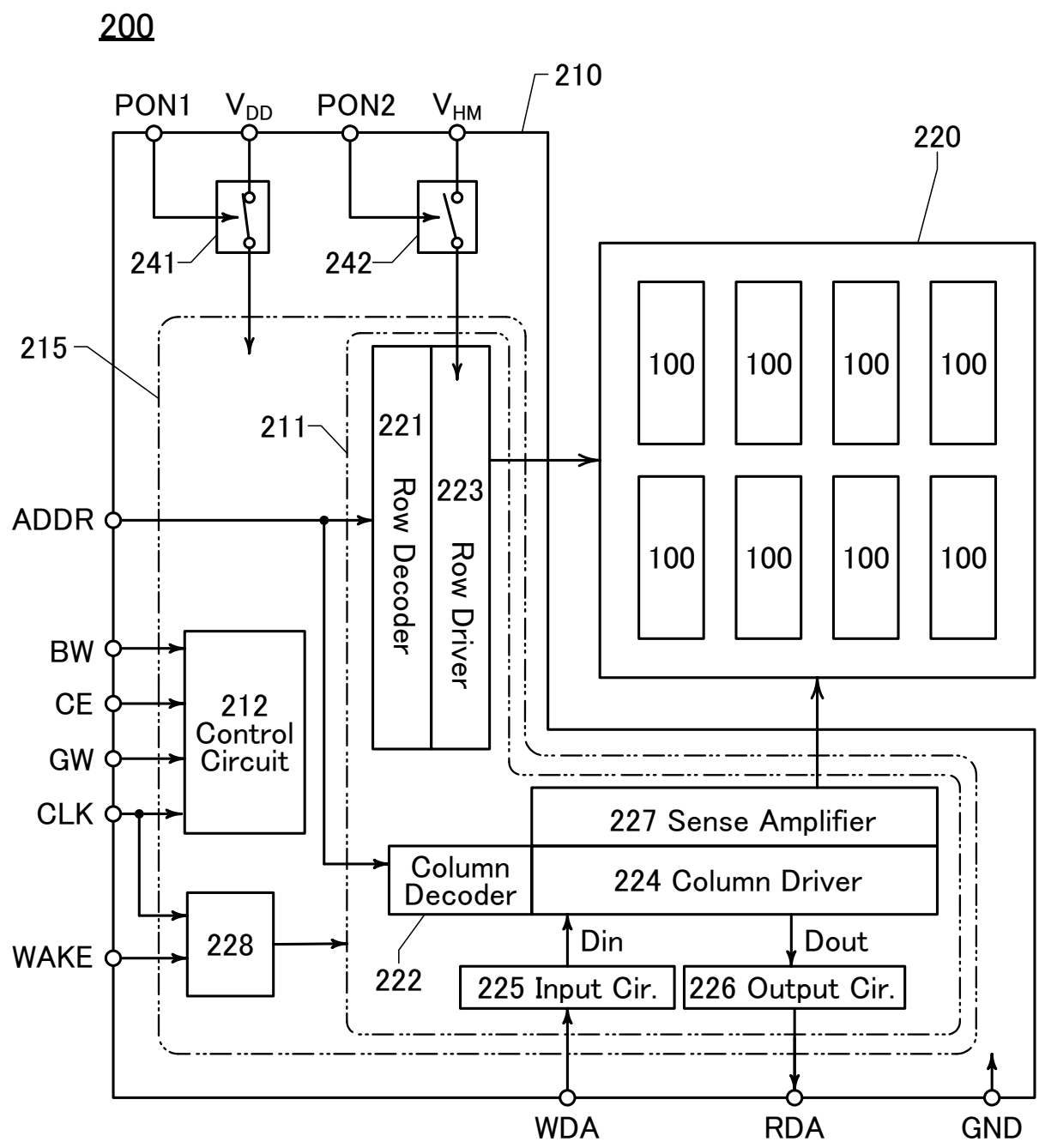


FIG. 43A

200

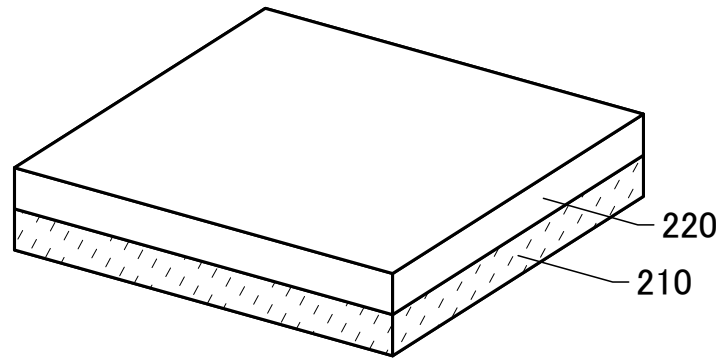


FIG. 43B

200

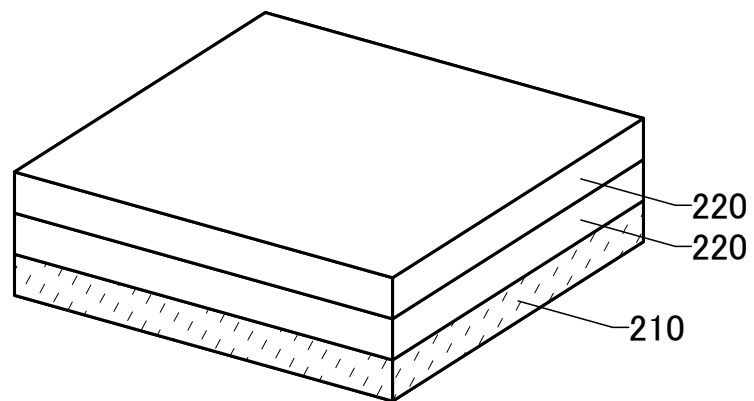


