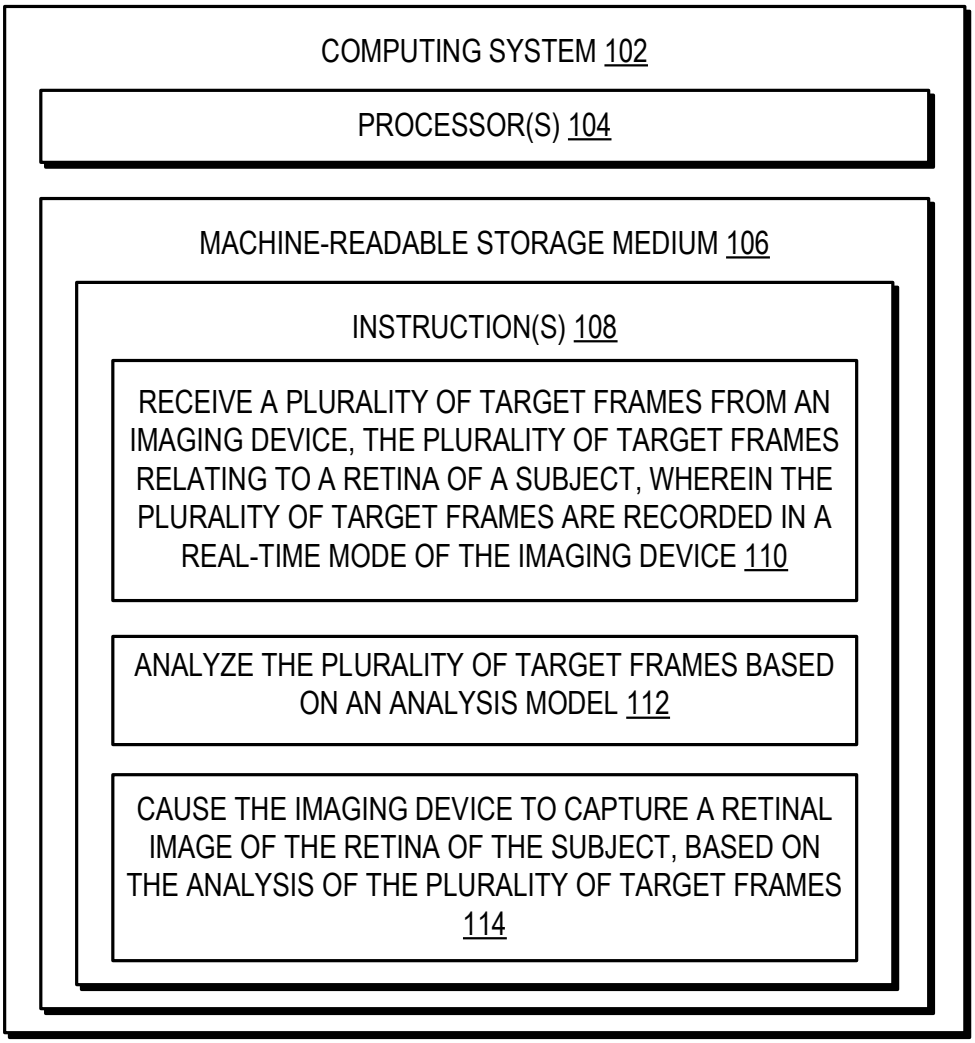

COMPUTING SYSTEM 102
PROCESSOR(S) 104
MACHINE-READABLE STORAGE MEDIUM 106
INSTRUCTION(S) 108
RECEIVE A PLURALITY OF TARGET FRAMES FROM AN IMAGING DEVICE, THE PLURALITY OF TARGET FRAMES RELATING TO A RETINA OF A SUBJECT, WHEREIN THE PLURALITY OF TARGET FRAMES ARE RECORDED IN A REAL-TIME MODE OF THE IMAGING DEVICE 110
ANALYZE THE PLURALITY OF TARGET FRAMES BASED ON AN ANALYSIS MODEL 112
CAUSE THE IMAGING DEVICE TO CAPTURE A RETINAL IMAGE OF THE RETINA OF THE SUBJECT, BASED ON THE ANALYSIS OF THE PLURALITY OF TARGET FRAMES 114

