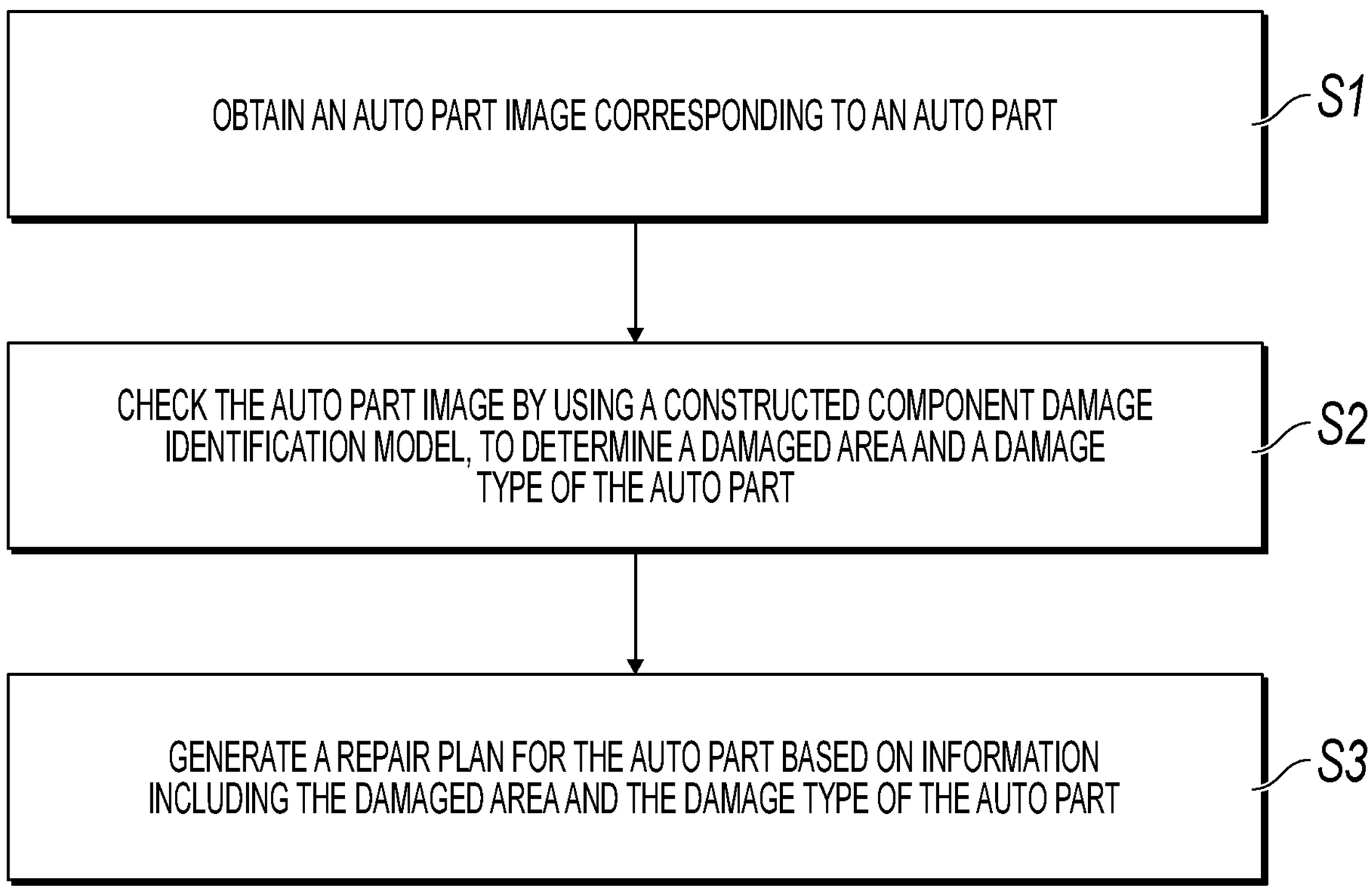

OBTAIN AN AUTO PART IMAGE CORRESPONDING TO AN AUTO PART
S1
CHECK THE AUTO PART IMAGE BY USING A CONSTRUCTED COMPONENT DAMAGE IDENTIFICATION MODEL, TO DETERMINE A DAMAGED AREA AND A DAMAGE TYPE OF THE AUTO PART
S2
GENERATE A REPAIR PLAN FOR THE AUTO PART BASED ON INFORMATION INCLUDING THE DAMAGED AREA AND THE DAMAGE TYPE OF THE AUTO PART
S3

