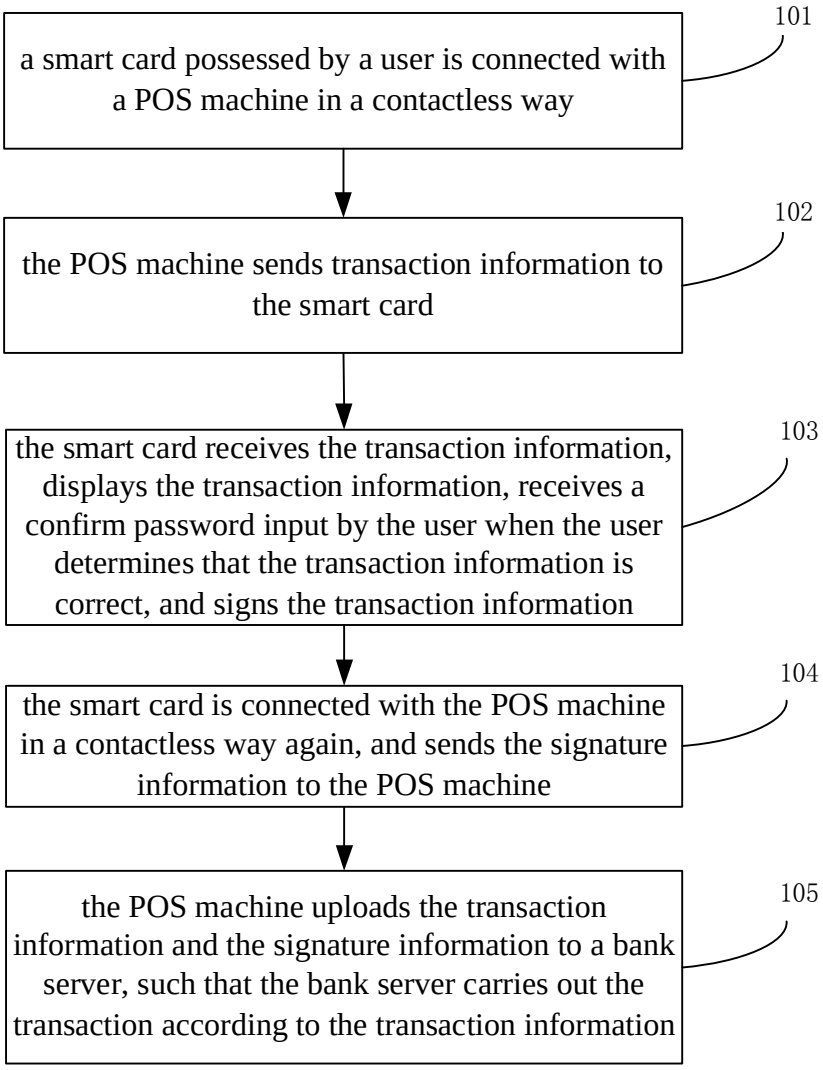

a smart card possessed by a user is connected with a POS machine in a contactless way
101
the POS machine sends transaction information to the smart card
102
the smart card receives the transaction information, displays the transaction information, receives a confirm password input by the user when the user determines that the transaction information is correct, and signs the transaction information
103
the smart card is connected with the POS machine in a contactless way again, and sends the signature information to the POS machine
104
the POS machine uploads the transaction information and the signature information to a bank server, such that the bank server carries out the transaction according to the transaction information
105