FIG. 43C

200

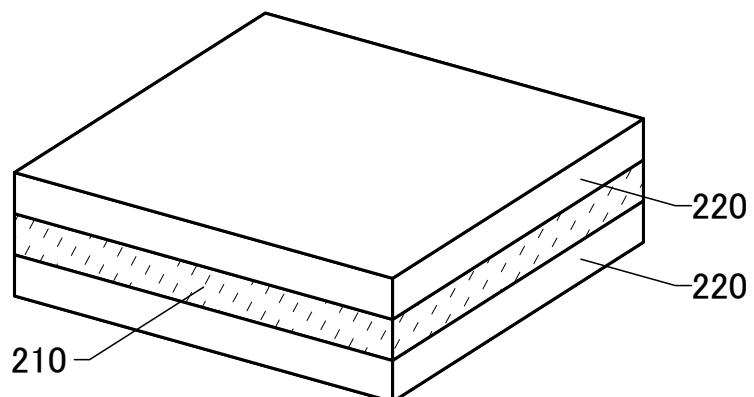


FIG. 44

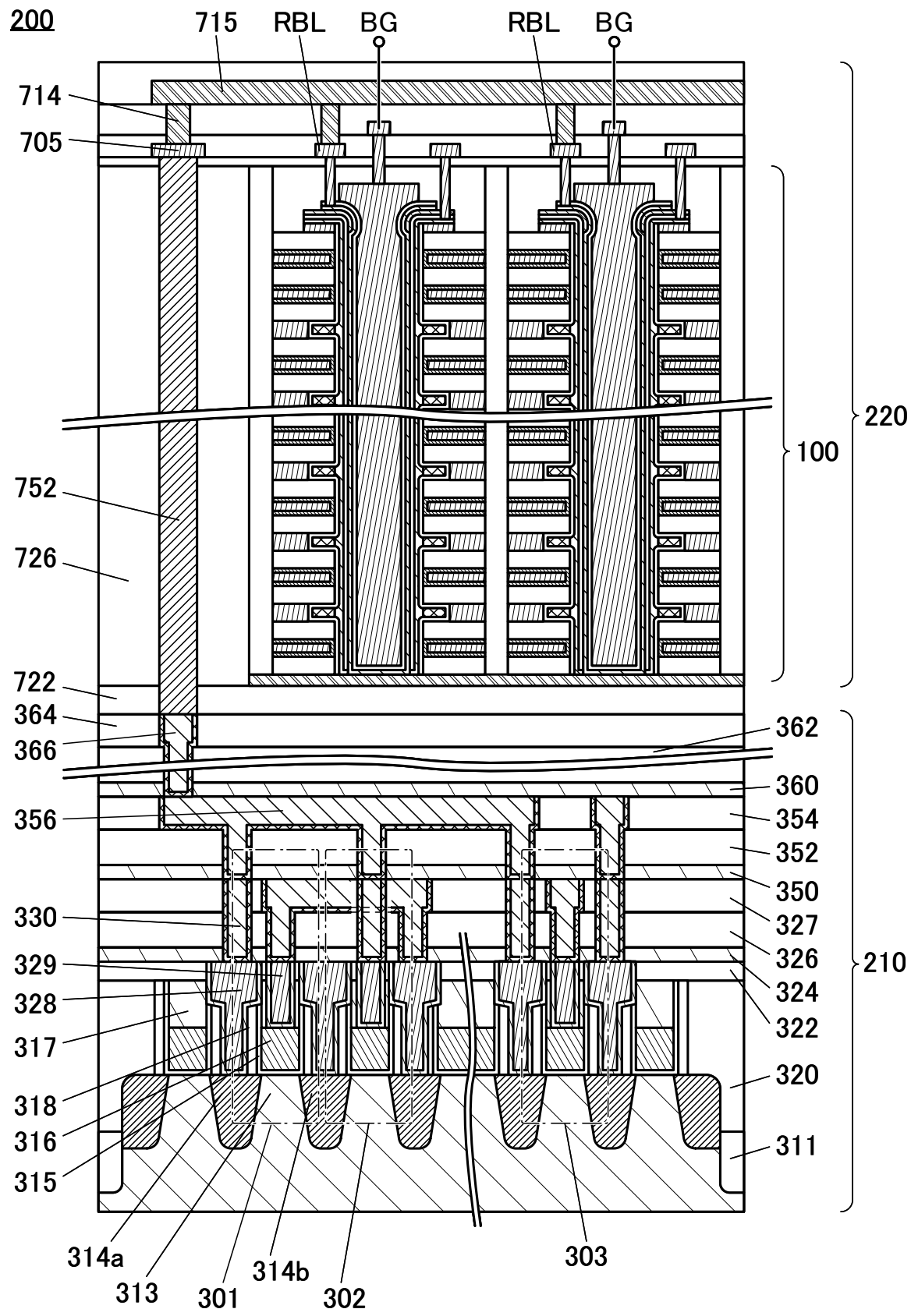


FIG. 45A