FIG. 1

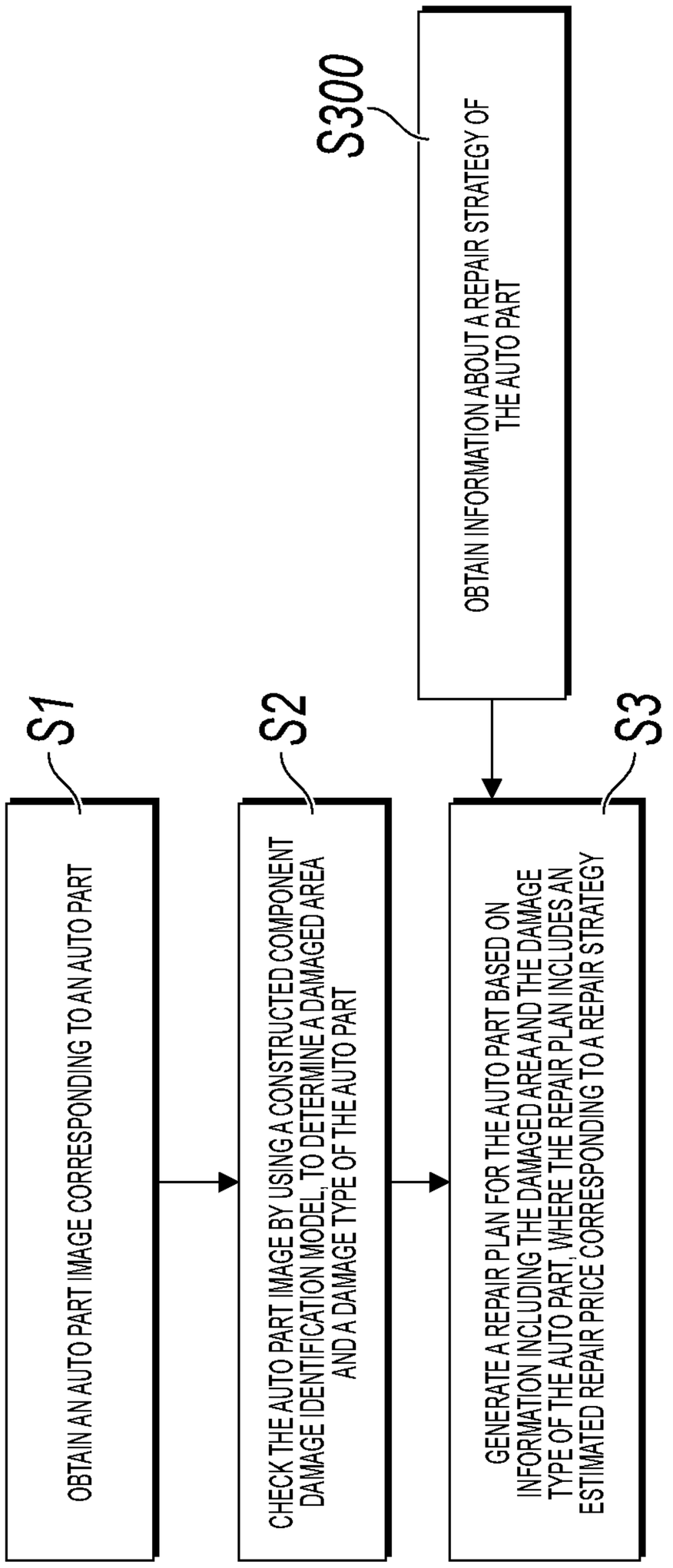

S1
OBTAIN AN AUTO PART IMAGE CORRESPONDING TO AN AUTO PART
S2
CHECK THE AUTO PART IMAGE BY USING A CONSTRUCTED COMPONENT DAMAGE IDENTIFICATION MODEL, TO DETERMINE A DAMAGED AREA AND A DAMAGE TYPE OF THE AUTO PART
S300
OBTAIN INFORMATION ABOUT A REPAIR STRATEGY OF THE AUTO PART
S3
GENERATE A REPAIR PLAN FOR THE AUTO PART BASED ON INFORMATION INCLUDING THE DAMAGED AREA AND THE DAMAGE TYPE OF THE AUTO PART, WHERE THE REPAIR PLAN INCLUDES AN ESTIMATED REPAIR PRICE CORRESPONDING TO A REPAIR STRATEGY

