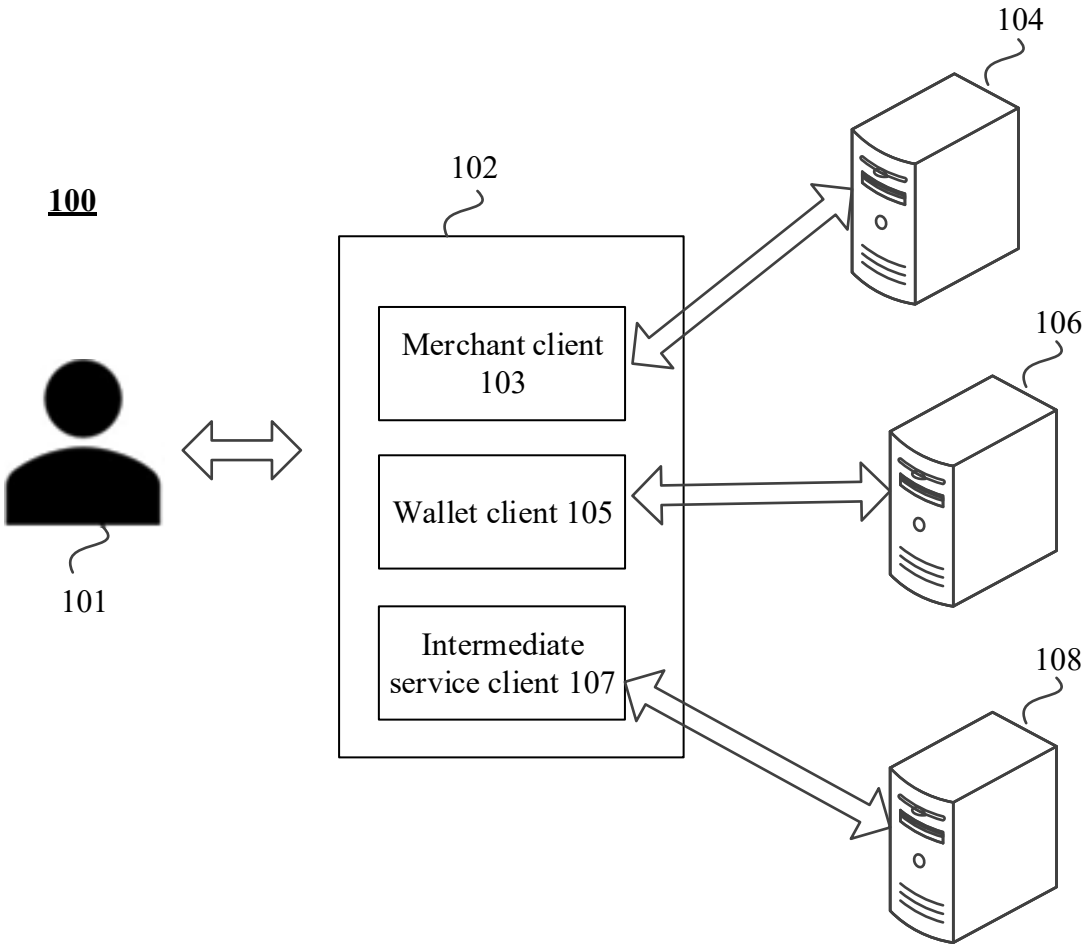

100
101
102
Merchant client 103
Wallet client 105
Intermediate service client 107
104
106
108