FIG. 1

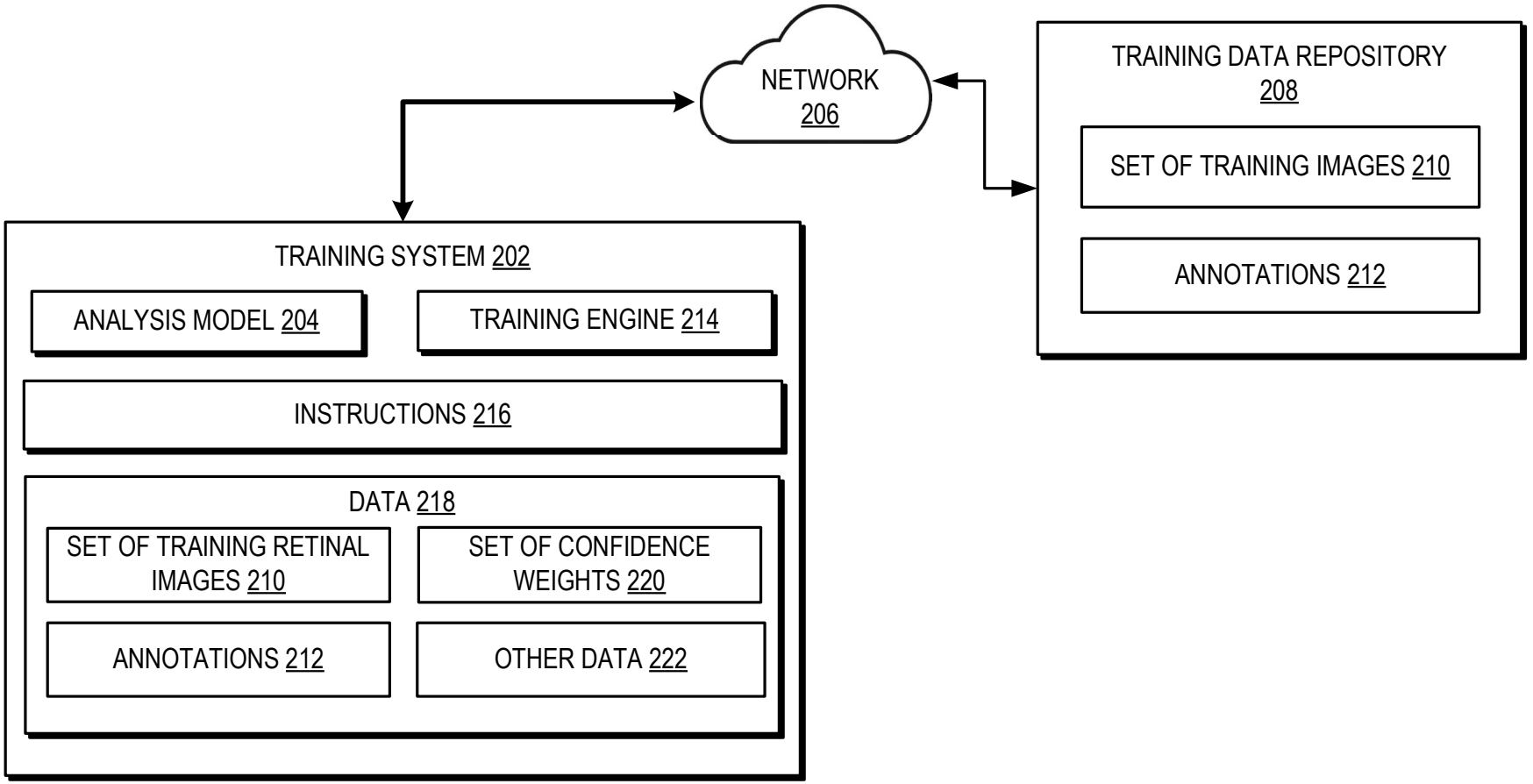

NETWORK
206
TRAINING DATA REPOSITORY
208
SET OF TRAINING IMAGES 210
ANNOTATIONS 212
TRAINING SYSTEM 202
ANALYSIS MODEL 204
TRAINING ENGINE 214
INSTRUCTIONS 216
DATA 218
SET OF TRAINING RETINAL IMAGES 210
SET OF CONFIDENCE WEIGHTS 220
ANNOTATIONS 212
OTHER DATA 222