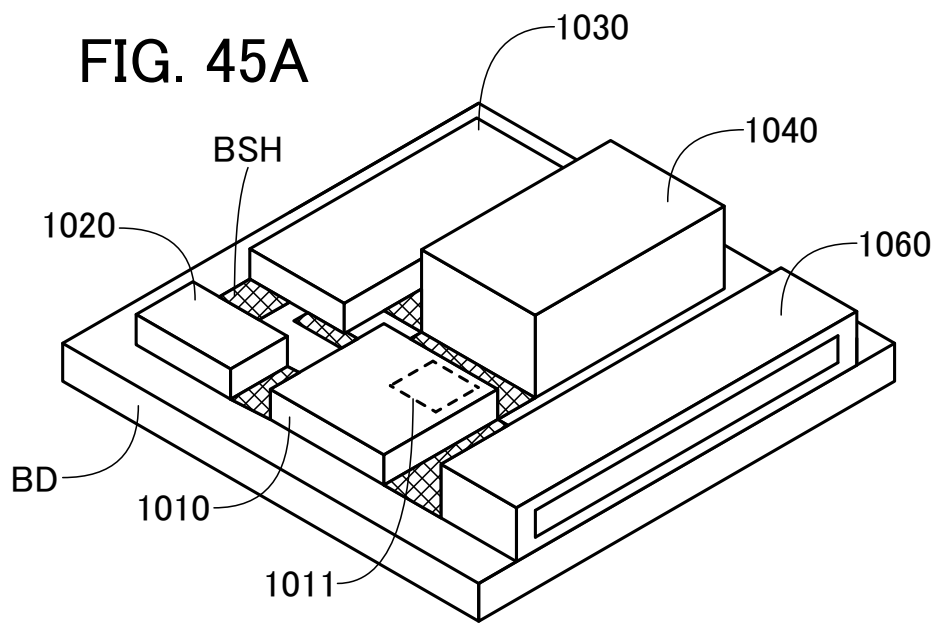


FIG. 45B

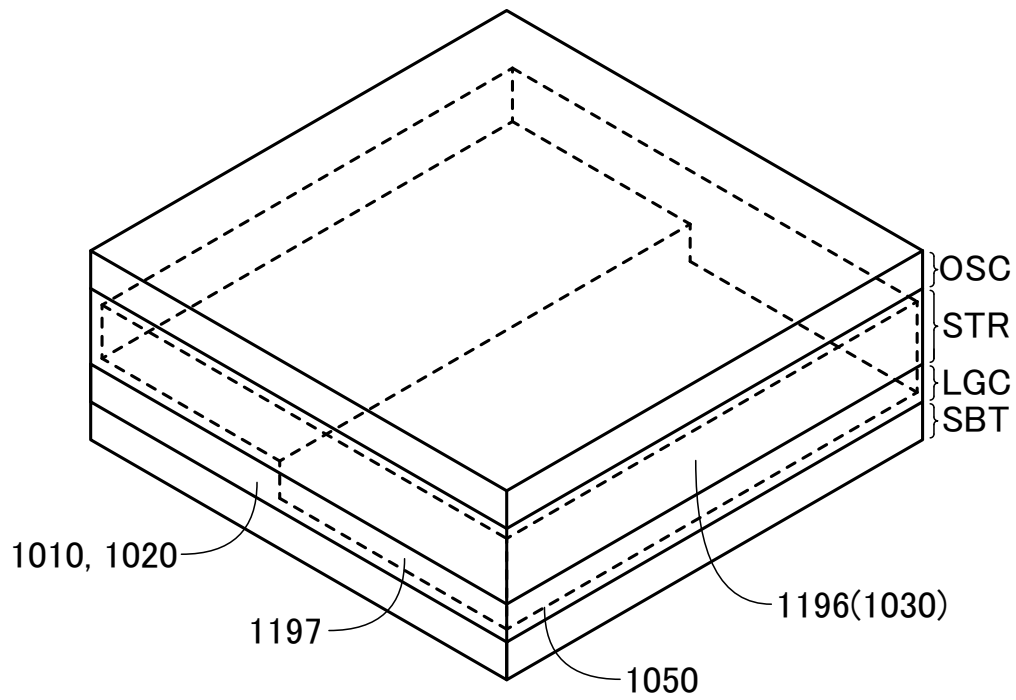


FIG. 46A

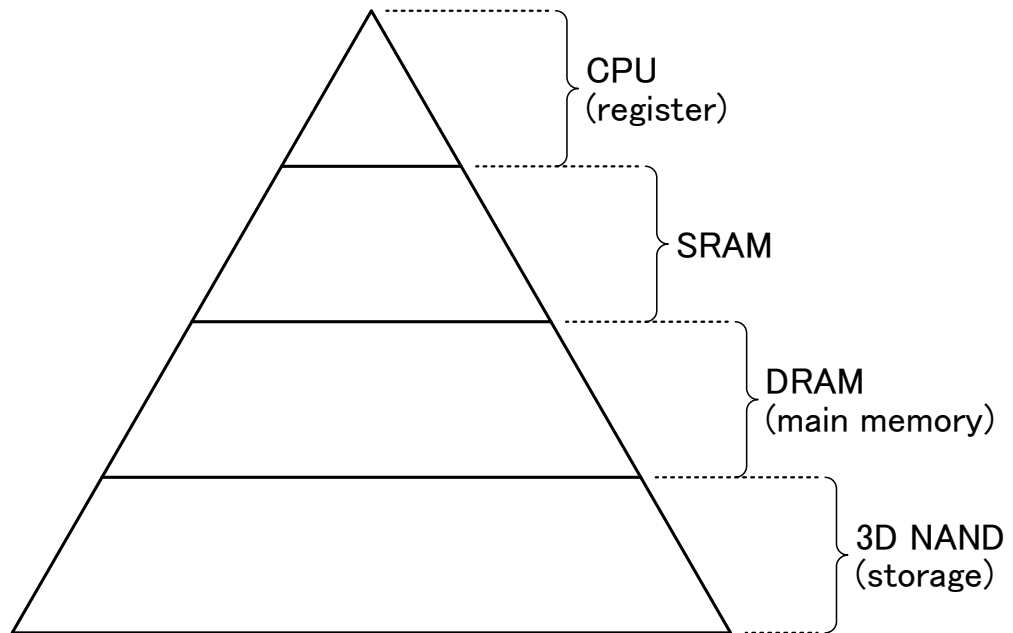


FIG. 46B

