

FIG. 1A

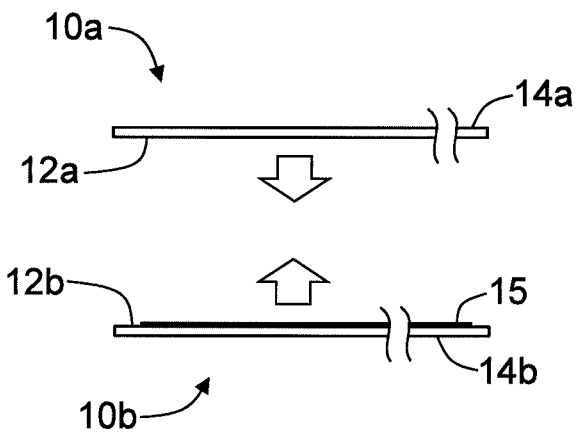


FIG. 1B

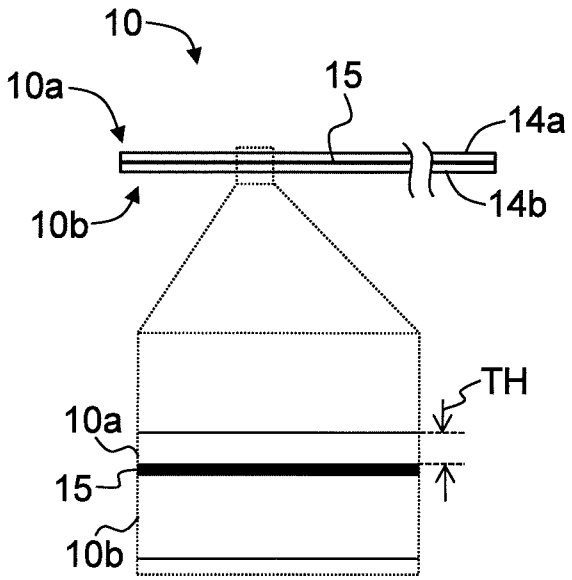


FIG. 1C

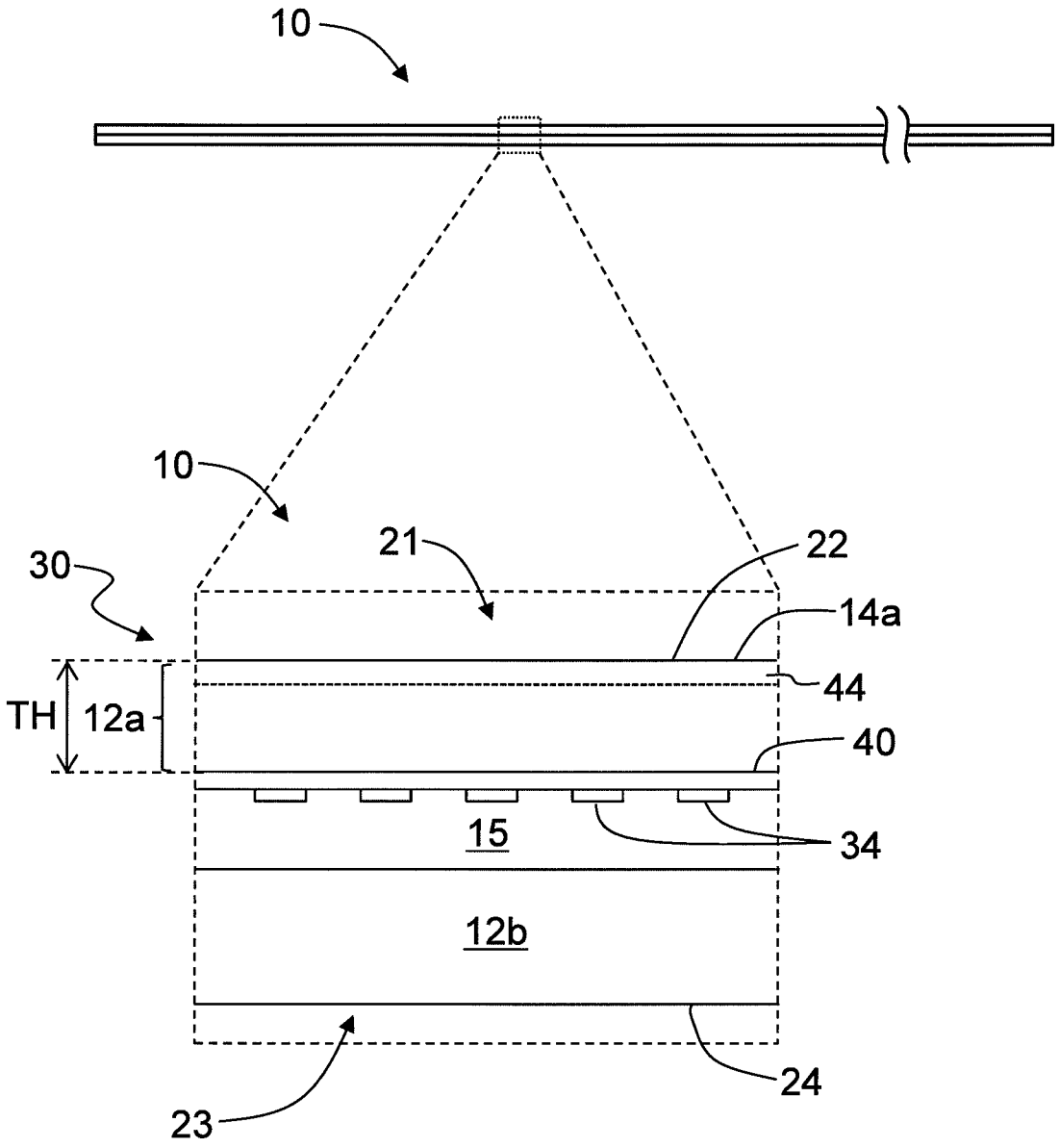


FIG. 1D

