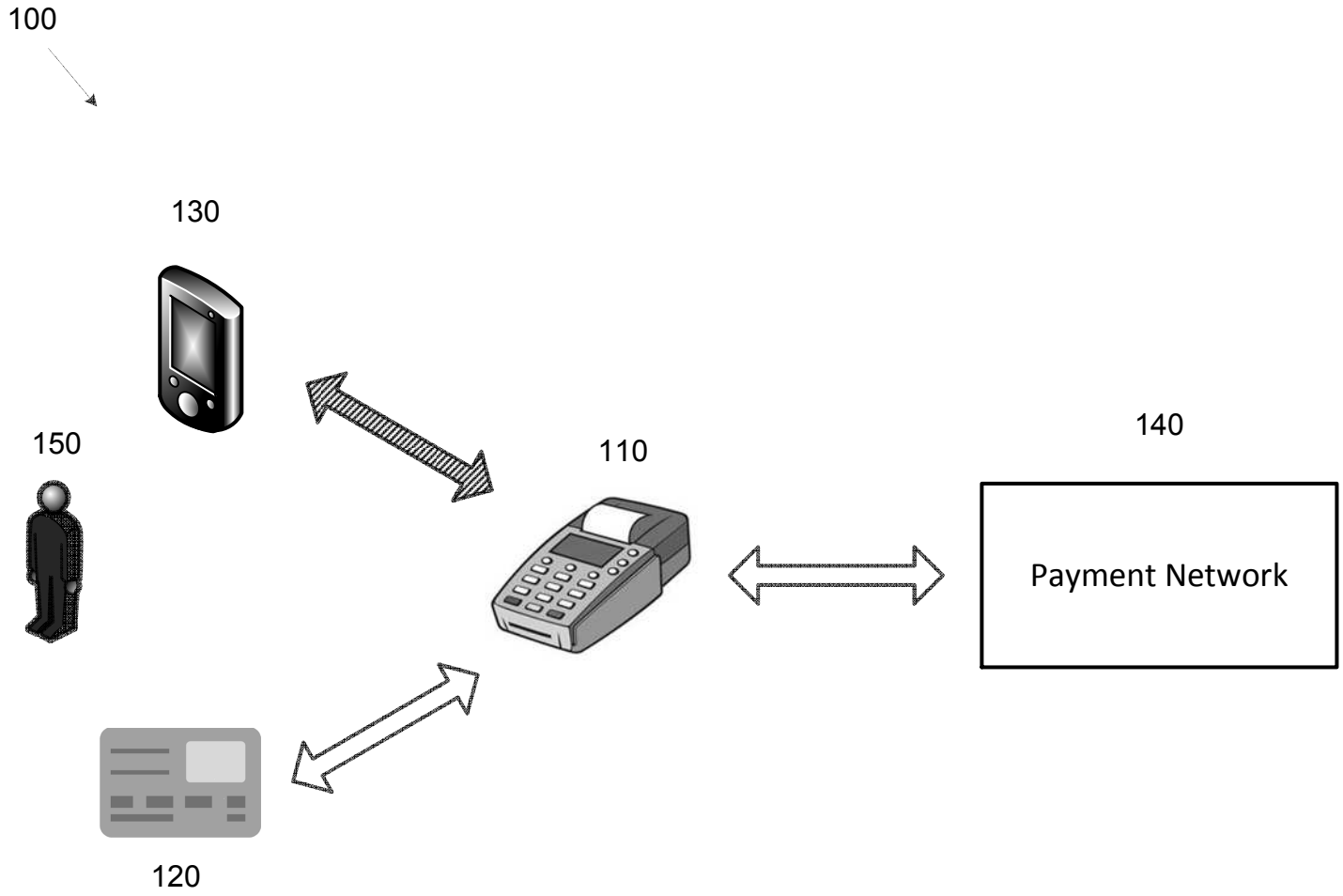


FIG. 1

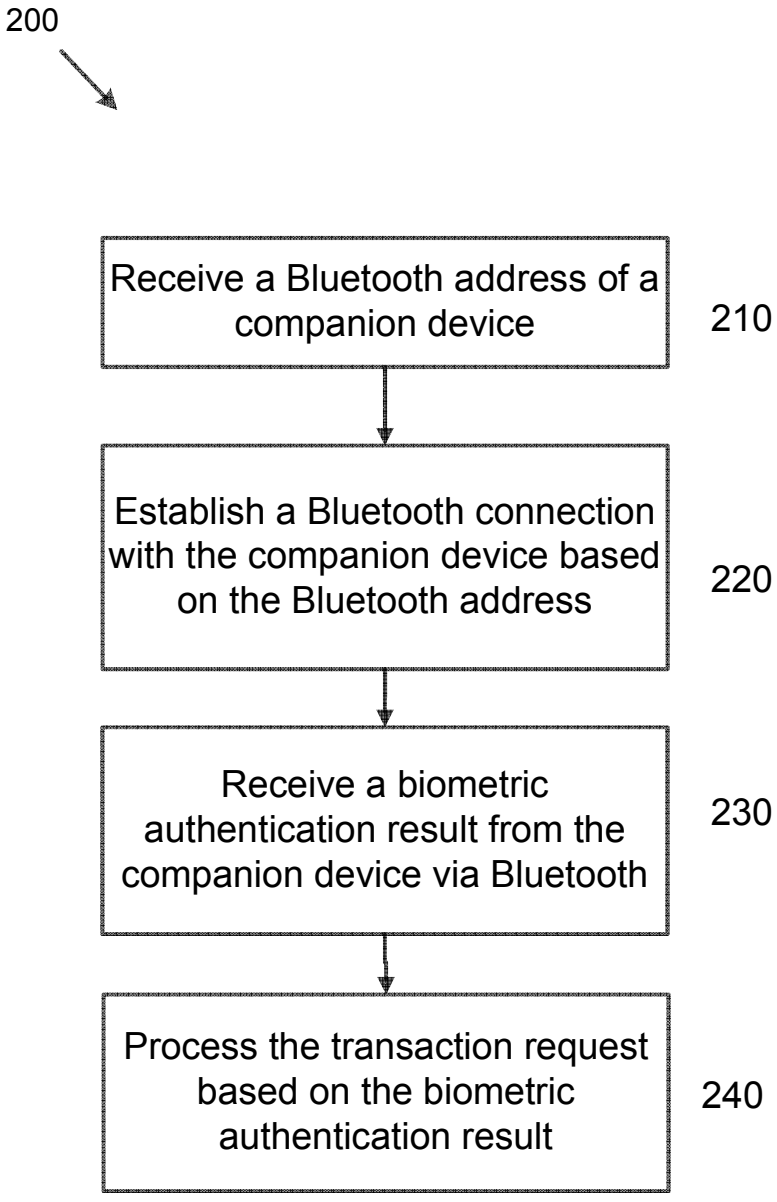

200
Receive a Bluetooth address of a companion device
210
Establish a Bluetooth connection with the companion device based on the Bluetooth address
220
Receive a biometric authentication result from the companion device via Bluetooth
230
Process the transaction request based on the biometric authentication result
240

