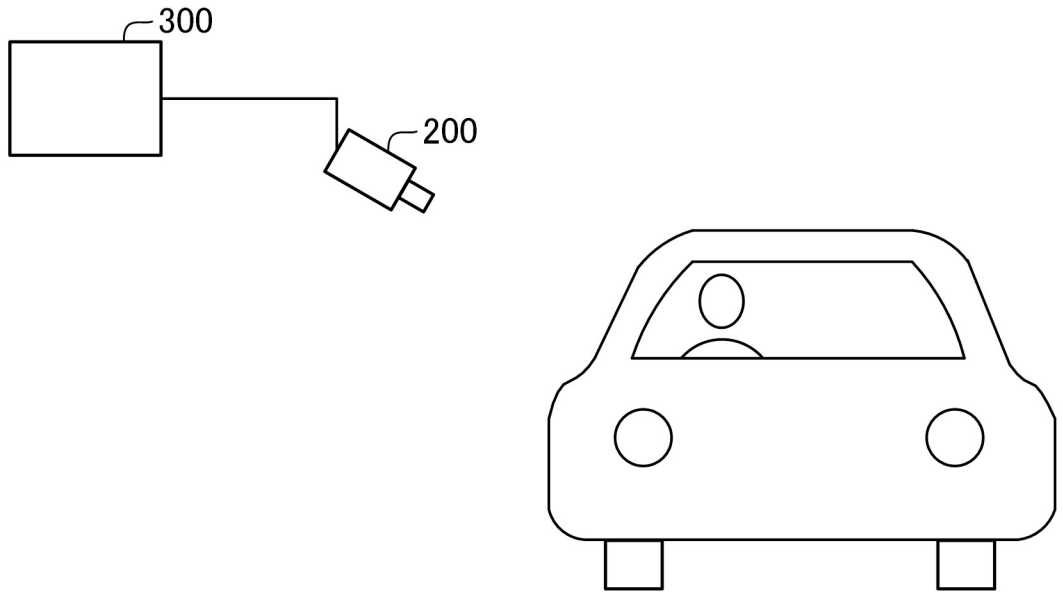
Fig.1



CONTROL SYSTEM 100

Fig.2

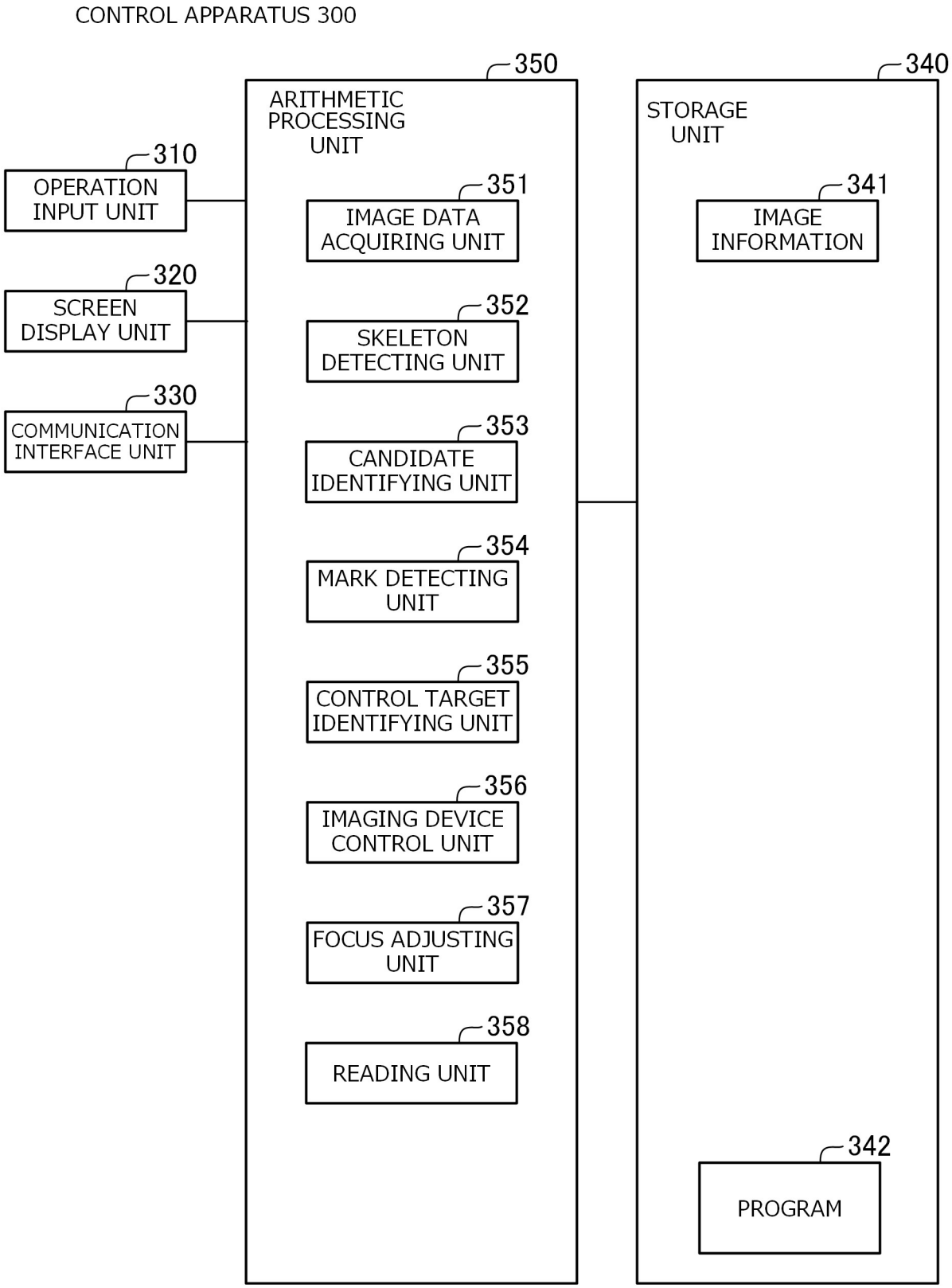

CONTROL APPARATUS 300
350
ARITHMETIC PROCESSING UNIT
340
STORAGE UNIT
310
OPERATION INPUT UNIT
320
SCREEN DISPLAY UNIT
330
COMMUNICATION INTERFACE UNIT
351
IMAGE DATA ACQUIRING UNIT
352
SKELETON DETECTING UNIT
353
CANDIDATE IDENTIFYING UNIT
354
MARK DETECTING UNIT
355
CONTROL TARGET IDENTIFYING UNIT
356
IMAGING DEVICE CONTROL UNIT
357
FOCUS ADJUSTING UNIT
358
READING UNIT
341
IMAGE INFORMATION
342
PROGRAM