FIG. 2

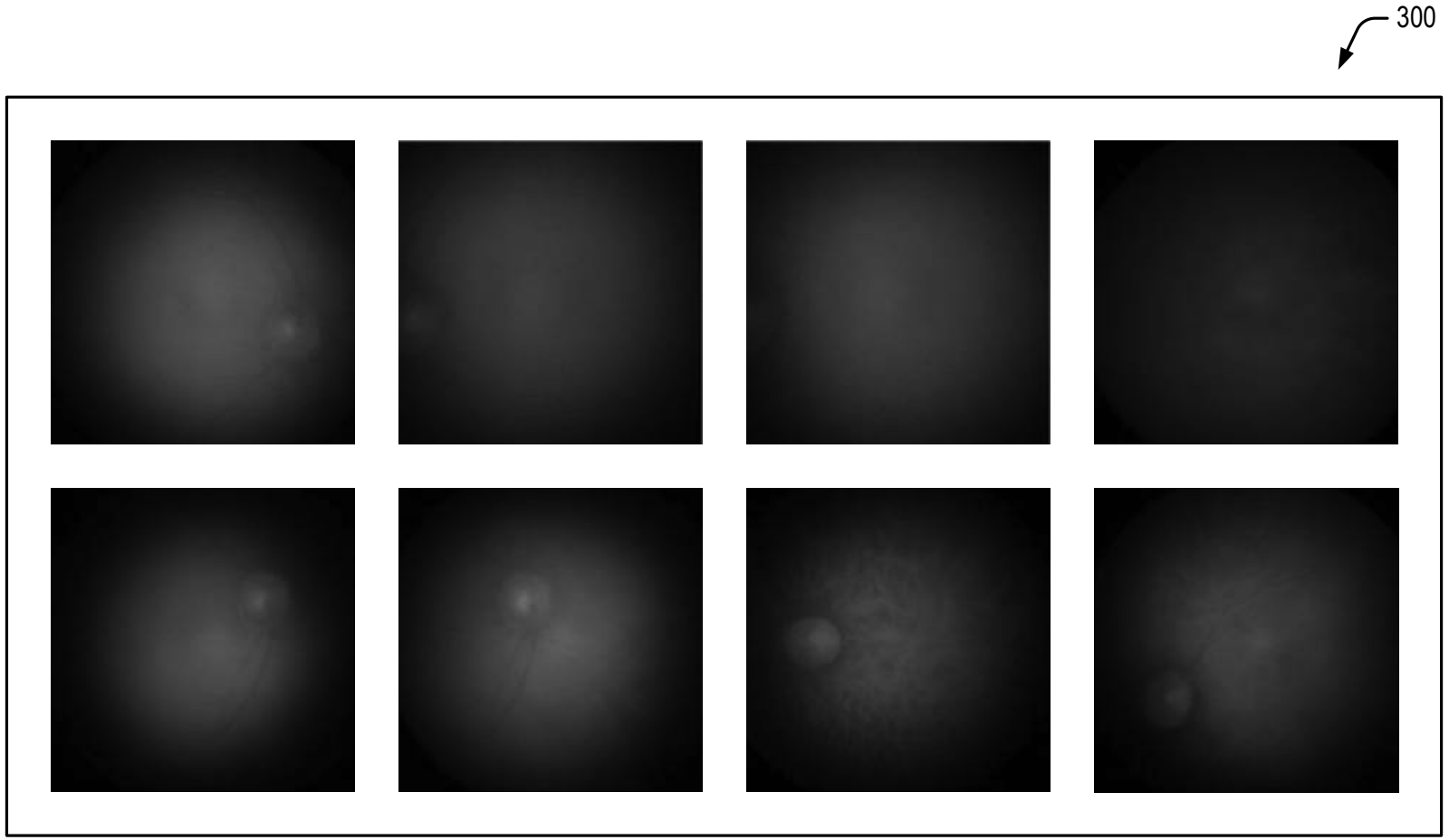


FIG. 3

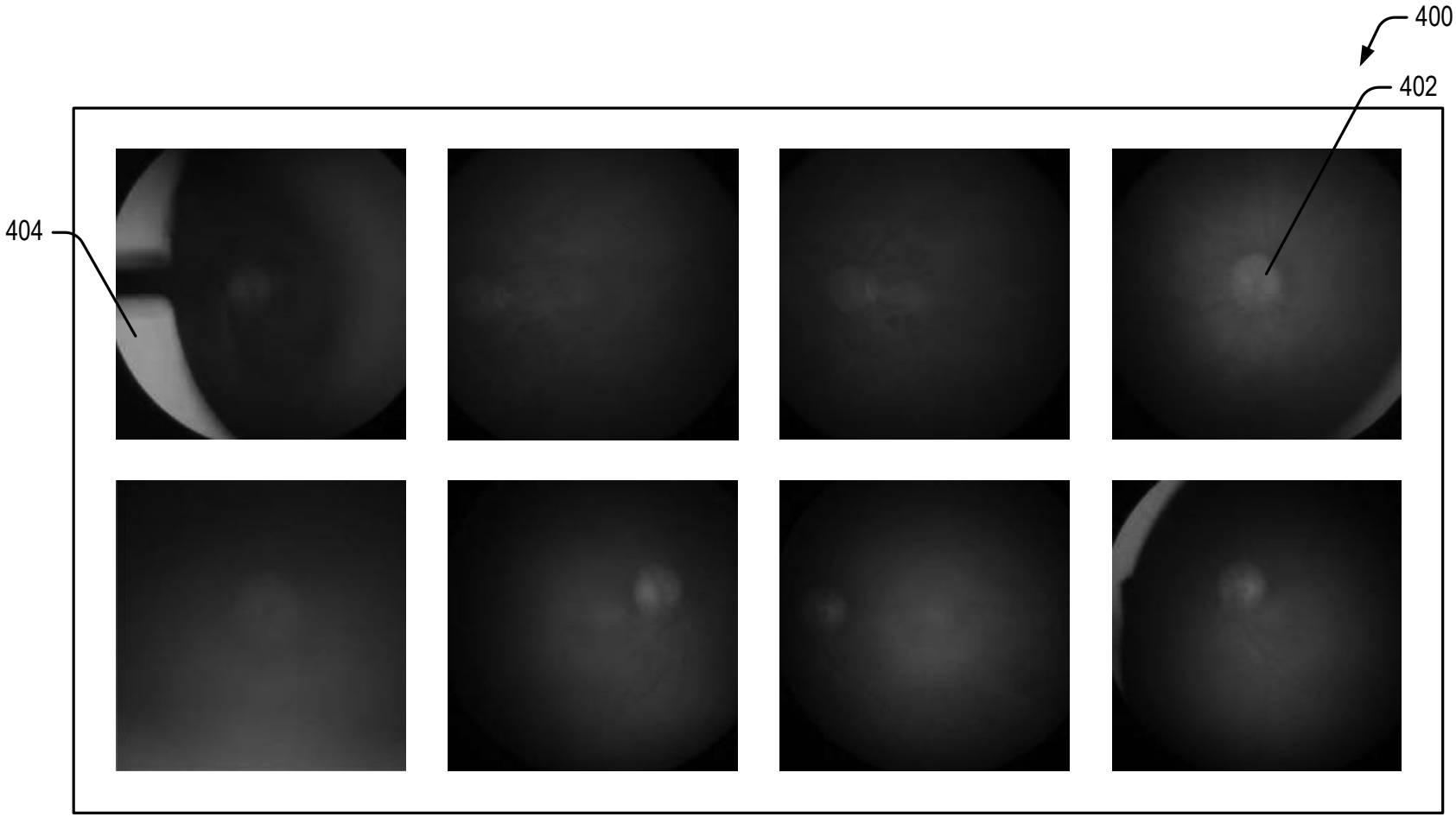


FIG. 4

