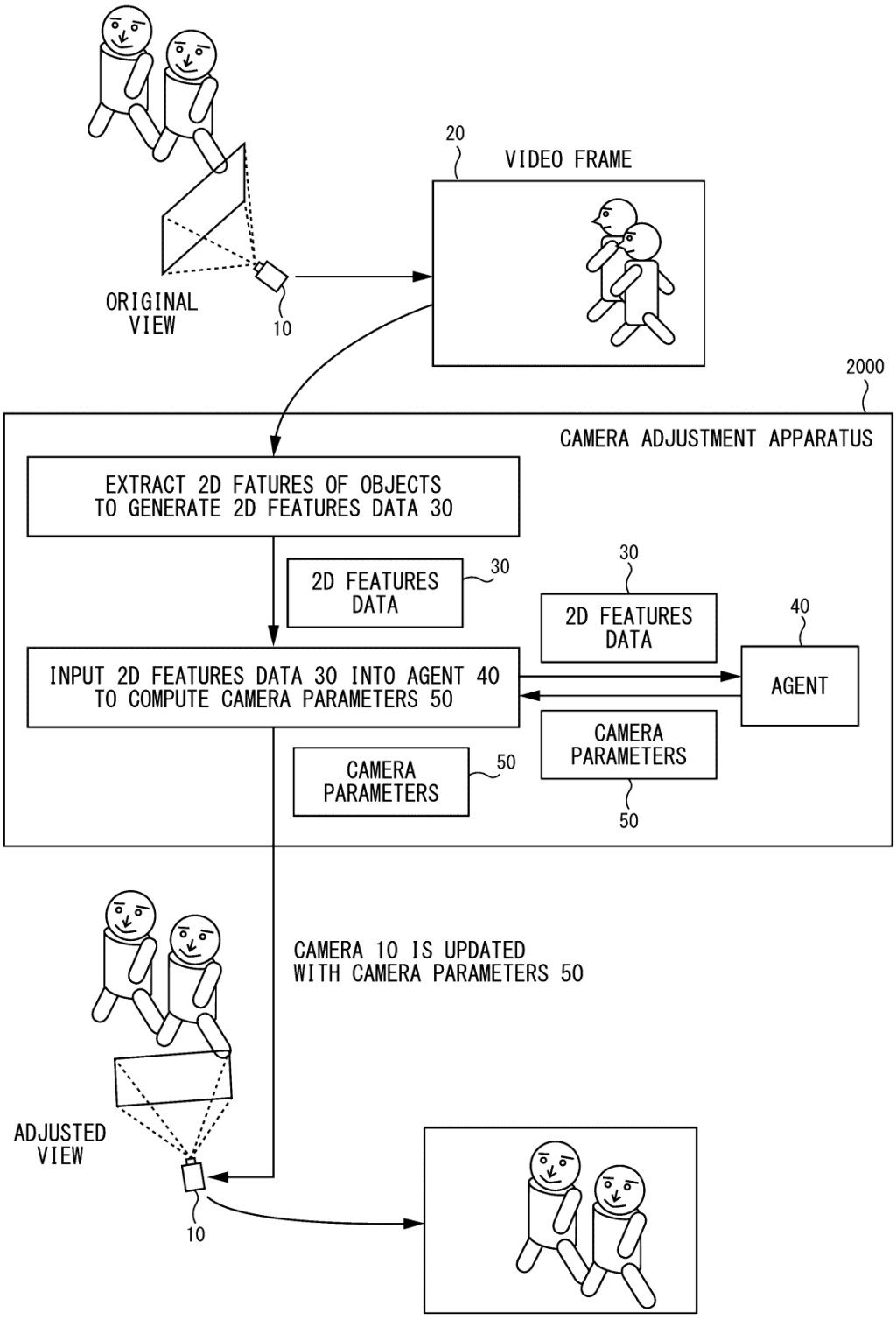
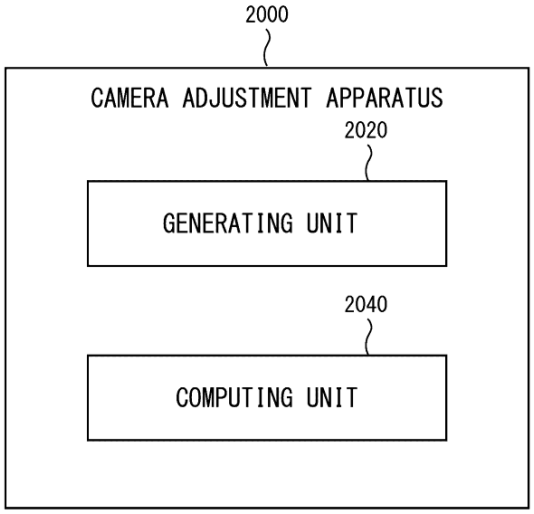
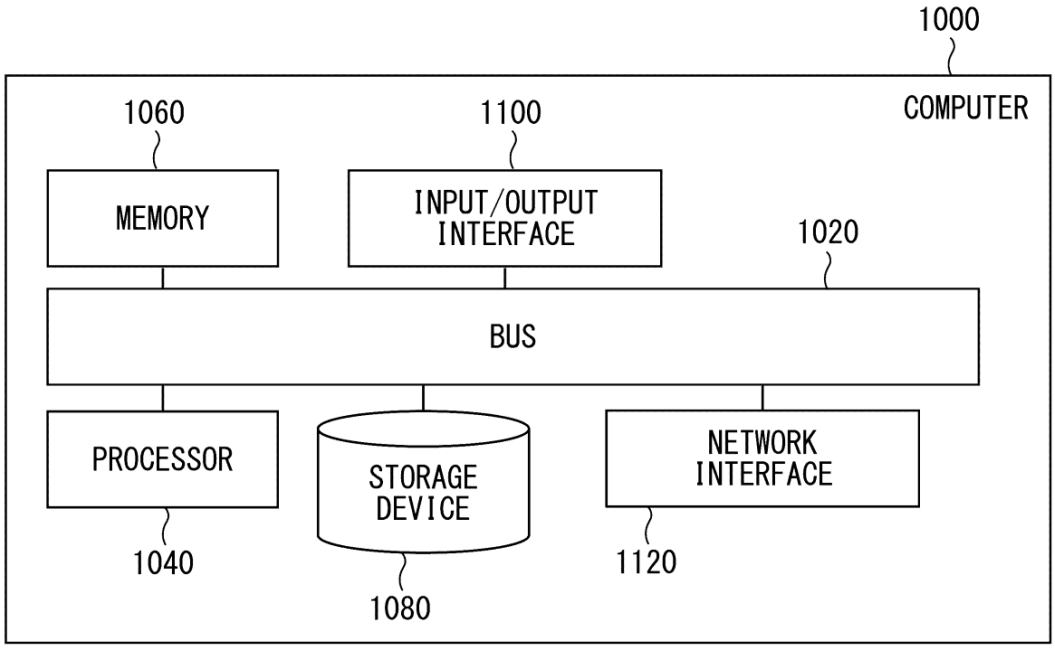
[Fig. 1]


