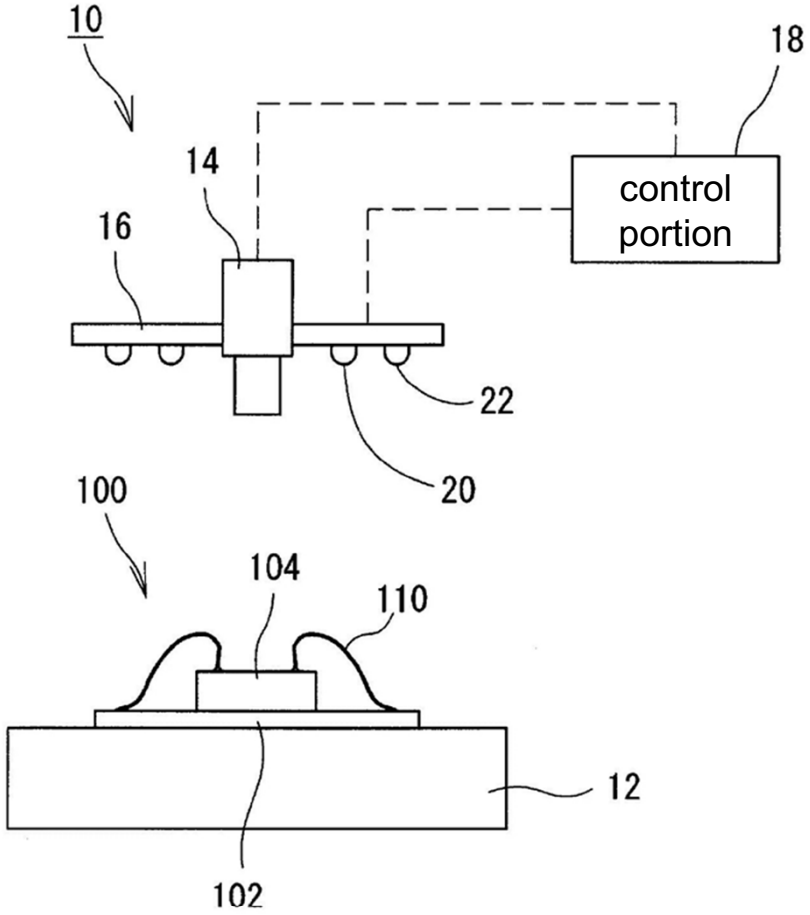

10
18
14
16
control
portion
22
20
100
104
110
12
102

FIG. 1

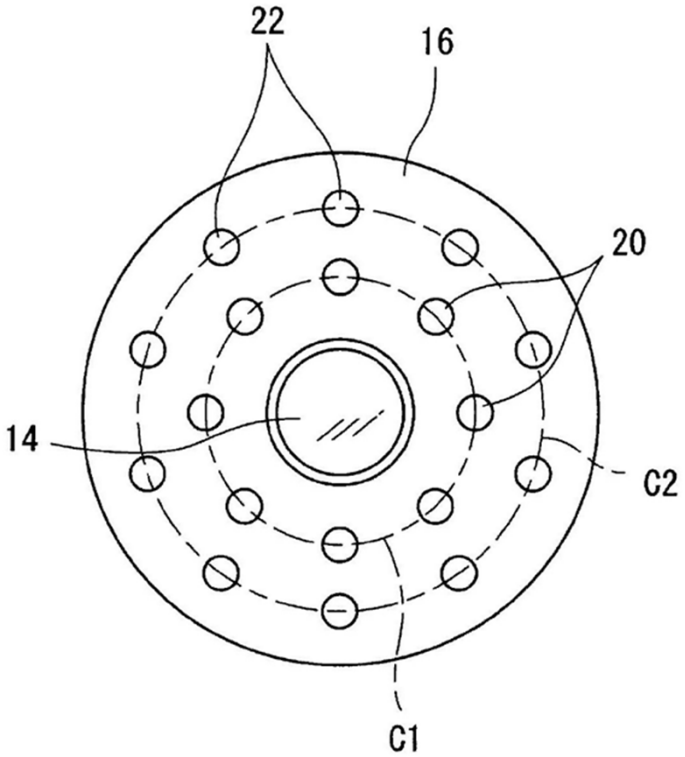

22
16
20
14
C2
C1

FIG. 2

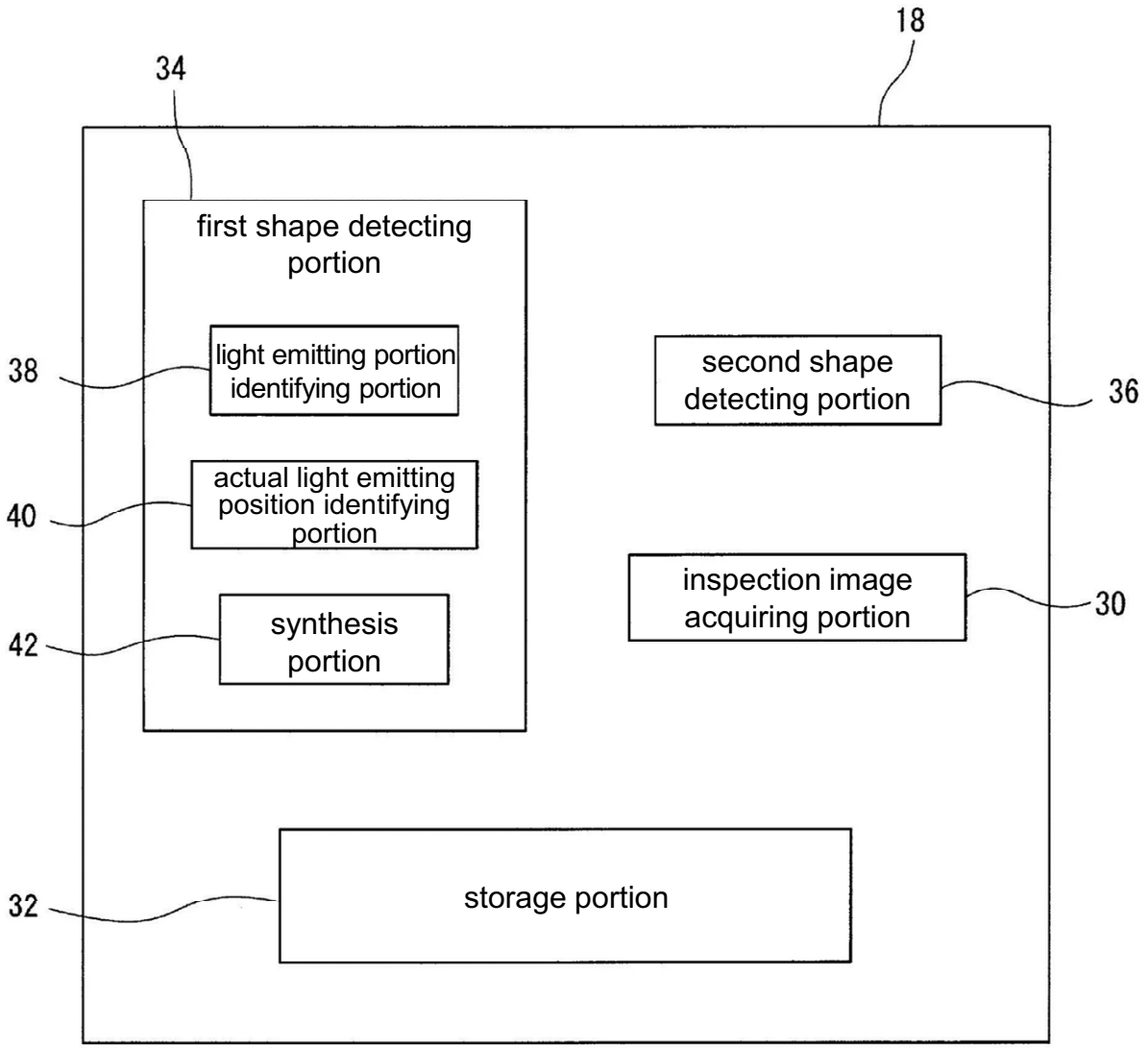

18
34
first shape detecting portion
38
light emitting portion identifying portion
40
actual light emitting position identifying portion
42
synthesis portion
second shape detecting portion
36
inspection image acquiring portion
30
32
storage portion