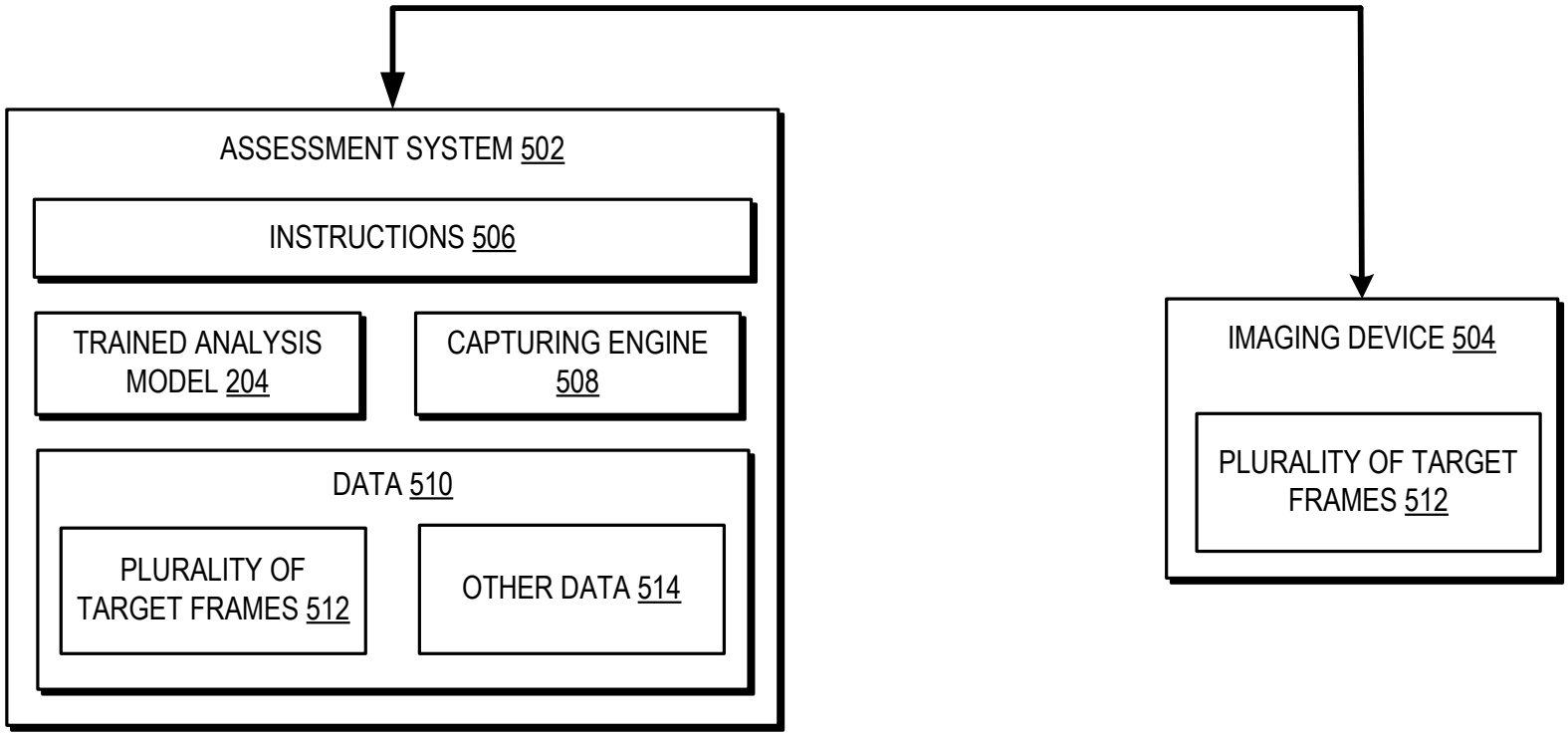

ASSESSMENT SYSTEM 502
INSTRUCTIONS 506
TRAINED ANALYSIS MODEL 204
CAPTURING ENGINE 508
DATA 510
PLURALITY OF TARGET FRAMES 512
OTHER DATA 514
IMAGING DEVICE 504
PLURALITY OF TARGET FRAMES 512

