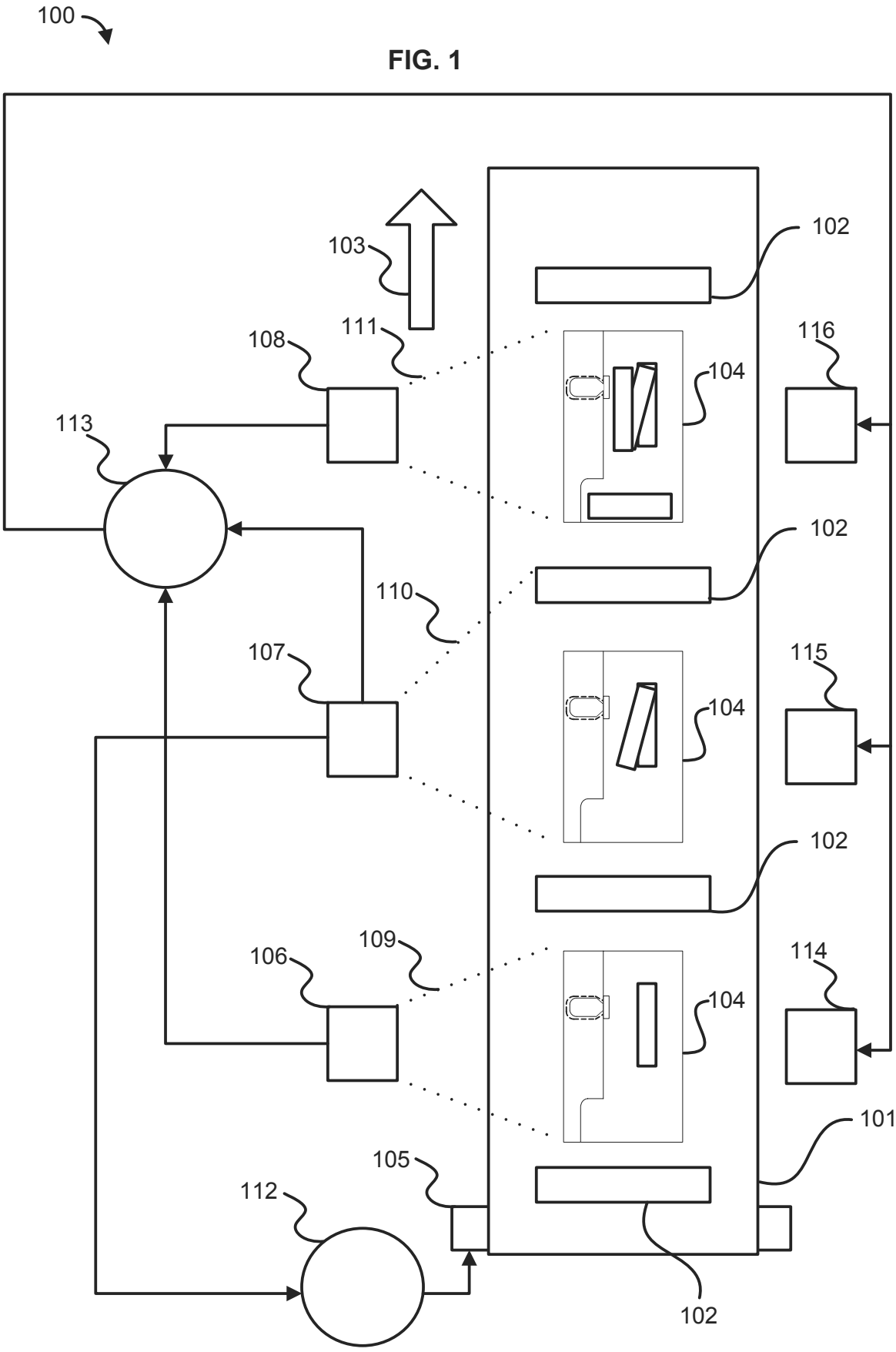
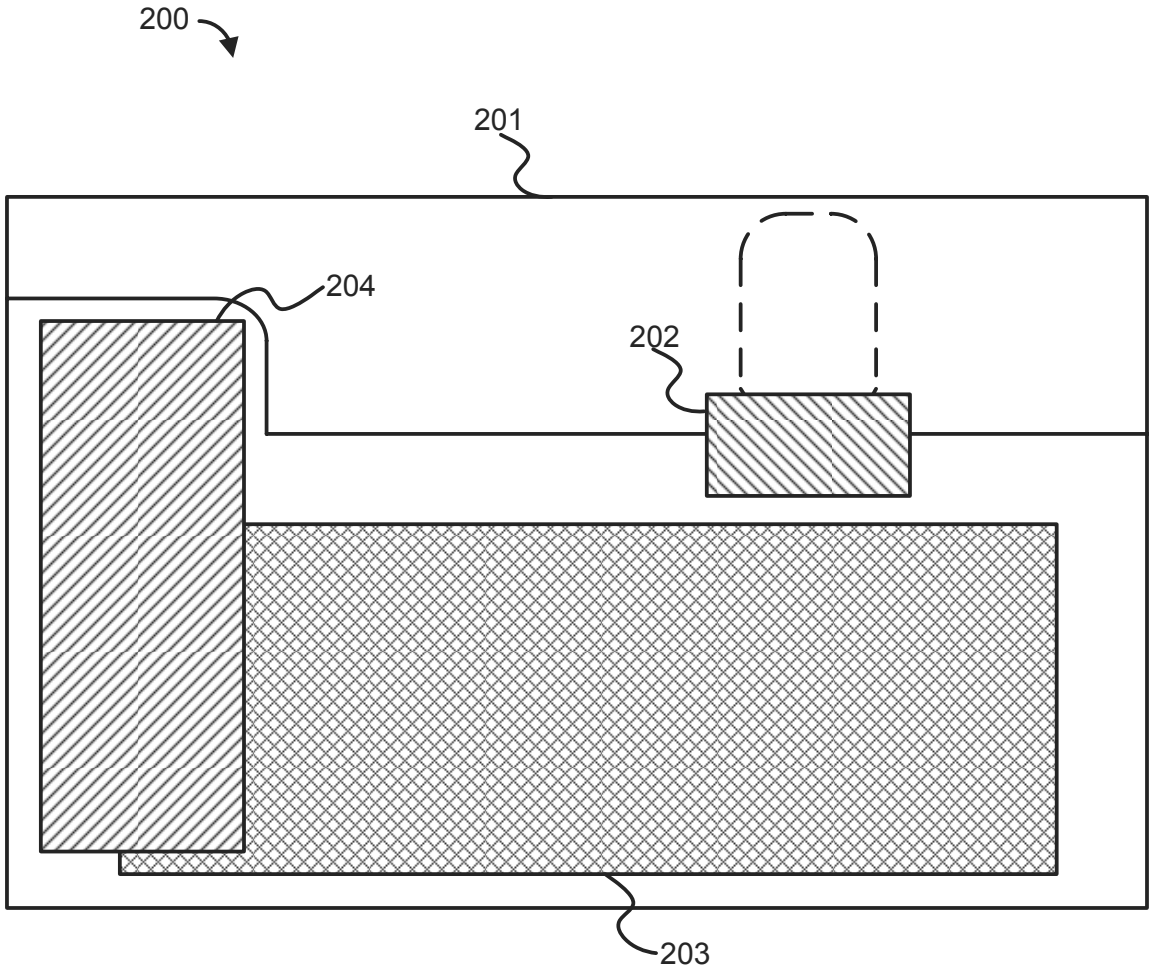