Fig.3

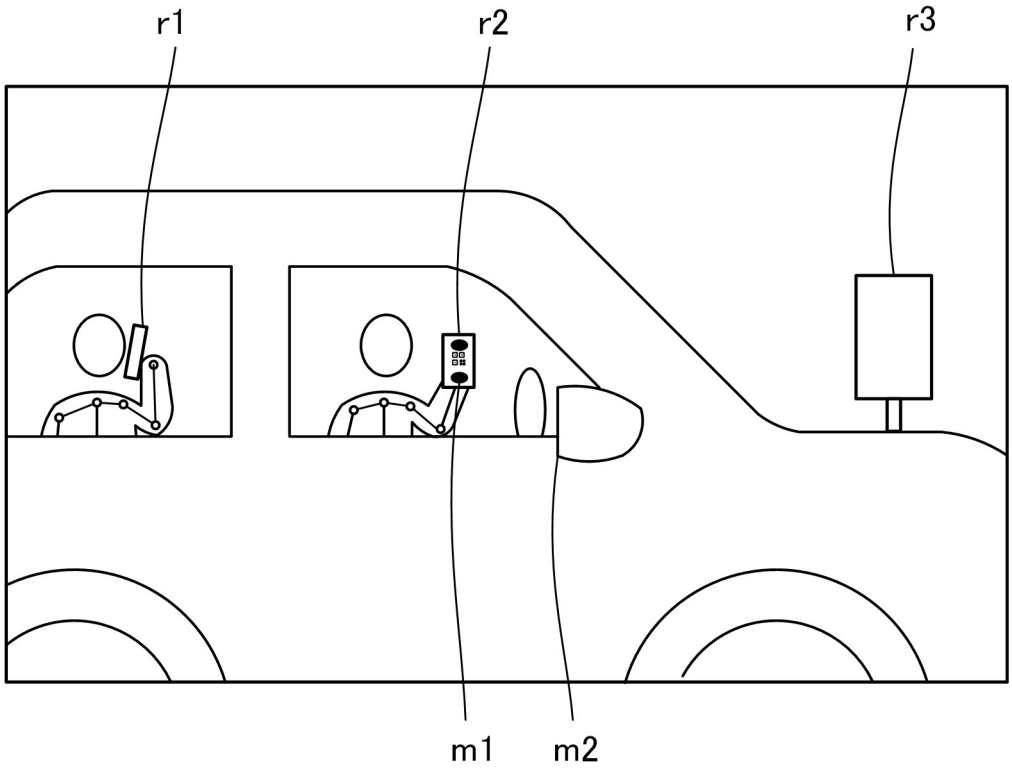


Fig.4

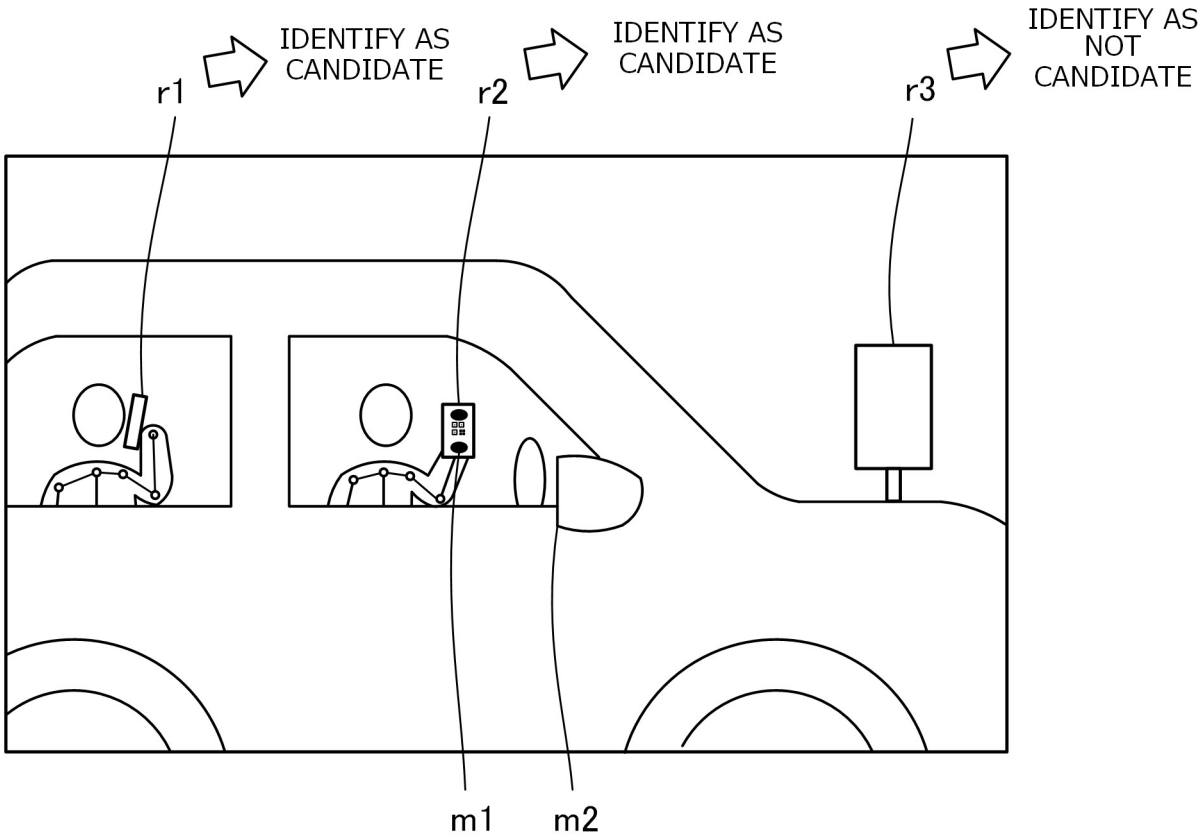

IDENTIFY AS CANDIDATE
IDENTIFY AS CANDIDATE
IDENTIFY AS NOT CANDIDATE
