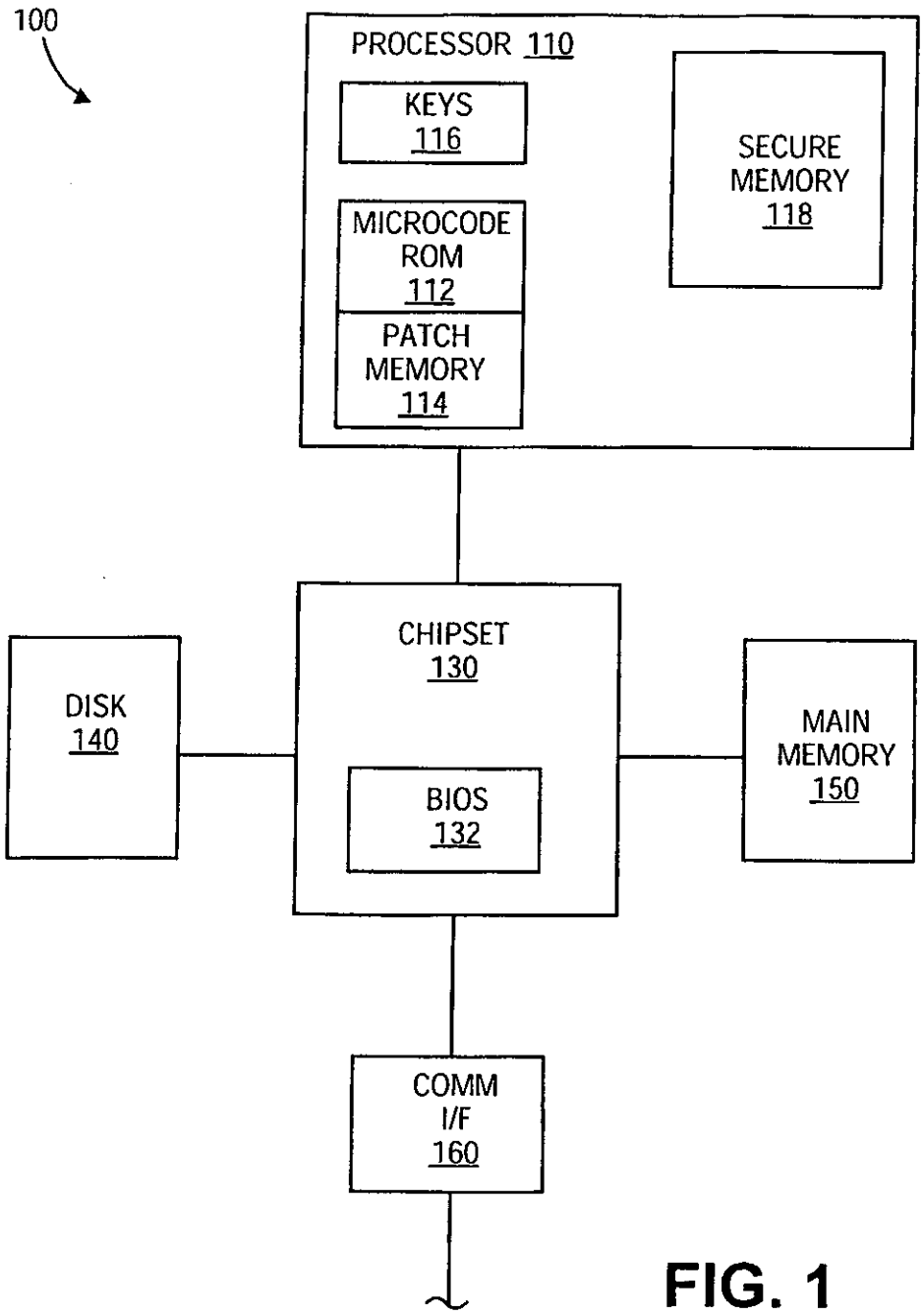

100
PROCESSOR 110
KEYS 116
SECURE MEMORY 118
MICROCODE ROM 112
PATCH MEMORY 114
CHIPSET 130
DISK 140
BIOS 132
MAIN MEMORY 150
COMM I/F 160