20
VIDEO FRAME
ORIGINAL VIEW
10
2000
CAMERA ADJUSTMENT APPARATUS
EXTRACT 2D FATURES OF OBJECTS TO GENERATE 2D FEATURES DATA 30
2D FEATURES DATA
30
30
2D FEATURES DATA
40
AGENT
INPUT 2D FEATURES DATA 30 INTO AGENT 40 TO COMPUTE CAMERA PARAMETERS 50
CAMERA PARAMETERS
50
CAMERA PARAMETERS
50
CAMERA 10 IS UPDATED WITH CAMERA PARAMETERS 50
ADJUSTED VIEW
10

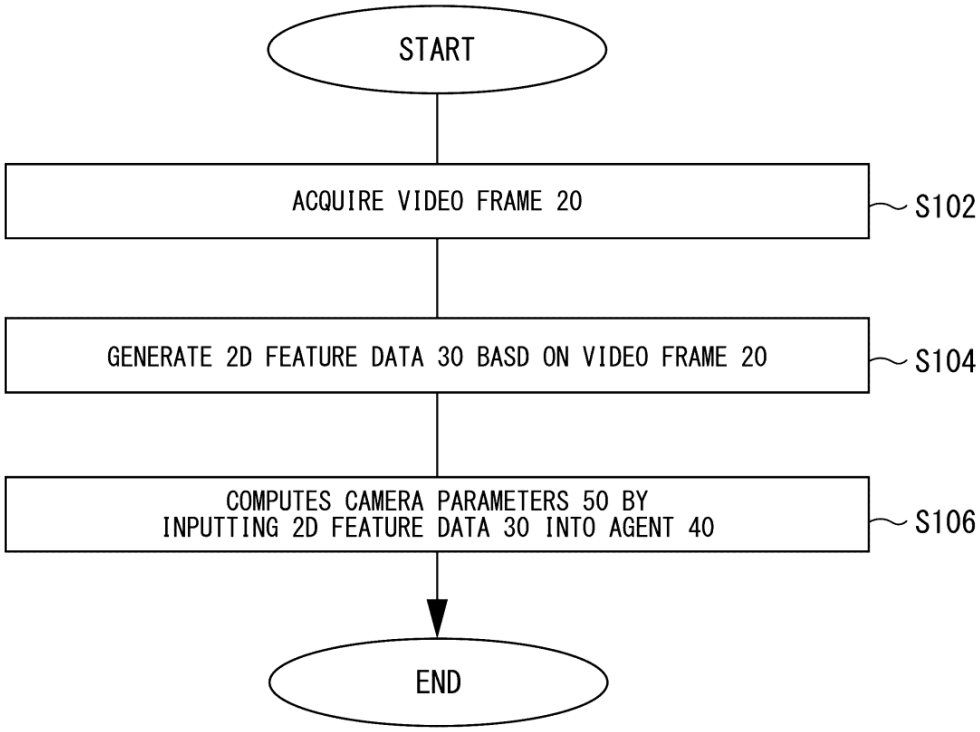
[Fig. 2]