FIG. 3

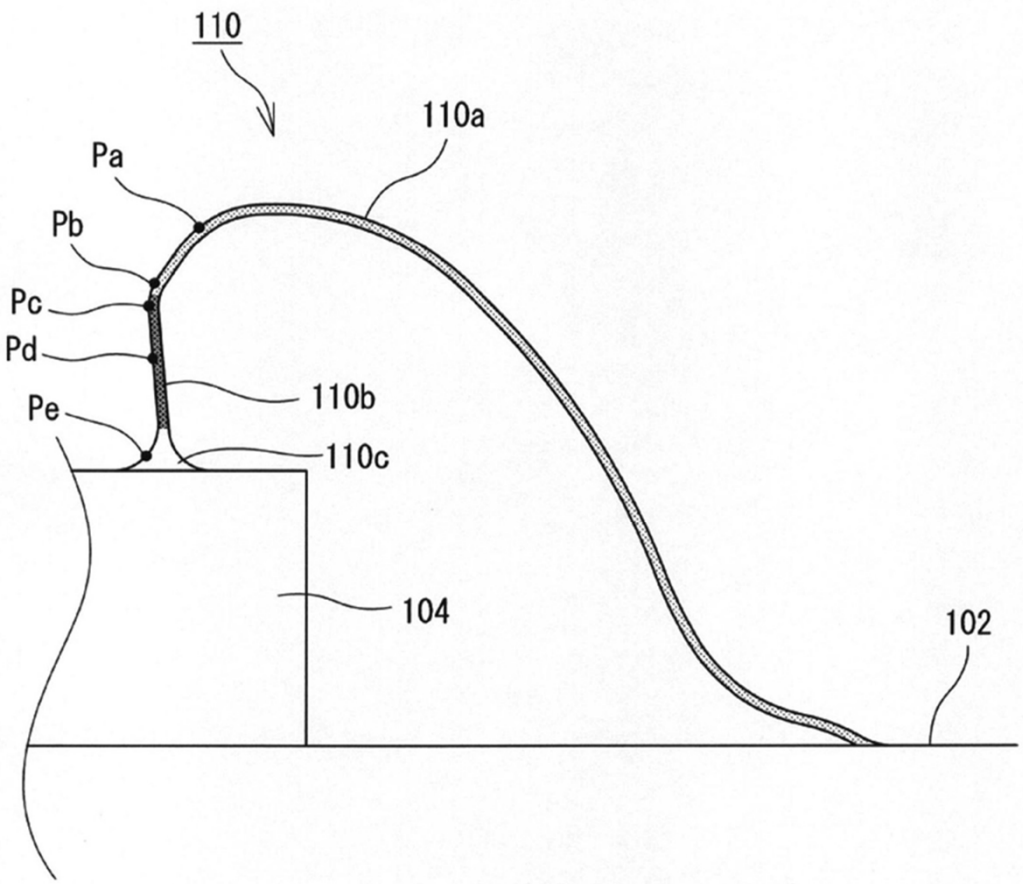


FIG. 4

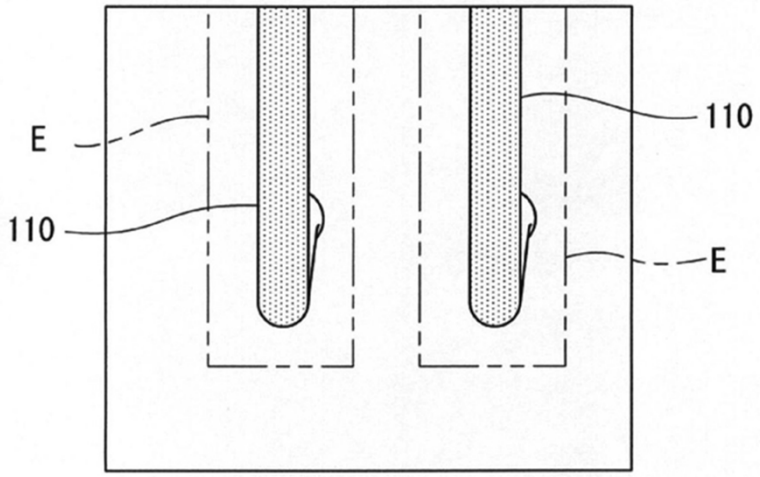


FIG. 5

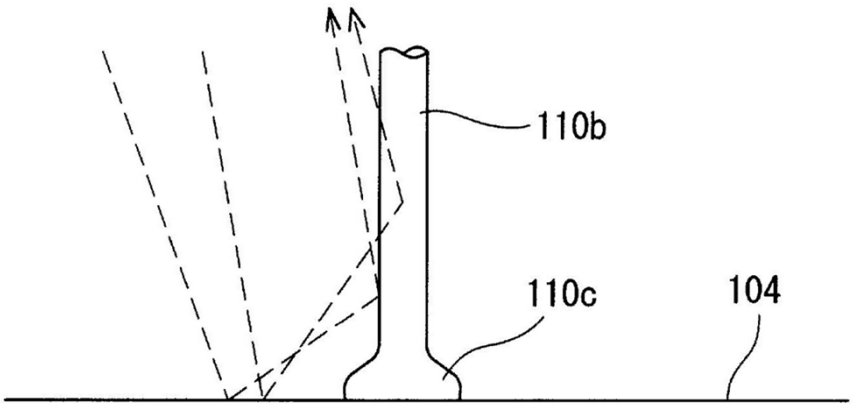


FIG. 6