FIG. 1

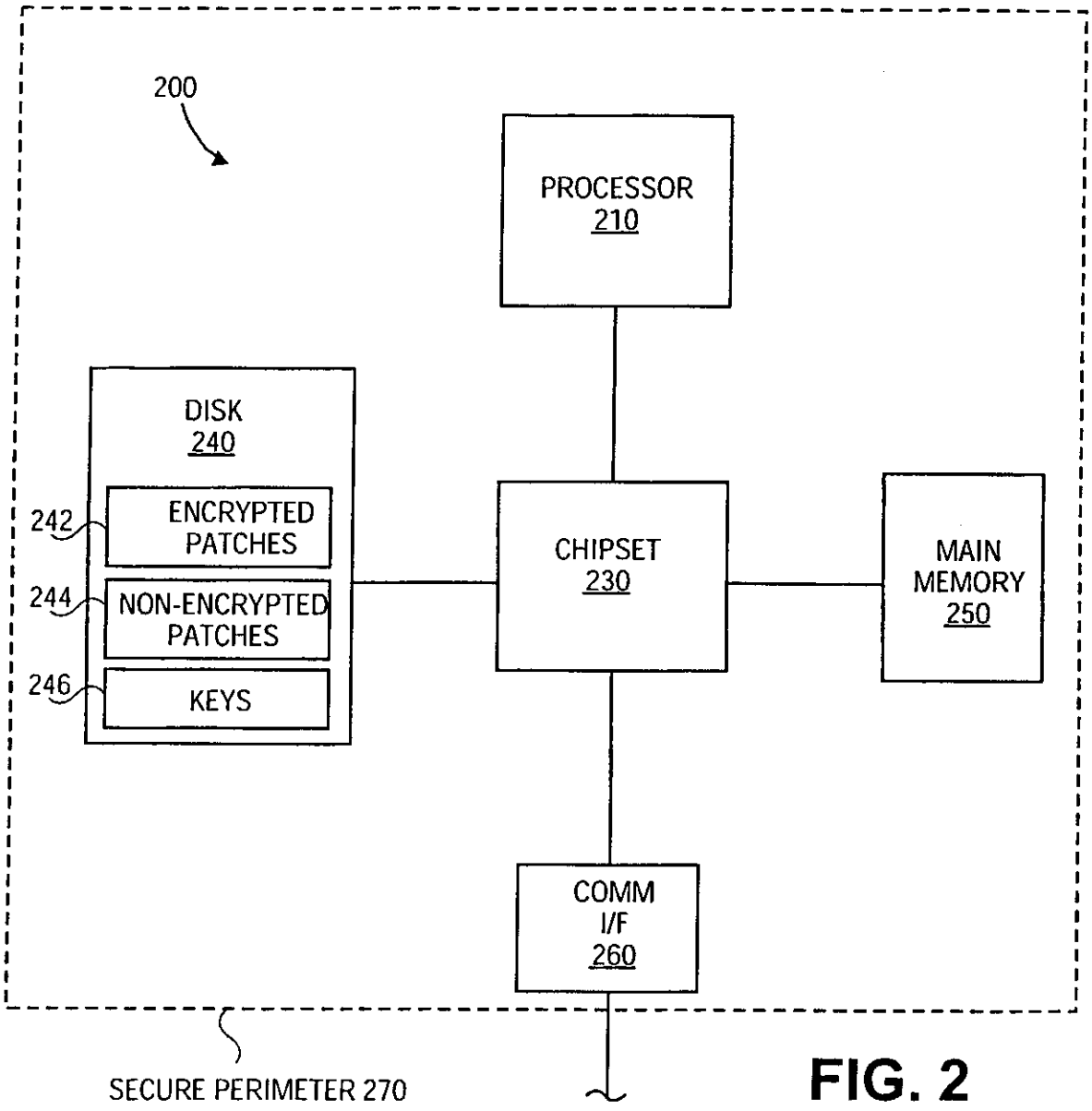

200
PROCESSOR
210
DISK
240
242
ENCRYPTED
PATCHES
244
NON-ENCRYPTED
PATCHES
246
KEYS
CHIPSET
230
MAIN
MEMORY
250
COMM
I/F
260
SECURE PERIMETER 270