FIG. 1

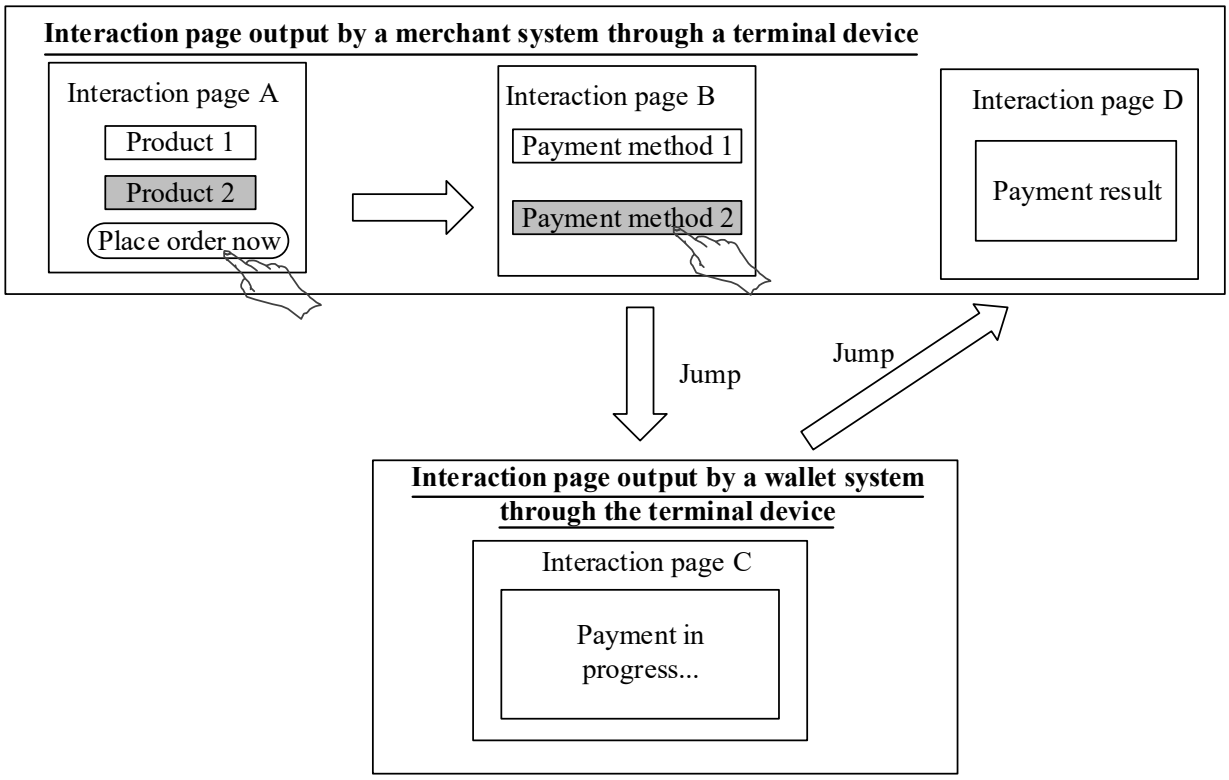

Interaction page output by a merchant system through a terminal device
Interaction page A
Product 1
Product 2
Place order now
Interaction page B
Payment method 1
Payment method 2
Interaction page D
Payment result
Jump
Jump
Interaction page output by a wallet system through the terminal device
Interaction page C
Payment in progress...