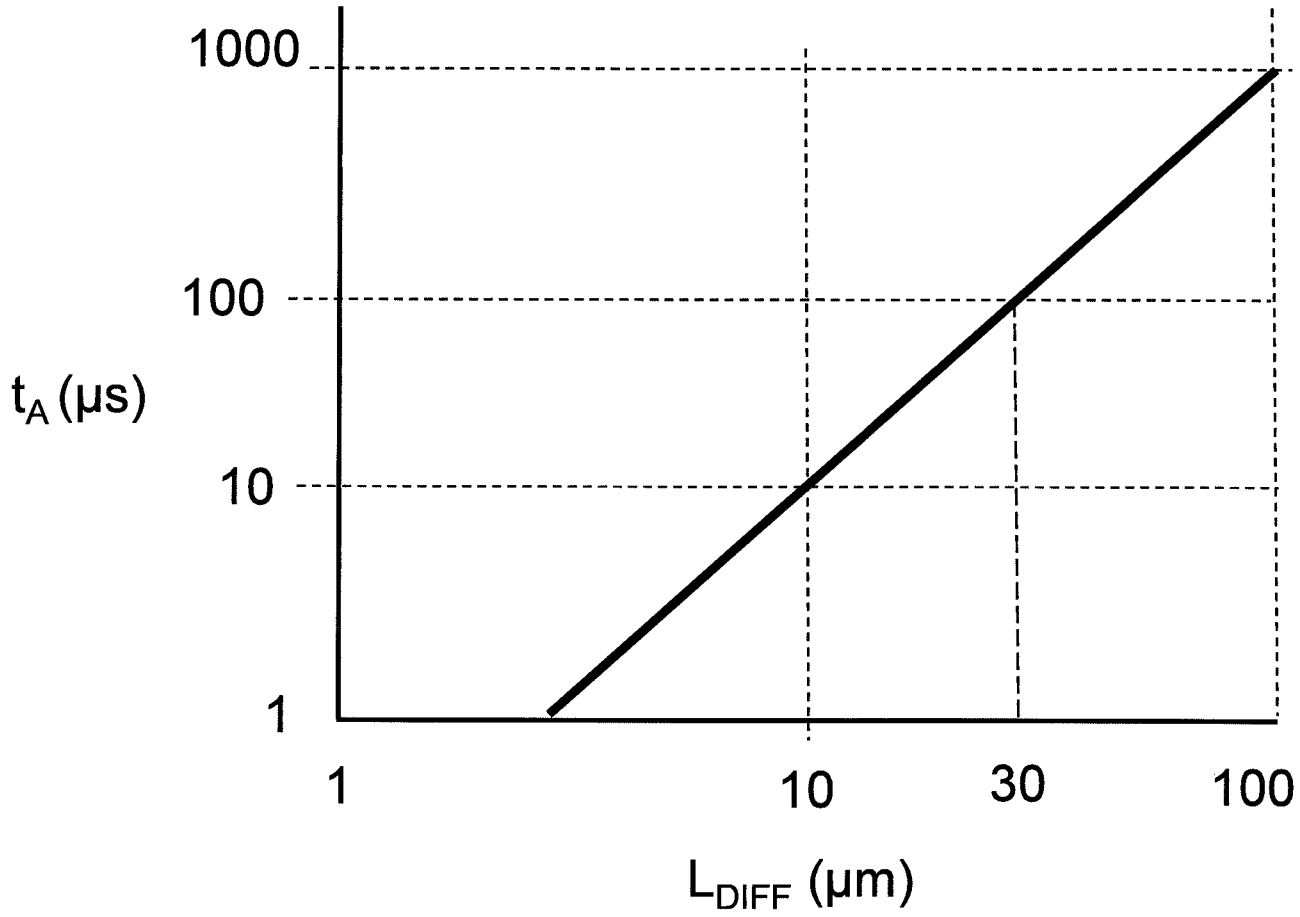


FIG. 2

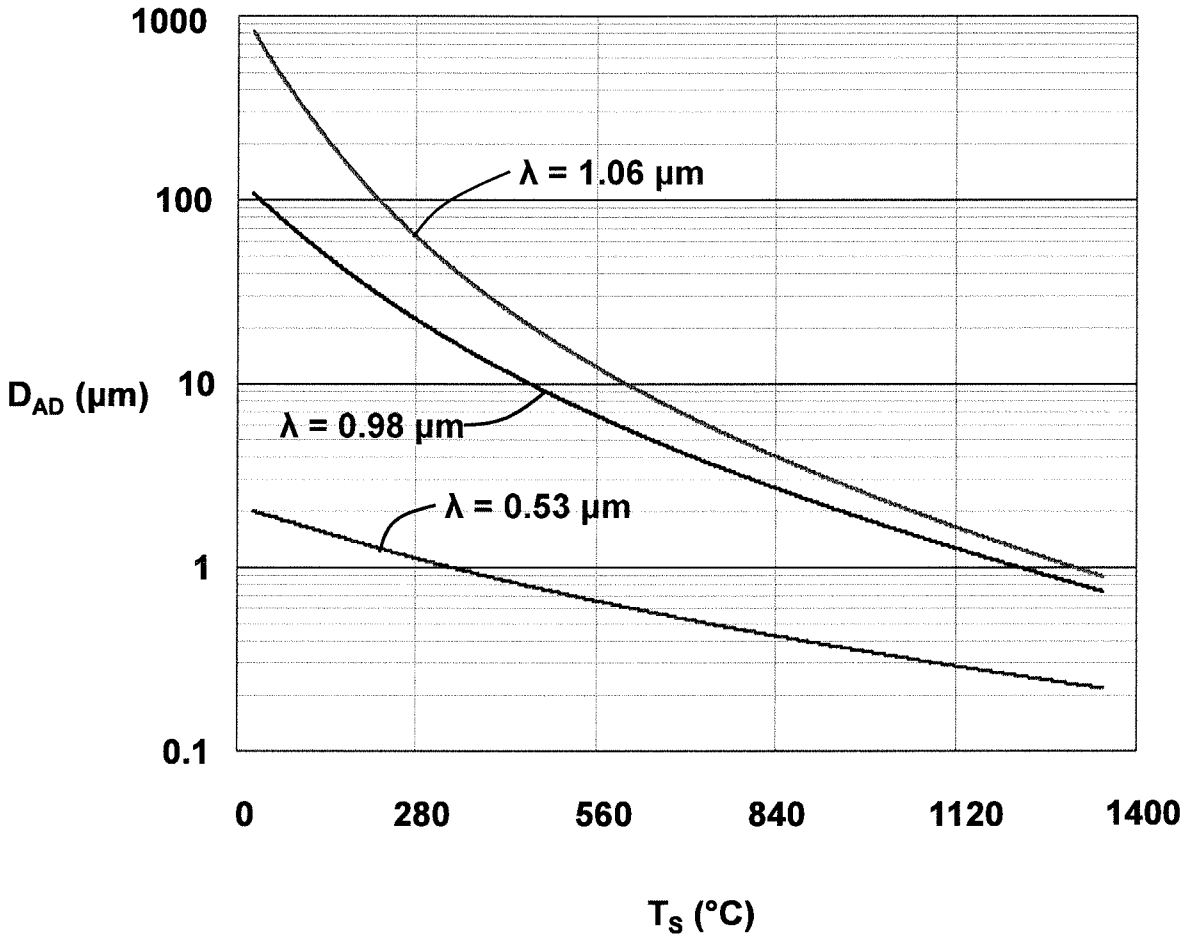

1000
100
10
1
0.1
D_{AD} (µm)
λ = 1.06 µm
λ = 0.98 µm
λ = 0.53 µm
0
280
560
840
1120
1400
T_S (°C)