2000
CAMERA ADJUSTMENT APPARATUS
2020
GENERATING UNIT
2040
COMPUTING UNIT

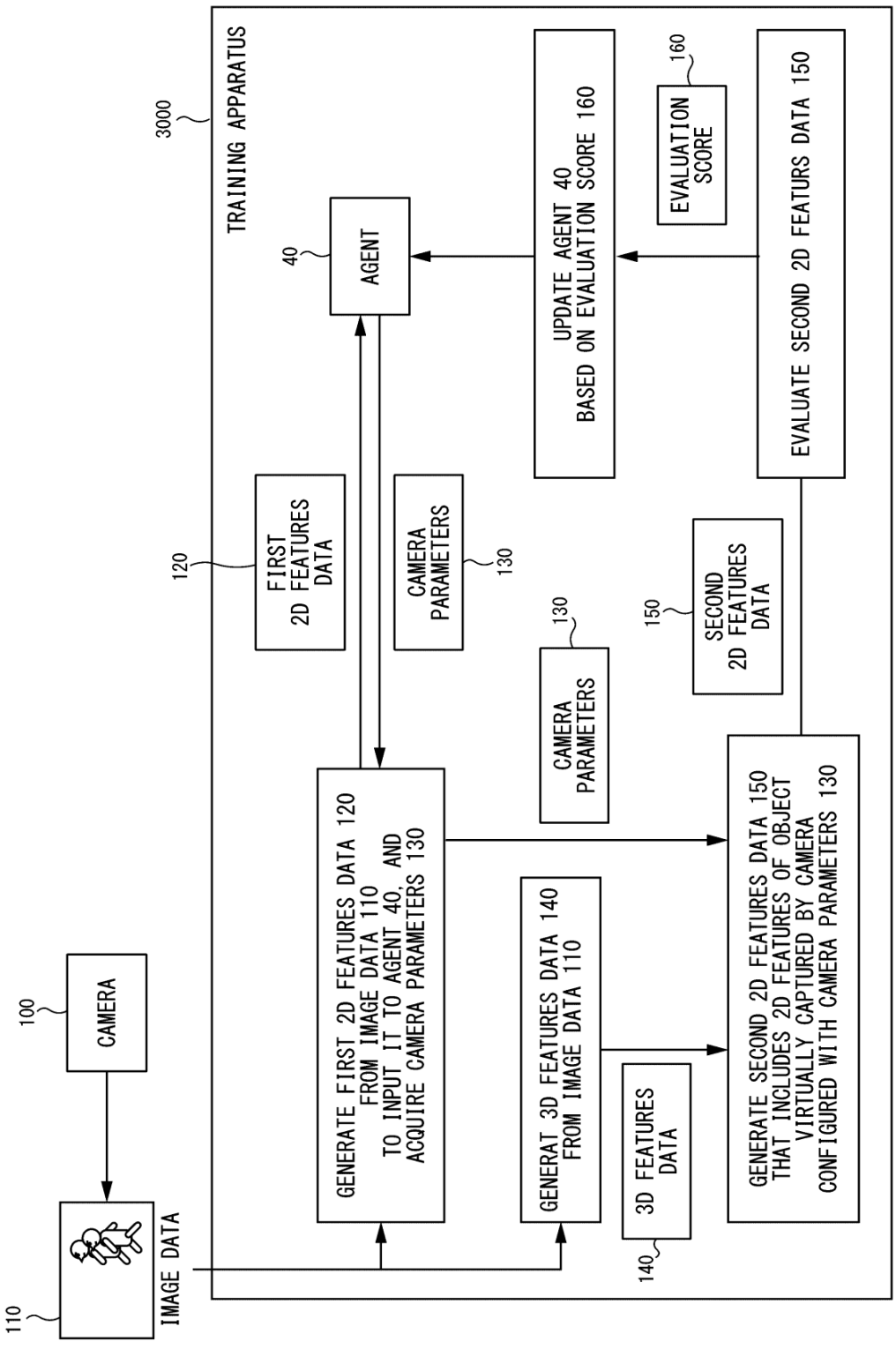
[Fig. 3]


