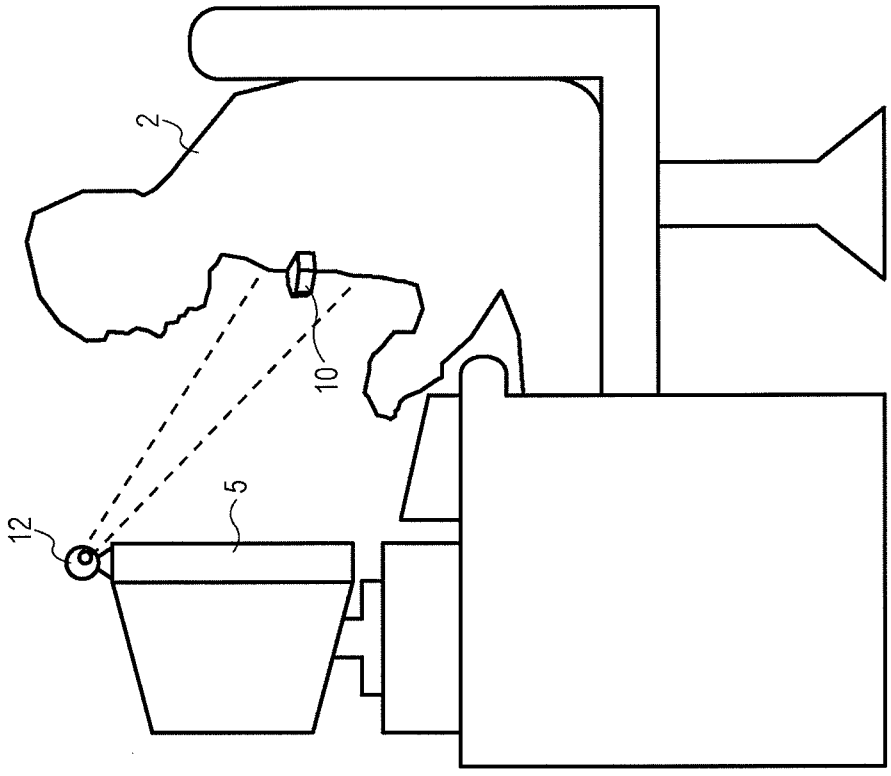


FIG. 1

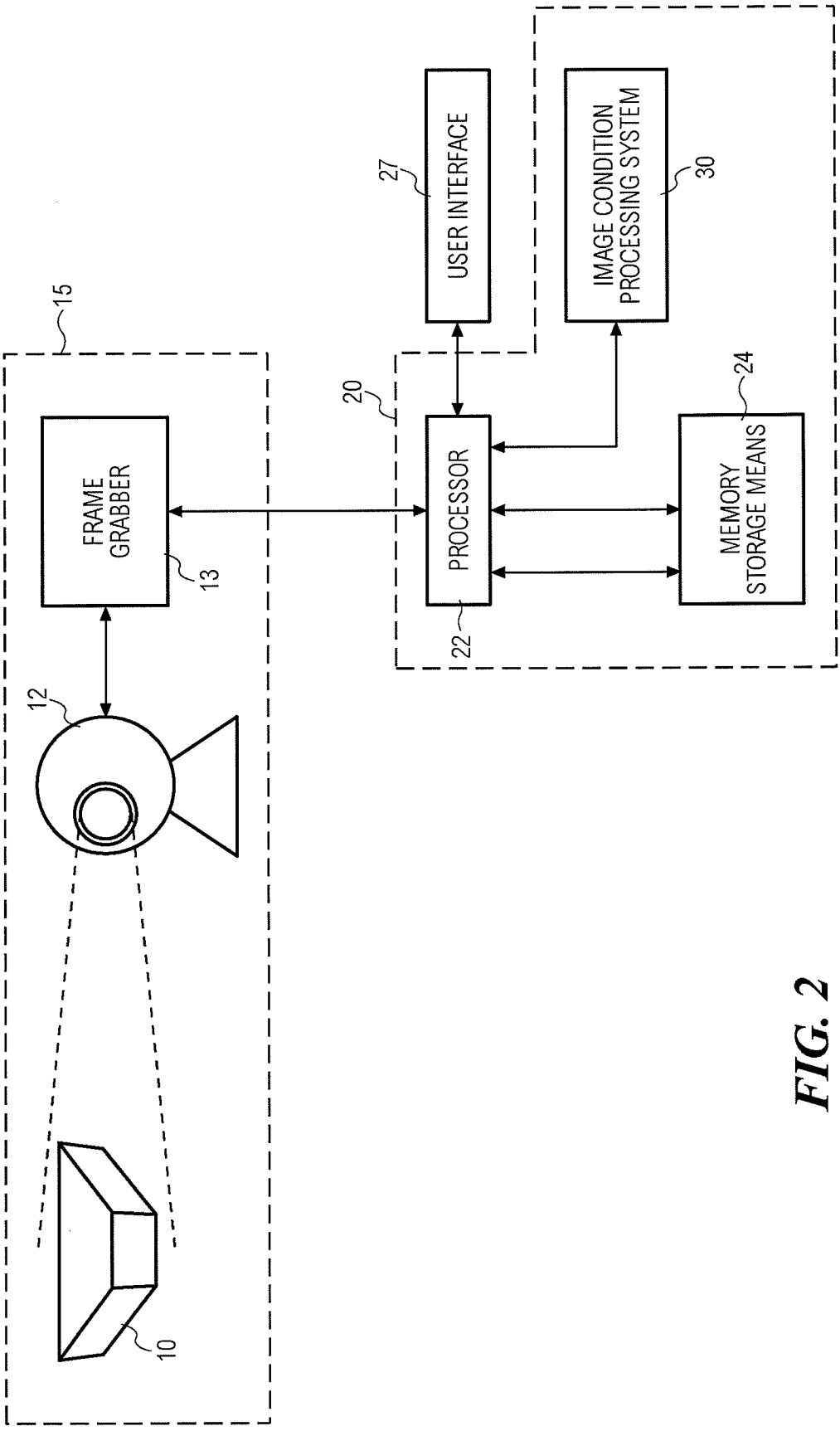

15
FRAME GRABBER
13
12
10
20
PROCESSOR
22
27
USER INTERFACE