Fig. 1

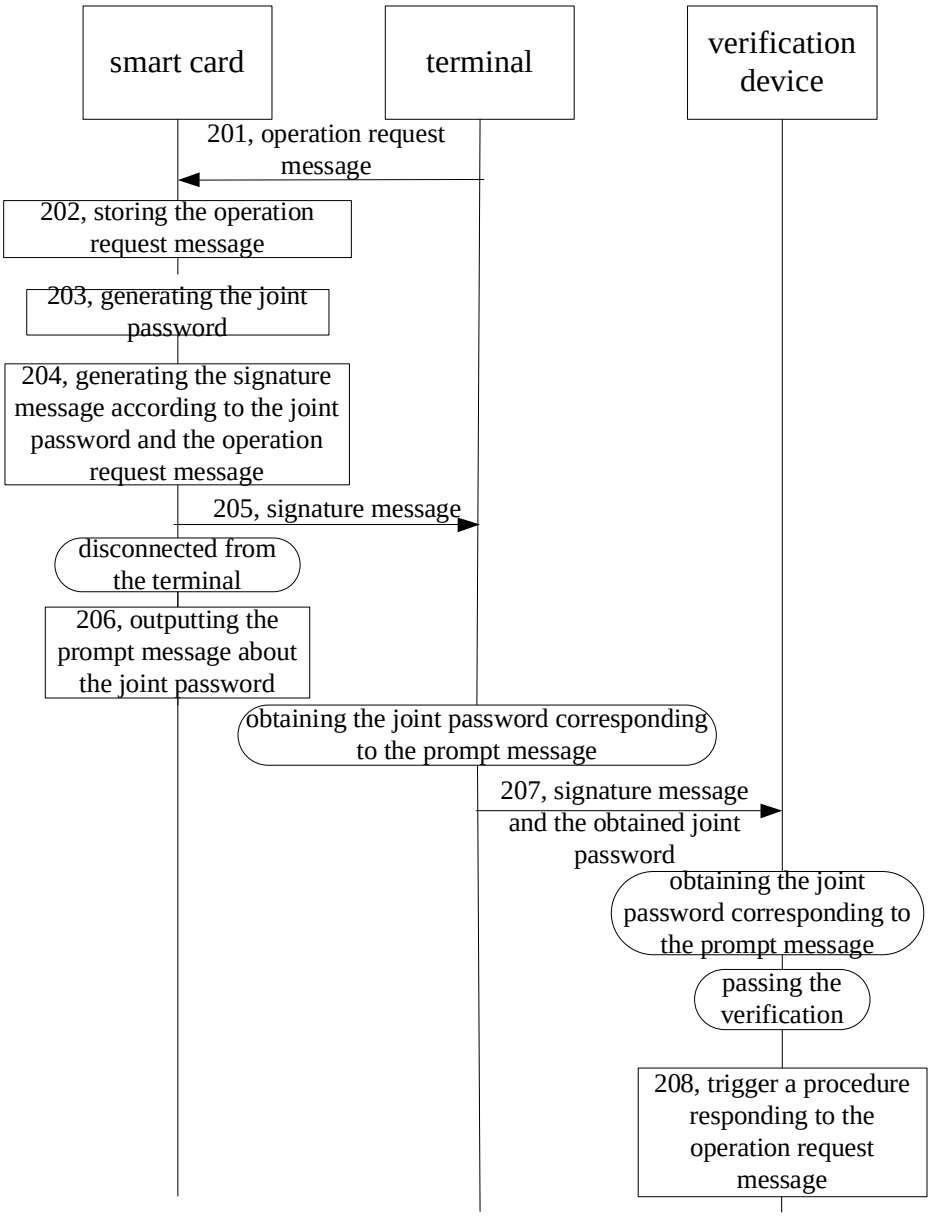

smart card
terminal
verification device
201, operation request message
202, storing the operation request message
203, generating the joint password
204, generating the signature message according to the joint password and the operation request message
205, signature message
disconnected from the terminal
206, outputting the prompt message about the joint password
obtaining the joint password corresponding to the prompt message
207, signature message and the obtained joint password
obtaining the joint password corresponding to the prompt message
passing the verification
208, trigger a procedure responding to the operation request message