100
103
102
111
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115
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114
104
101
105
112
102

FIG. 1

FIG. 2



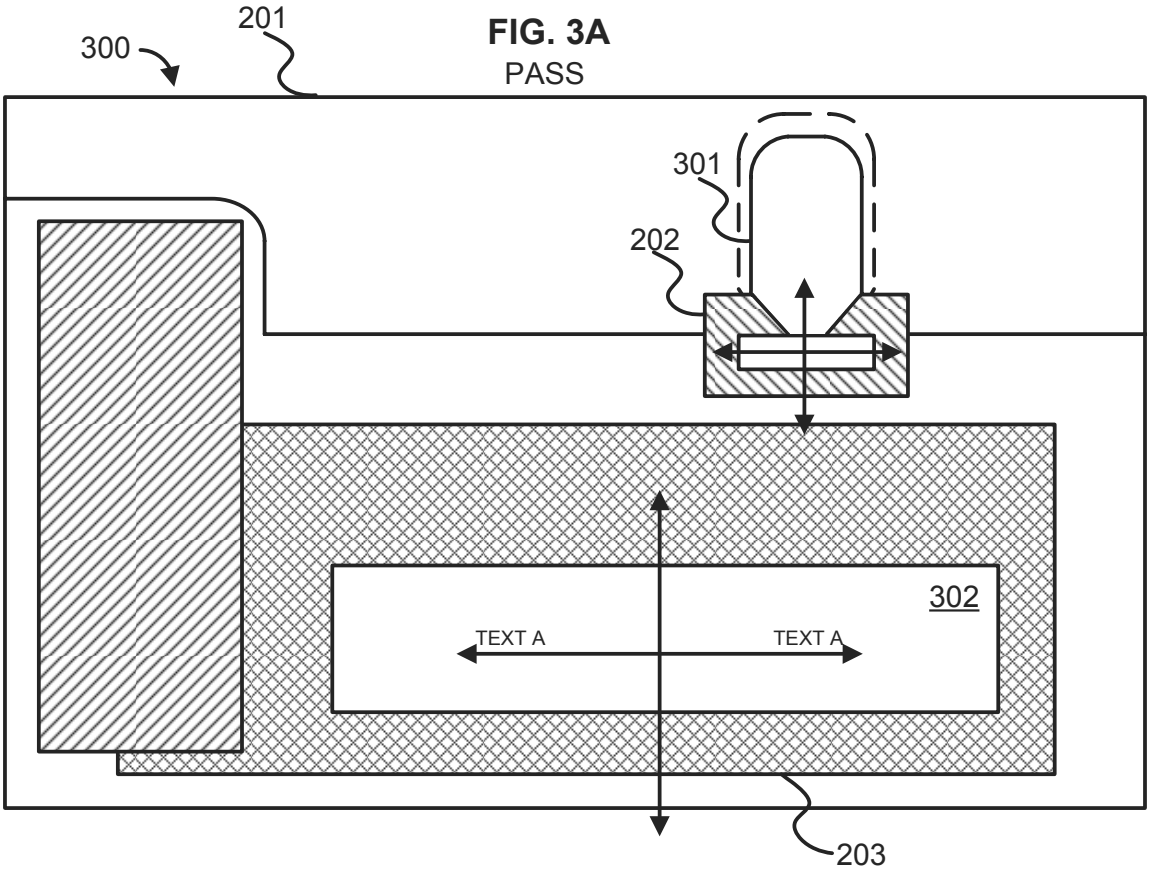


FIG. 3A
PASS