FIG. 3

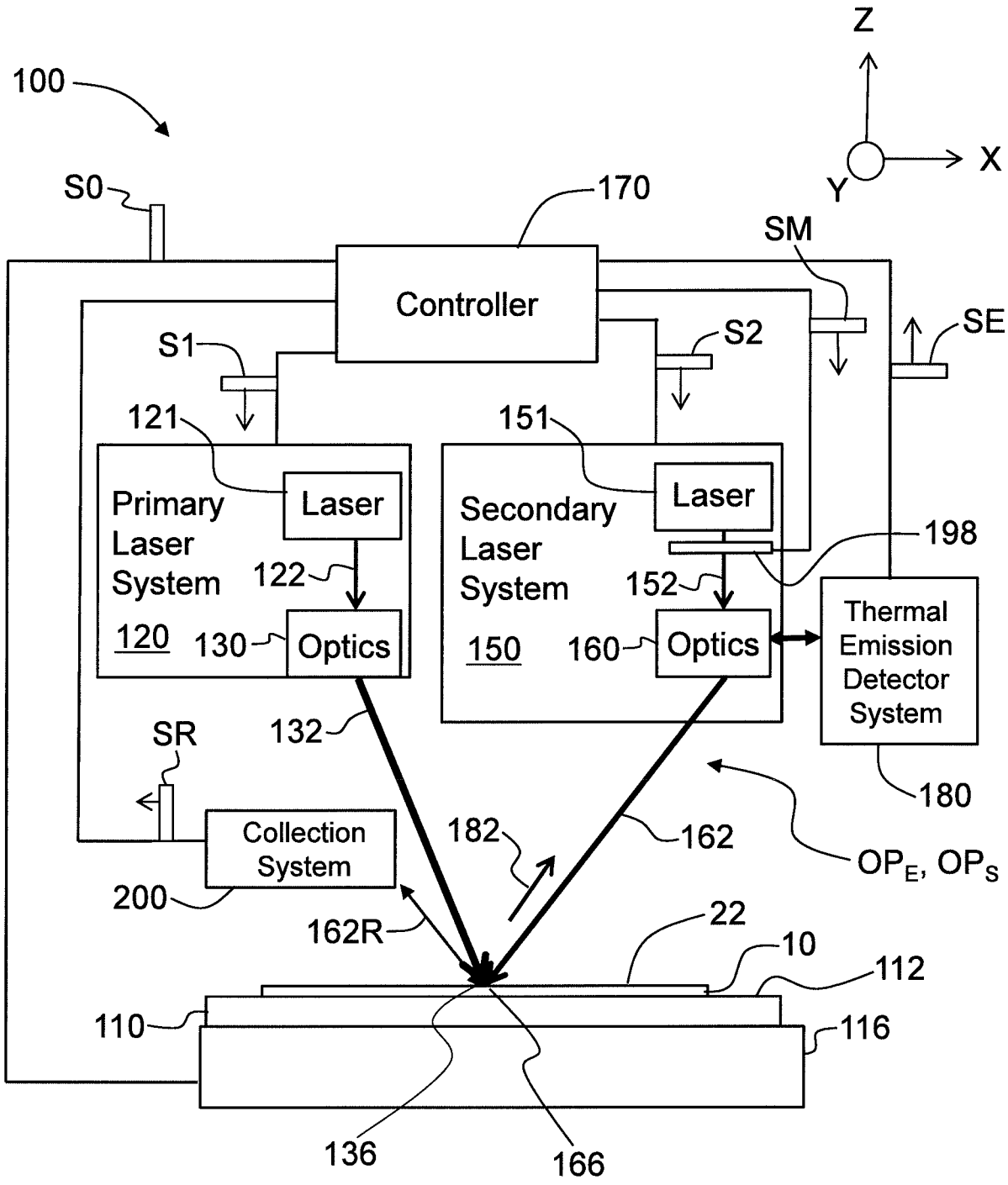

100
Z
X
Y
S0
170
SM
Controller
S1
S2
SE
121
151
Primary
Laser
System
120
Laser
122
130
Optics
Secondary
Laser
System
150
Laser
152
160
Optics
198
Thermal
Emission
Detector
System
180
SR
132
Collection
System
200
182
162
OP$_E$, OP$_S$
162R
22
10
112
110
116
136
166