r1
r2
r3
m1
m2

Fig.5

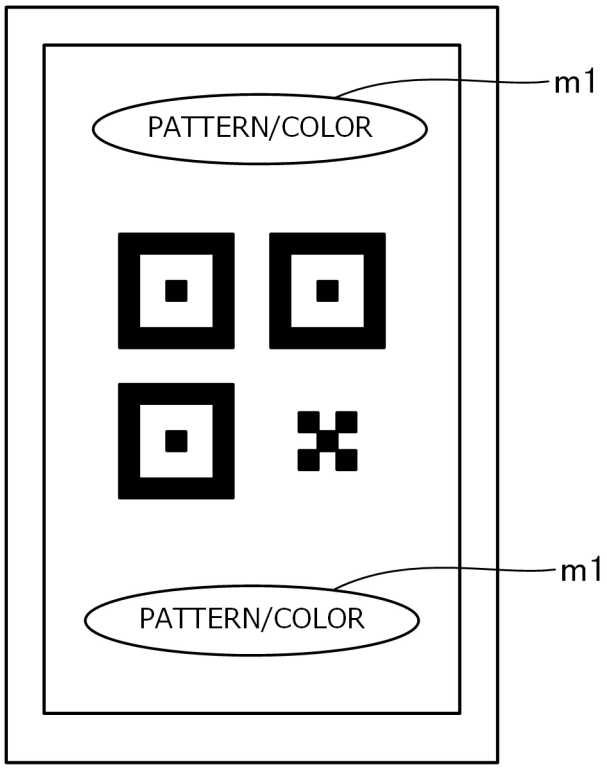


Fig.6

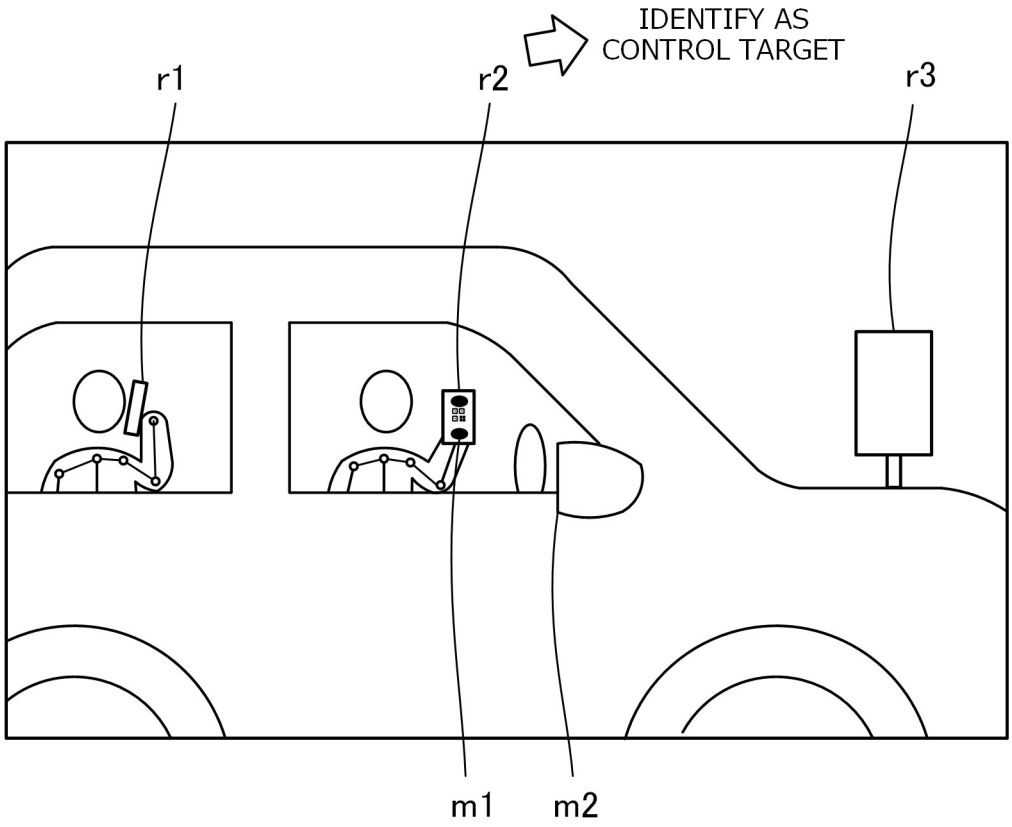


Fig.7

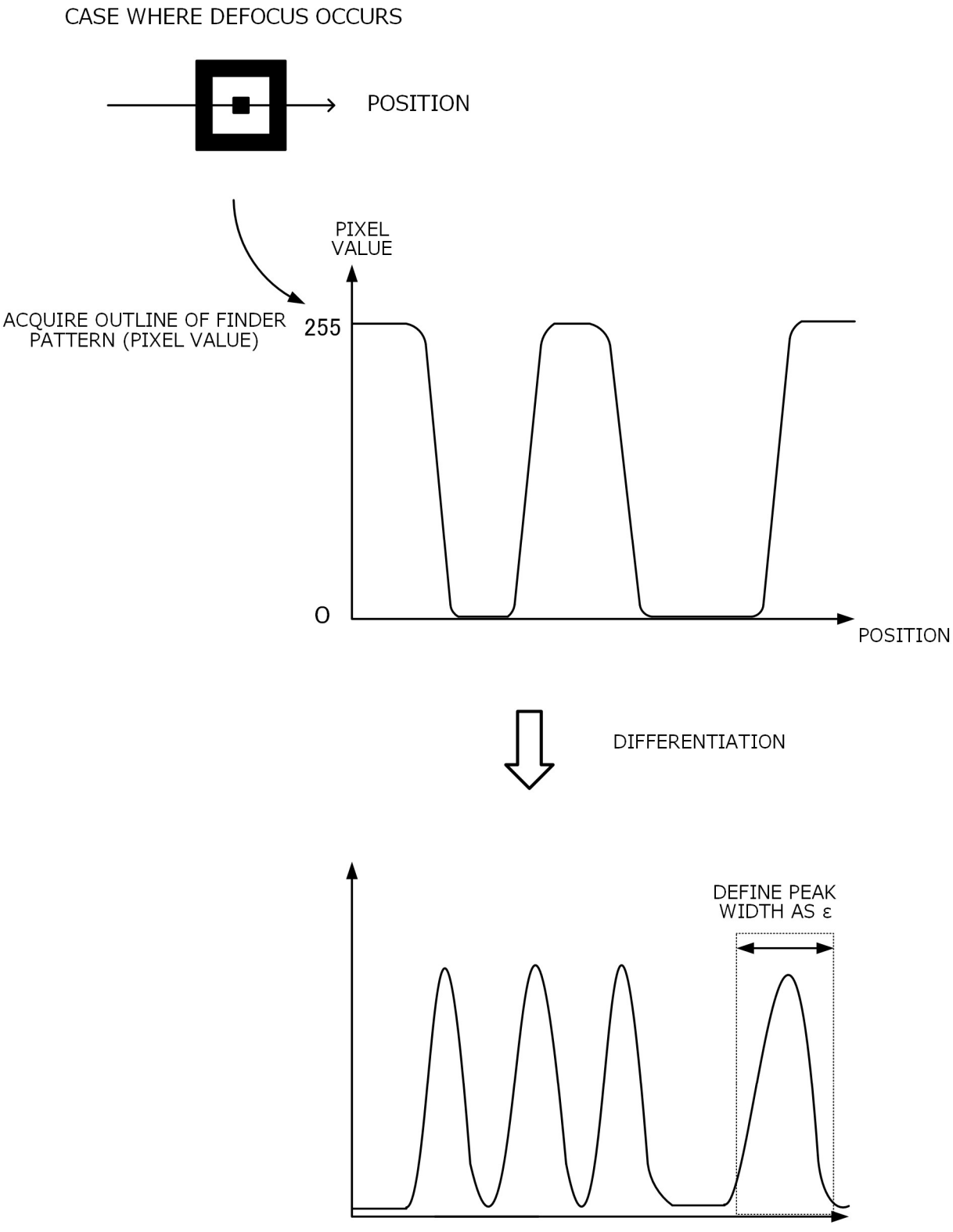

CASE WHERE DEFOCUS OCCURS
POSITION
PIXEL VALUE
ACQUIRE OUTLINE OF FINDER PATTERN (PIXEL VALUE)
255
0
POSITION
DIFFERENTIATION
DEFINE PEAK WIDTH AS ε