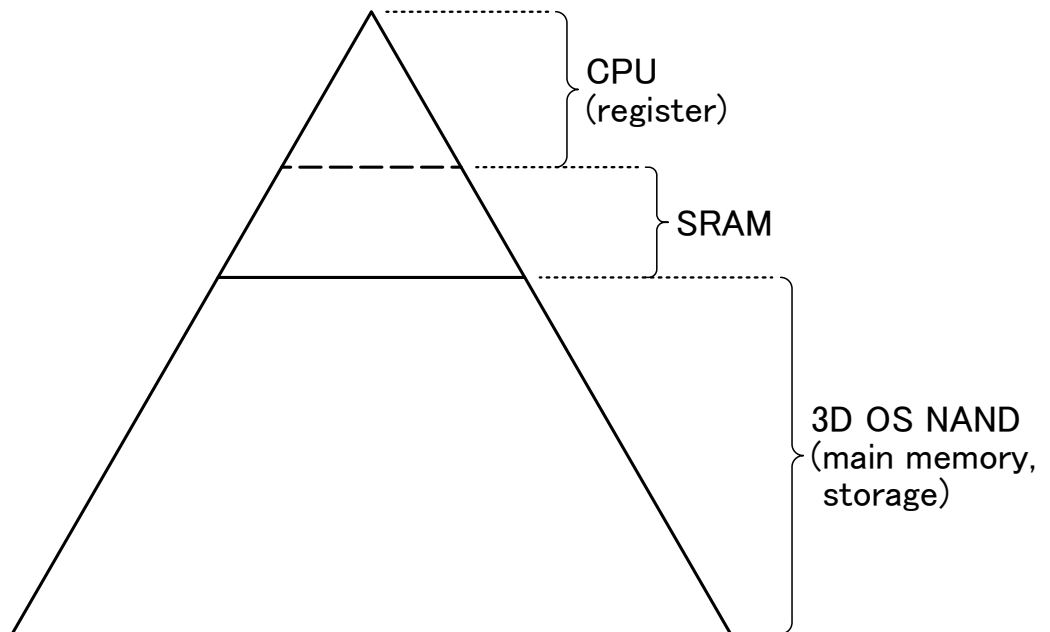


FIG. 47A

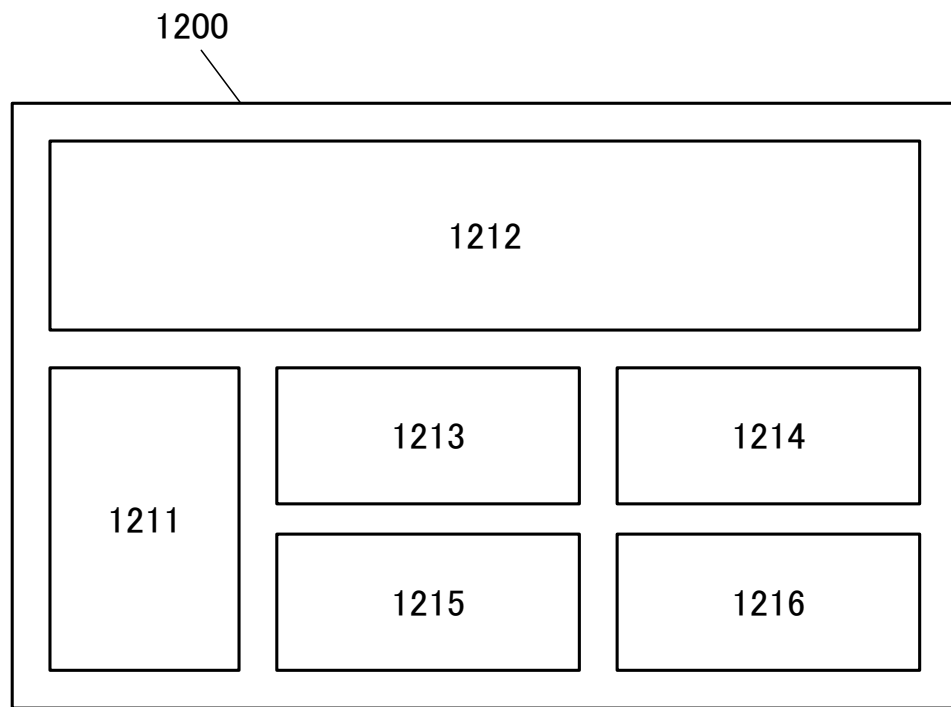


FIG. 47B

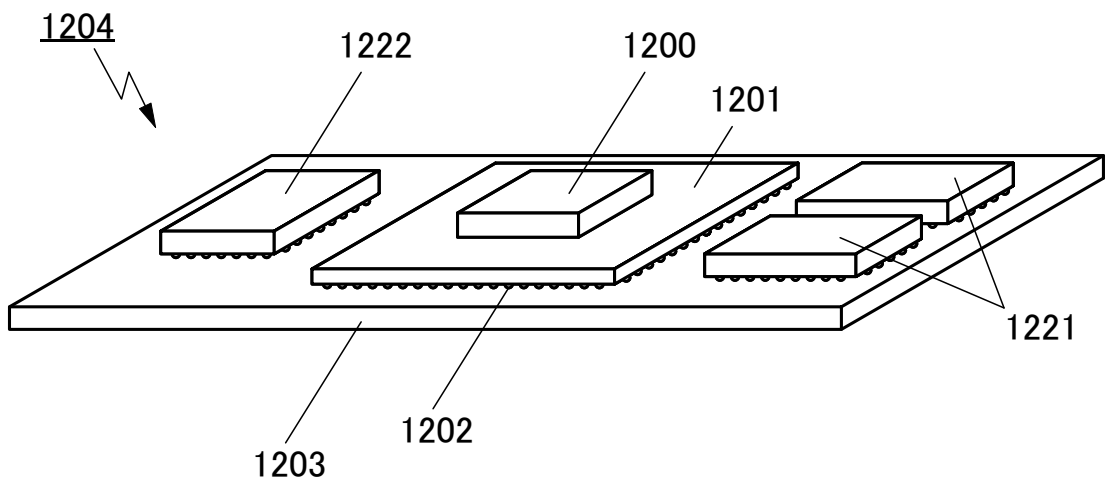