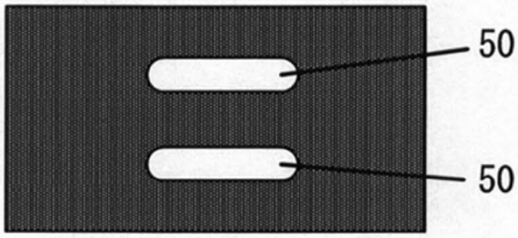


FIG. 7A

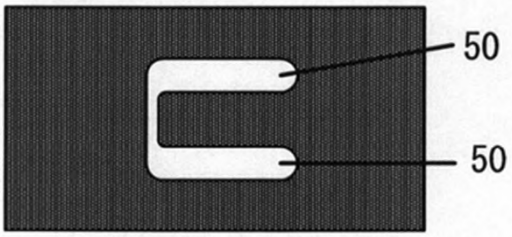


FIG. 7B

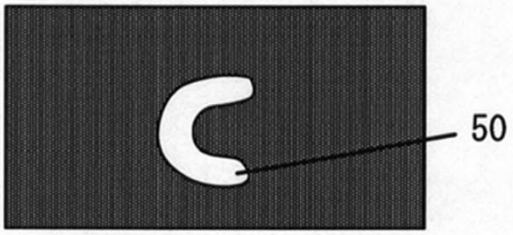


FIG. 7C