FIG. 2

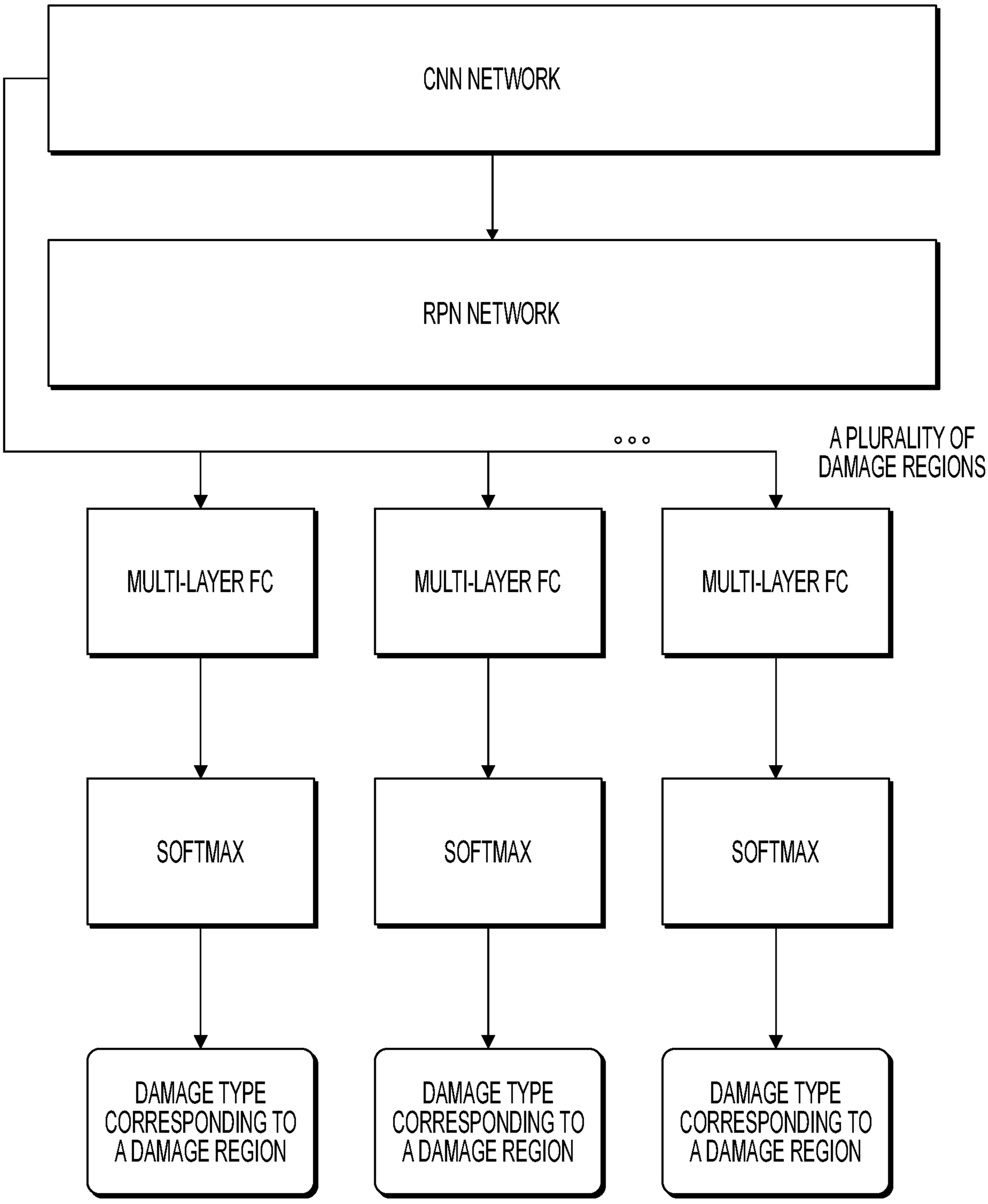

CNN NETWORK
RPN NETWORK
A PLURALITY OF DAMAGE REGIONS
MULTI-LAYER FC
MULTI-LAYER FC
MULTI-LAYER FC
SOFTMAX
SOFTMAX
SOFTMAX
DAMAGE TYPE CORRESPONDING TO A DAMAGE REGION
DAMAGE TYPE CORRESPONDING TO A DAMAGE REGION
DAMAGE TYPE CORRESPONDING TO A DAMAGE REGION