FIG. 4

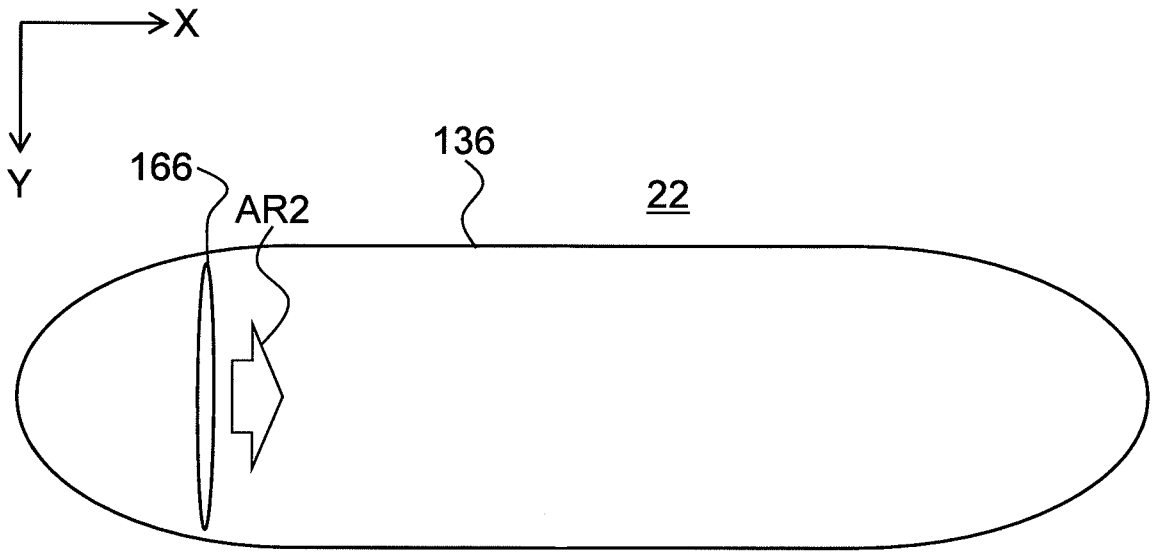


FIG. 5A

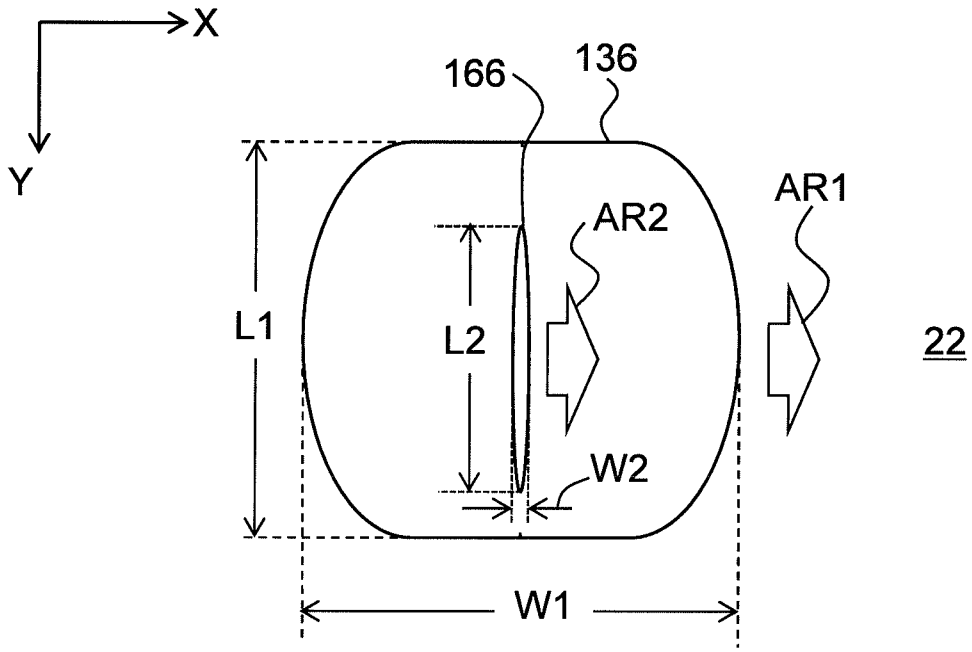


FIG. 5B

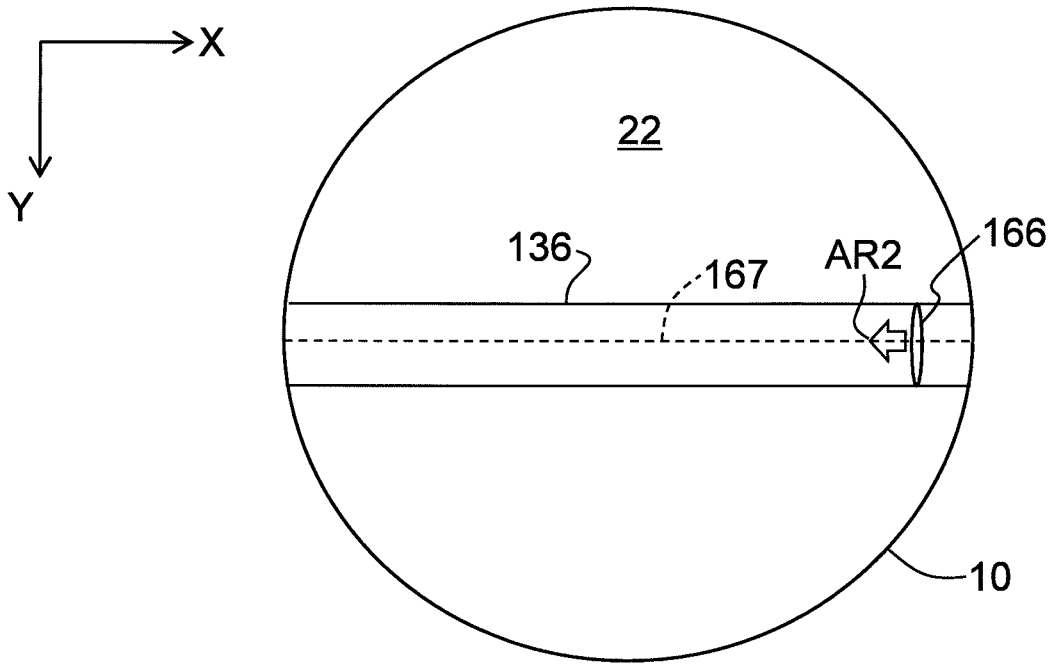


FIG. 5C

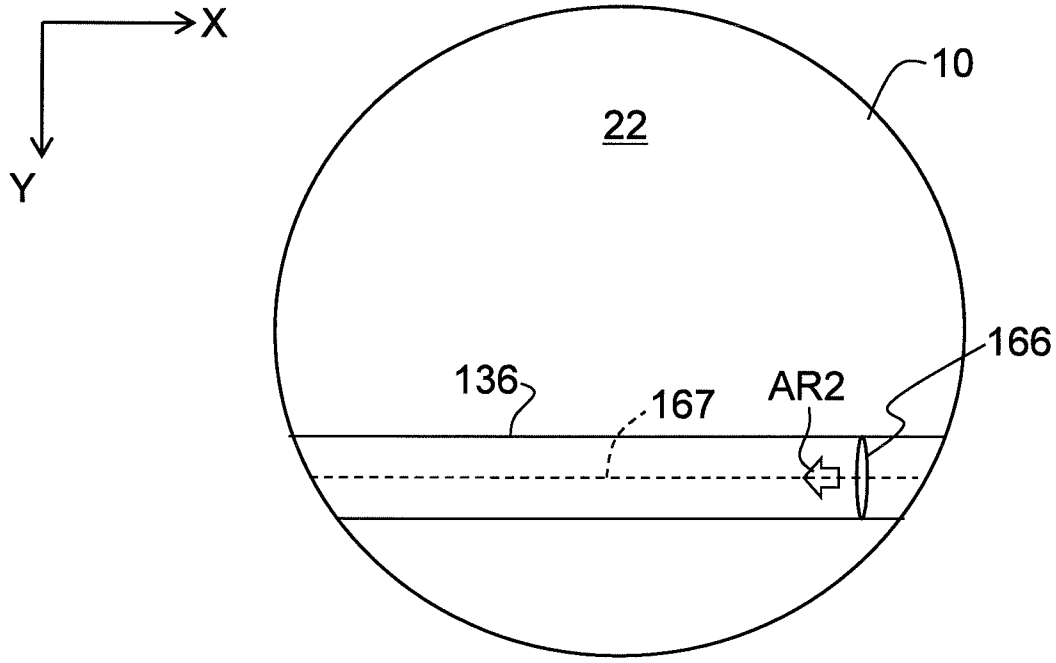


FIG. 5D

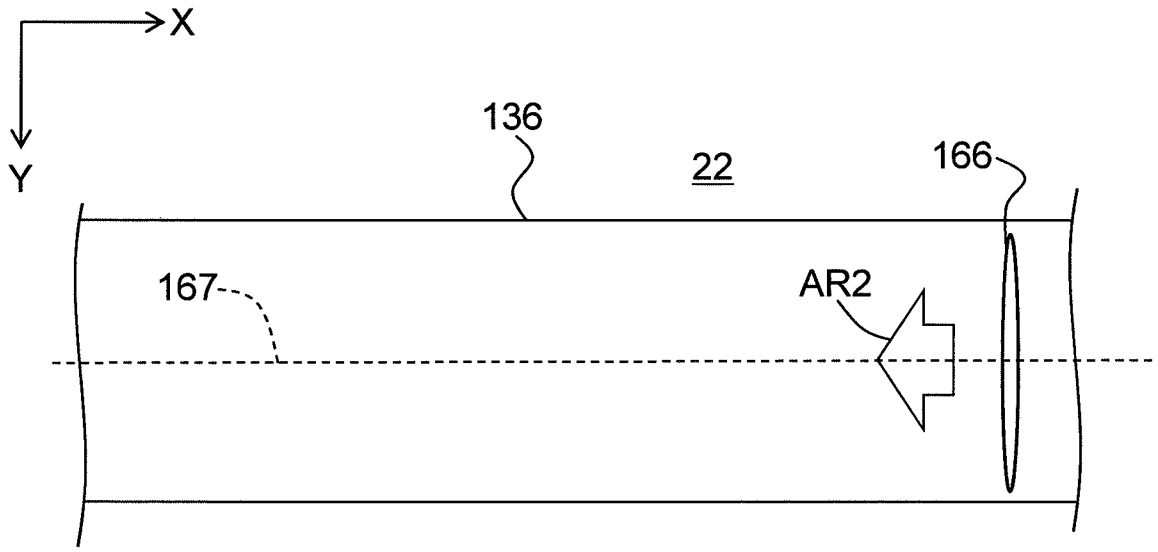