FIG. 2

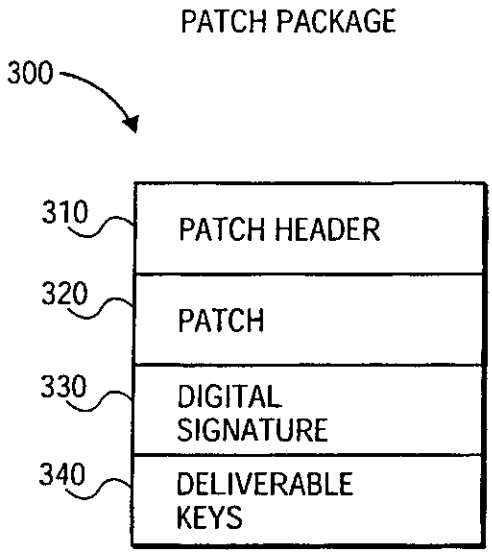

PATCH PACKAGE
300
310
PATCH HEADER
320
PATCH
330
DIGITAL SIGNATURE
340
DELIVERABLE KEYS

FIG. 3

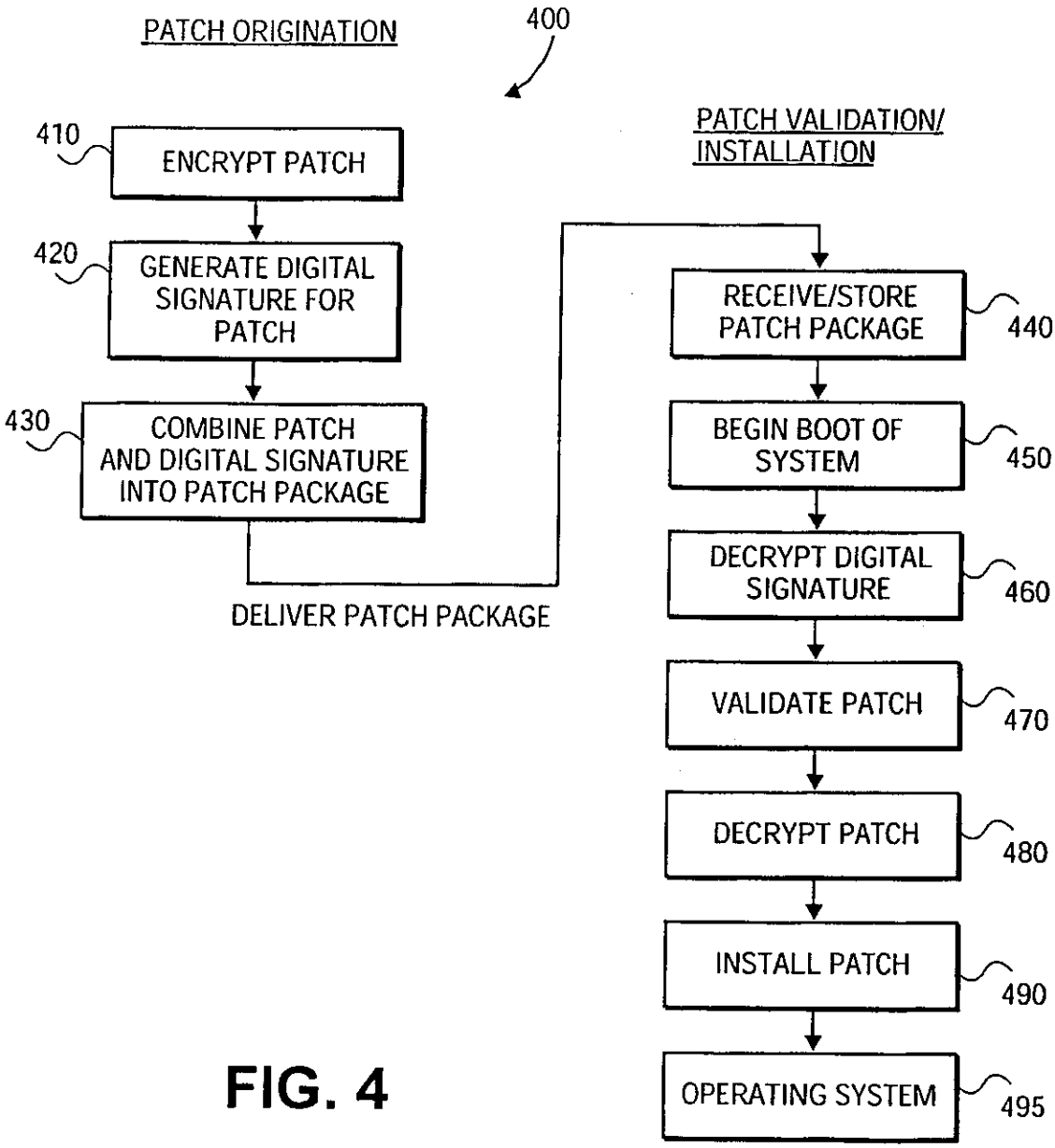

PATCH ORIGINATION
400
410
ENCRYPT PATCH
420
GENERATE DIGITAL SIGNATURE FOR PATCH
430
COMBINE PATCH AND DIGITAL SIGNATURE INTO PATCH PACKAGE
DELIVER PATCH PACKAGE
PATCH VALIDATION/ INSTALLATION
RECEIVE/STORE PATCH PACKAGE
440
BEGIN BOOT OF SYSTEM
450
DECRYPT DIGITAL SIGNATURE
460
VALIDATE PATCH
470
DECRYPT PATCH
480
INSTALL PATCH
490
OPERATING SYSTEM
495