FIG. 3

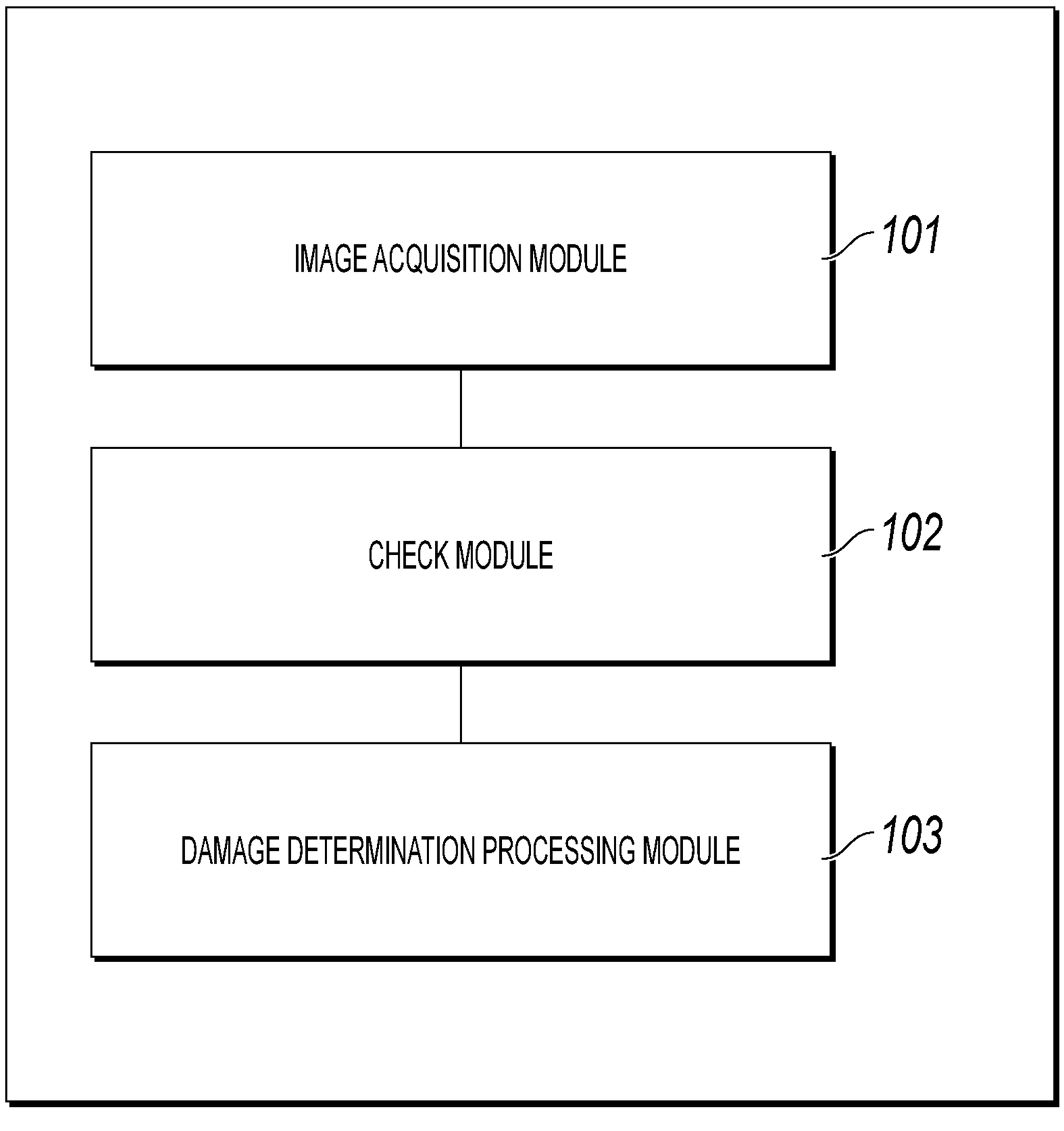

IMAGE ACQUISITION MODULE
101
CHECK MODULE
102
DAMAGE DETERMINATION PROCESSING MODULE
103

FIG. 4