FIG. 5E

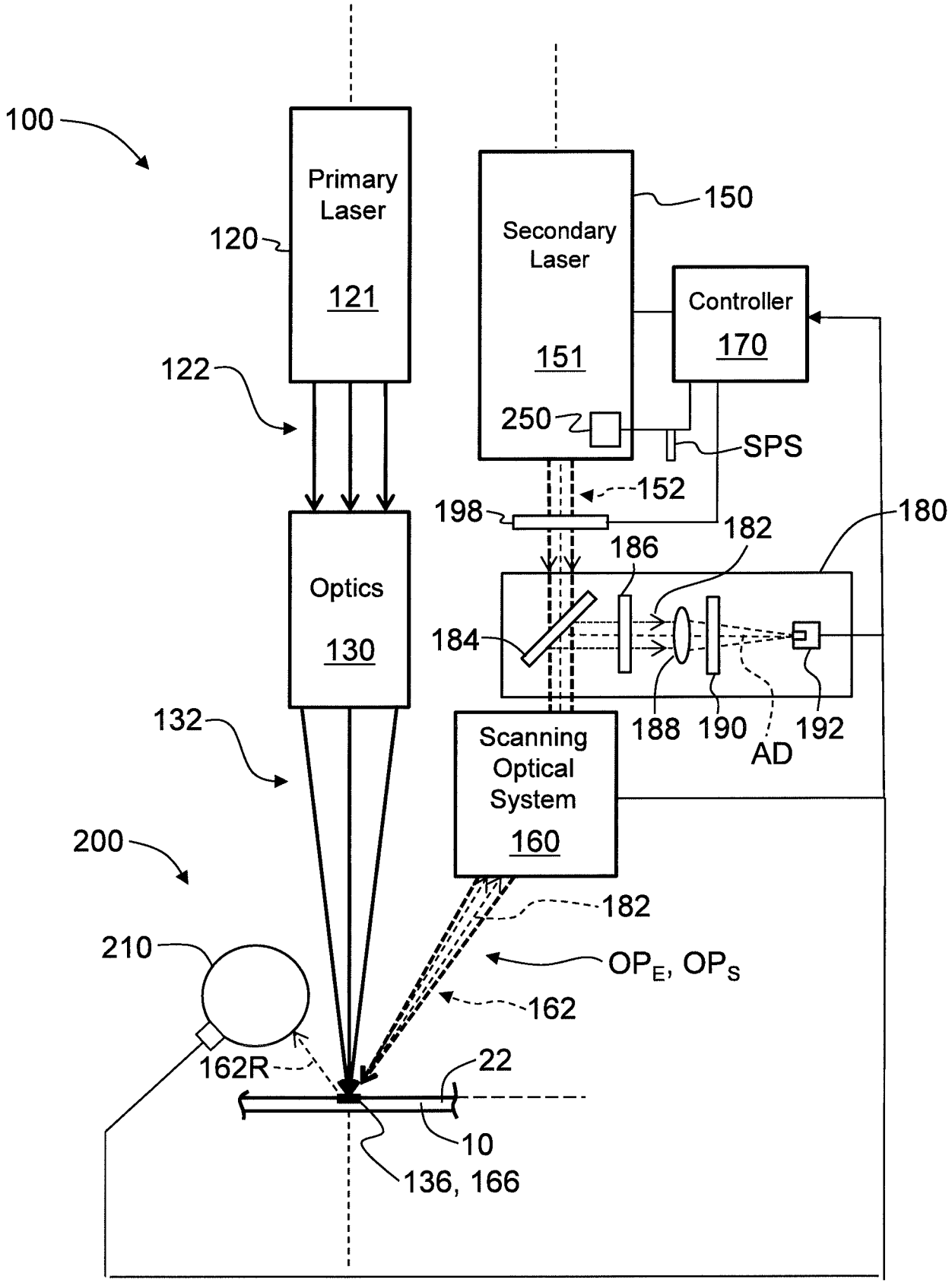

100
Primary Laser
120
121
122
Secondary Laser
150
151
Controller
170
250
SPS
152
198
180
182
186
Optics
130
184
188
190
192
AD
132
Scanning Optical System
160
200
182
210
OPE, OPS
162
162R
22
10
136, 166