Fig. 2

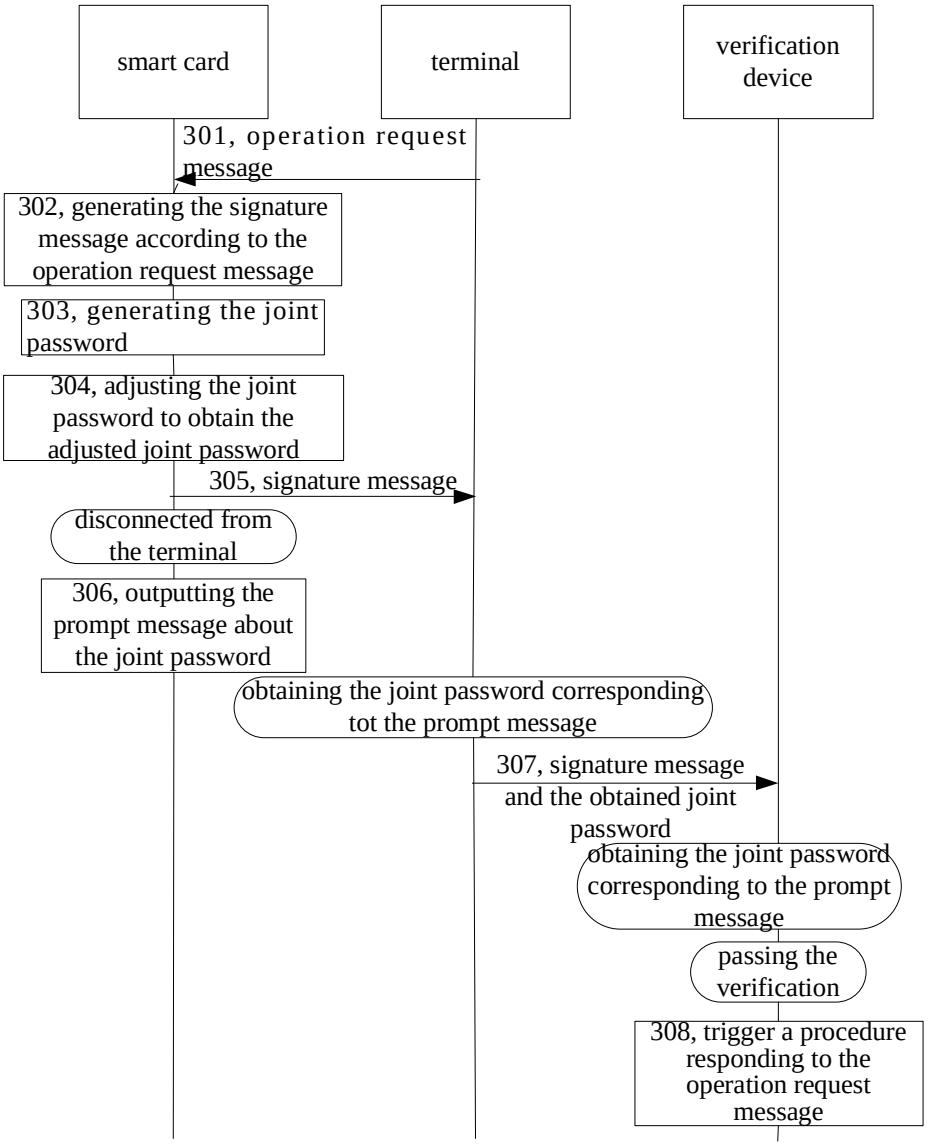

smart card
terminal
verification device
301, operation request message
302, generating the signature message according to the operation request message
303, generating the joint password
304, adjusting the joint password to obtain the adjusted joint password
305, signature message
disconnected from the terminal
306, outputting the prompt message about the joint password
obtaining the joint password corresponding tot the prompt message
307, signature message and the obtained joint password
obtaining the joint password corresponding to the prompt message
passing the verification
308, trigger a procedure responding to the operation request message