FIG. 2

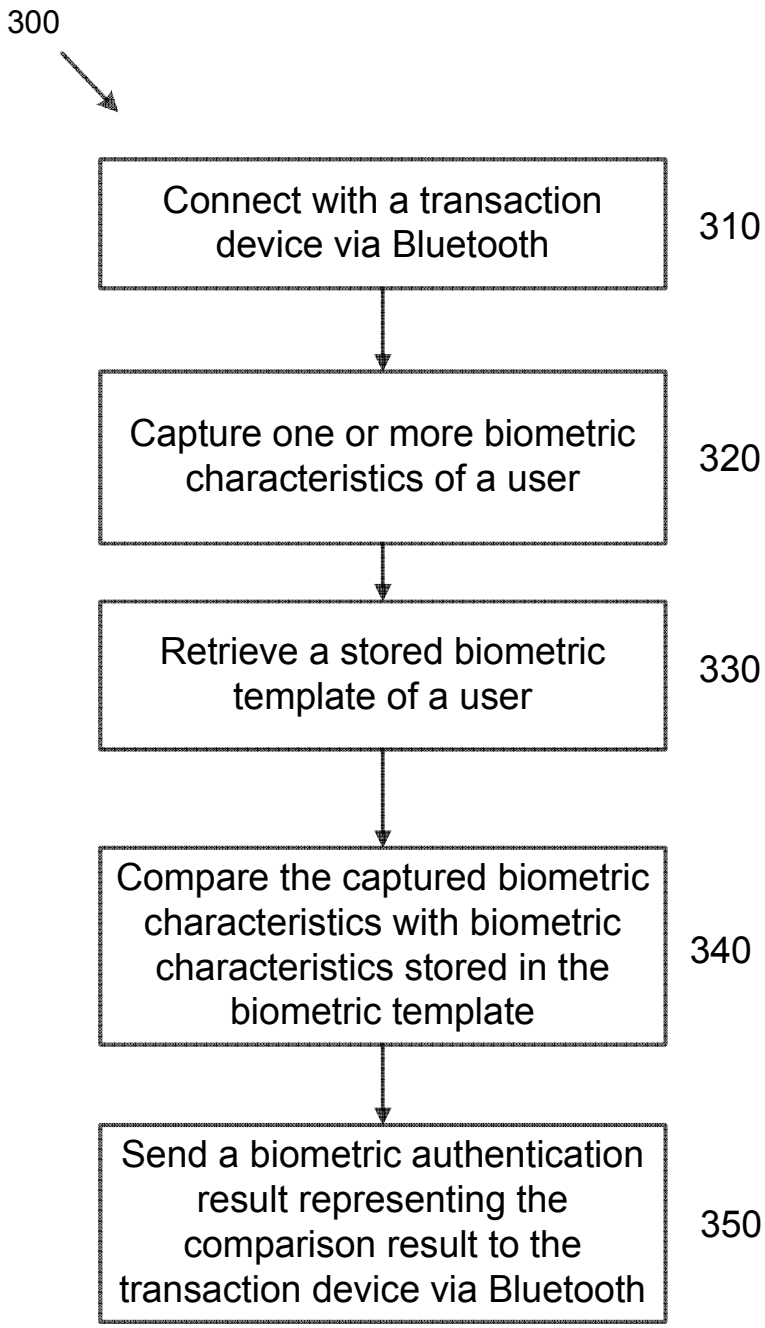

300
Connect with a transaction device via Bluetooth
310
Capture one or more biometric characteristics of a user
320
Retrieve a stored biometric template of a user
330
Compare the captured biometric characteristics with biometric characteristics stored in the biometric template
340
Send a biometric authentication result representing the comparison result to the transaction device via Bluetooth
350