FIG. 4

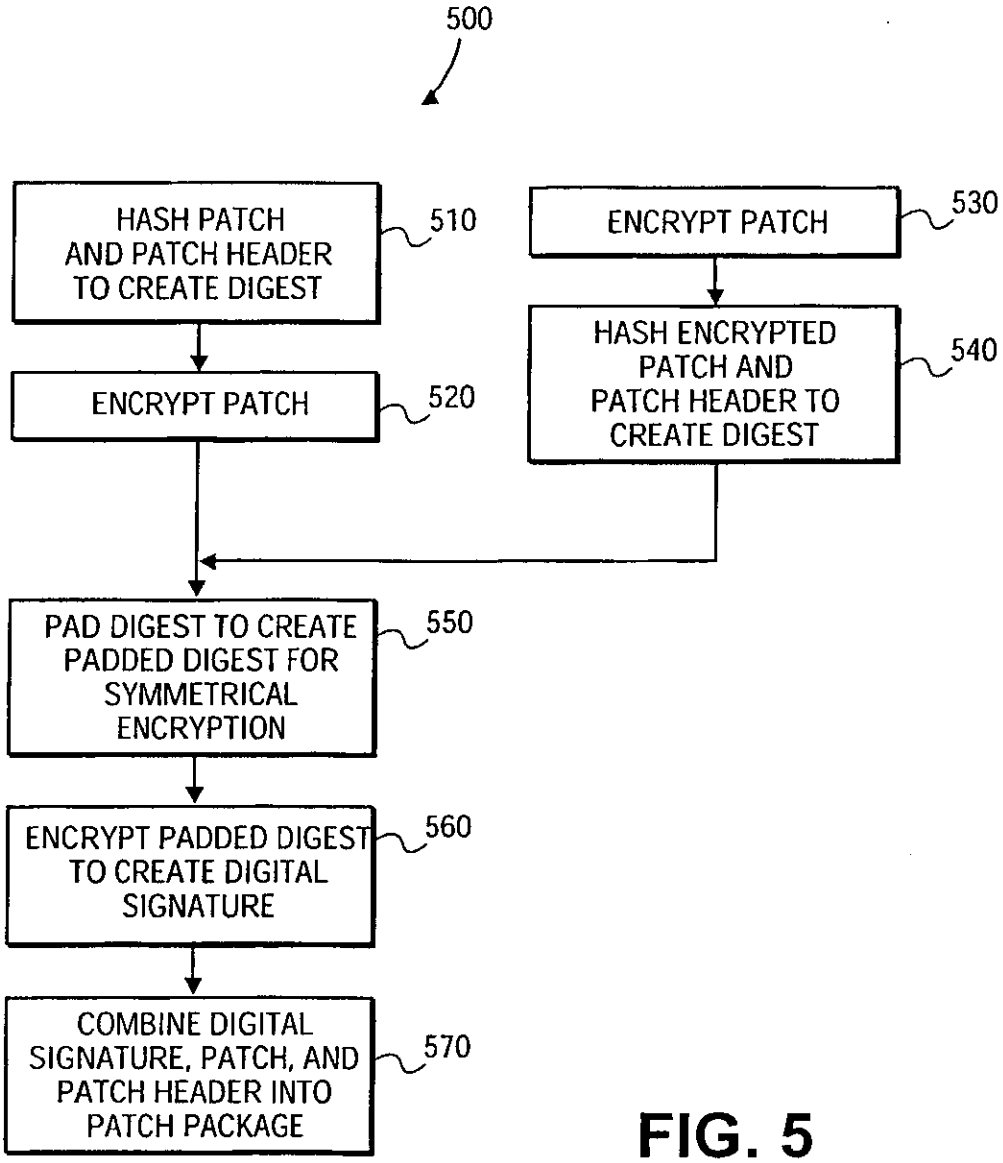

500
HASH PATCH AND PATCH HEADER TO CREATE DIGEST
510
ENCRYPT PATCH
520
ENCRYPT PATCH
530
HASH ENCRYPTED PATCH AND PATCH HEADER TO CREATE DIGEST
540
PAD DIGEST TO CREATE PADDED DIGEST FOR SYMMETRICAL ENCRYPTION
550
ENCRYPT PADDED DIGEST TO CREATE DIGITAL SIGNATURE
560
COMBINE DIGITAL SIGNATURE, PATCH, AND PATCH HEADER INTO PATCH PACKAGE
570