Fig. 3

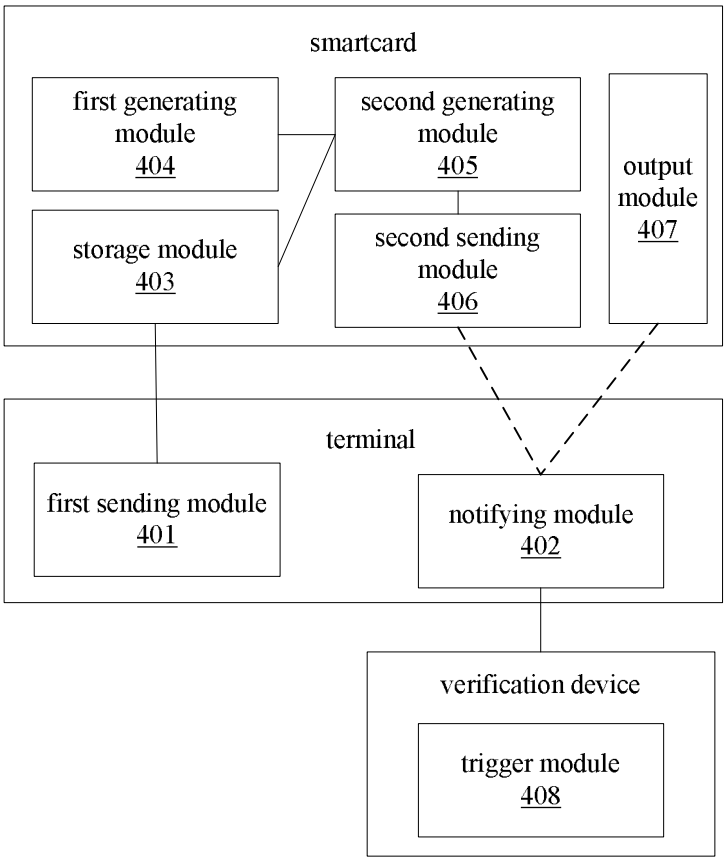

smartcard
first generating module 404
second generating module 405
output module 407
storage module 403
second sending module 406
terminal
first sending module 401
notifying module 402
verification device
trigger module 408

Fig. 4

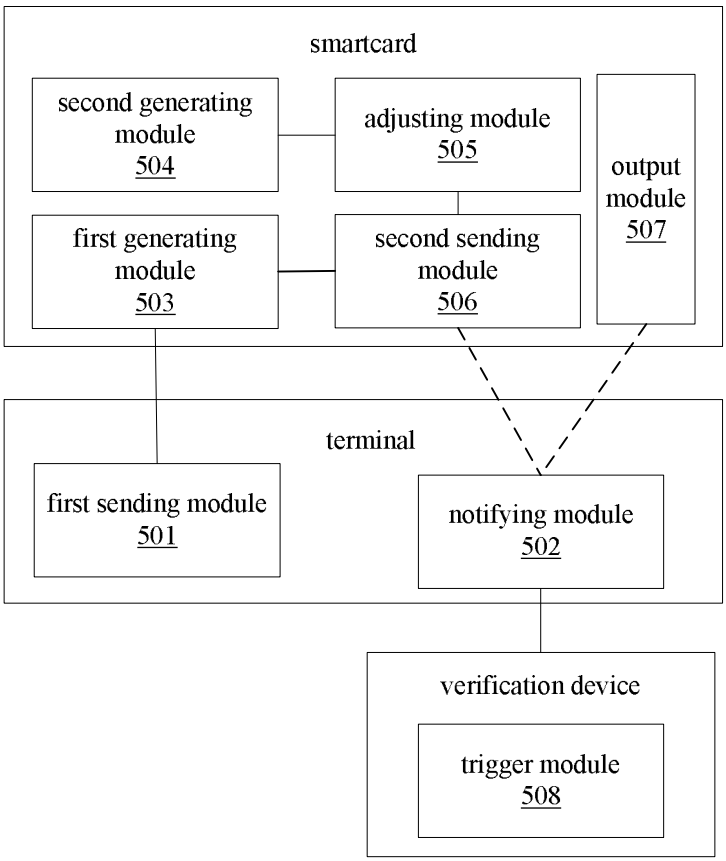

smartcard
second generating module 504
adjusting module 505
output module 507
first generating module 503
second sending module 506
terminal
first sending module 501
notifying module 502
verification device
trigger module 508

Fig. 5