FIG. 5

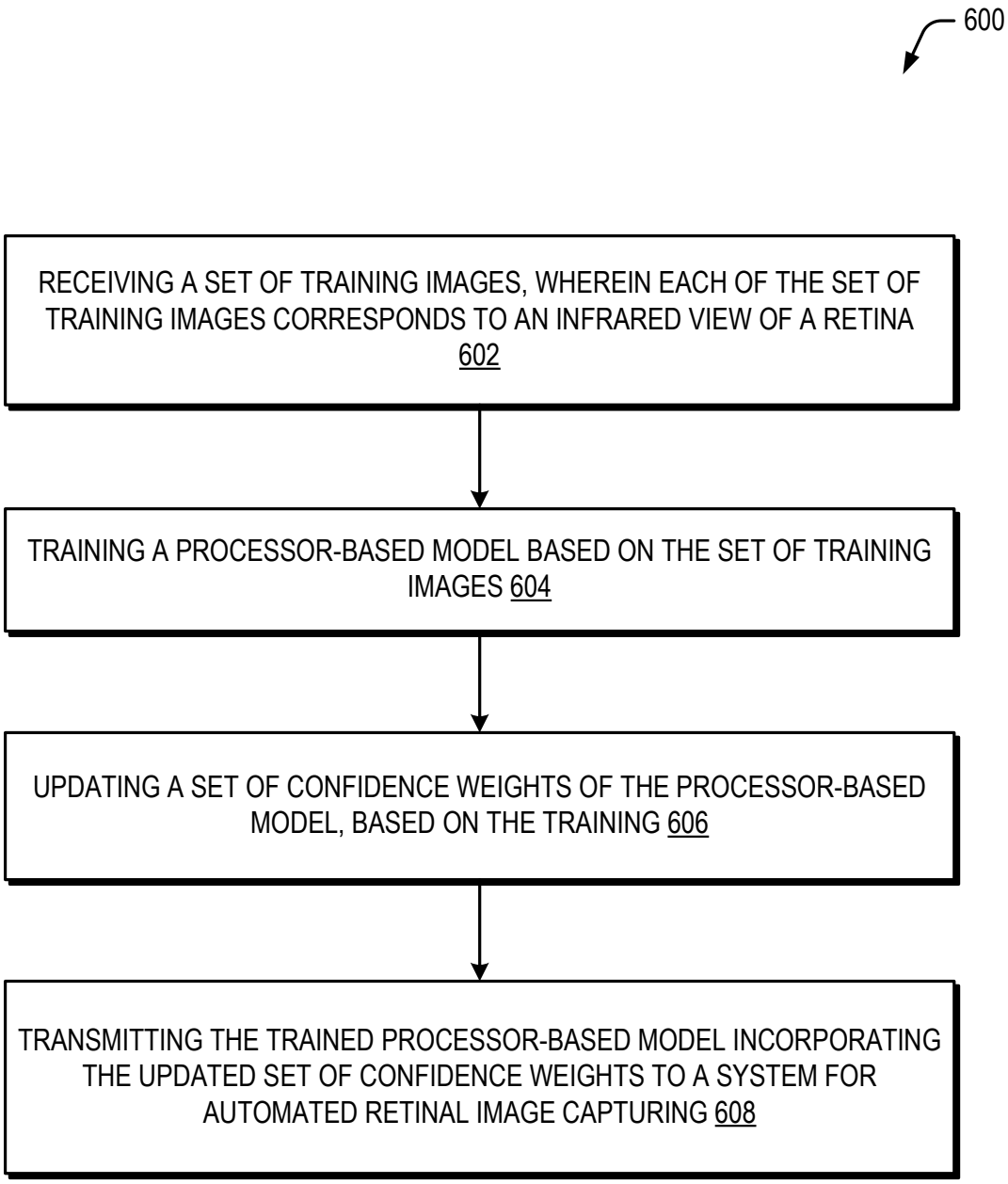

600
RECEIVING A SET OF TRAINING IMAGES, WHEREIN EACH OF THE SET OF TRAINING IMAGES CORRESPONDS TO AN INFRARED VIEW OF A RETINA 602
TRAINING A PROCESSOR-BASED MODEL BASED ON THE SET OF TRAINING IMAGES 604
UPDATING A SET OF CONFIDENCE WEIGHTS OF THE PROCESSOR-BASED MODEL, BASED ON THE TRAINING 606
TRANSMITTING THE TRAINED PROCESSOR-BASED MODEL INCORPORATING THE UPDATED SET OF CONFIDENCE WEIGHTS TO A SYSTEM FOR AUTOMATED RETINAL IMAGE CAPTURING 608

