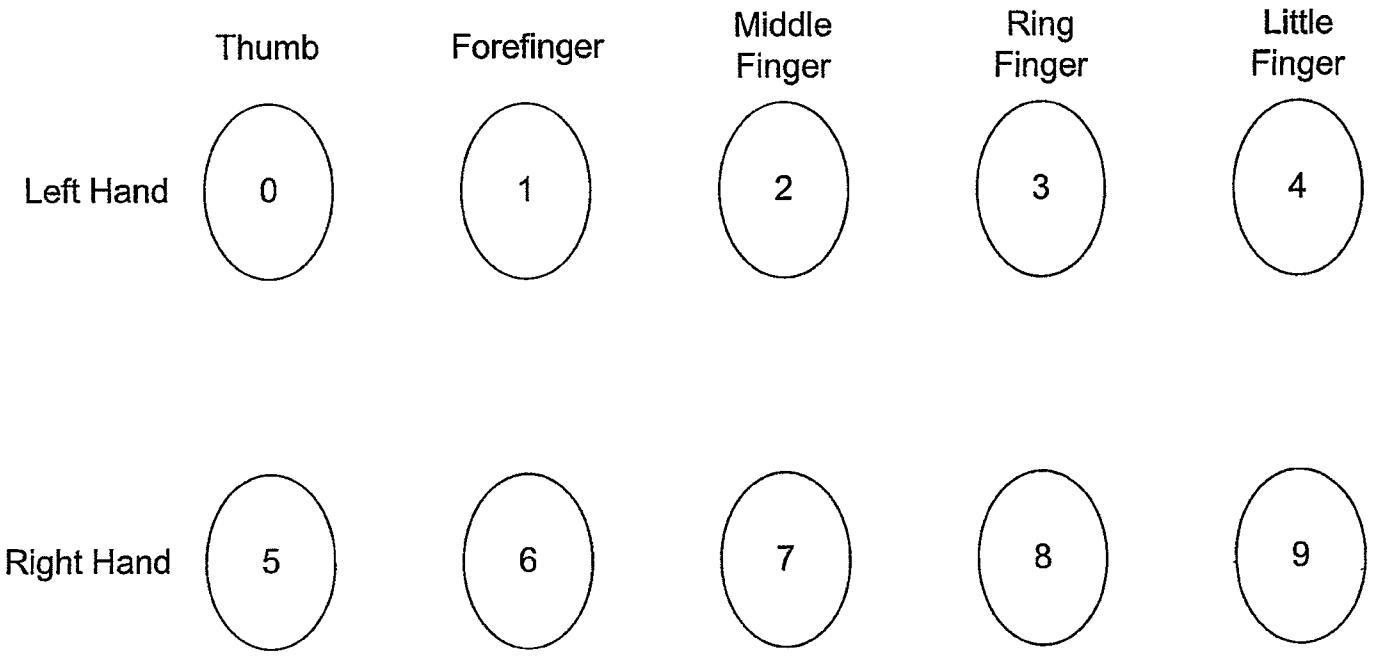

Thumb
Forefinger
Middle Finger
Ring Finger
Little Finger
Left Hand
0
1
2
3
4
Right Hand
5
6
7
8
9