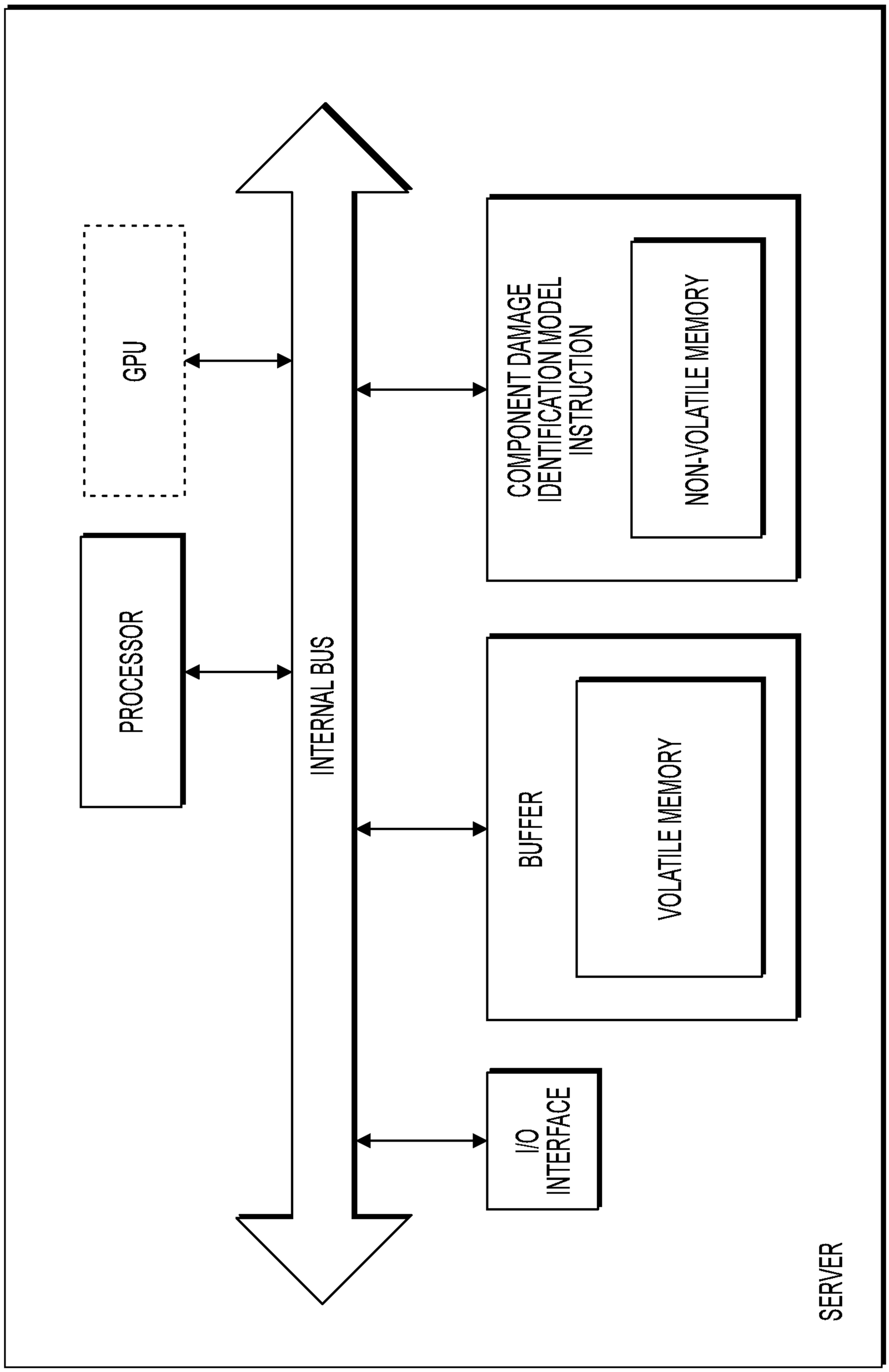

SERVER
PROCESSOR
GPU
INTERNAL BUS
I/O INTERFACE
BUFFER
VOLATILE MEMORY
COMPONENT DAMAGE IDENTIFICATION MODEL INSTRUCTION
NON-VOLATILE MEMORY