1000
COMPUTER
1060
1100
MEMORY
INPUT/OUTPUT INTERFACE
1020
BUS
PROCESSOR
STORAGE DEVICE
NETWORK INTERFACE
1040
1080
1120

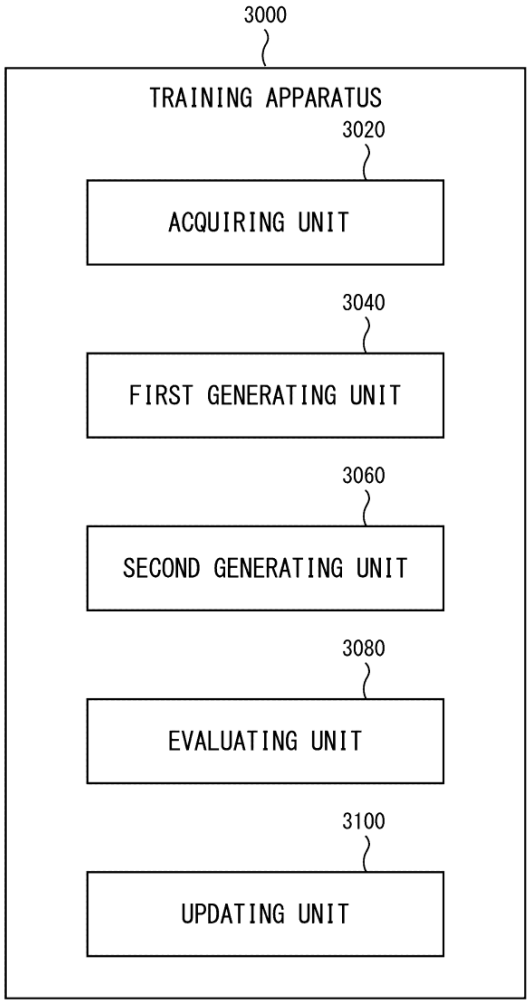
[Fig. 4]


START
ACQUIRE VIDEO FRAME 20
S102
GENERATE 2D FEATURE DATA 30 BASD ON VIDEO FRAME 20
S104
COMPUTES CAMERA PARAMETERS 50 BY
INPUTTING 2D FEATURE DATA 30 INTO AGENT 40
S106
END

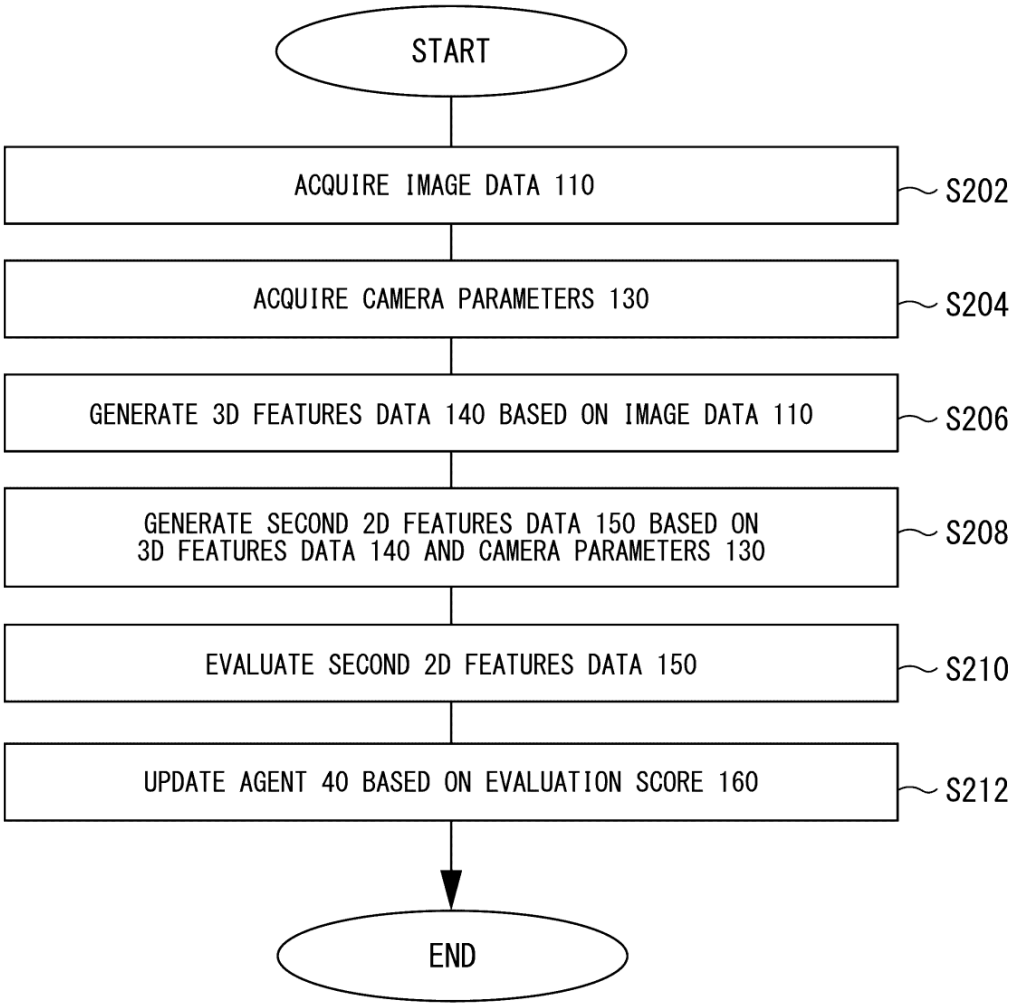
[Fig. 5]