FIG. 6

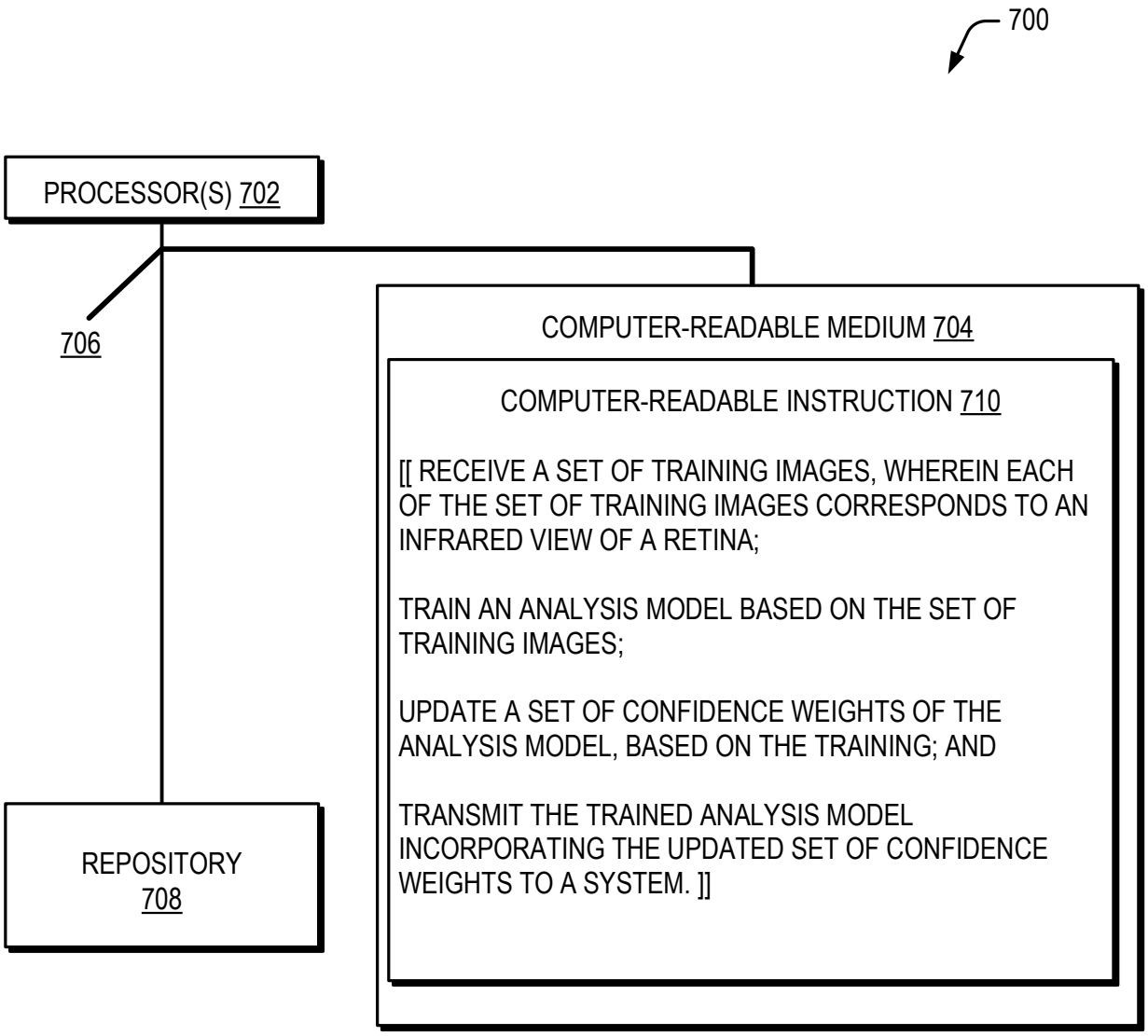

700
PROCESSOR(S) 702
706
COMPUTER-READABLE MEDIUM 704
COMPUTER-READABLE INSTRUCTION 710
[[RECEIVE A SET OF TRAINING IMAGES, WHEREIN EACH OF THE SET OF TRAINING IMAGES CORRESPONDS TO AN INFRARED VIEW OF A RETINA;
TRAIN AN ANALYSIS MODEL BASED ON THE SET OF TRAINING IMAGES;
UPDATE A SET OF CONFIDENCE WEIGHTS OF THE ANALYSIS MODEL, BASED ON THE TRAINING; AND
TRANSMIT THE TRAINED ANALYSIS MODEL INCORPORATING THE UPDATED SET OF CONFIDENCE WEIGHTS TO A SYSTEM.]]
REPOSITORY 708

FIG. 7