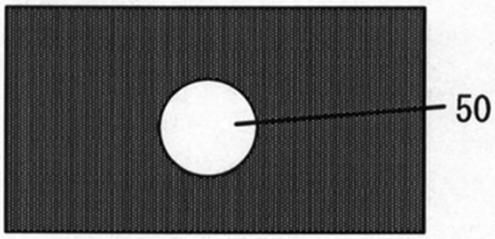


FIG. 7D

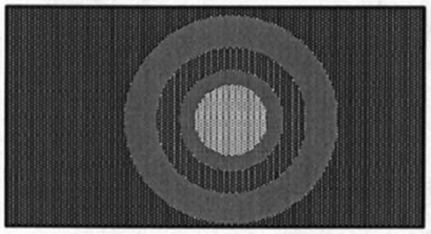


FIG. 7E

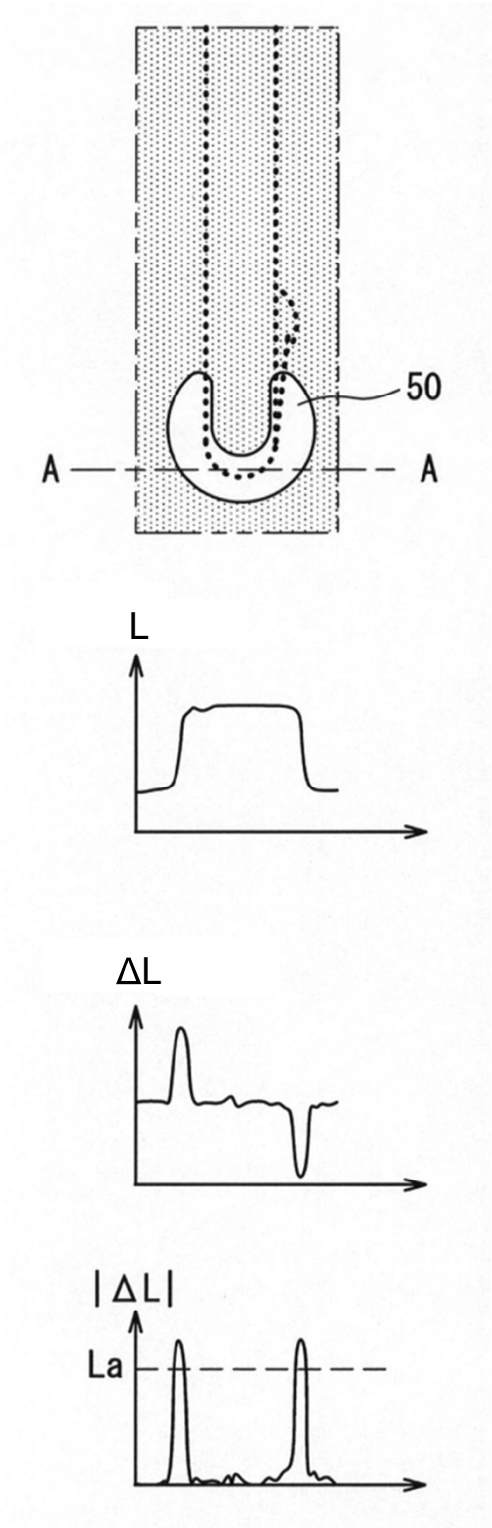
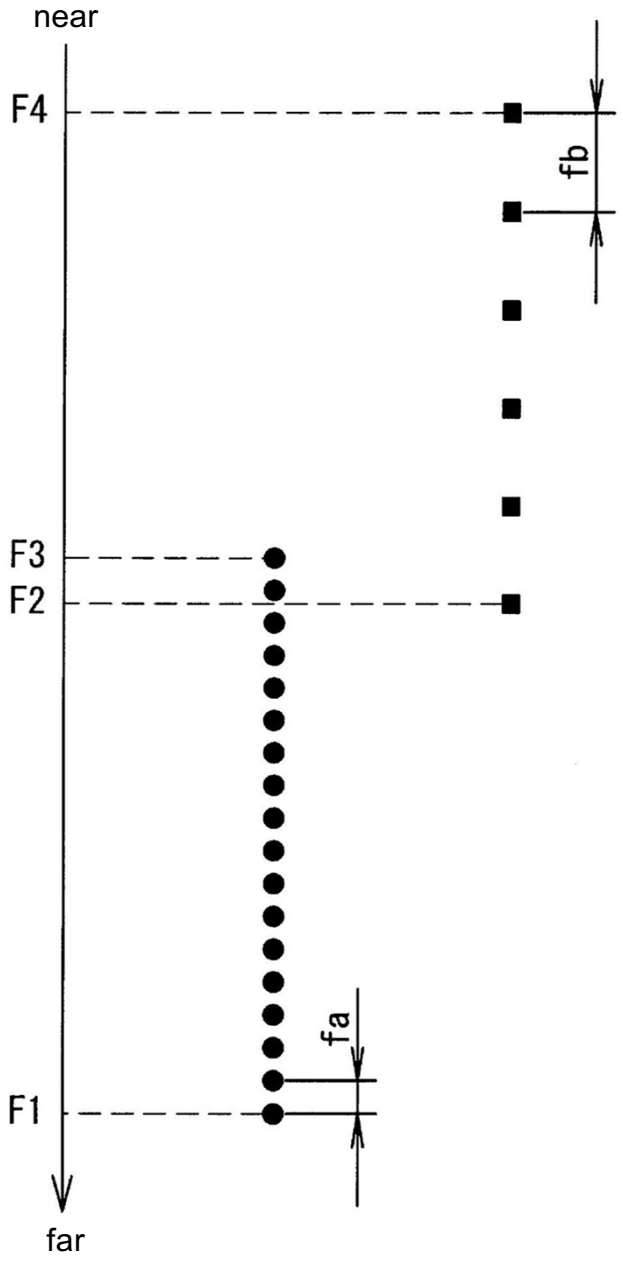