TRAINING APPARATUS
3000
CAMERA
100
IMAGE DATA
110
AGENT
40
FIRST 2D FEATURES DATA
120
CAMERA PARAMETERS
130
GENERATE FIRST 2D FEATURES DATA 120 FROM IMAGE DATA 110 TO INPUT IT TO AGENT 40, AND ACQUIRE CAMERA PARAMETERS 130
GENERAT 3D FEATURES DATA 140 FROM IMAGE DATA 110
3D FEATURES DATA
140
CAMERA PARAMETERS
130
SECOND 2D FEATURES DATA
150
GENERATE SECOND 2D FEATURES DATA 150 THAT INCLUDES 2D FEATURES OF OBJECT VIRTUALLY CAPTURED BY CAMERA CONFIGURED WITH CAMERA PARAMETERS 130
EVALUATE SECOND 2D FEATURS DATA 150
EVALUATION SCORE
160
UPDATE AGENT 40 BASED ON EVALUATION SCORE 160

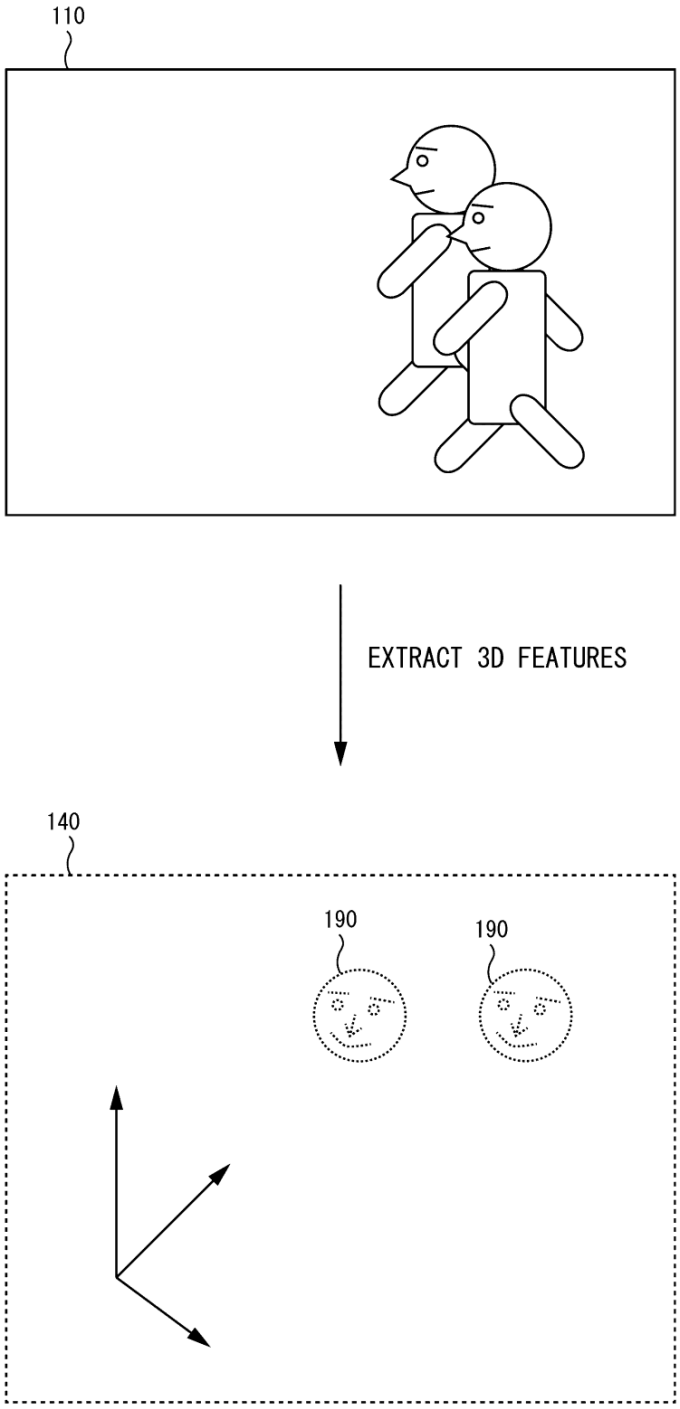
[Fig. 6]


3000
TRAINING APPARATUS
3020
ACQUIRING UNIT
3040
FIRST GENERATING UNIT
3060
SECOND GENERATING UNIT
3080
EVALUATING UNIT
3100
UPDATING UNIT