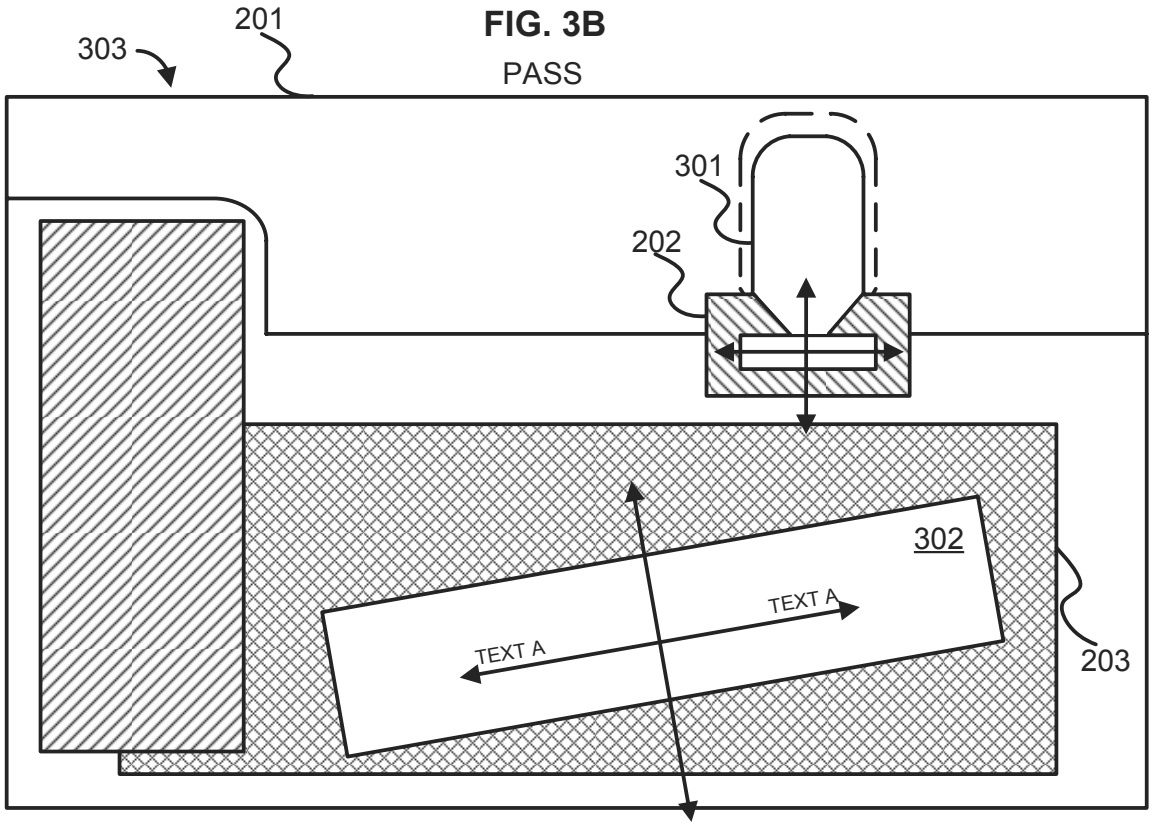


FIG. 3B
PASS

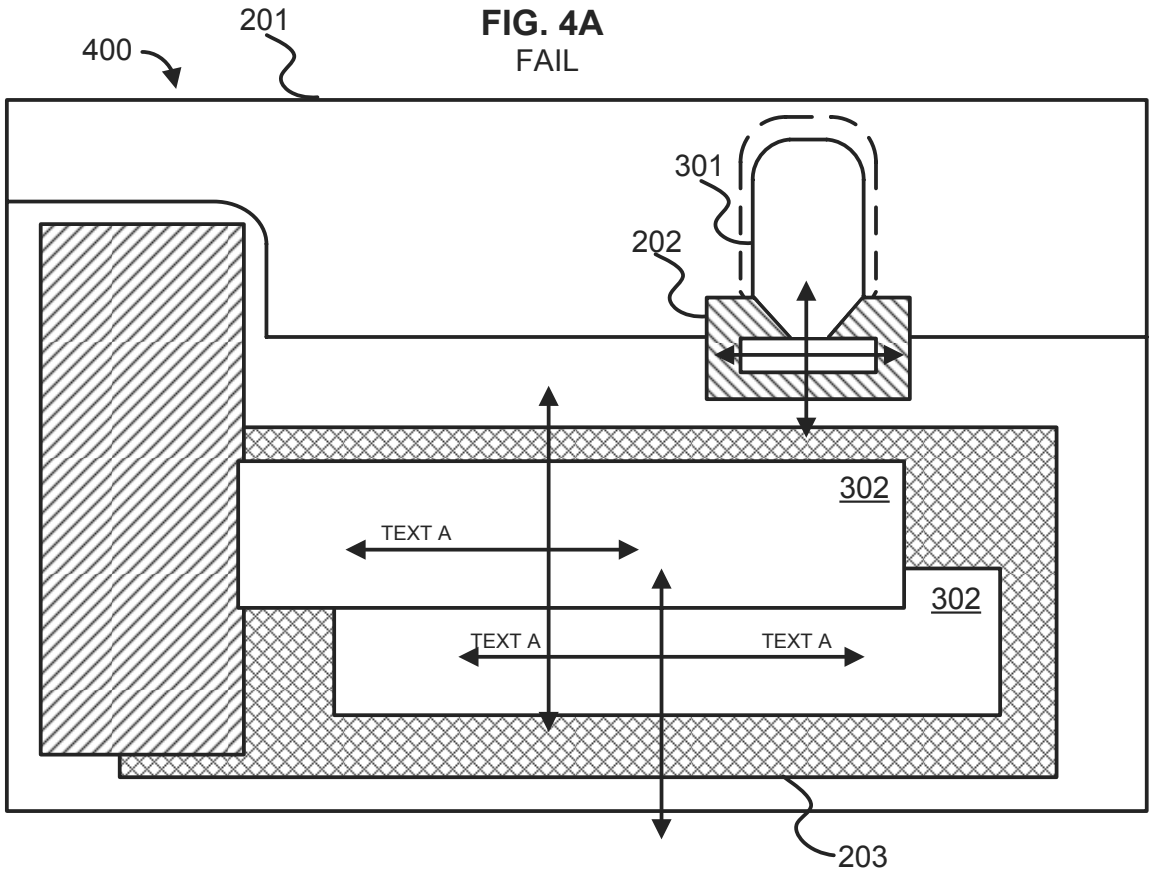


FIG. 4A
FAIL

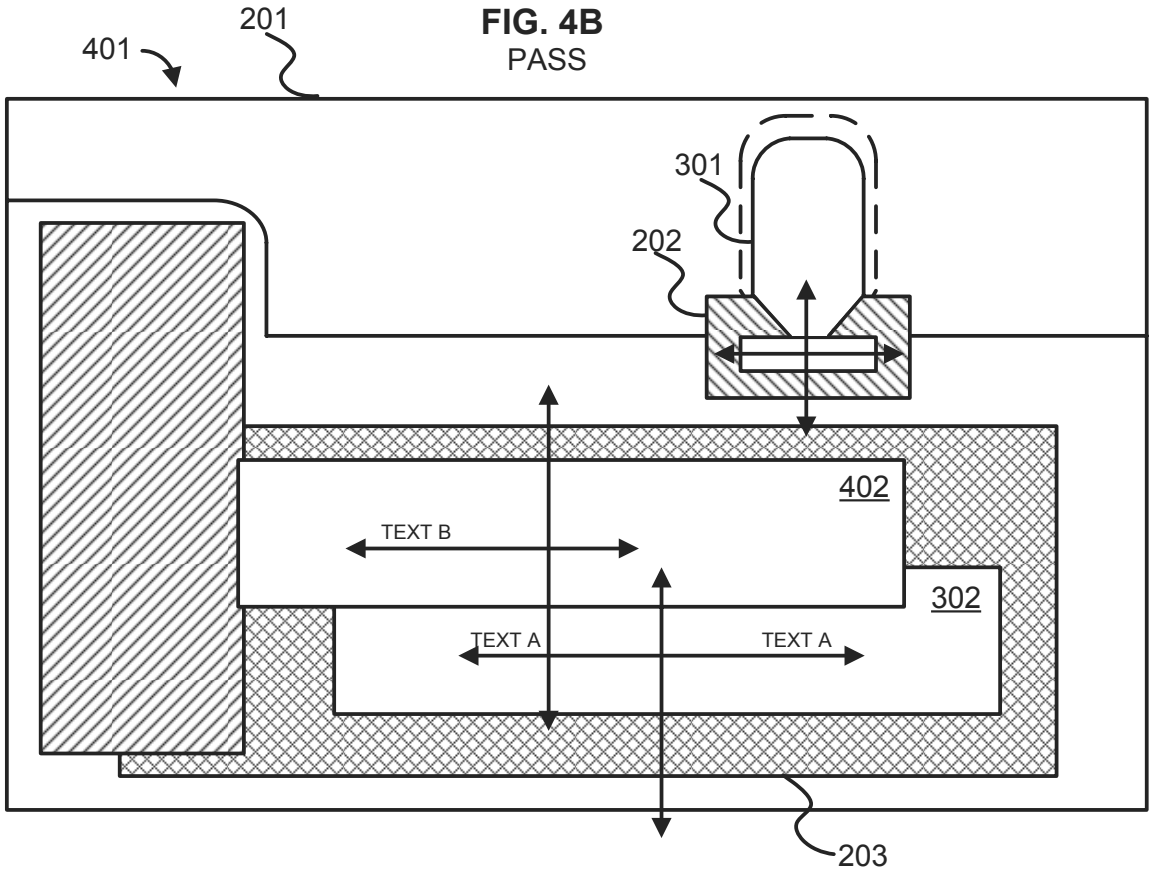


FIG. 4B
PASS

FIG. 5A

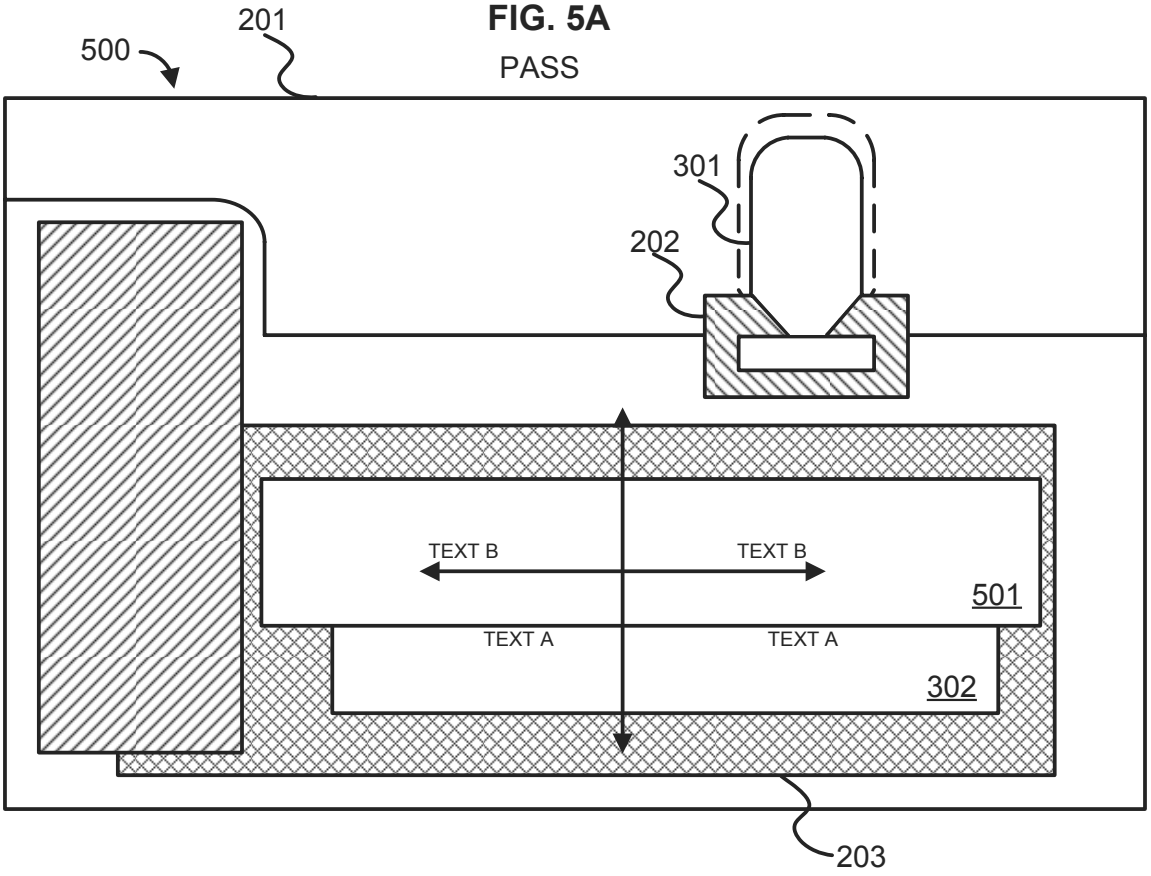

500
201
PASS
301
202