FIG. 3

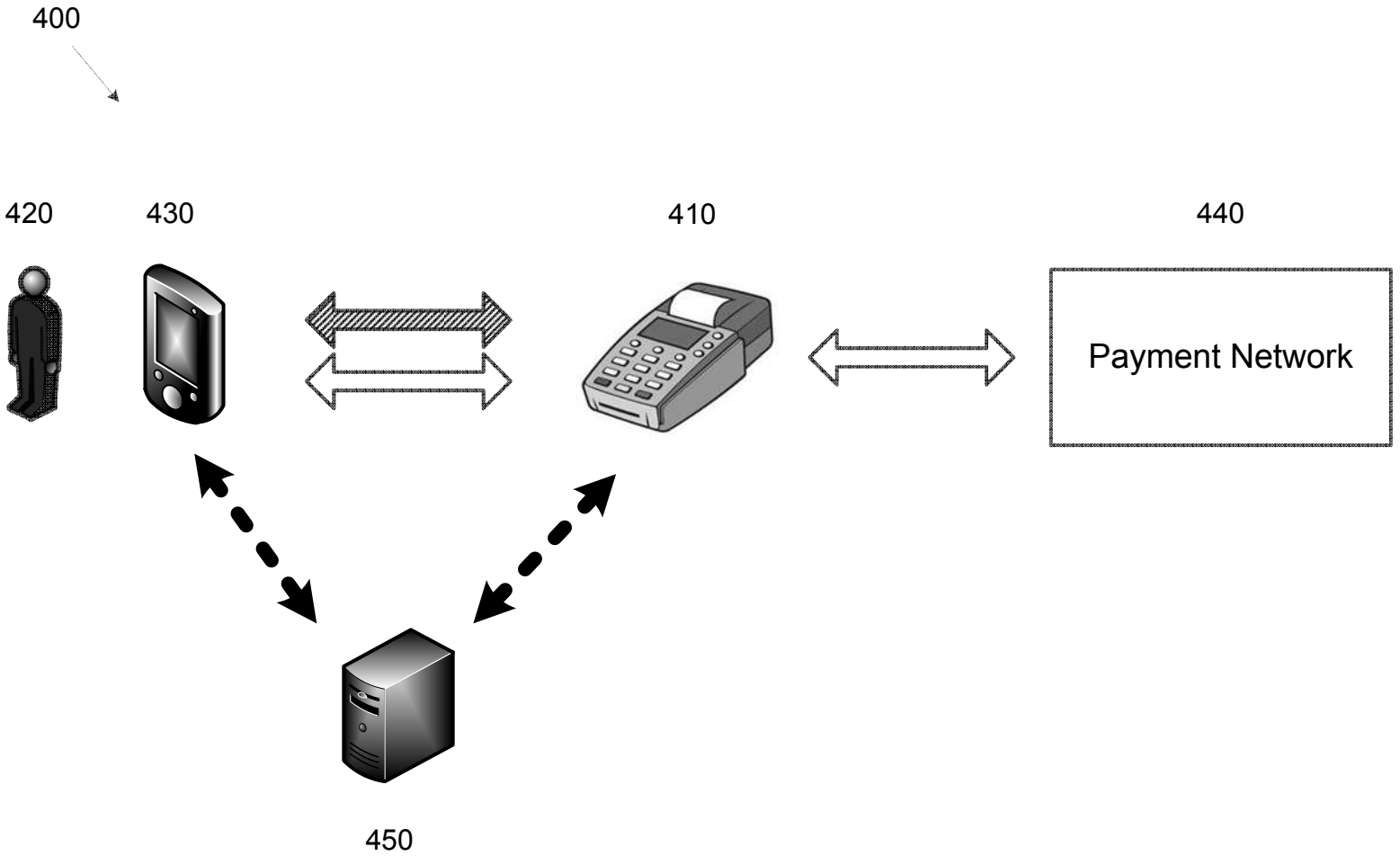


FIG. 4

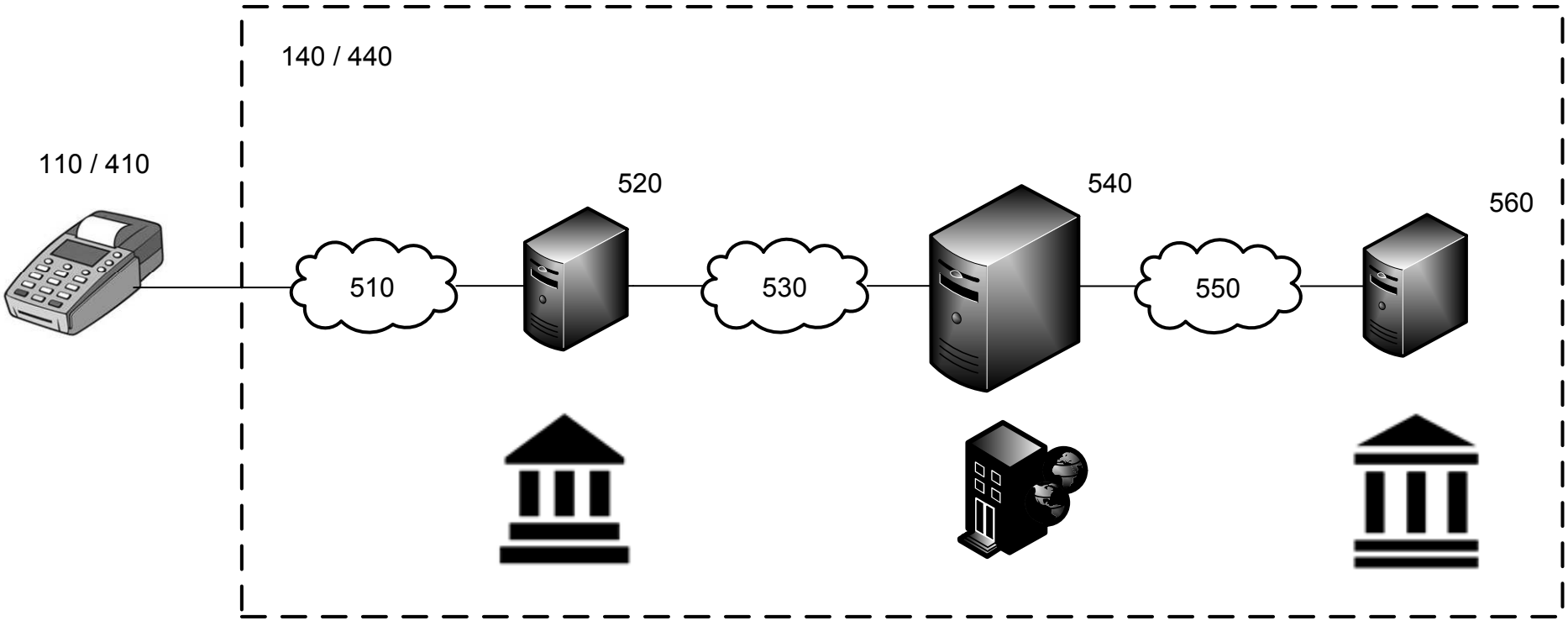


FIG. 5

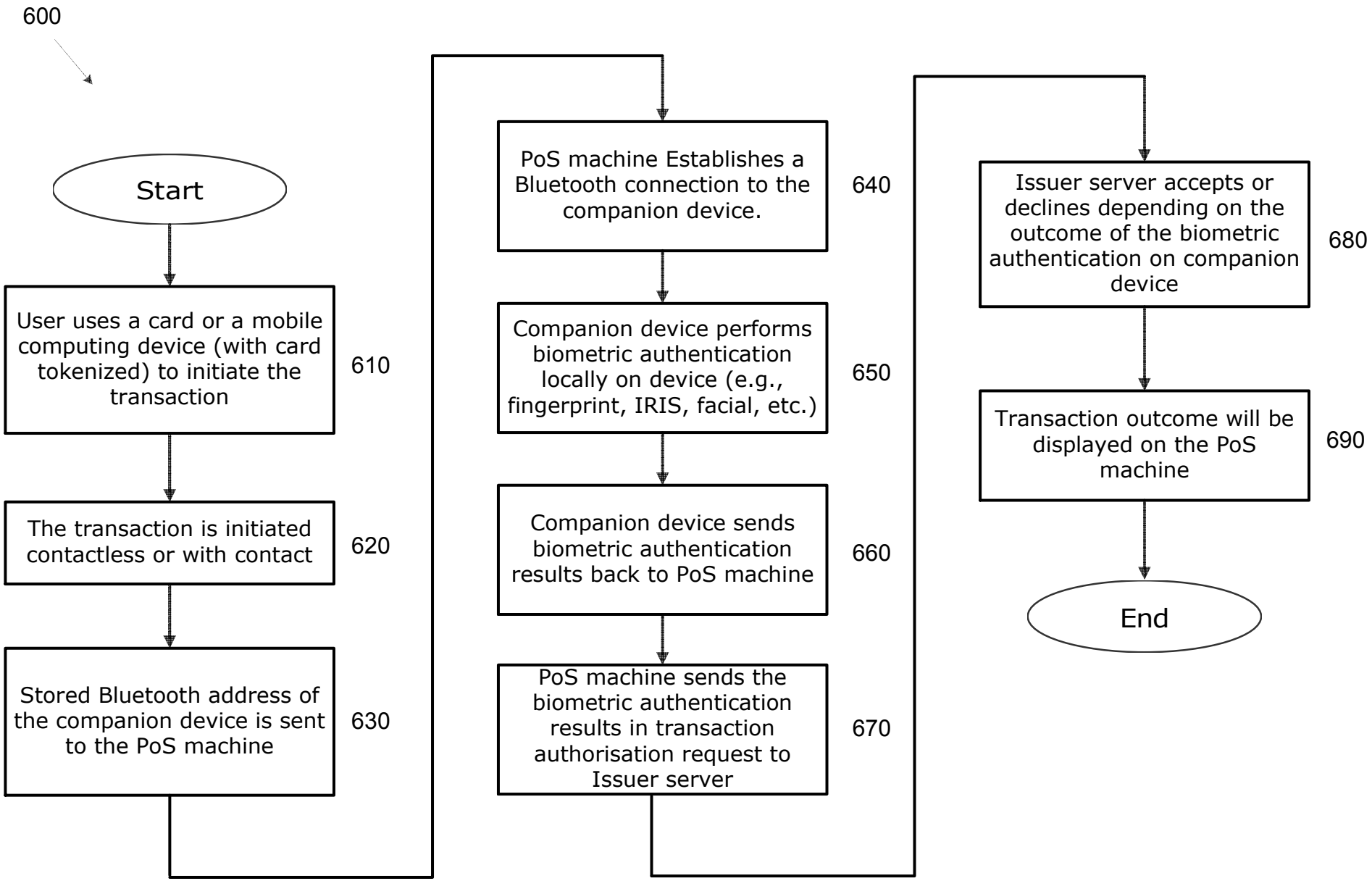

600
Start
User uses a card or a mobile computing device (with card tokenized) to initiate the transaction
610
The transaction is initiated contactless or with contact
620
Stored Bluetooth address of the companion device is sent to the PoS machine