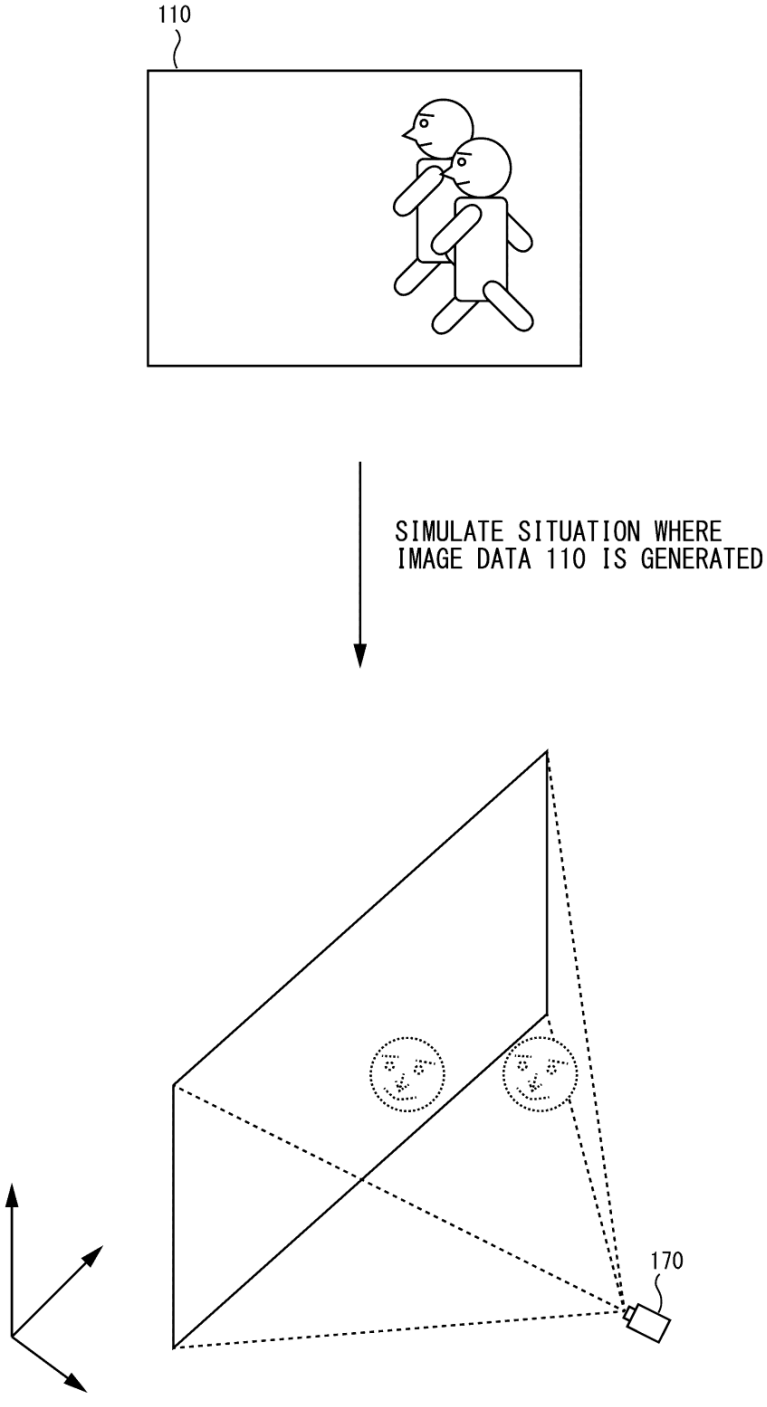
[Fig. 7]


START
ACQUIRE IMAGE DATA 110
S202
ACQUIRE CAMERA PARAMETERS 130
S204
GENERATE 3D FEATURES DATA 140 BASED ON IMAGE DATA 110
S206
GENERATE SECOND 2D FEATURES DATA 150 BASED ON 3D FEATURES DATA 140 AND CAMERA PARAMETERS 130
S208
EVALUATE SECOND 2D FEATURES DATA 150
S210
UPDATE AGENT 40 BASED ON EVALUATION SCORE 160
S212
END