FIG. 5

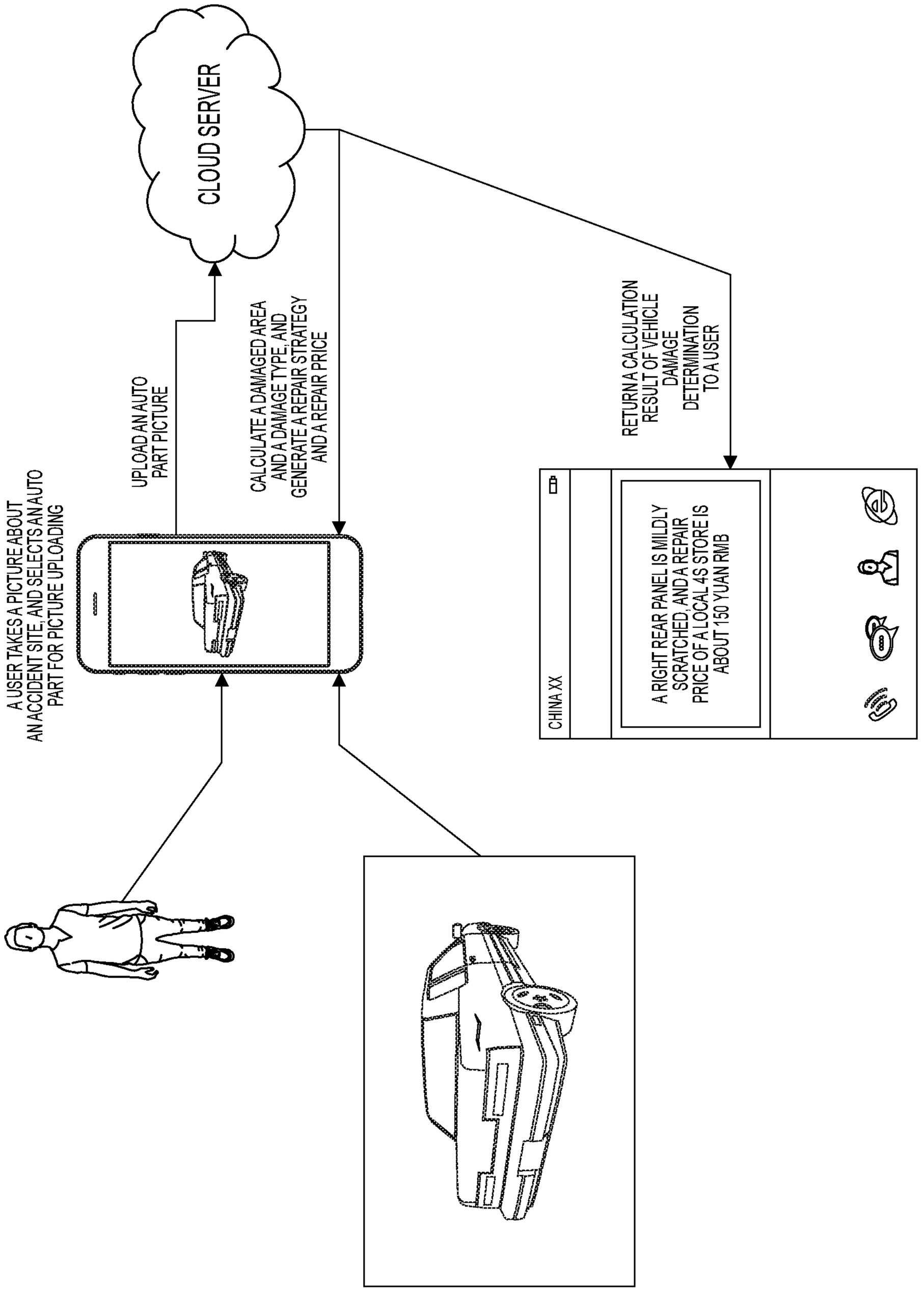

CLOUD SERVER
UPLOAD AN AUTO PART PICTURE
CALCULATE A DAMAGED AREA AND A DAMAGE TYPE, AND GENERATE A REPAIR STRATEGY AND A REPAIR PRICE
RETURN A CALCULATION RESULT OF VEHICLE DAMAGE DETERMINATION TO A USER
A USER TAKES A PICTURE ABOUT AN ACCIDENT SITE, AND SELECTS AN AUTO PART FOR PICTURE UPLOADING
CHINA XX
A RIGHT REAR PANEL IS MILDLY SCRATCHED, AND A REPAIR PRICE OF A LOCAL 4S STORE IS ABOUT 150 YUAN RMB