IMAGE CONDITION PROCESSING SYSTEM
30
24
MEMORY STORAGE MEANS

FIG. 2

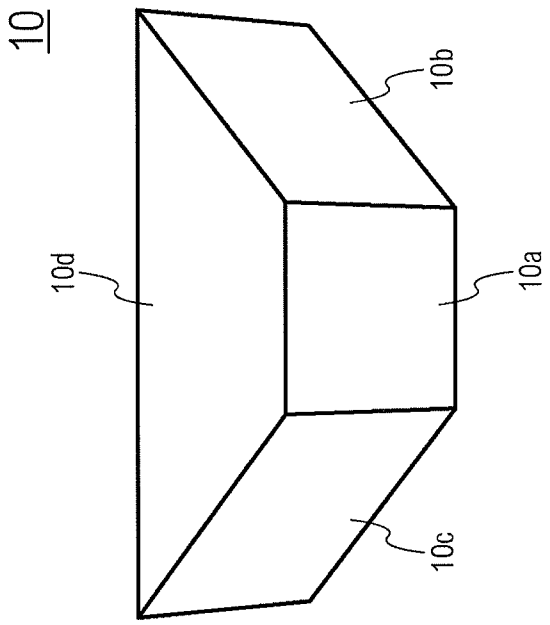


FIG. 3

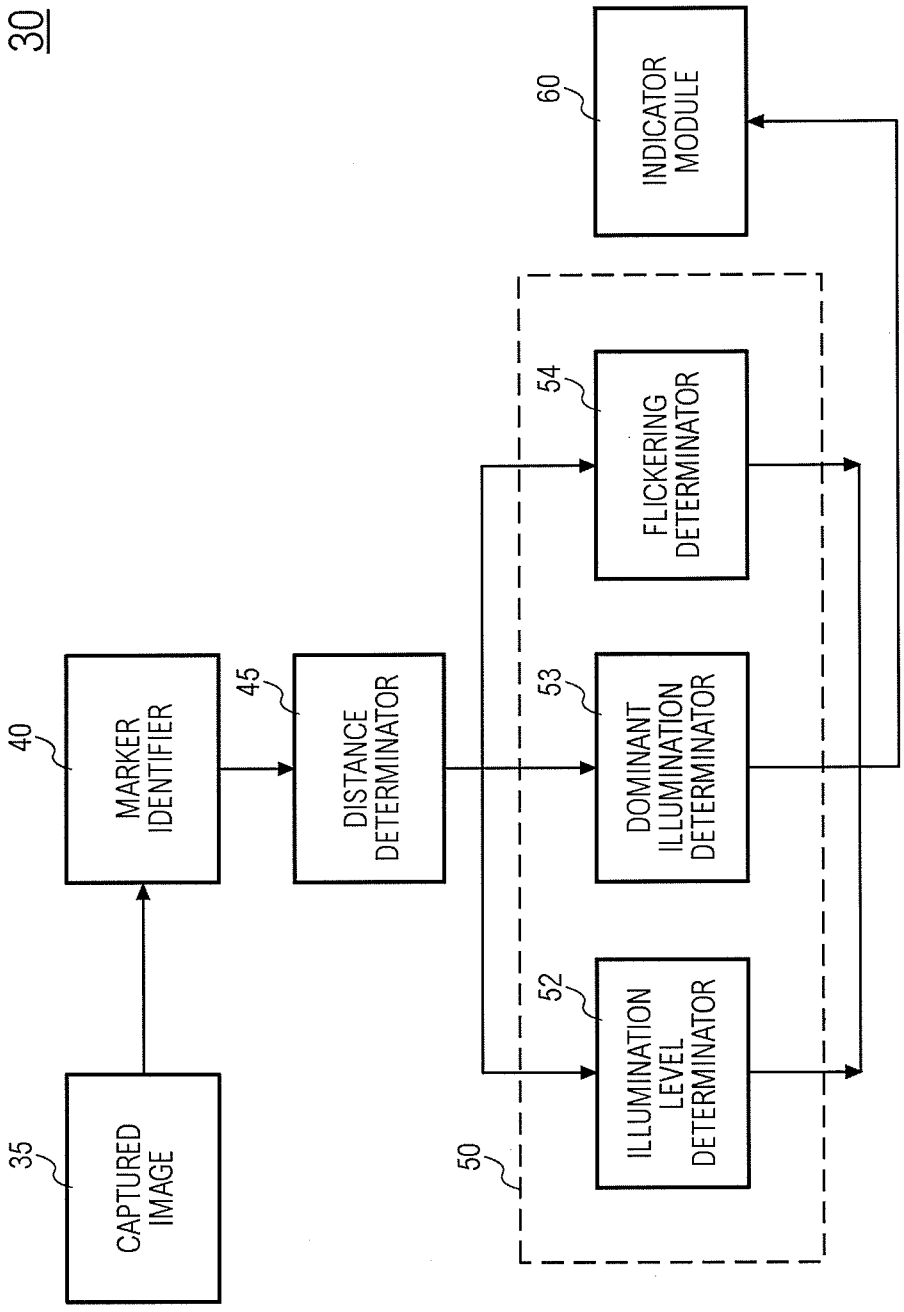

30
35
CAPTURED IMAGE
40
MARKER IDENTIFIER
45
DISTANCE DETERMINATOR
50
52
ILLUMINATION LEVEL DETERMINATOR
53
DOMINANT ILLUMINATION DETERMINATOR
54
FLICKERING DETERMINATOR
60
INDICATOR MODULE