Fig.8

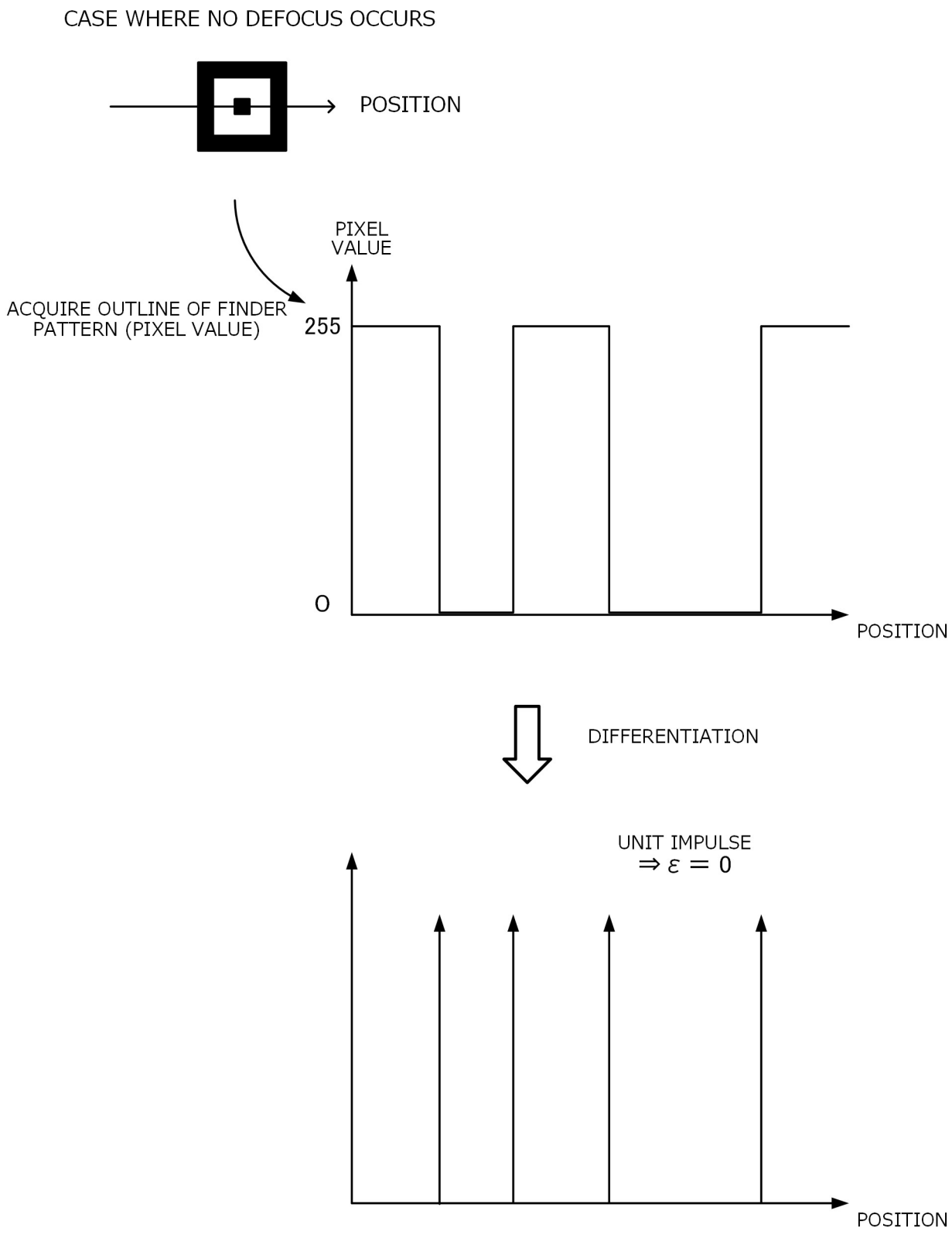

CASE WHERE NO DEFOCUS OCCURS
POSITION
PIXEL VALUE
ACQUIRE OUTLINE OF FINDER PATTERN (PIXEL VALUE)
255
0
POSITION
DIFFERENTIATION
UNIT IMPULSE
⇒ ε = 0
POSITION