FIG. 1

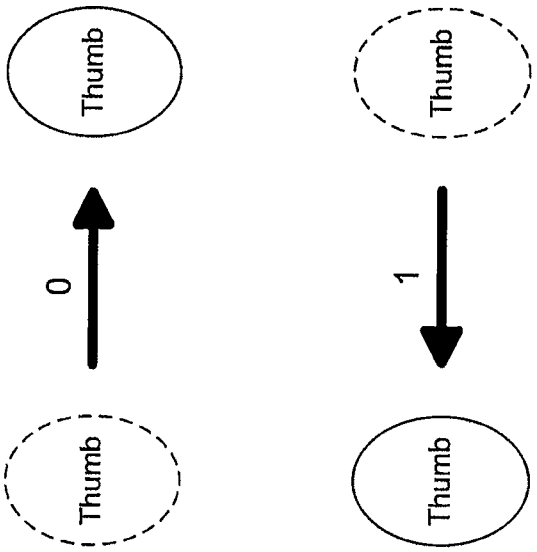


FIG. 2

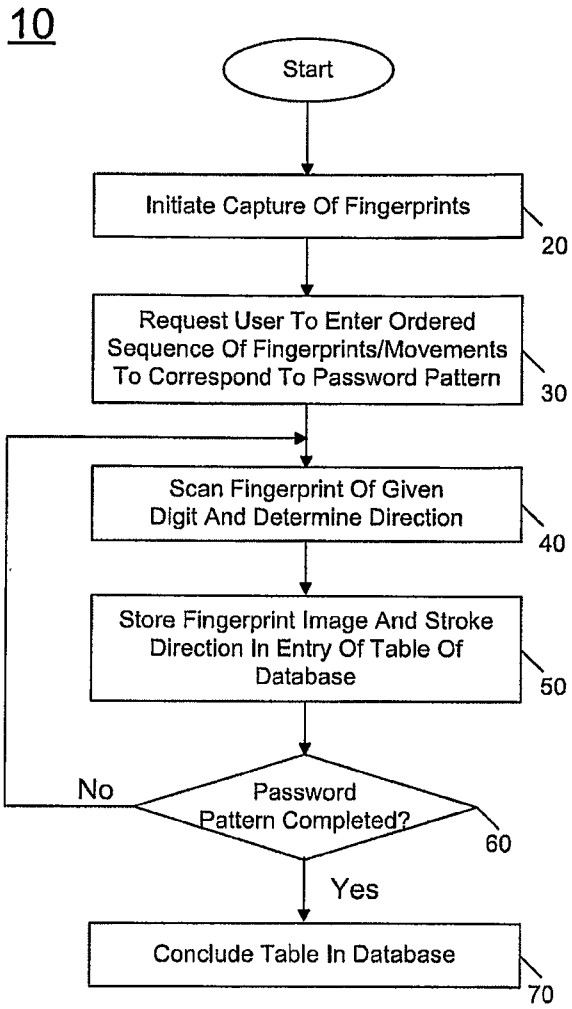

10
Start
Initiate Capture Of Fingerprints
20
Request User To Enter Ordered Sequence Of Fingerprints/Movements To Correspond To Password Pattern
30
Scan Fingerprint Of Given Digit And Determine Direction
40
Store Fingerprint Image And Stroke Direction In Entry Of Table Of Database
50
No
Password Pattern Completed?
60
Yes
Conclude Table In Database
70