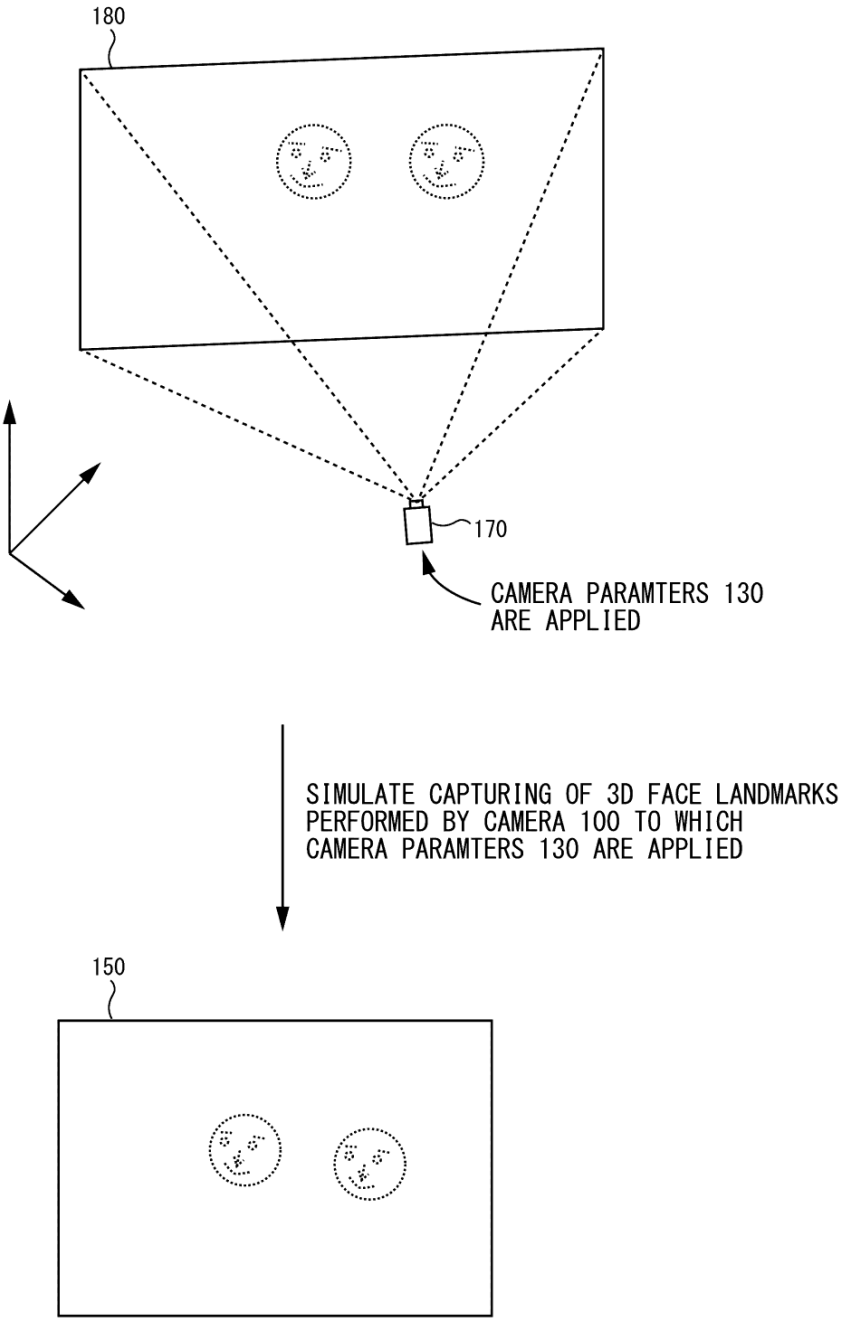
[Fig. 8]



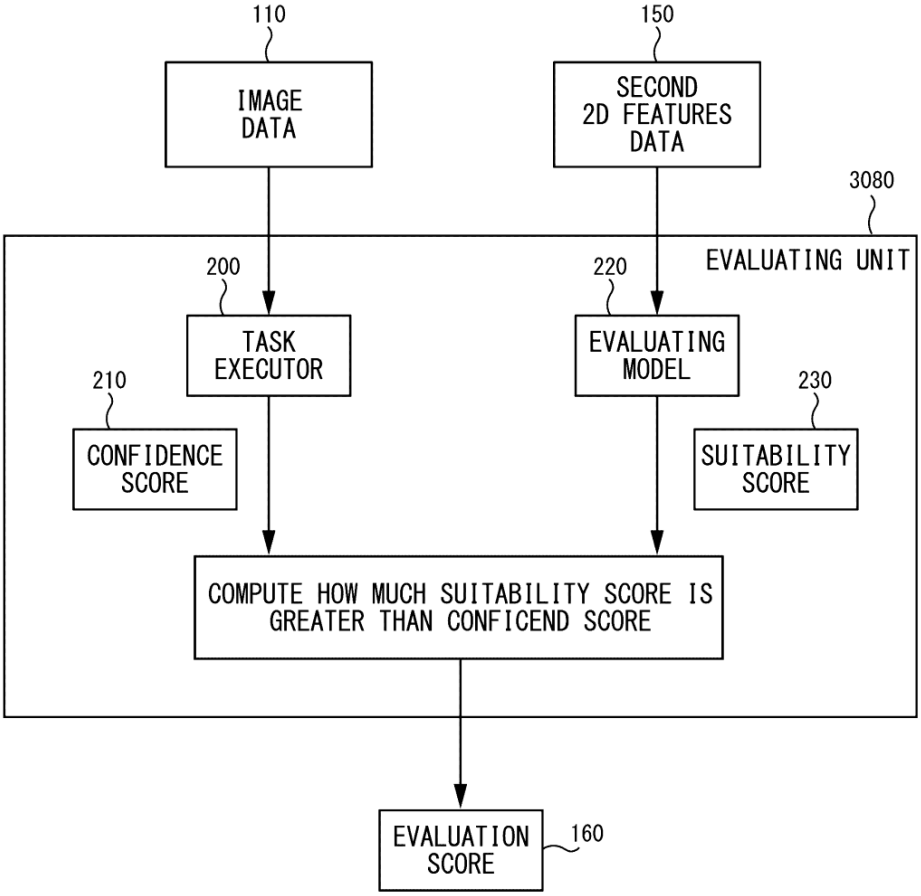
[Fig. 9]