TEXT B
TEXT B
501
TEXT A
TEXT A
302
203

FIG. 5B

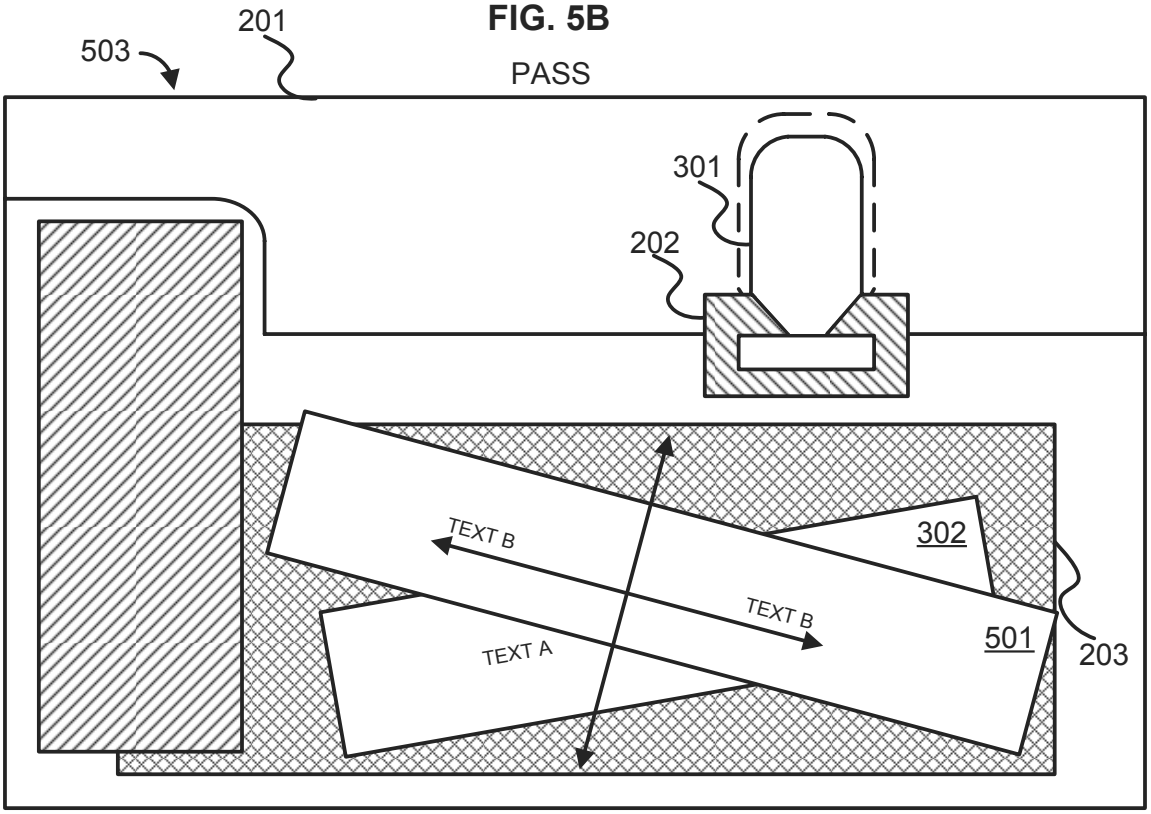

503
201
PASS
301
202
TEXT B
302
TEXT B
501
TEXT A
203

FIG. 6A

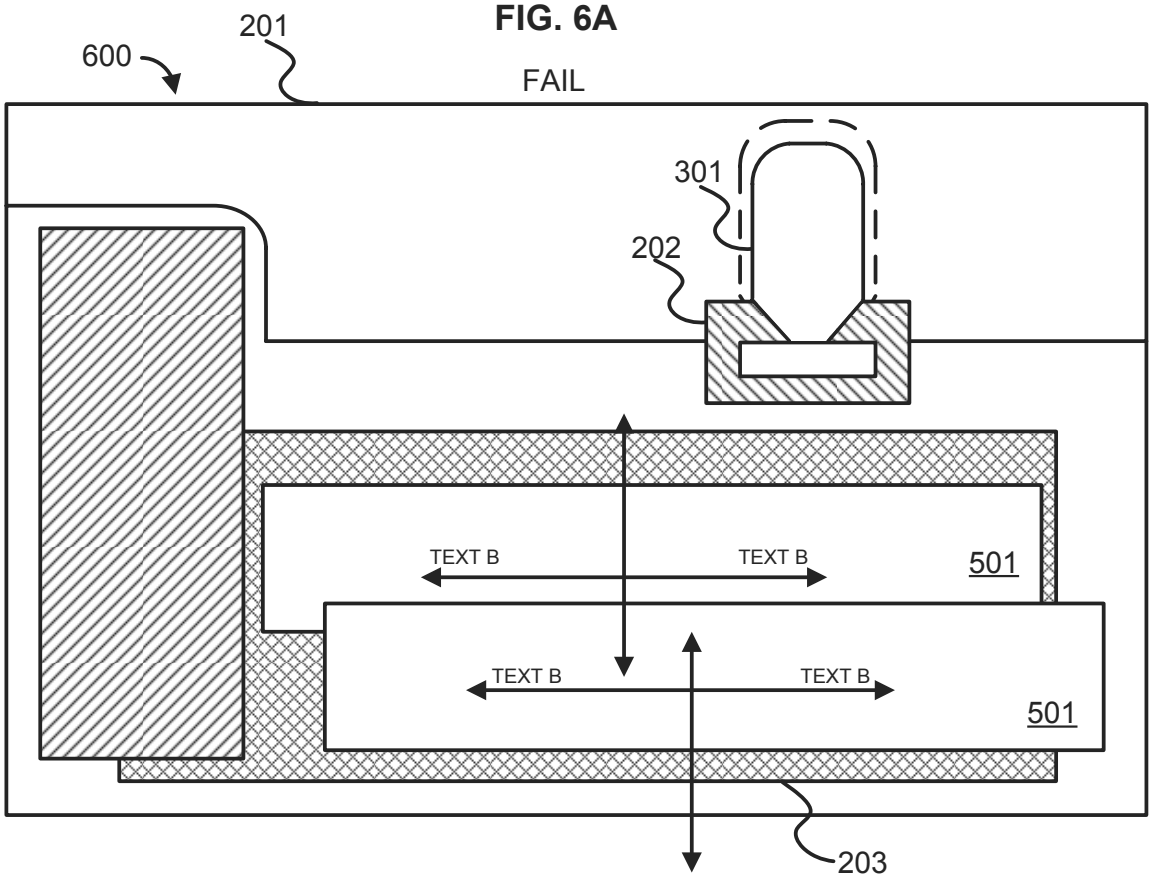
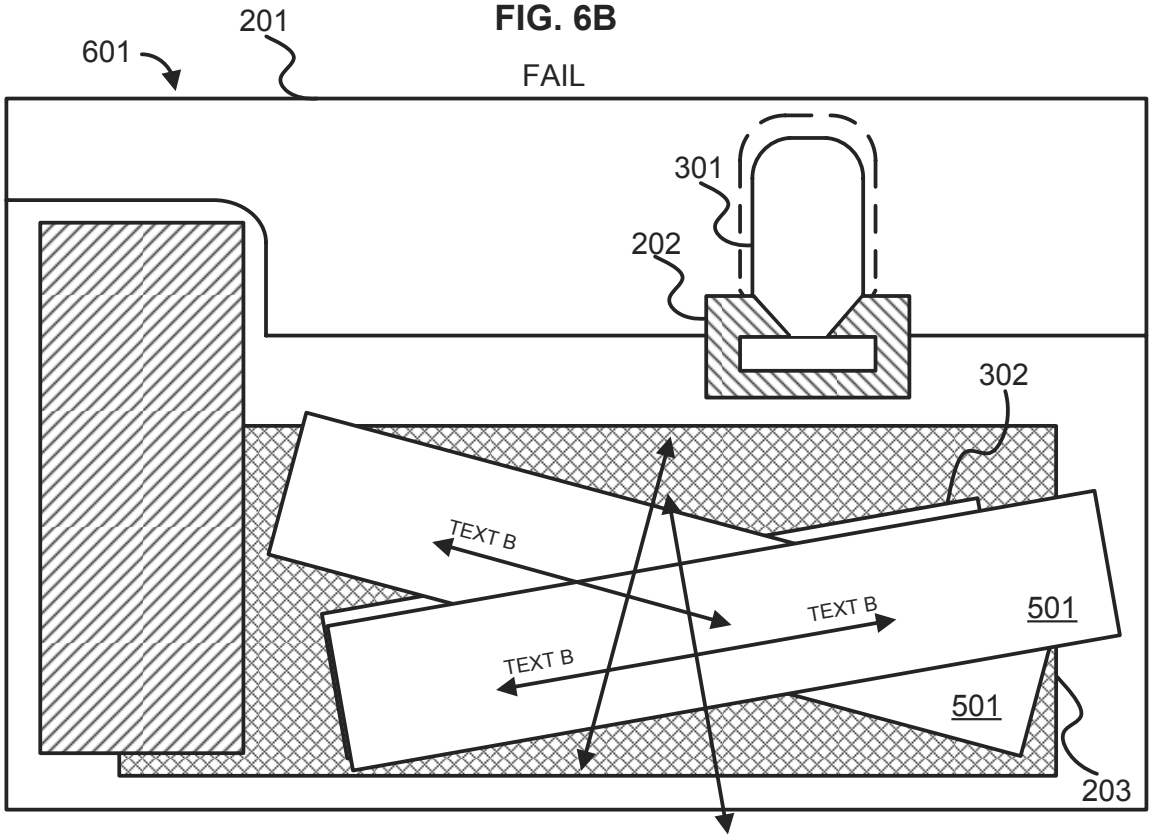