FIG. 3

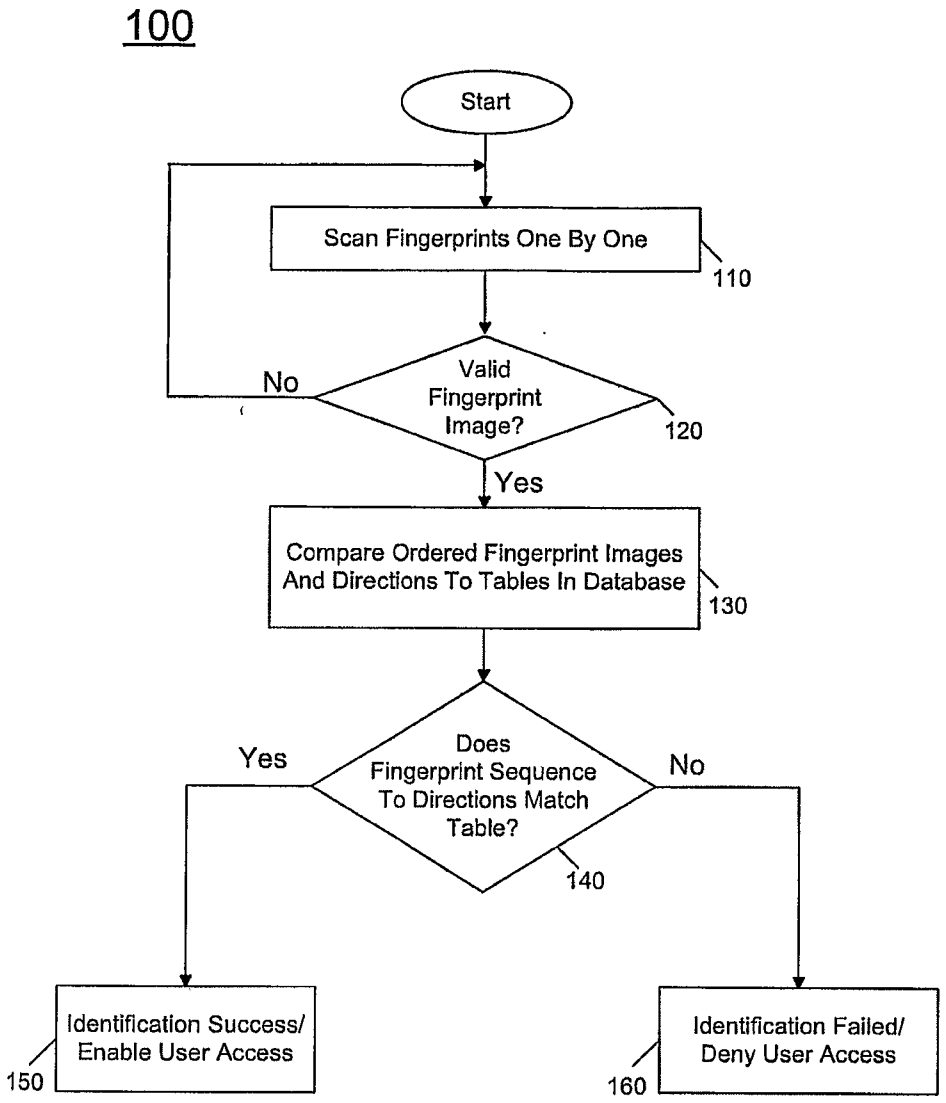

100
Start
Scan Fingerprints One By One
110
Valid Fingerprint Image?
No
120
Yes
Compare Ordered Fingerprint Images And Directions To Tables In Database
130
Does Fingerprint Sequence To Directions Match Table?
Yes
No
140
Identification Success/ Enable User Access
150
Identification Failed/ Deny User Access
160

FIG. 4

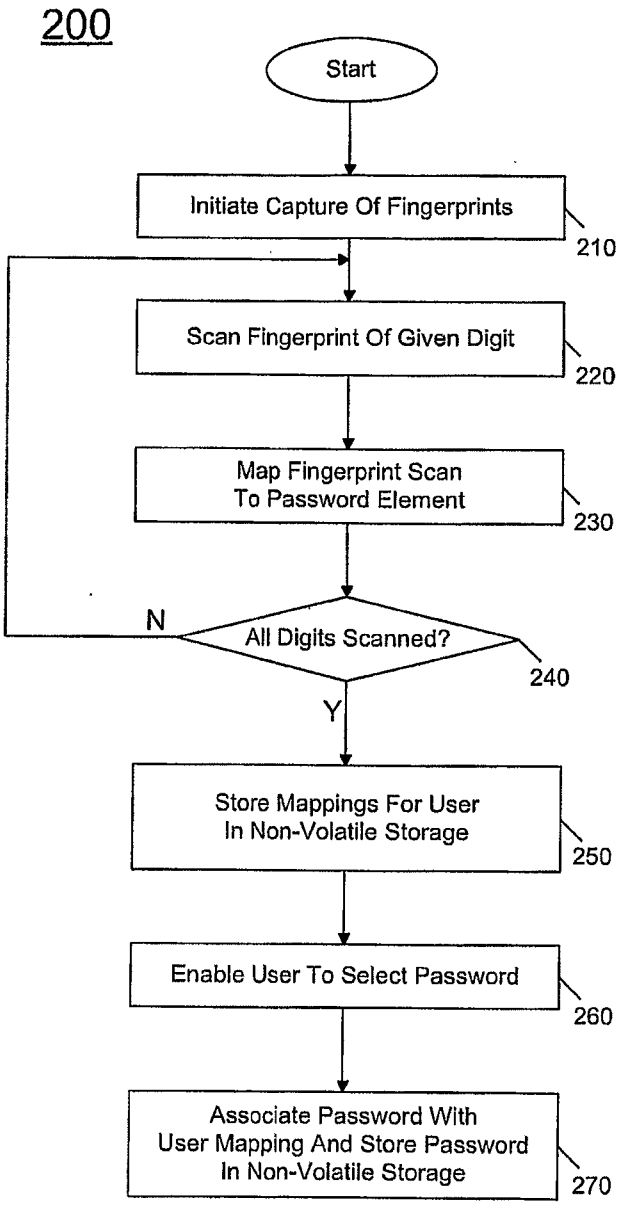

200
Start
Initiate Capture Of Fingerprints
210
Scan Fingerprint Of Given Digit
220
Map Fingerprint Scan
To Password Element
230
N
All Digits Scanned?
240
Y
Store Mappings For User
In Non-Volatile Storage
250
Enable User To Select Password
260
Associate Password With
User Mapping And Store Password
In Non-Volatile Storage
270