Fig.9

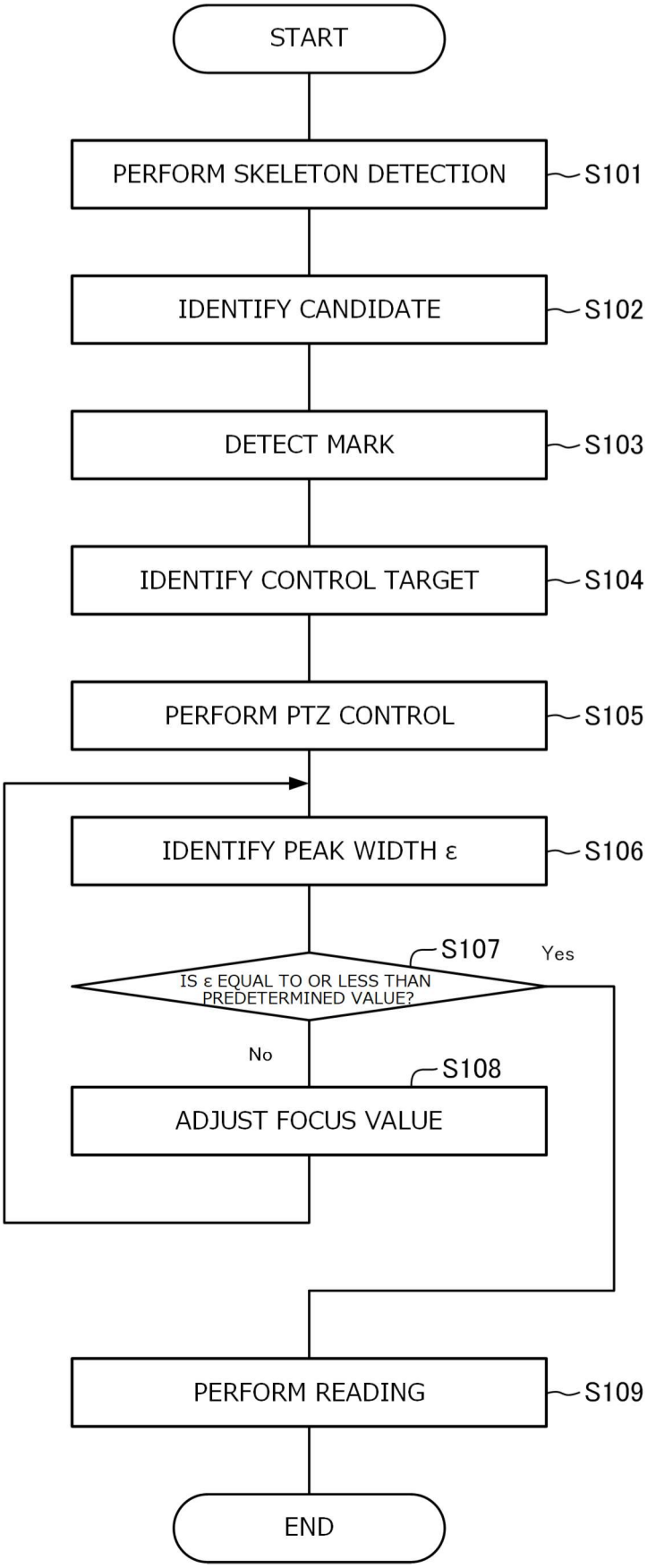

START
PERFORM SKELETON DETECTION
S101
IDENTIFY CANDIDATE
S102
DETECT MARK
S103
IDENTIFY CONTROL TARGET
S104
PERFORM PTZ CONTROL
S105
IDENTIFY PEAK WIDTH ε
S106
S107
IS ε EQUAL TO OR LESS THAN PREDETERMINED VALUE?
Yes
No
S108
ADJUST FOCUS VALUE
PERFORM READING
S109
END