600
201
FAIL
301
202
TEXT B
TEXT B
501
TEXT B
TEXT B
501
203

FIG. 6B


601
201
FAIL
301
202
302
TEXT B
TEXT B
501
TEXT B
501
203

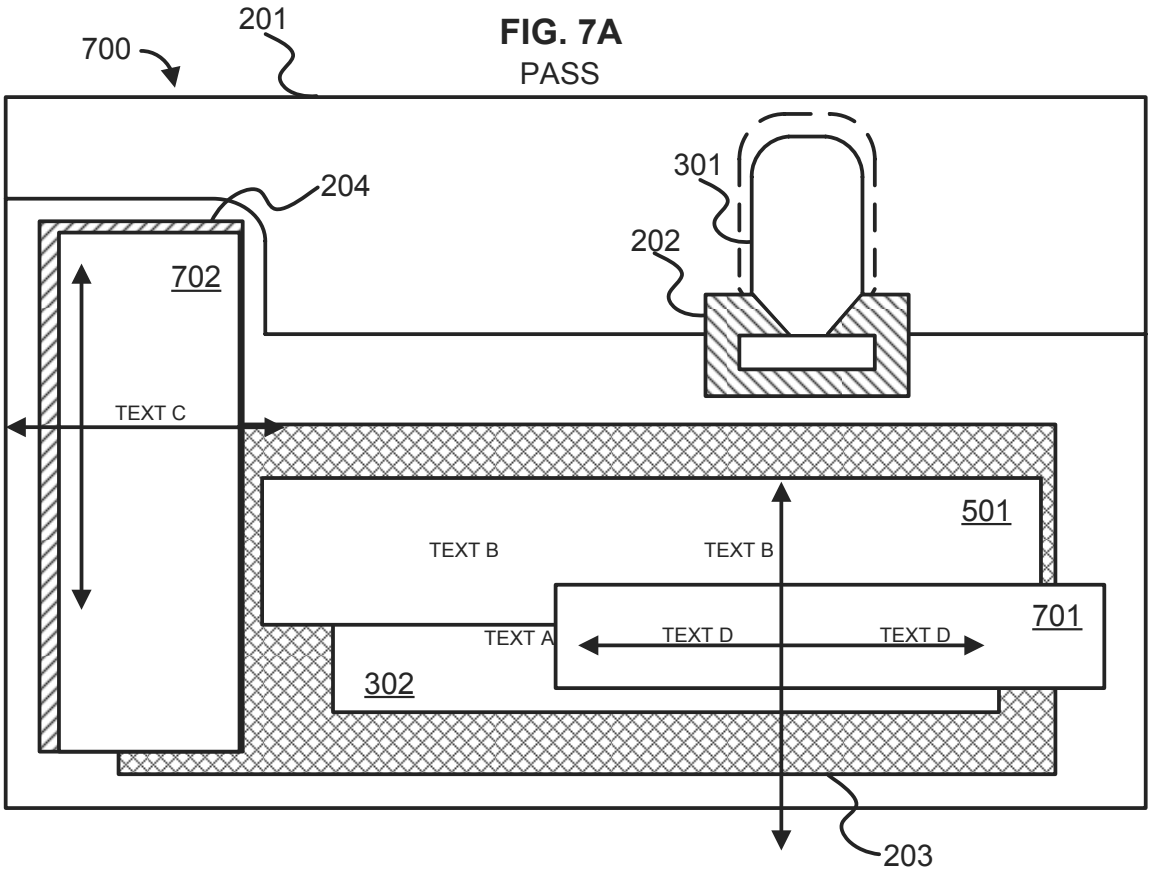