630
PoS machine Establishes a Bluetooth connection to the companion device.
640
Companion device performs biometric authentication locally on device (e.g., fingerprint, IRIS, facial, etc.)
650
Companion device sends biometric authentication results back to PoS machine
660
PoS machine sends the biometric authentication results in transaction authorisation request to Issuer server
670
Issuer server accepts or declines depending on the outcome of the biometric authentication on companion device
680
Transaction outcome will be displayed on the PoS machine
690
End

FIG. 6

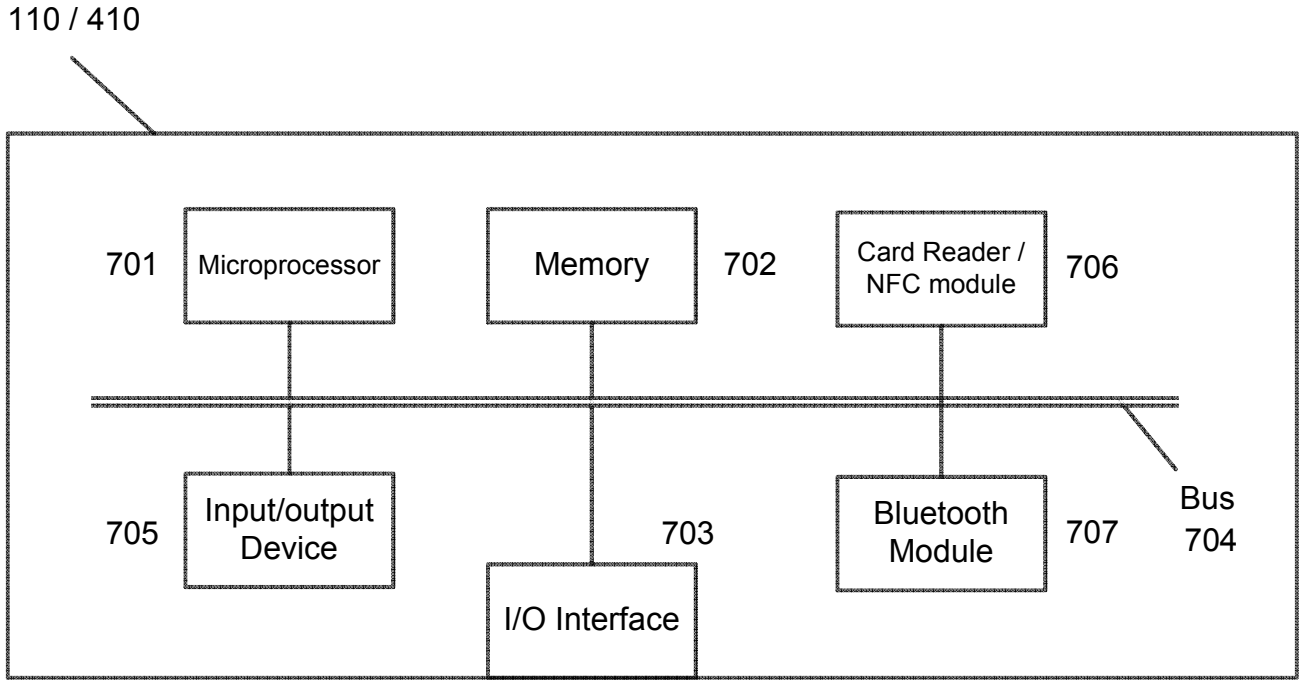

110 / 410
701
Microprocessor
Memory
702
Card Reader / NFC module
706
705
Input/output Device
703
I/O Interface
Bluetooth Module
707
Bus 704