FIG. 6

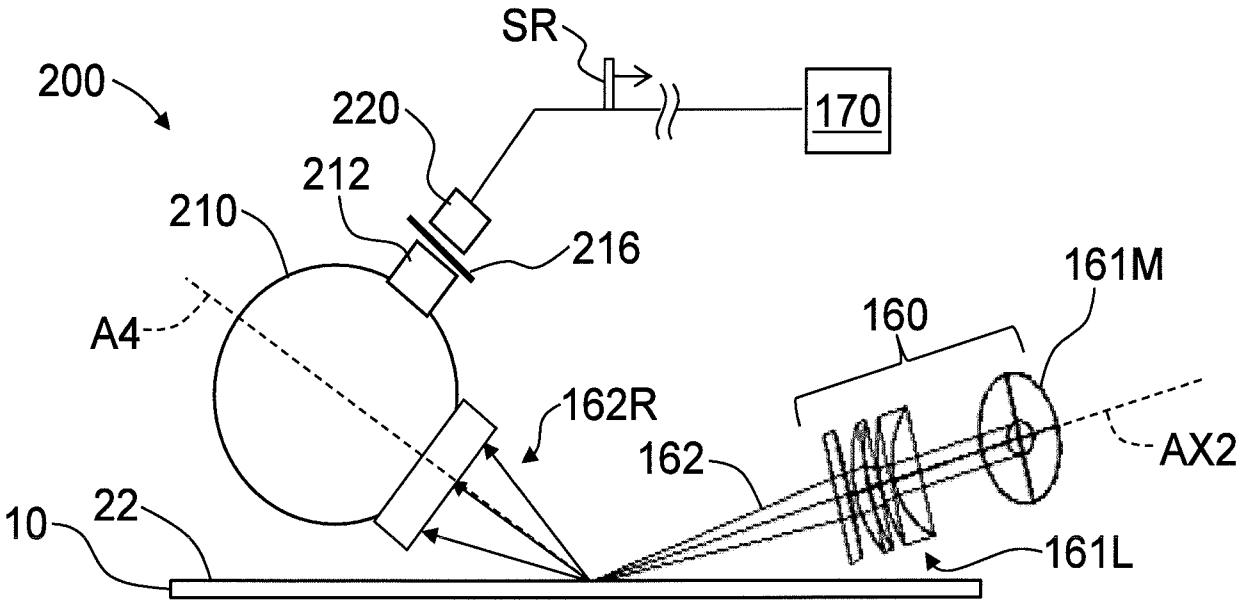


FIG. 7

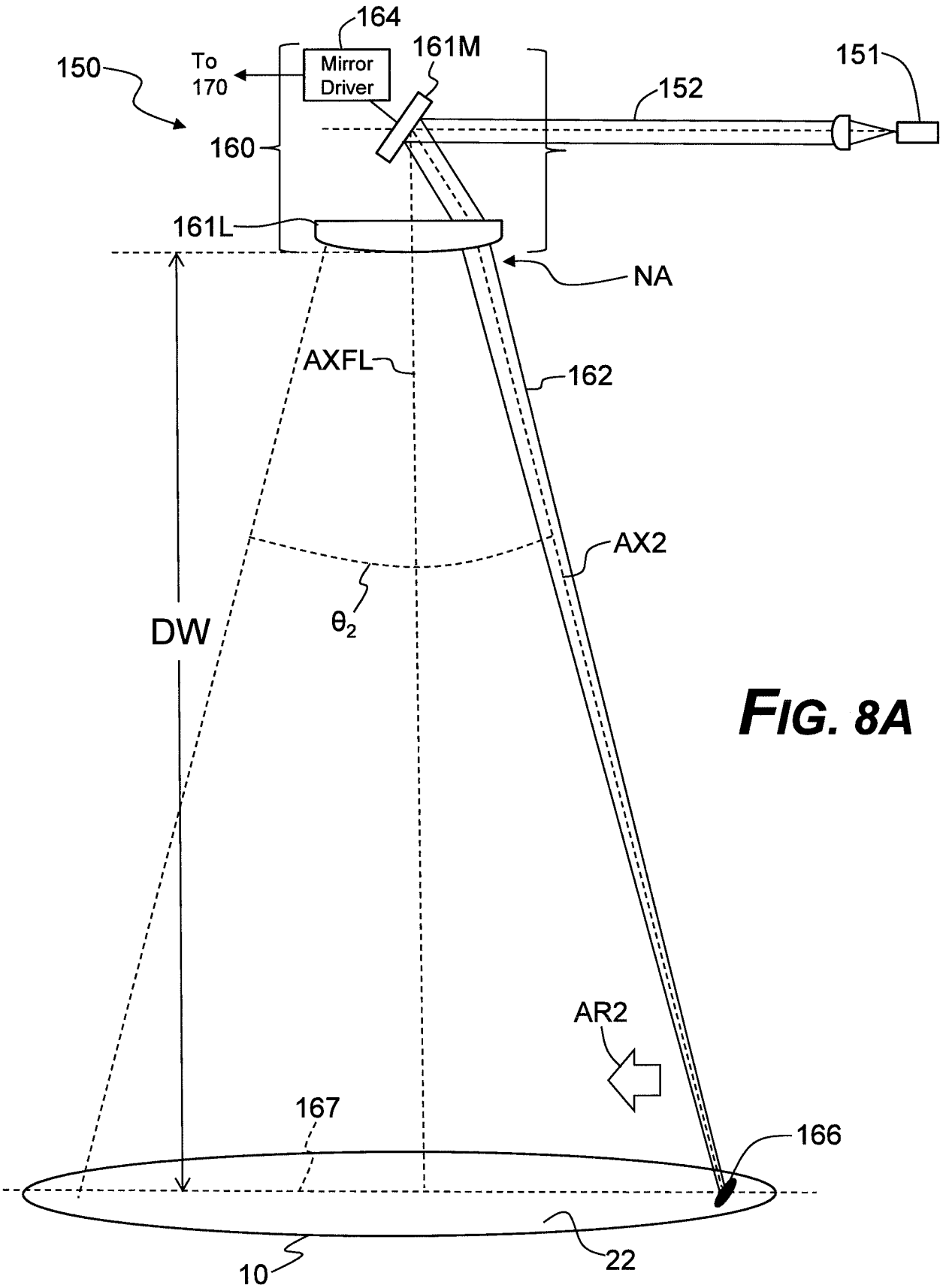

164
161M
150
To
170
Mirror
Driver
151
152
160
161L
NA
AXFL
162
AX2
DW
θ2
AR2
167
166
10
22

FIG. 8A

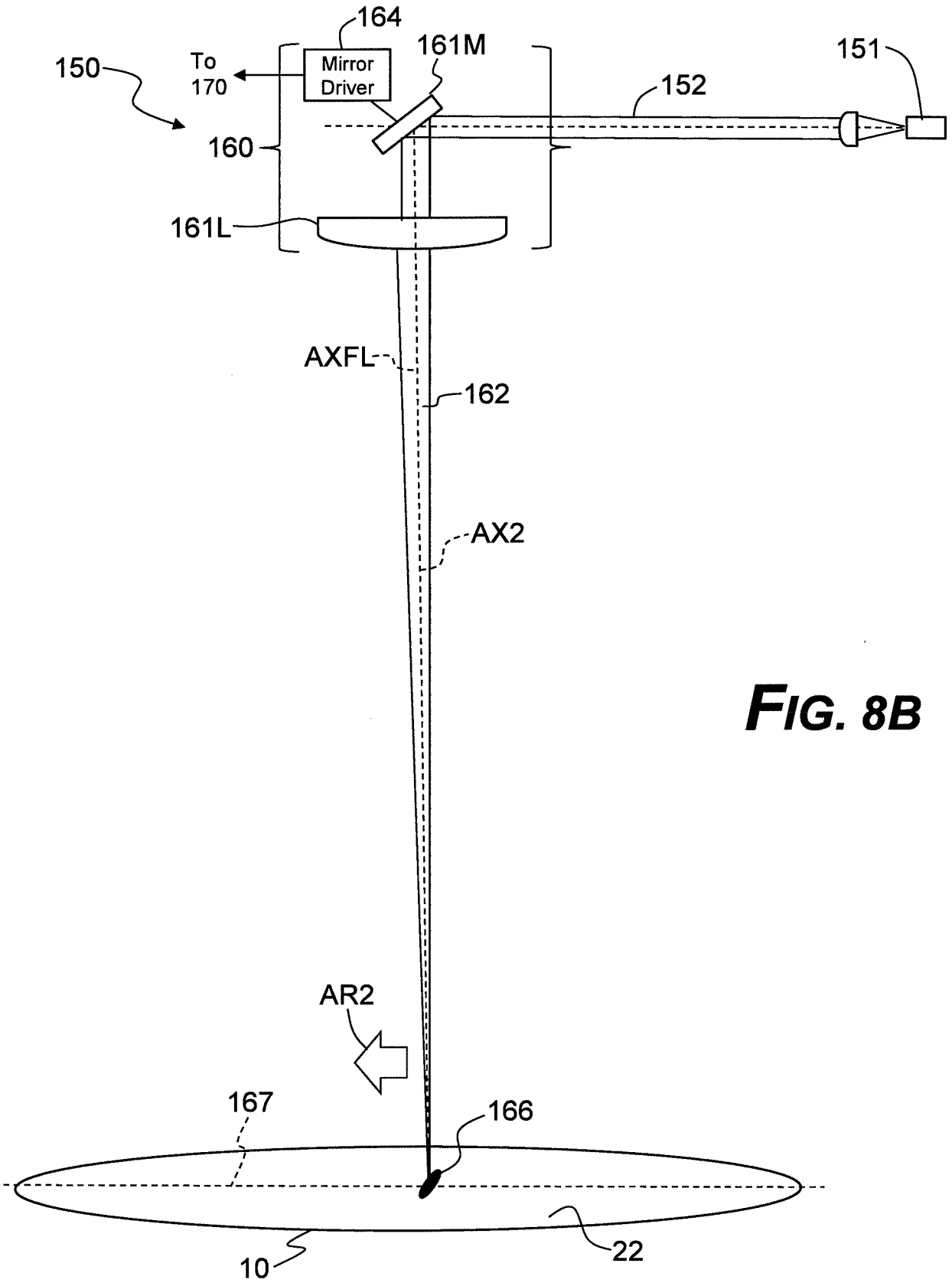

164
161M
151
150
To
170
Mirror
Driver
152
160
161L
AXFL
162
AX2
AR2
167
166
10
22