FIG. 7A
PASS

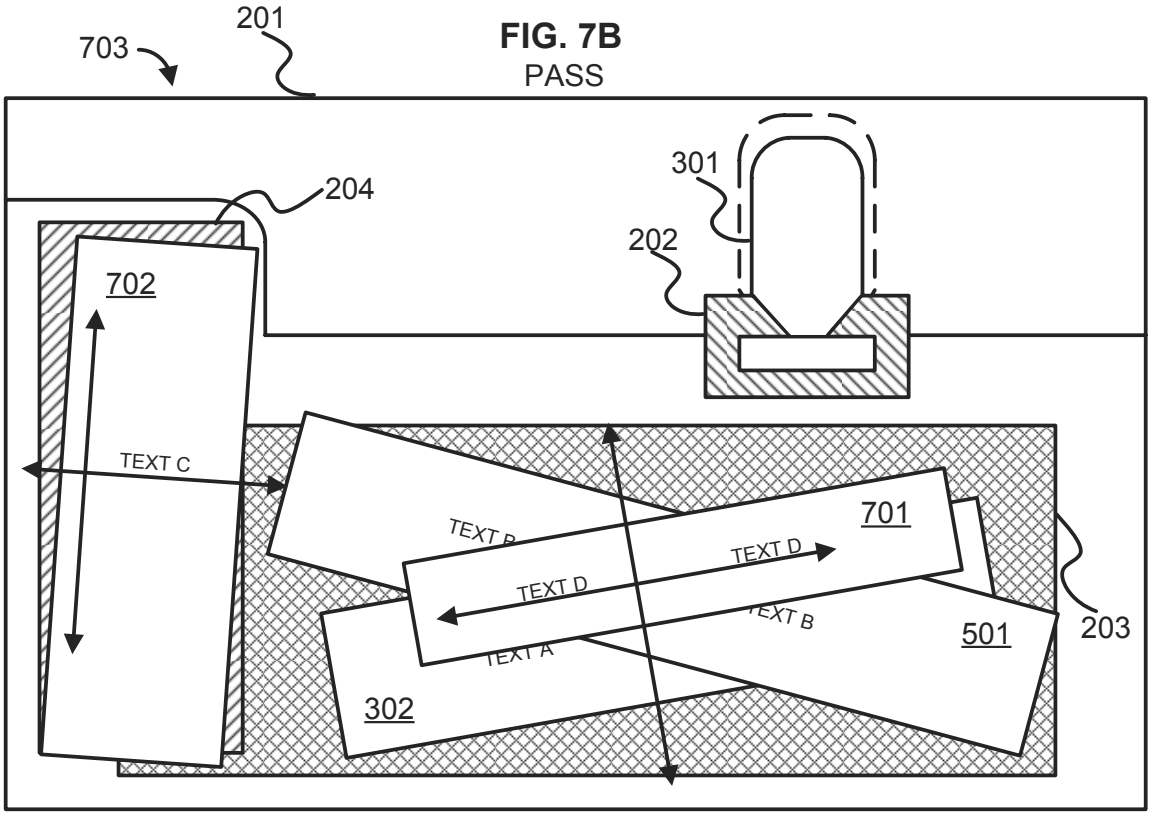


FIG. 7B
PASS

FIG. 8A

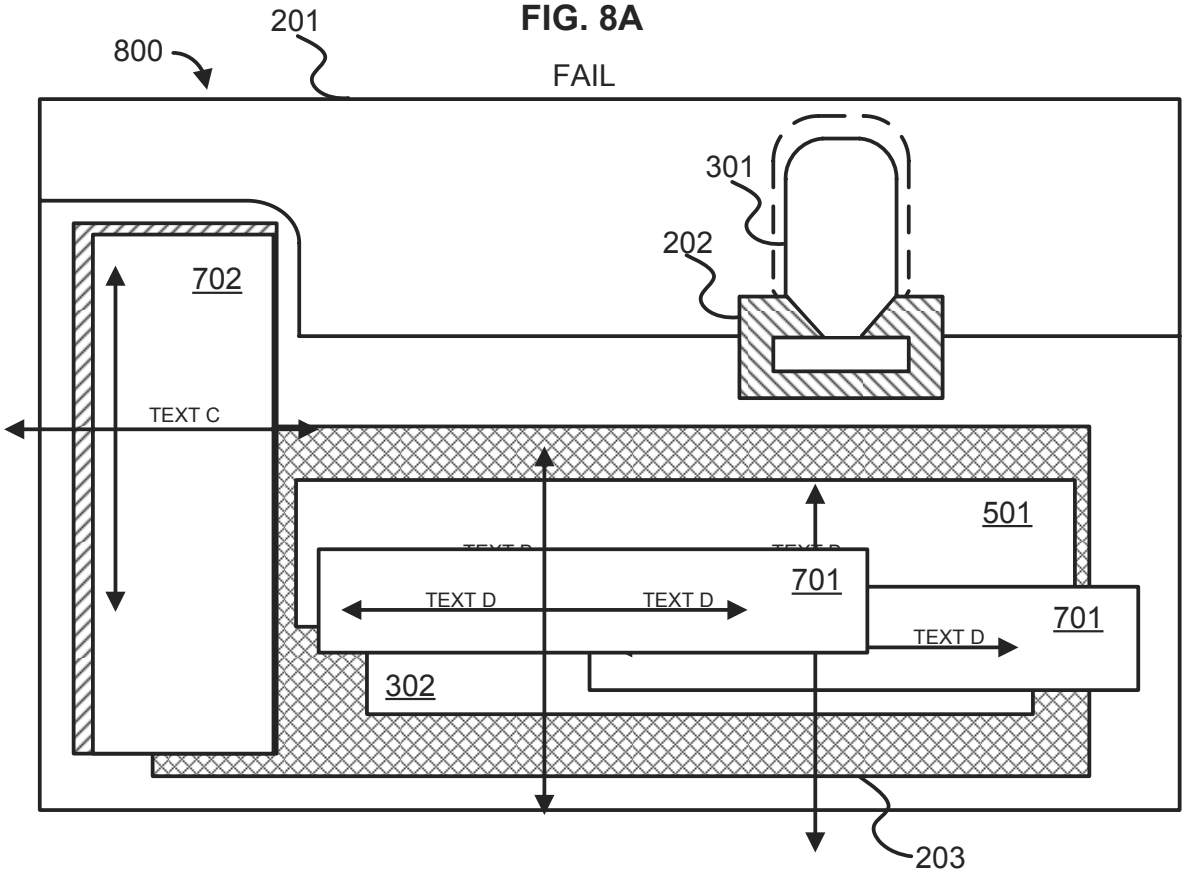
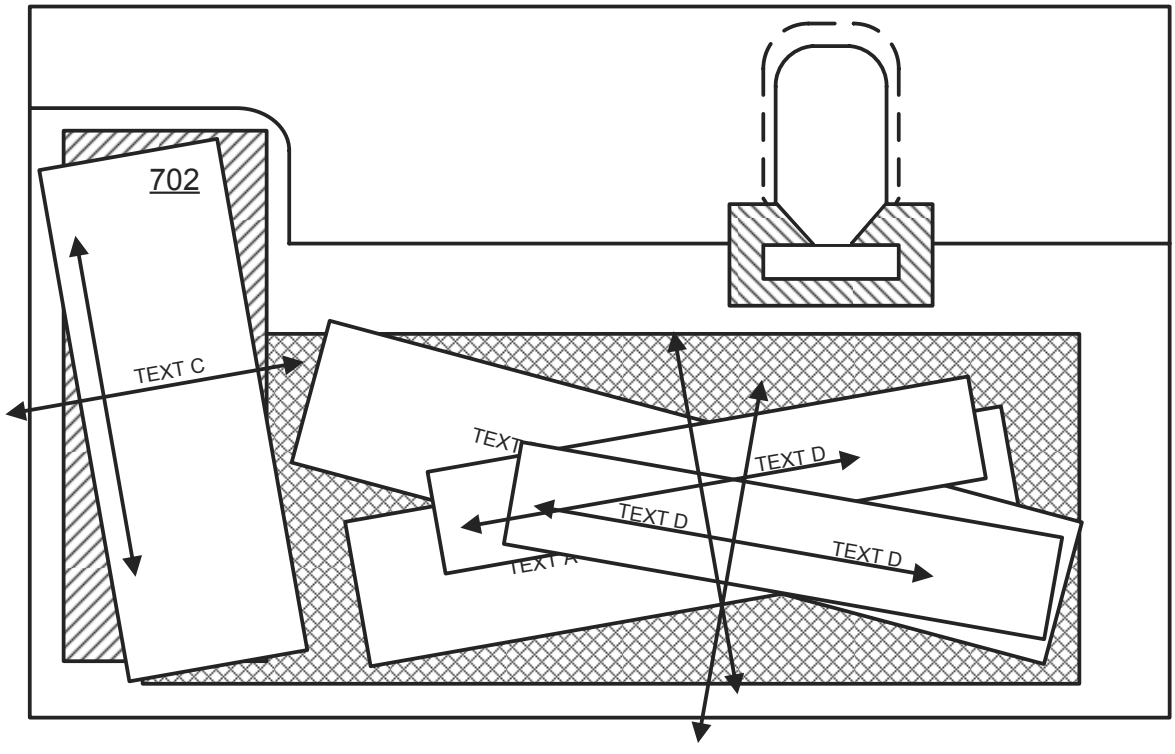