Fig.10

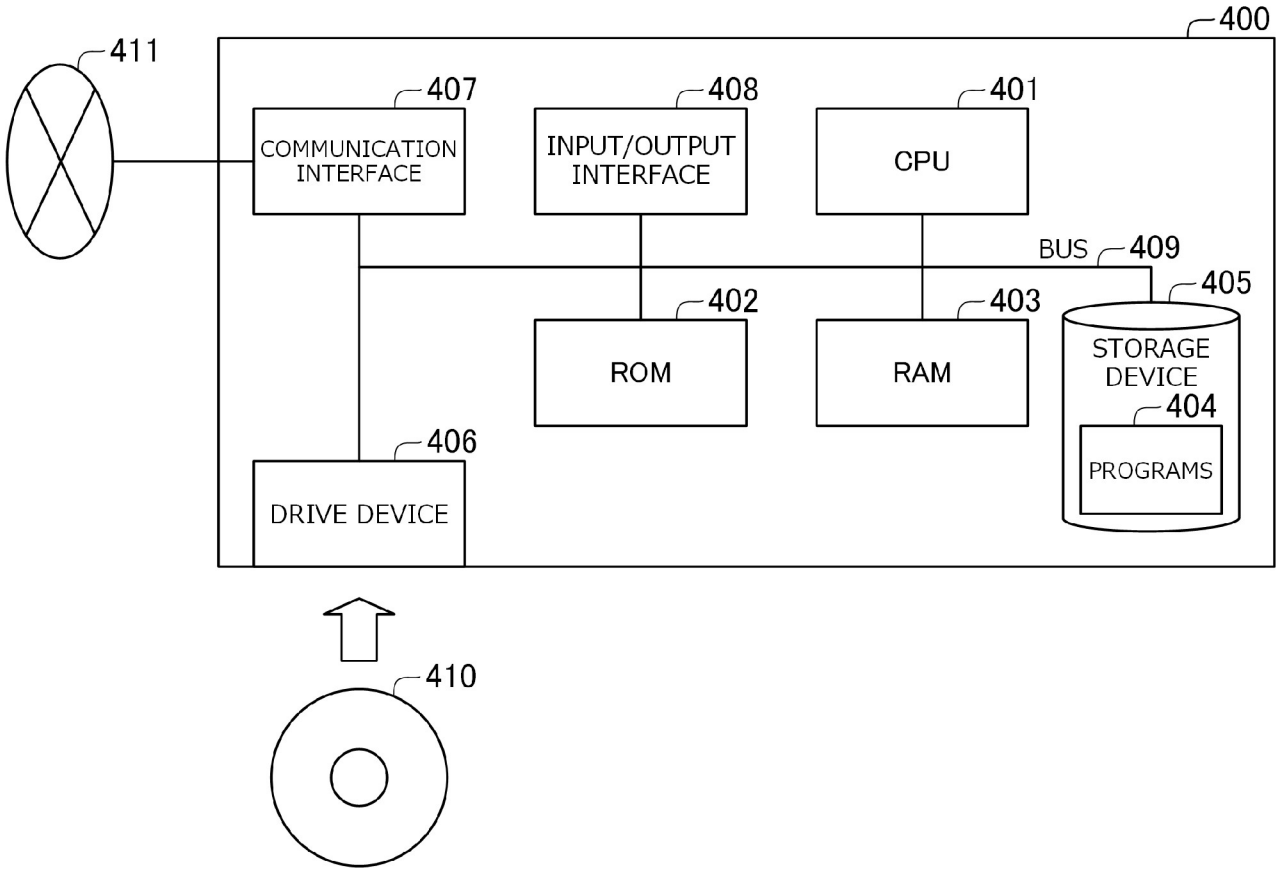

400
411
407
COMMUNICATION INTERFACE
408
INPUT/OUTPUT INTERFACE
401
CPU
BUS
409
405
402
ROM
403
RAM
STORAGE DEVICE
404
PROGRAMS
406
DRIVE DEVICE
410

Fig.11

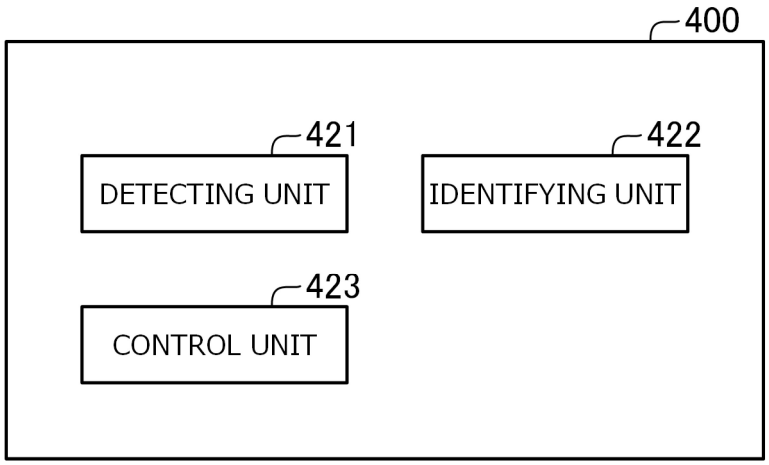
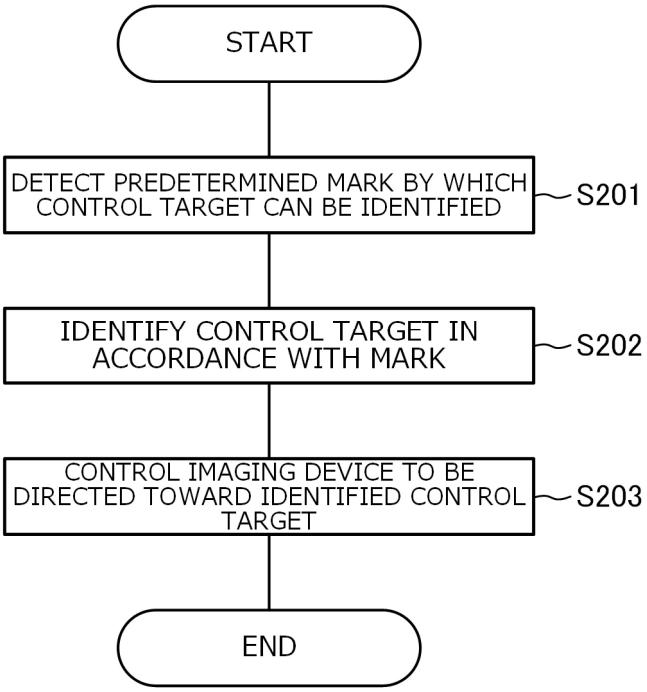

400
421
DETECTING UNIT
422
IDENTIFYING UNIT
423
CONTROL UNIT

Fig.12


START
DETECT PREDETERMINED MARK BY WHICH CONTROL TARGET CAN BE IDENTIFIED
S201
IDENTIFY CONTROL TARGET IN ACCORDANCE WITH MARK
S202
CONTROL IMAGING DEVICE TO BE DIRECTED TOWARD IDENTIFIED CONTROL TARGET
S203
END