FIG. 7

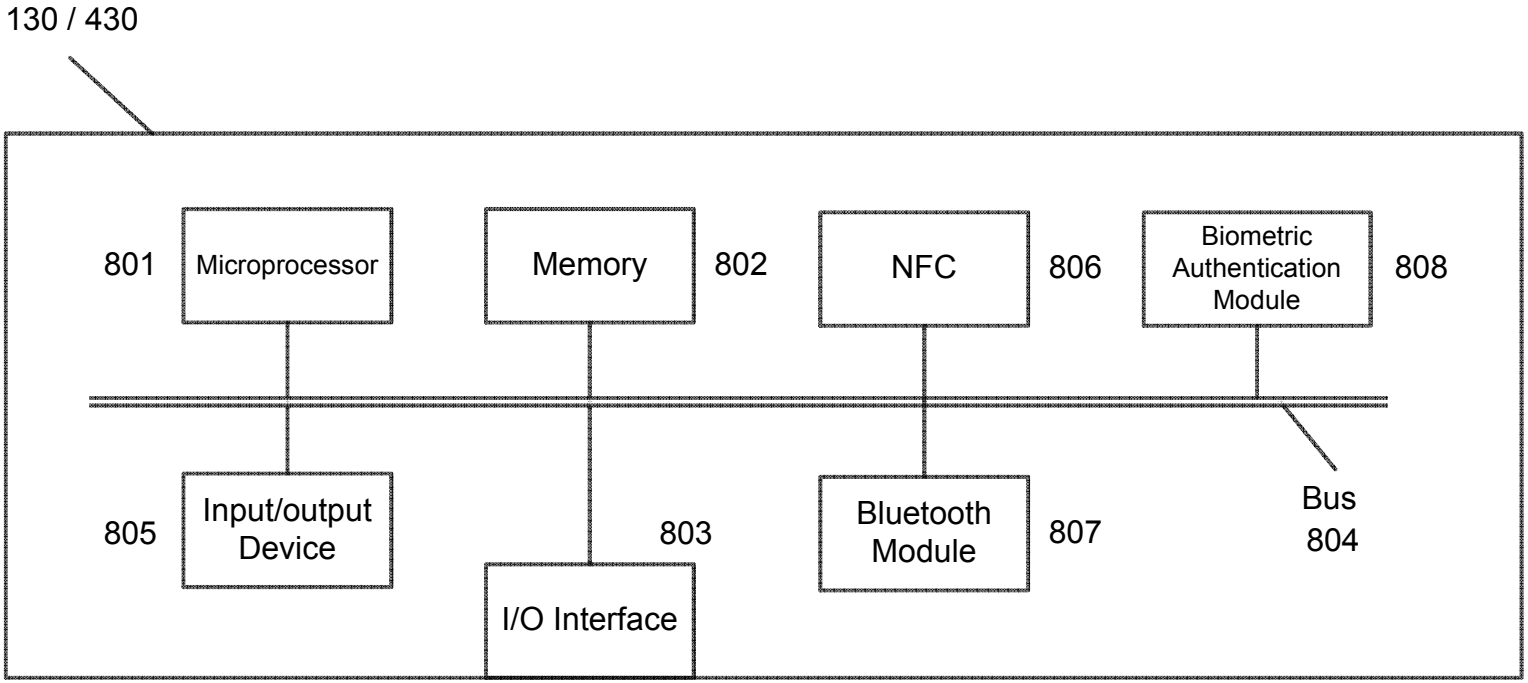

130 / 430
801
Microprocessor
Memory
802
NFC
806
Biometric Authentication Module
808
805
Input/output Device
803
I/O Interface
Bluetooth Module
807
Bus
804

FIG. 8