110
SIMULATE SITUATION WHERE
IMAGE DATA 110 IS GENERATED
170

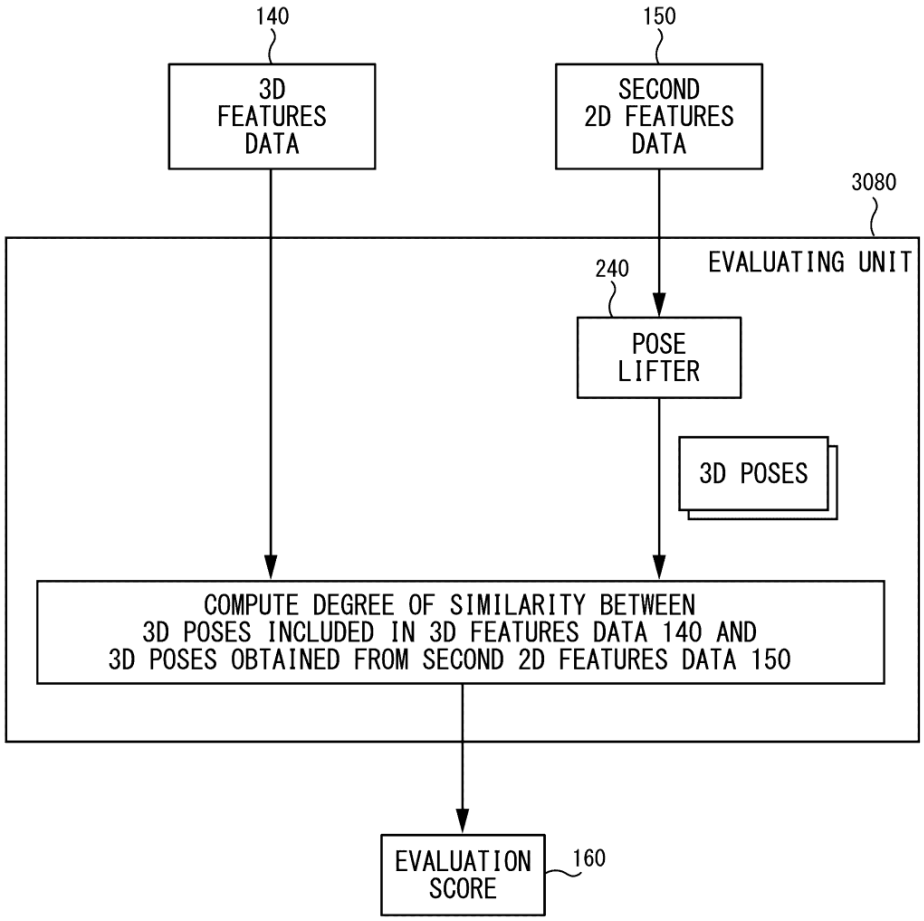
[Fig. 10]


180
170
CAMERA PARAMTERS 130
ARE APPLIED
SIMULATE CAPTURING OF 3D FACE LANDMARKS
PERFORMED BY CAMERA 100 TO WHICH
CAMERA PARAMTERS 130 ARE APPLIED
150

[Fig. 11]


110
IMAGE DATA
150
SECOND 2D FEATURES DATA
3080
EVALUATING UNIT
200
TASK EXECUTOR
220
EVALUATING MODEL
210
CONFIDENCE SCORE
230
SUITABILITY SCORE
COMPUTE HOW MUCH SUITABILITY SCORE IS GREATER THAN CONFICEND SCORE
EVALUATION SCORE
160

[Fig. 12]


140
3D FEATURES DATA
150
SECOND 2D FEATURES DATA
3080
EVALUATING UNIT
240
POSE LIFTER
3D POSES
COMPUTE DEGREE OF SIMILARITY BETWEEN 3D POSES INCLUDED IN 3D FEATURES DATA 140 AND 3D POSES OBTAINED FROM SECOND 2D FEATURES DATA 150
EVALUATION SCORE
160