FIG. 8B

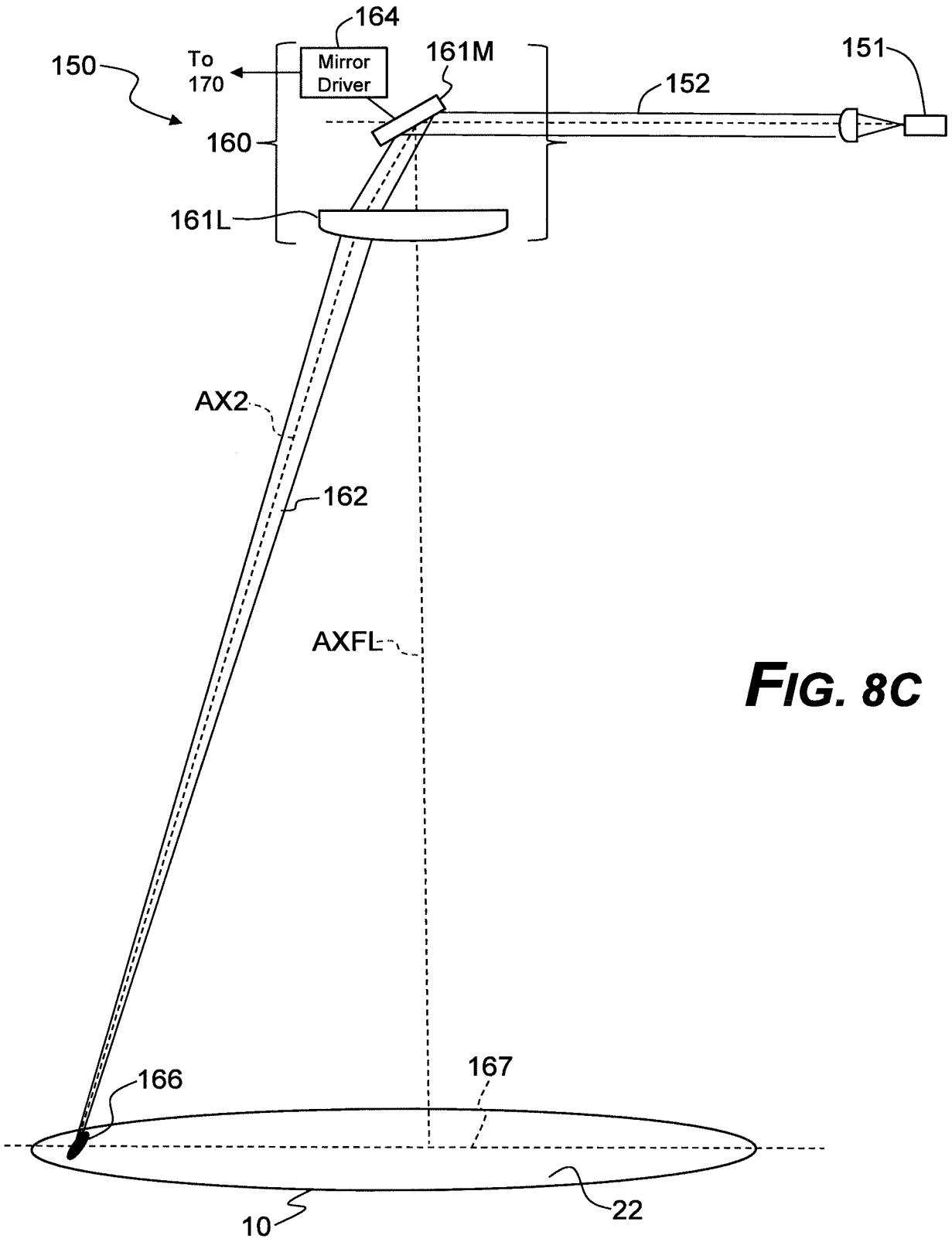

164
150
To
170
Mirror
Driver
161M
151
152
160
161L
AX2
162
AXFL
166
167
10
22

FIG. 8C

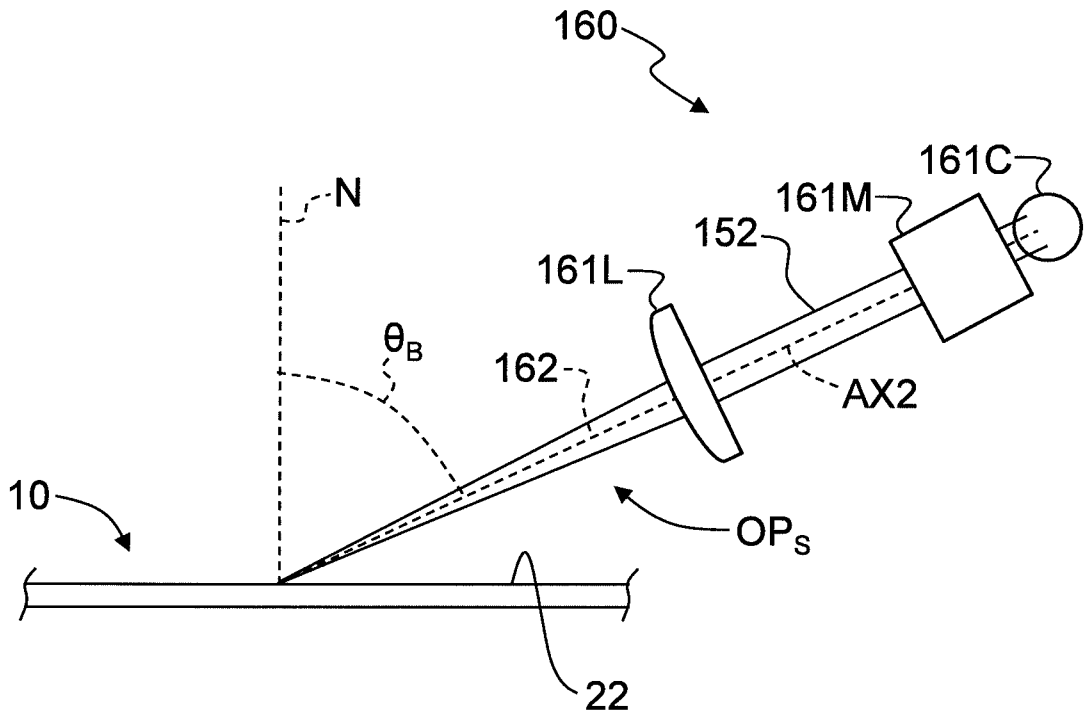


FIG. 9

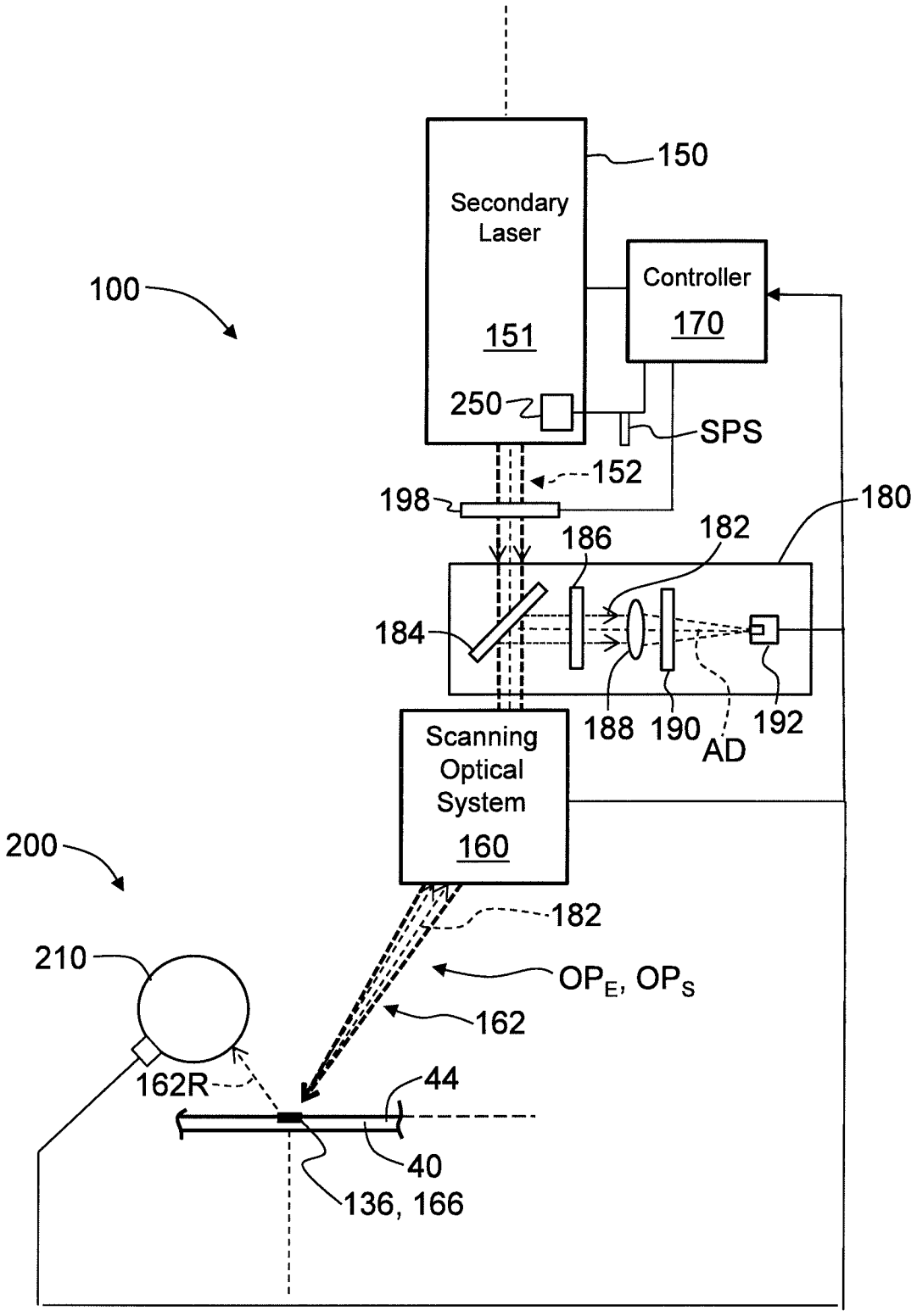

100
150
Secondary Laser
151
Controller
170
250
SPS
152
198
180
182
186
184