FIG. 48A

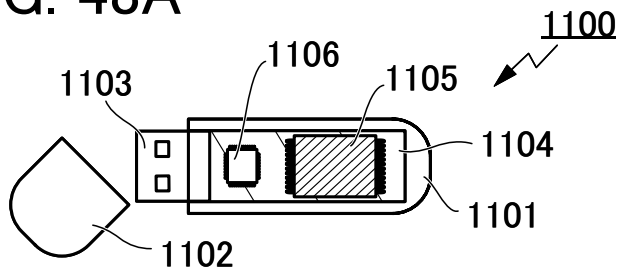


FIG. 48B

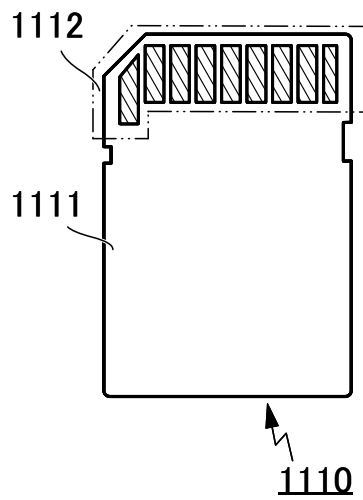


FIG. 48C

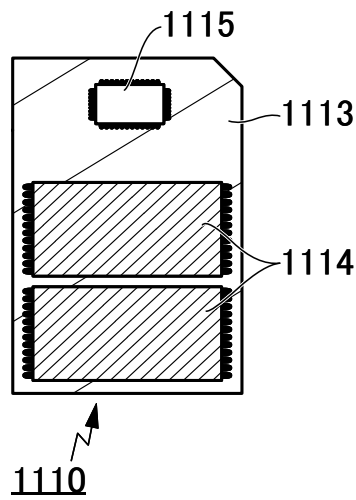