FIG. 4

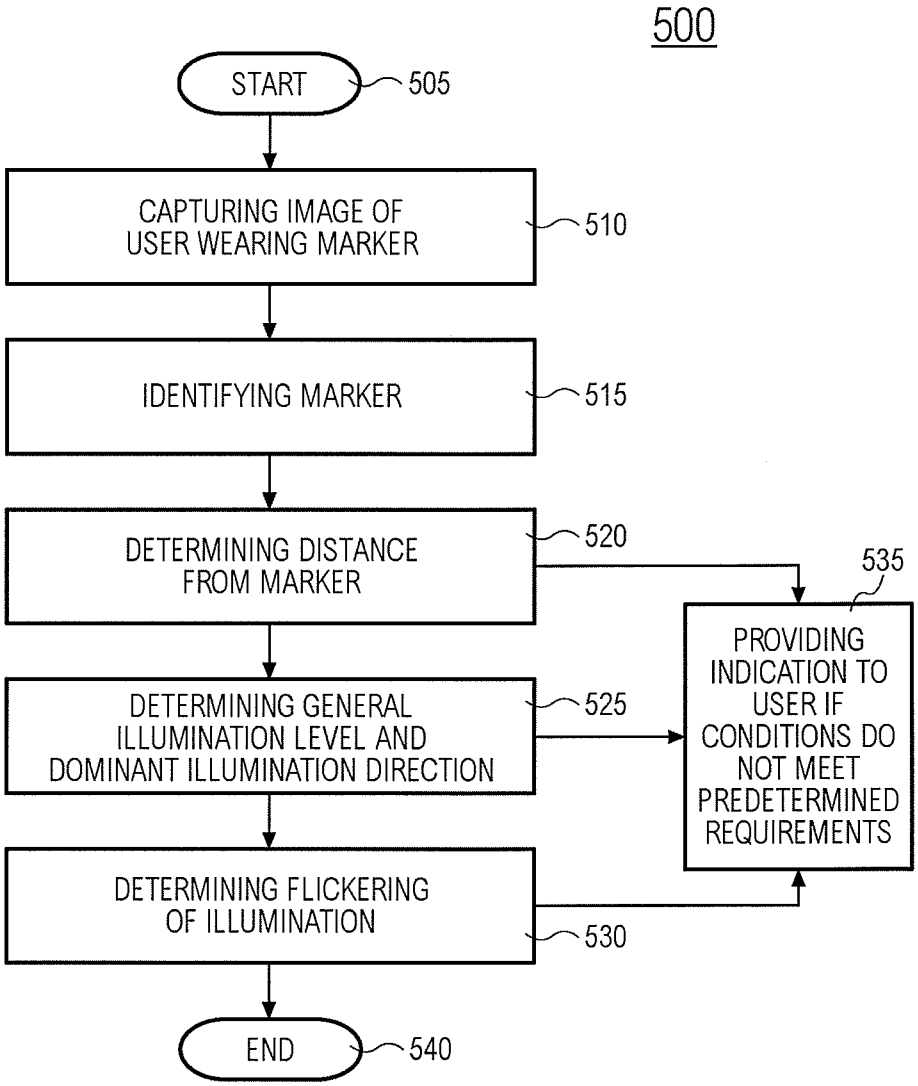

500
START
505
CAPTURING IMAGE OF USER WEARING MARKER
510
IDENTIFYING MARKER
515
DETERMINING DISTANCE FROM MARKER
520
DETERMINING GENERAL ILLUMINATION LEVEL AND DOMINANT ILLUMINATION DIRECTION
525
DETERMINING FLICKERING OF ILLUMINATION
530
END
540
535
PROVIDING INDICATION TO USER IF CONDITIONS DO NOT MEET PREDETERMINED REQUIREMENTS