FIG. 6

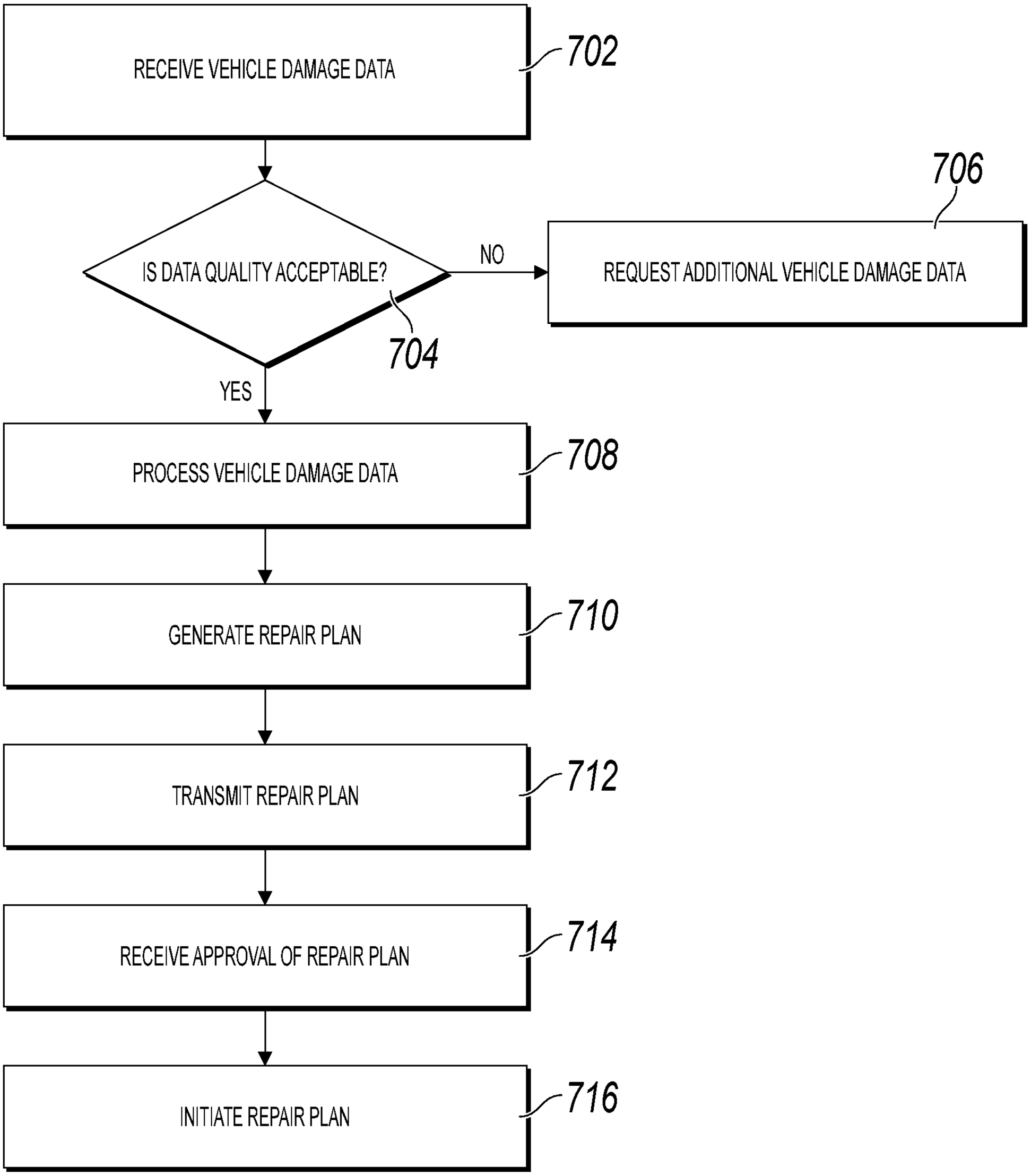

RECEIVE VEHICLE DAMAGE DATA
702
IS DATA QUALITY ACCEPTABLE?
704
NO
706
REQUEST ADDITIONAL VEHICLE DAMAGE DATA
YES
PROCESS VEHICLE DAMAGE DATA
708
GENERATE REPAIR PLAN
710
TRANSMIT REPAIR PLAN
712
RECEIVE APPROVAL OF REPAIR PLAN
714
INITIATE REPAIR PLAN
716

FIG. 7