FIG. 8



● image-capturing focal distance of first inspection image

■ image-capturing focal distance of second inspection image

FIG. 9

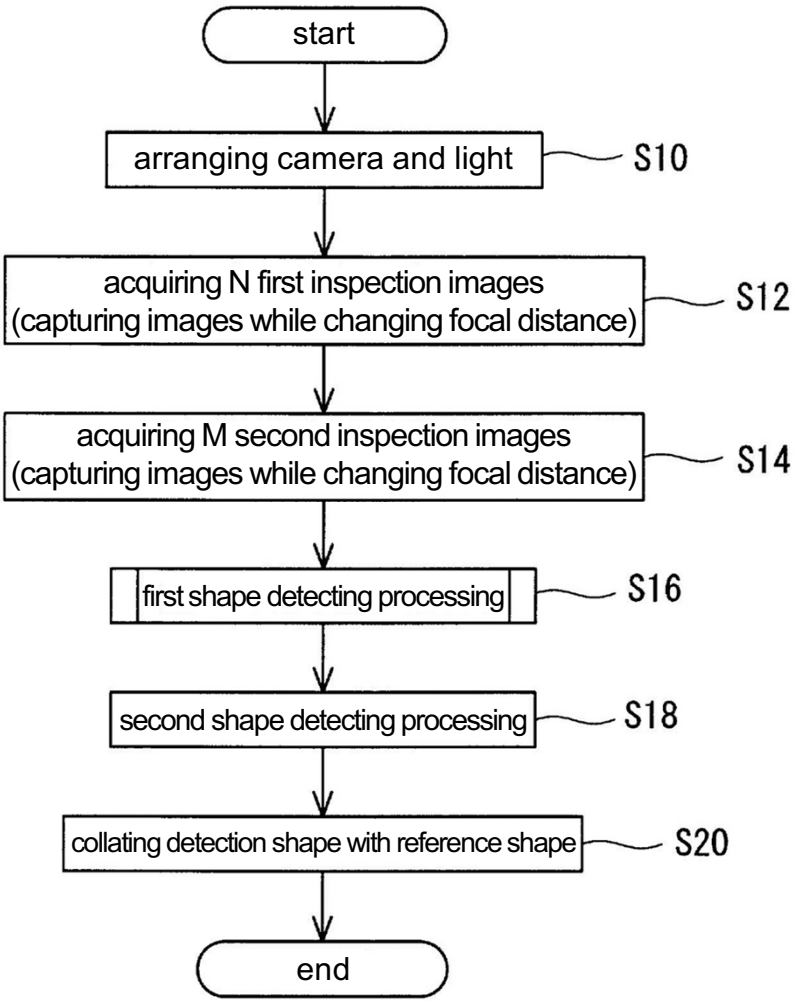

start
arranging camera and light
S10
acquiring N first inspection images
(capturing images while changing focal distance)
S12
acquiring M second inspection images
(capturing images while changing focal distance)
S14
first shape detecting processing
S16
second shape detecting processing
S18
collating detection shape with reference shape
S20
end