FIG. 5

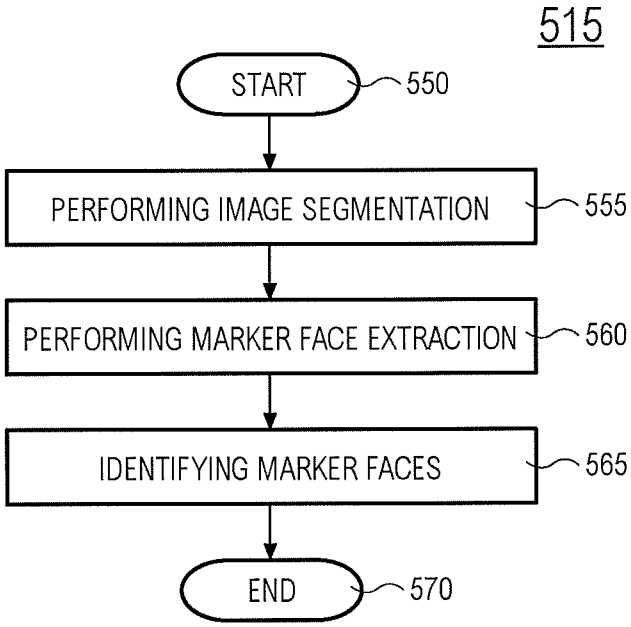

515
START
550
PERFORMING IMAGE SEGMENTATION
555
PERFORMING MARKER FACE EXTRACTION
560
IDENTIFYING MARKER FACES
565
END
570

FIG. 6

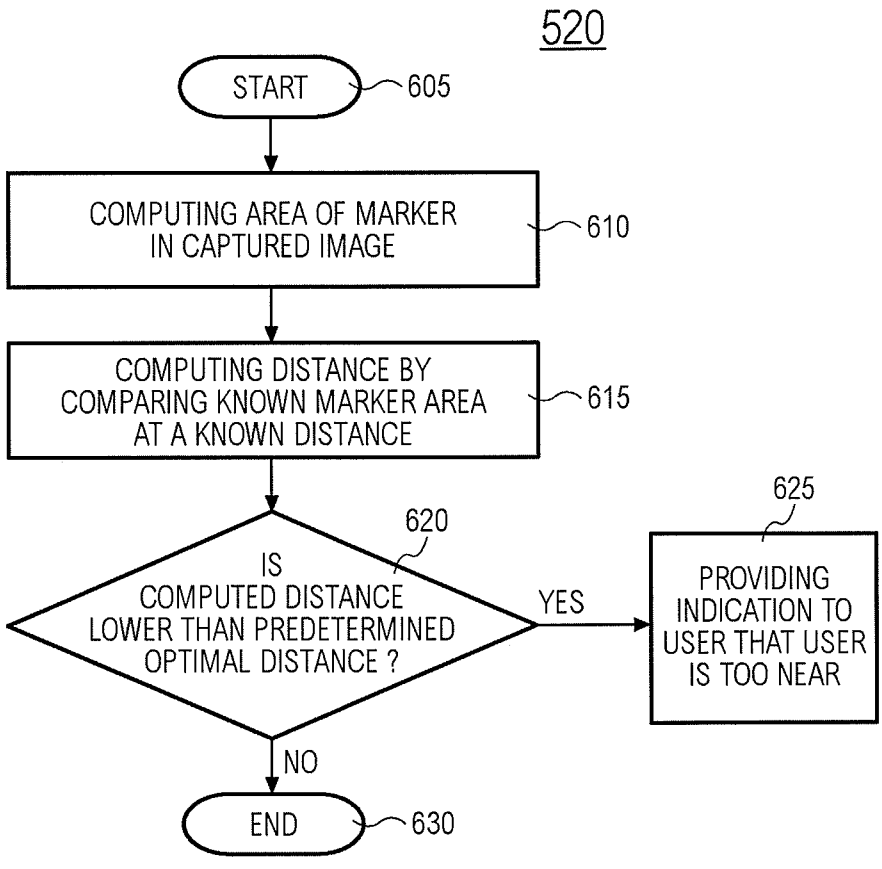

520
START
605
COMPUTING AREA OF MARKER IN CAPTURED IMAGE
610
COMPUTING DISTANCE BY COMPARING KNOWN MARKER AREA AT A KNOWN DISTANCE
615
620
IS COMPUTED DISTANCE LOWER THAN PREDETERMINED OPTIMAL DISTANCE ?
YES
625
PROVIDING INDICATION TO USER THAT USER IS TOO NEAR
NO
END
630