FIG. 5

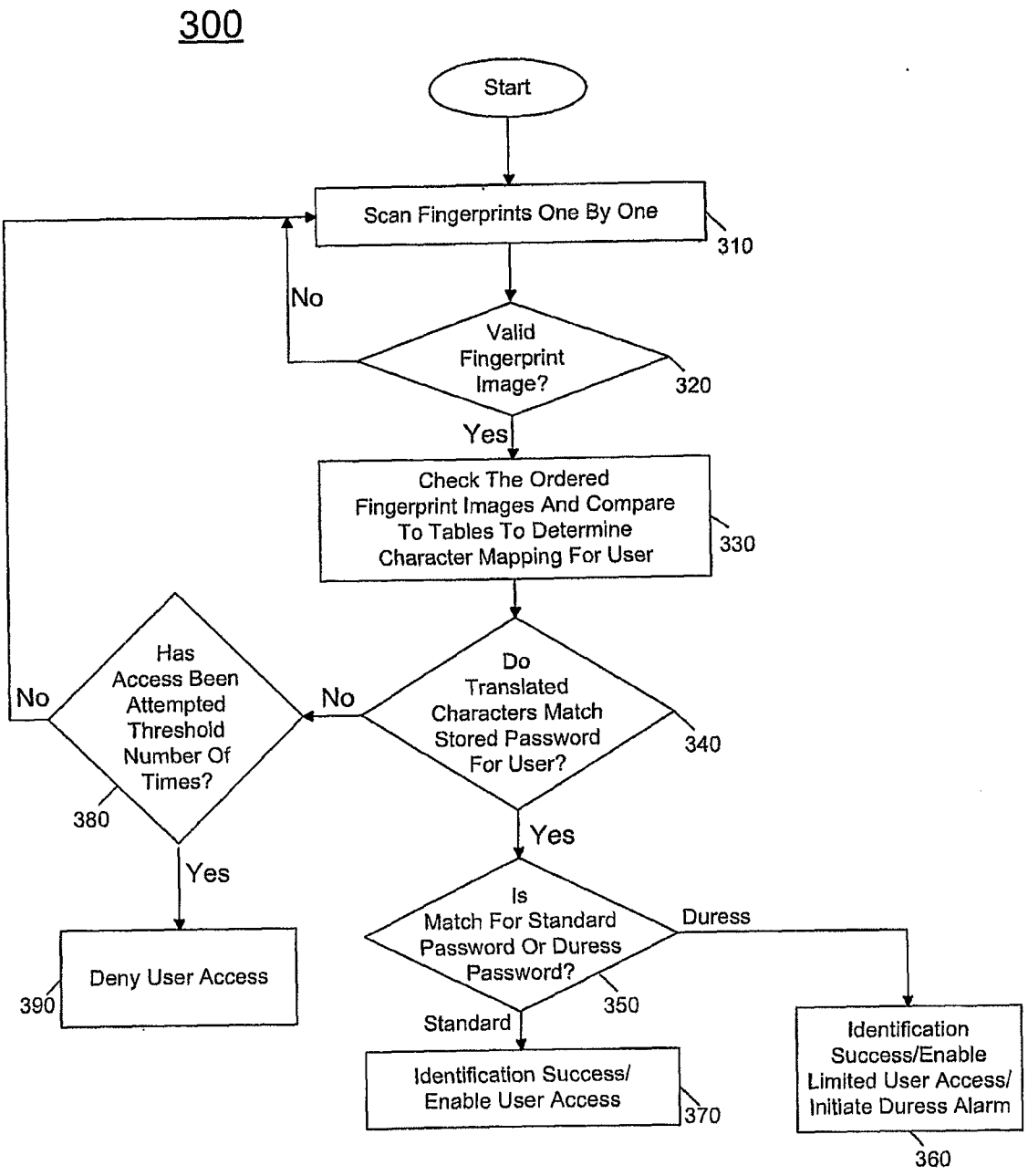

300
Start
Scan Fingerprints One By One
310
No
Valid Fingerprint Image?
320
Yes
Check The Ordered Fingerprint Images And Compare To Tables To Determine Character Mapping For User
330
Do Translated Characters Match Stored Password For User?
340
No
Has Access Been Attempted Threshold Number Of Times?
380
No
Yes
Deny User Access
390
Yes
Is Match For Standard Password Or Duress Password?
350
Duress
Standard
Identification Success/ Enable User Access
370
Identification Success/Enable Limited User Access/ Initiate Duress Alarm
360