188
190
AD
192
Scanning Optical System
160
200
182
210
OP_E, OP_S
162
162R
44
40
136, 166

FIG. 10A

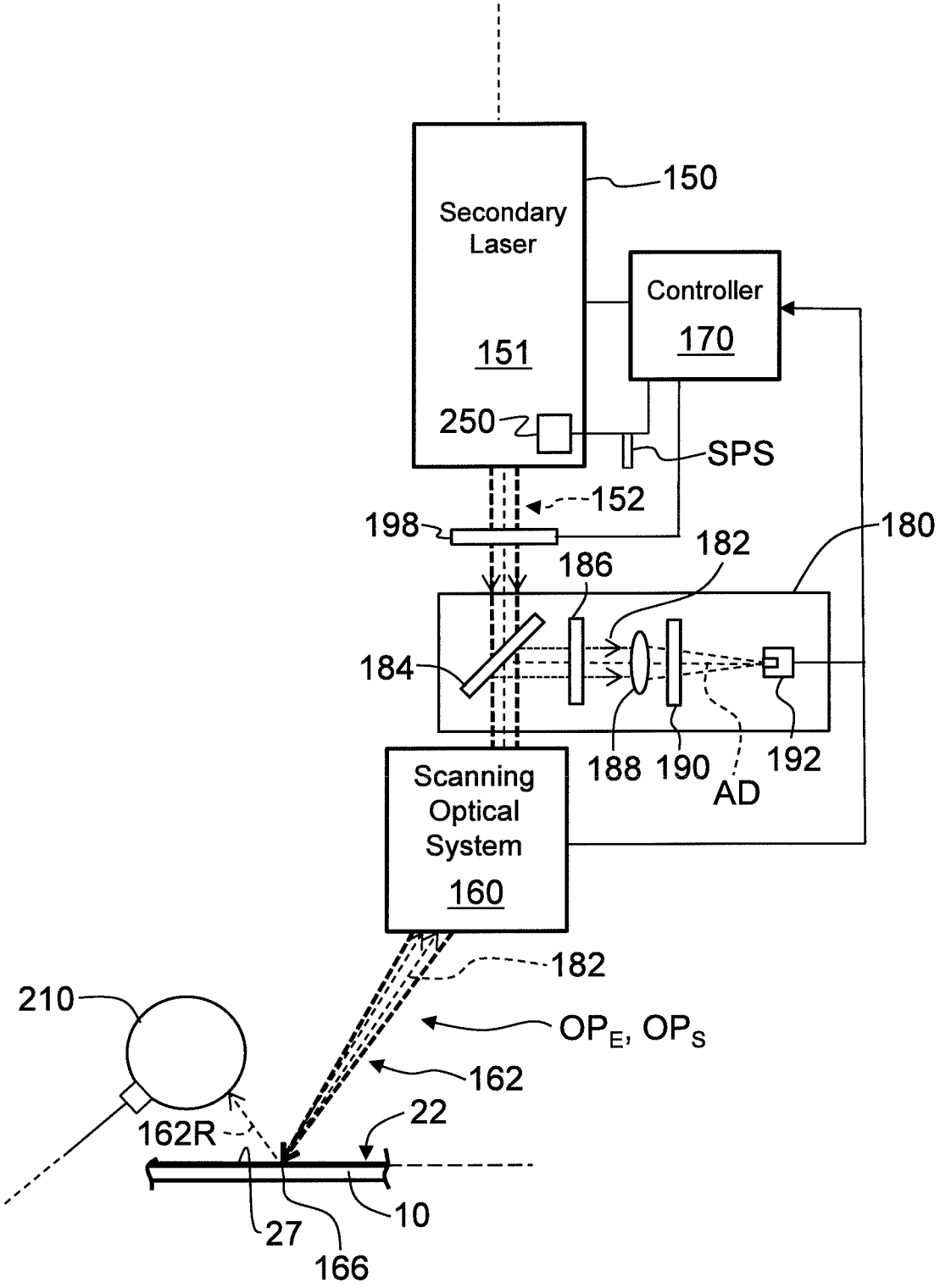

Secondary Laser
150
151
Controller
170
250
SPS
152
198
180
182
186
184
188
190
192
AD
Scanning Optical System
160
182
210
OP_E, OP_S
162
22
162R
10
27
166

FIG. 10B