FIG. 48D

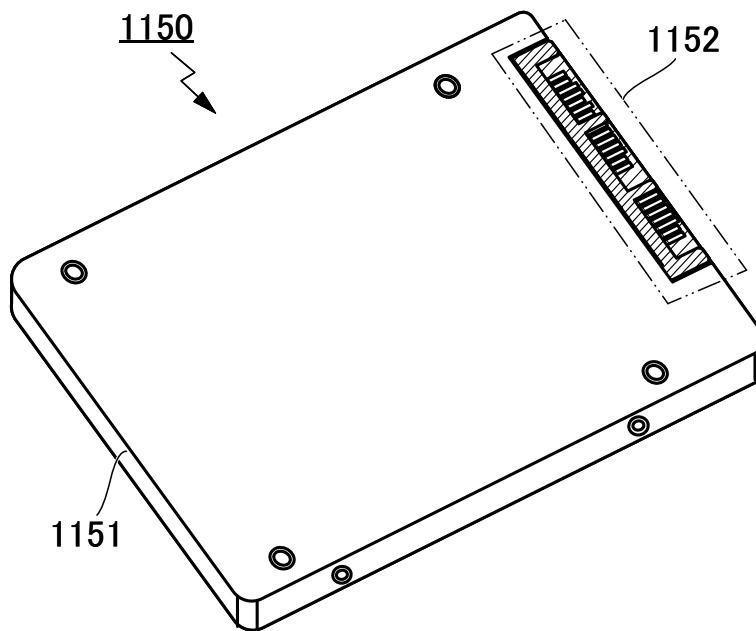


FIG. 48E

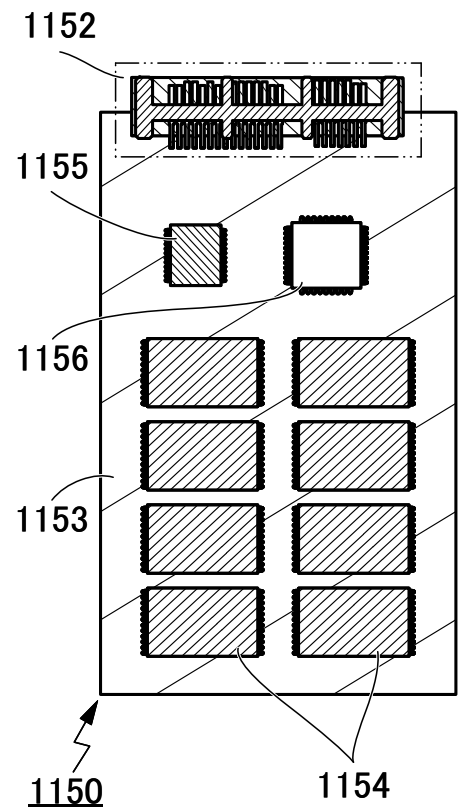


FIG. 49A

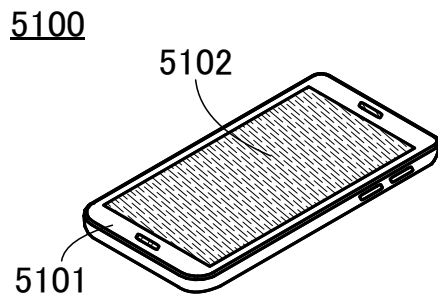