800
201
FAIL
301
202
702
TEXT C
501
701
TEXT D
TEXT D
701
TEXT D
302
203

FIG. 8B


FAIL
702
TEXT C
TEXT D
TEXT D
TEXT D

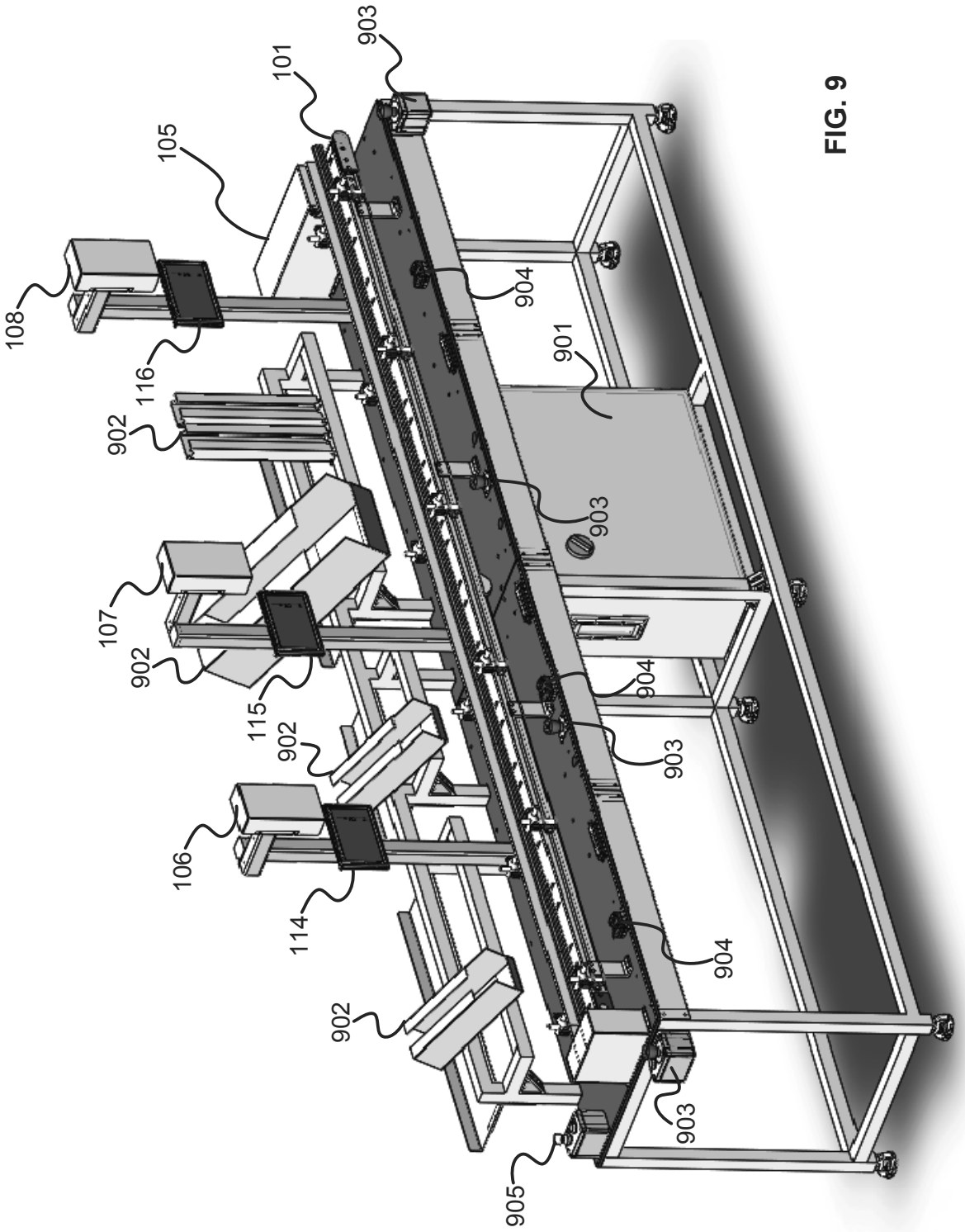
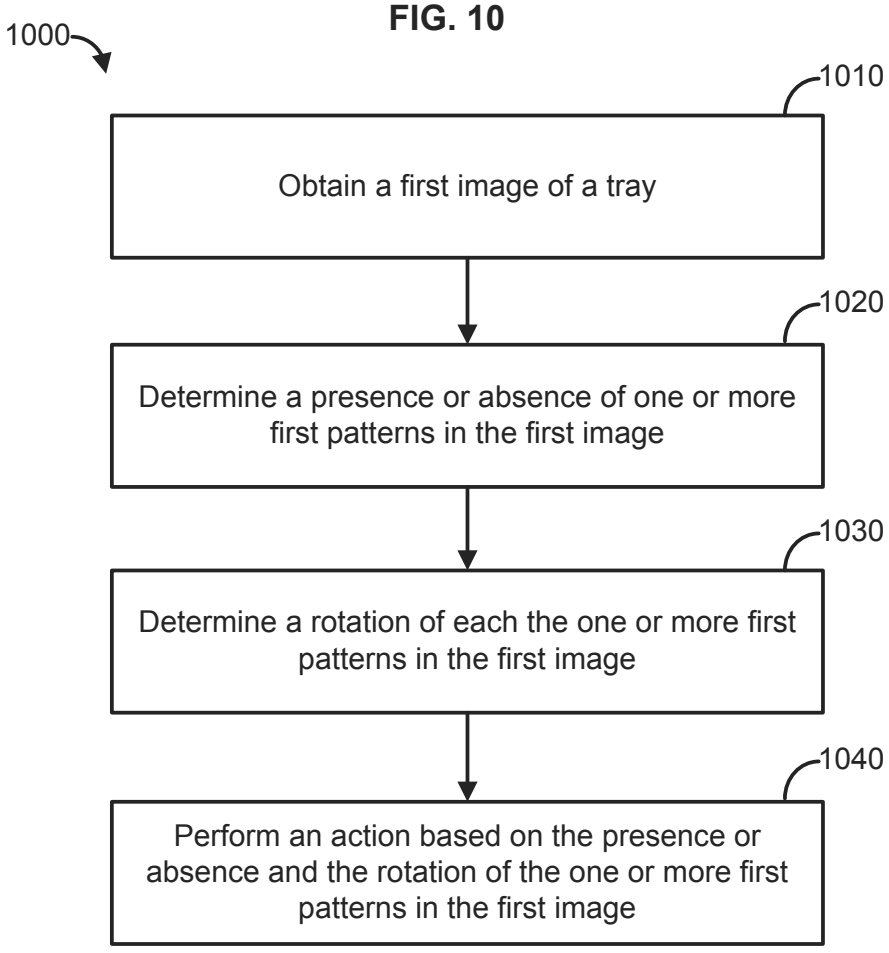