FIG. 5

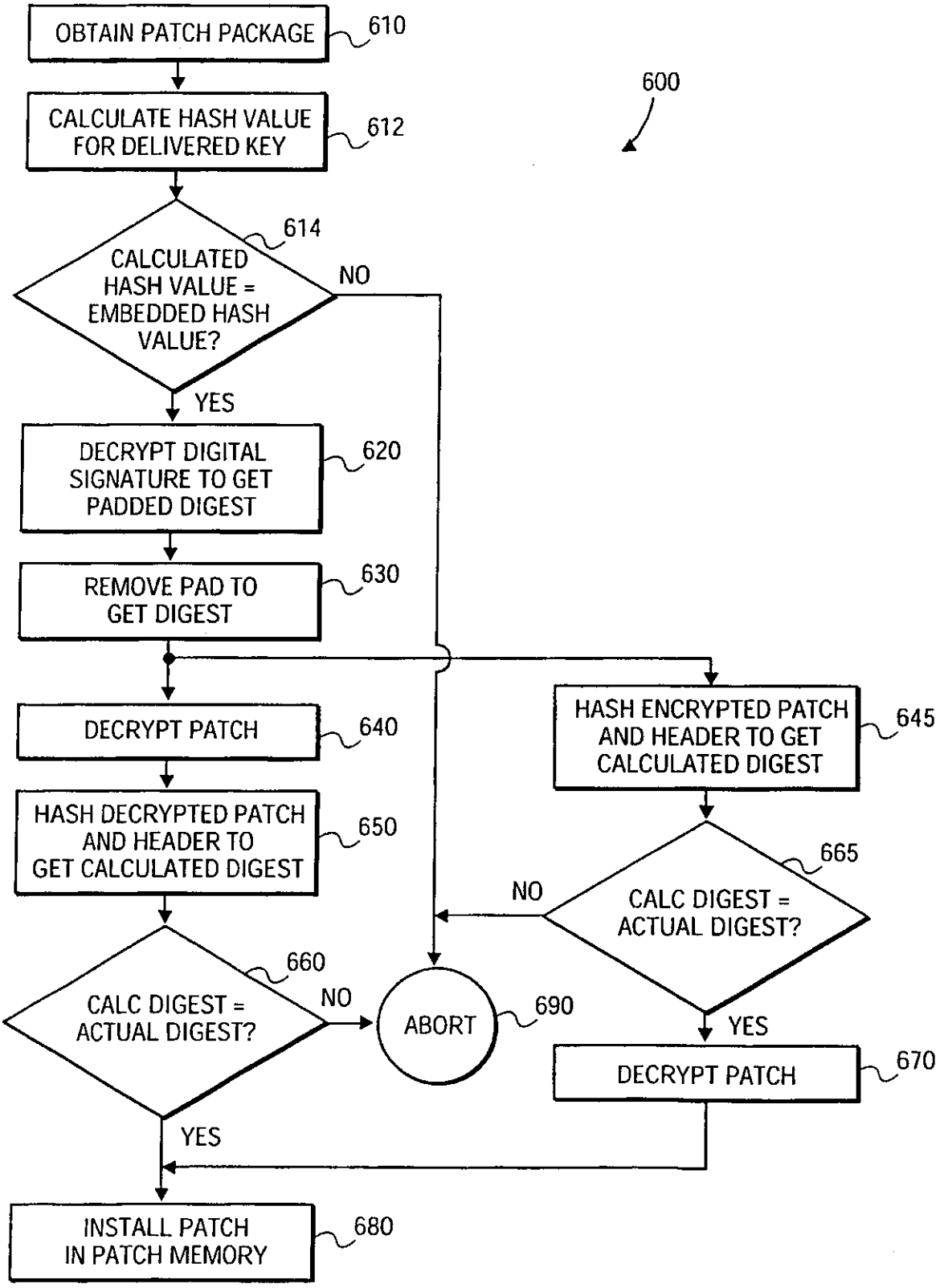

OBTAIN PATCH PACKAGE
610
600
CALCULATE HASH VALUE FOR DELIVERED KEY
612
614
CALCULATED HASH VALUE = EMBEDDED HASH VALUE?
NO
YES
DECRYPT DIGITAL SIGNATURE TO GET PADDED DIGEST
620
REMOVE PAD TO GET DIGEST
630
DECRYPT PATCH
640
HASH DECRYPTED PATCH AND HEADER TO GET CALCULATED DIGEST
650
660
CALC DIGEST = ACTUAL DIGEST?
NO
ABORT
690
YES
INSTALL PATCH IN PATCH MEMORY
680
HASH ENCRYPTED PATCH AND HEADER TO GET CALCULATED DIGEST
645
665
NO
CALC DIGEST = ACTUAL DIGEST?
YES
DECRYPT PATCH
670

FIG. 6