FIG. 49B

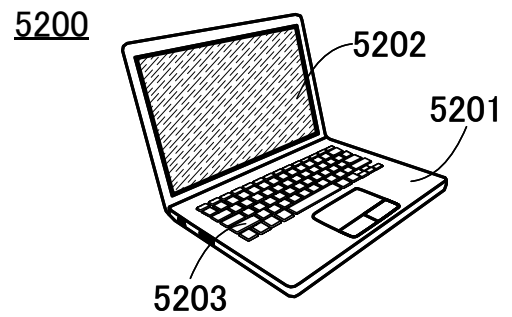


FIG. 49C

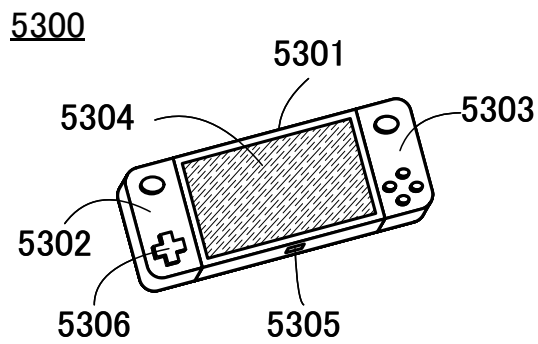


FIG. 49D