FIG. 6

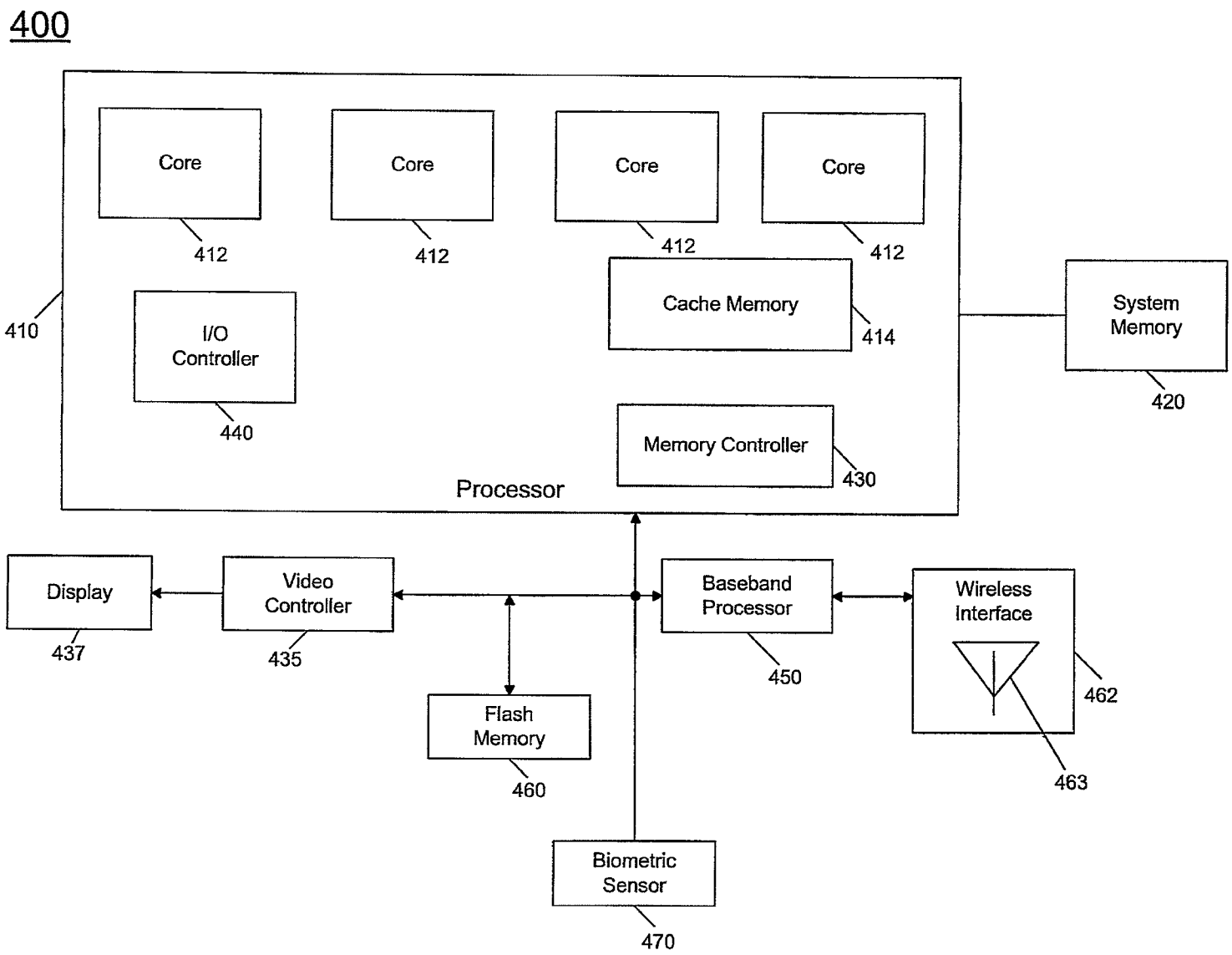

400
Core
Core
Core
Core
412
412
412
412
410
I/O Controller
440
Cache Memory
414
System Memory
420
Memory Controller
430
Processor
Display
437
Video Controller
435
Baseband Processor
450
Wireless Interface
462
463
Flash Memory
460
Biometric Sensor
470

FIG. 7