903
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904
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902
903
106
114
904
902
903
905

FIG. 9

FIG. 10


1000
1010
Obtain a first image of a tray
1020
Determine a presence or absence of one or more first patterns in the first image
1030
Determine a rotation of each the one or more first patterns in the first image
1040
Perform an action based on the presence or absence and the rotation of the one or more first patterns in the first image

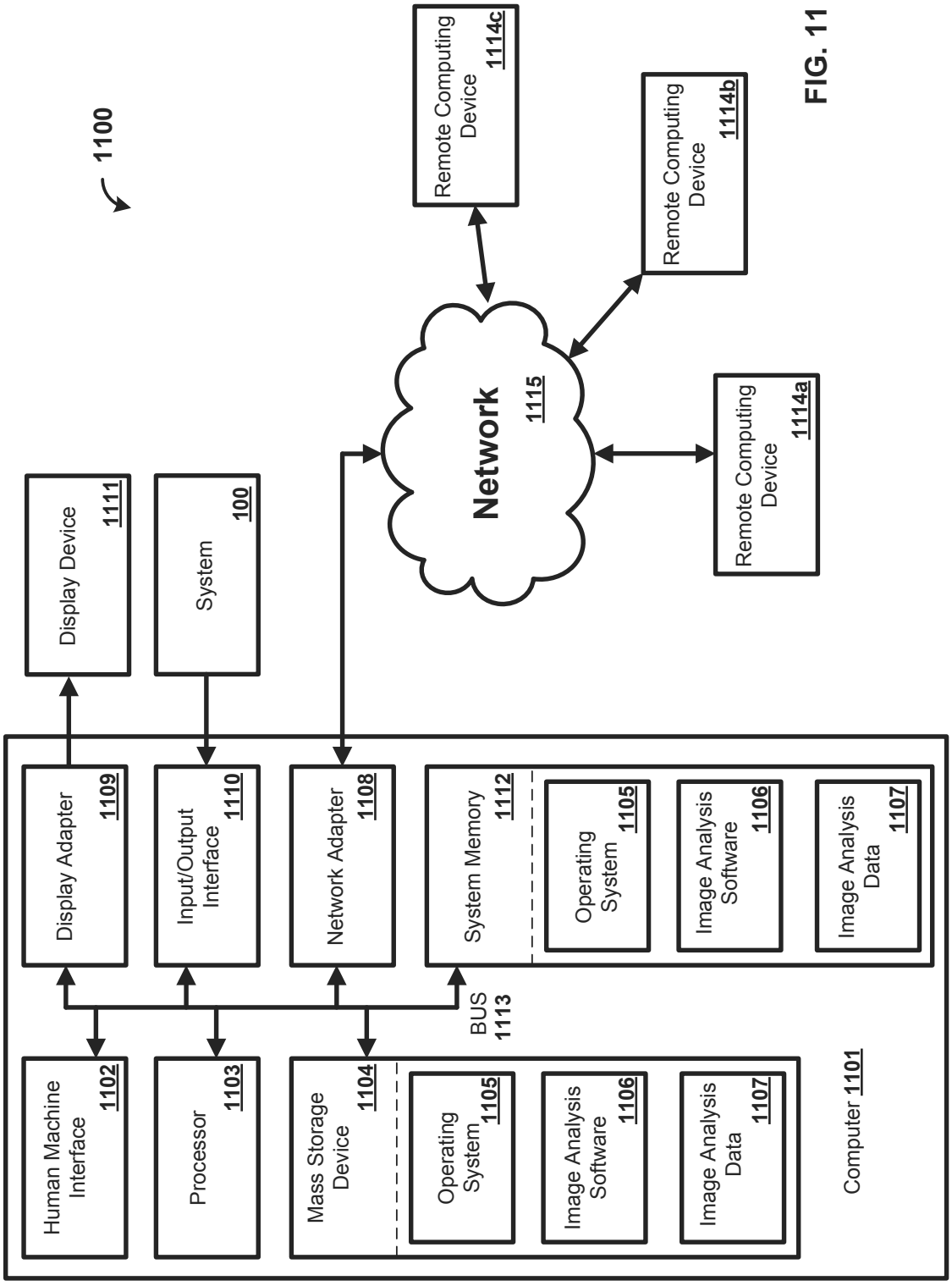

1100
Remote Computing Device 1114c
Remote Computing Device 1114b
Remote Computing Device 1114a
Network 1115
Display Device 1111
System 100
Display Adapter 1109
Input/Output Interface 1110
Network Adapter 1108
System Memory 1112
Operating System 1105
Image Analysis Software 1106
Image Analysis Data 1107
BUS 1113
Human Machine Interface 1102
Processor 1103
Mass Storage Device 1104
Operating System 1105
Image Analysis Software 1106
Image Analysis Data 1107
Computer 1101

FIG. 11