FIG. 7

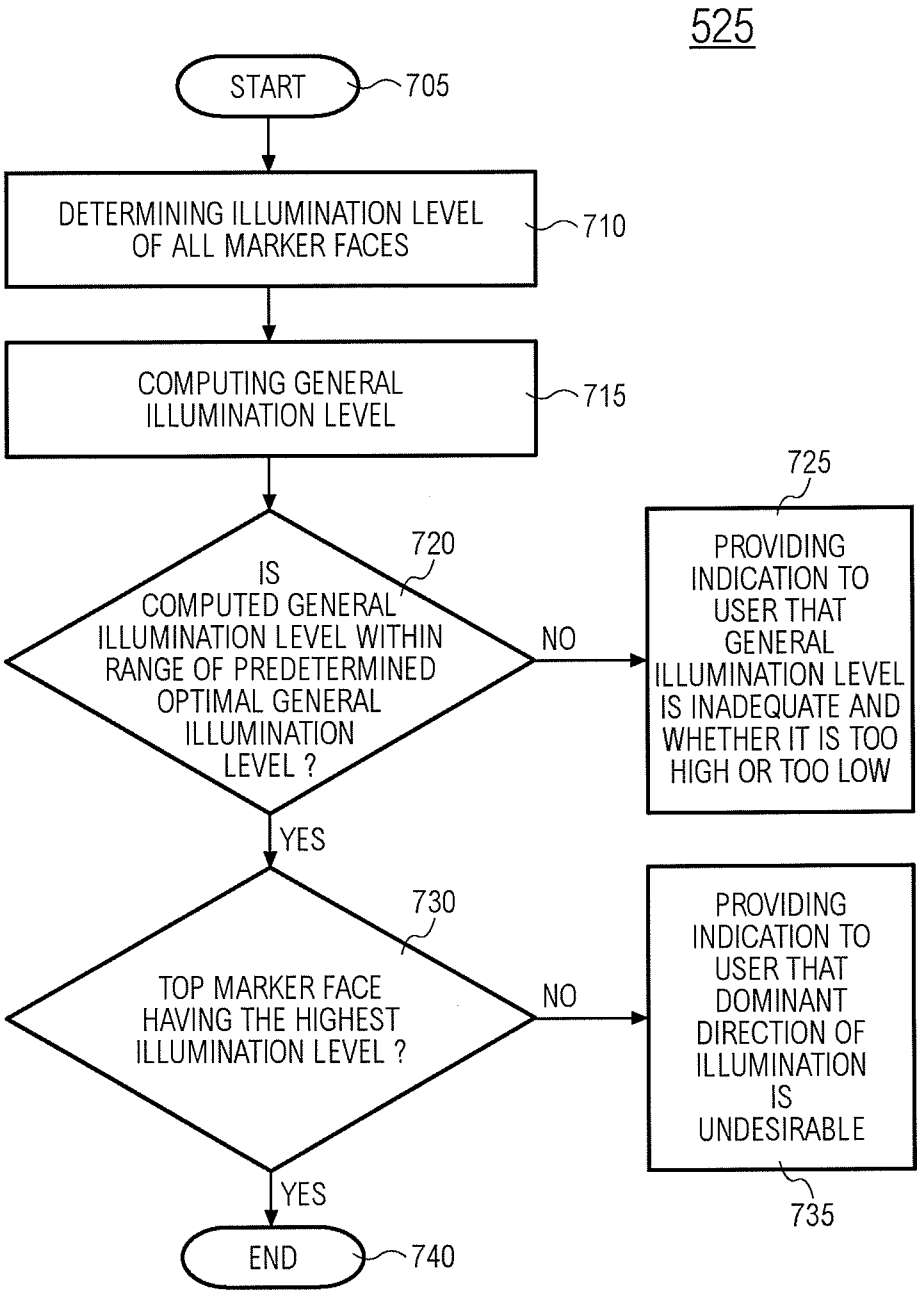

525
START
705
DETERMINING ILLUMINATION LEVEL OF ALL MARKER FACES
710
COMPUTING GENERAL ILLUMINATION LEVEL
715
725
720
IS COMPUTED GENERAL ILLUMINATION LEVEL WITHIN RANGE OF PREDETERMINED OPTIMAL GENERAL ILLUMINATION LEVEL ?
NO
PROVIDING INDICATION TO USER THAT GENERAL ILLUMINATION LEVEL IS INADEQUATE AND WHETHER IT IS TOO HIGH OR TOO LOW
YES
730
TOP MARKER FACE HAVING THE HIGHEST ILLUMINATION LEVEL ?
NO
PROVIDING INDICATION TO USER THAT DOMINANT DIRECTION OF ILLUMINATION IS UNDESIRABLE
735
YES
END
740