FIG. 10

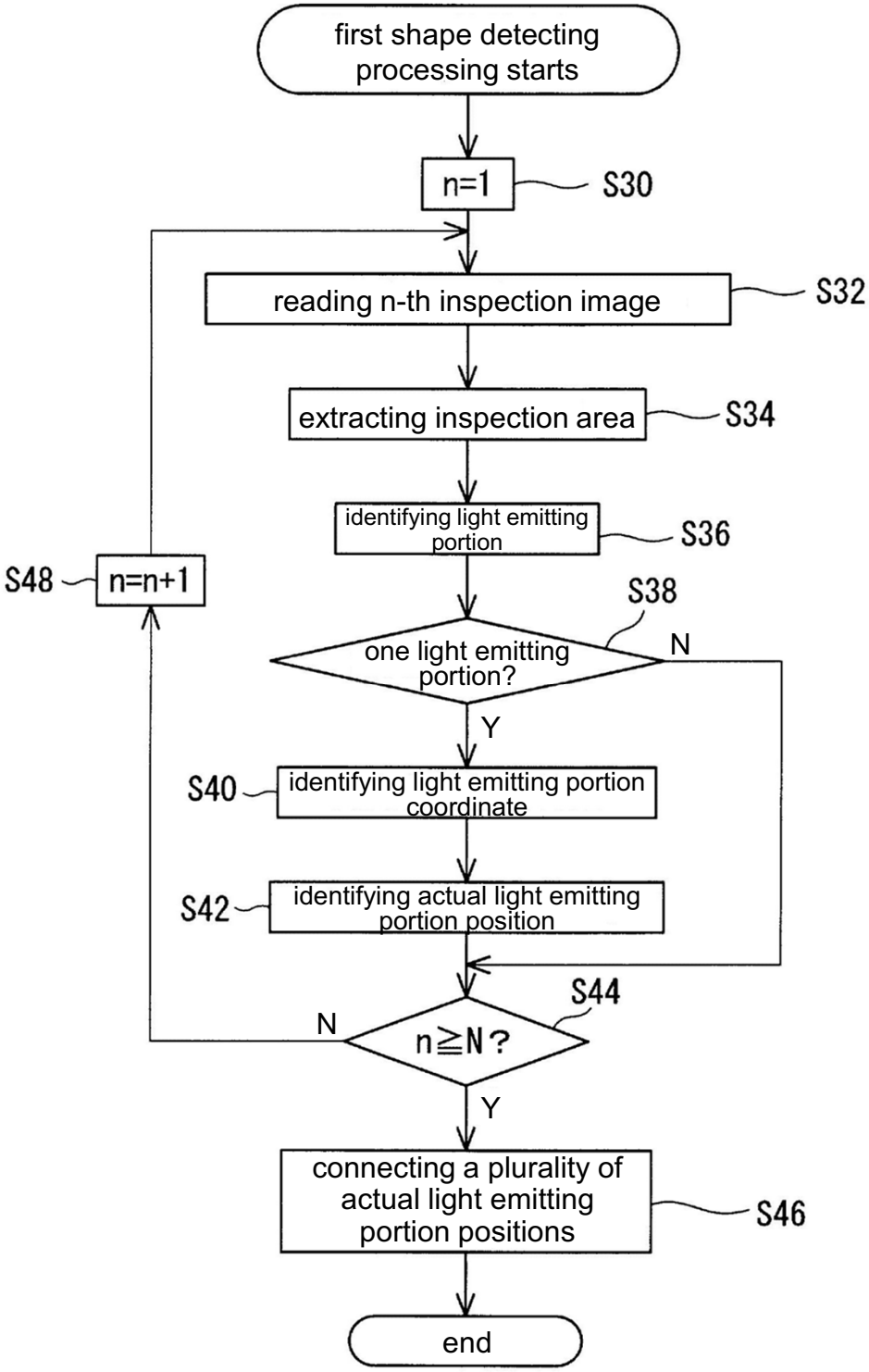

first shape detecting processing starts
n=1
S30
reading n-th inspection image
S32
extracting inspection area
S34
identifying light emitting portion
S36
S48
n=n+1
S38
one light emitting portion?
N
Y
S40
identifying light emitting portion coordinate
S42
identifying actual light emitting portion position
S44
N
n≧N?
Y
connecting a plurality of actual light emitting portion positions
S46
end

FIG. 11