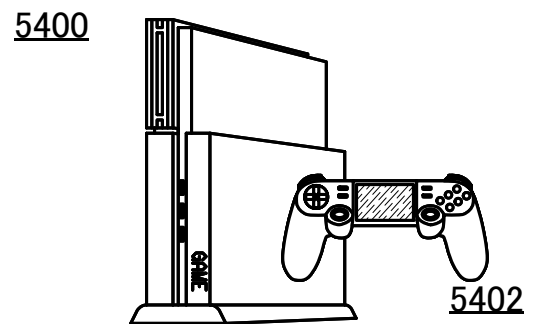


FIG. 49E

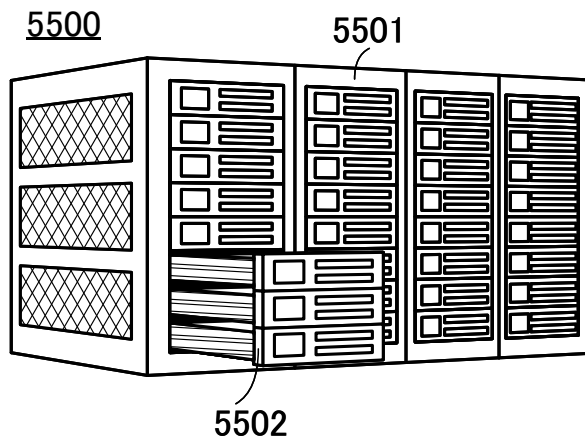


FIG. 49F

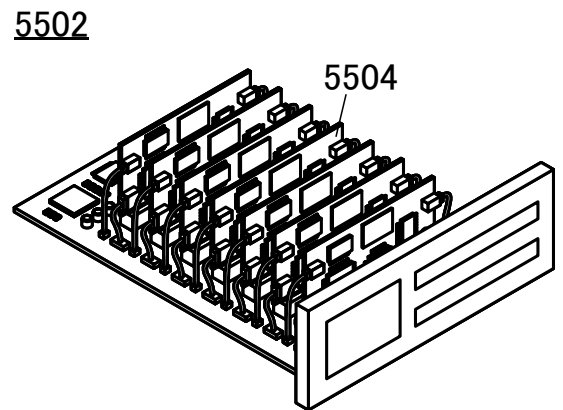


FIG. 49G