FIG. 8

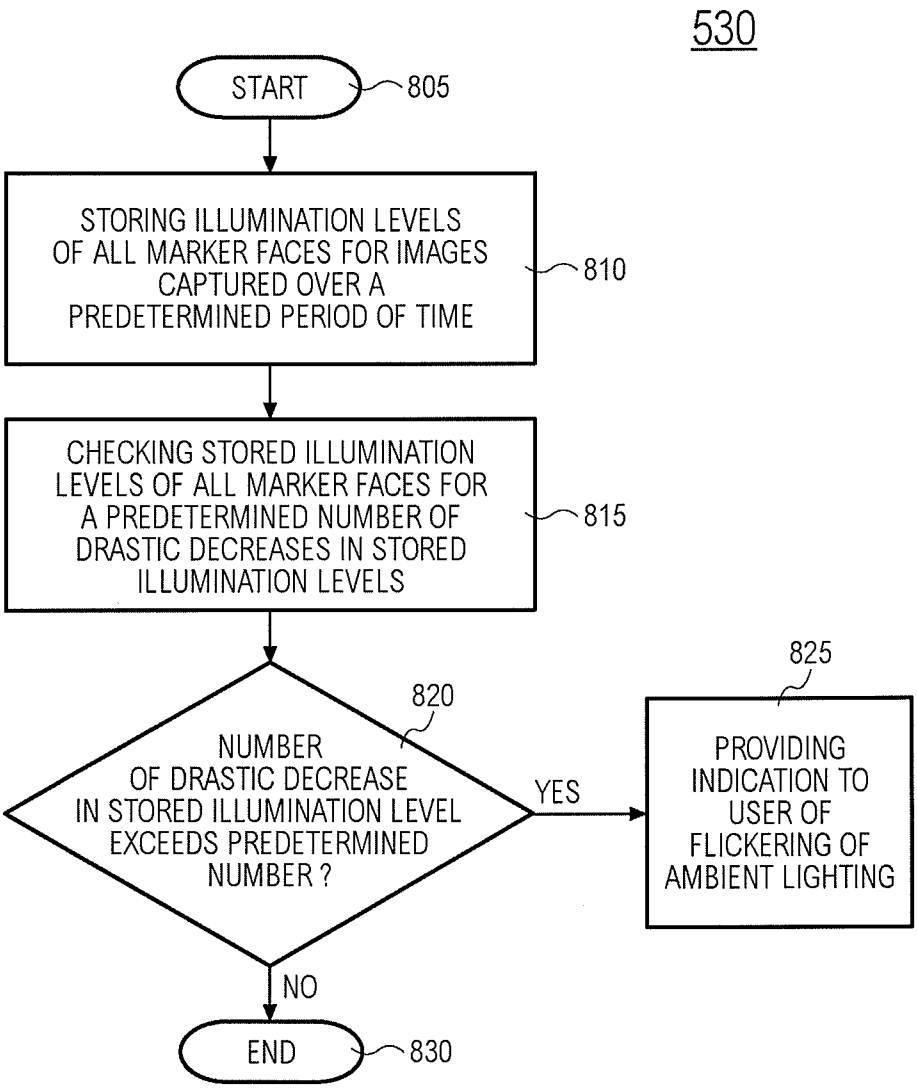

530
START
805
STORING ILLUMINATION LEVELS OF ALL MARKER FACES FOR IMAGES CAPTURED OVER A PREDETERMINED PERIOD OF TIME
810
CHECKING STORED ILLUMINATION LEVELS OF ALL MARKER FACES FOR A PREDETERMINED NUMBER OF DRASTIC DECREASES IN STORED ILLUMINATION LEVELS
815
820
NUMBER OF DRASTIC DECREASE IN STORED ILLUMINATION LEVEL EXCEEDS PREDETERMINED NUMBER ?
YES
825
PROVIDING INDICATION TO USER OF FLICKERING OF AMBIENT LIGHTING
NO
END
830

FIG. 9