FIG. 2A

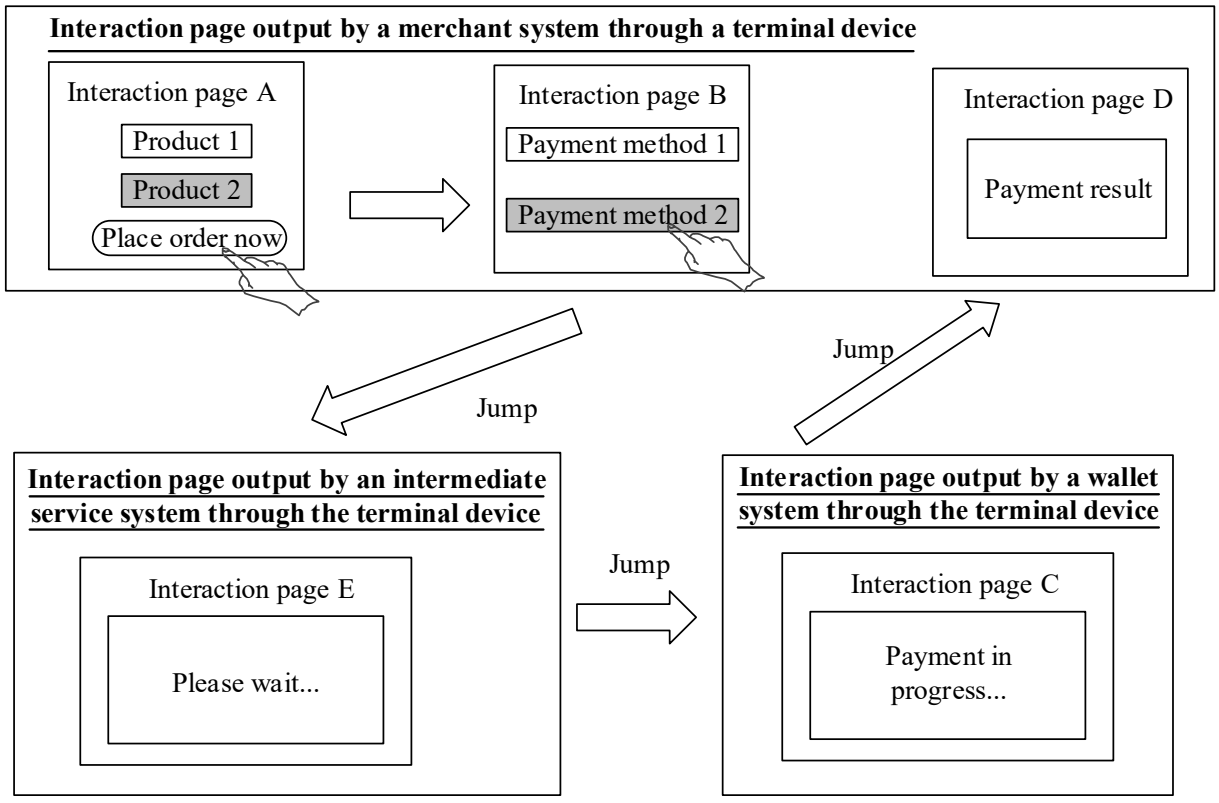

Interaction page output by a merchant system through a terminal device
Interaction page A
Product 1
Product 2
Place order now
Interaction page B
Payment method 1
Payment method 2
Interaction page D
Payment result
Jump
Jump
Interaction page output by an intermediate service system through the terminal device
Interaction page E
Please wait...
Jump
Interaction page output by a wallet system through the terminal device
Interaction page C
Payment in progress...

FIG. 2B

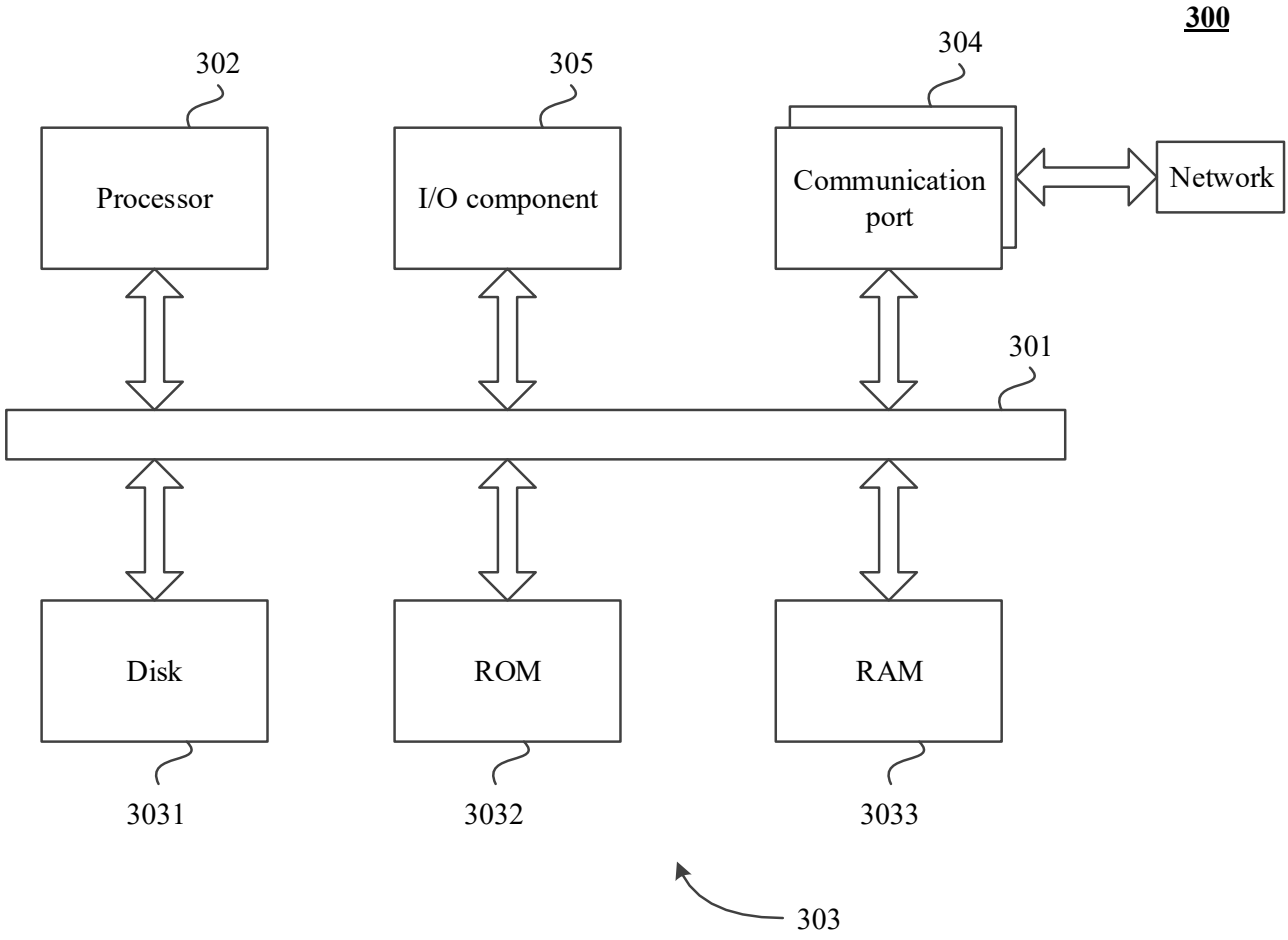

300
302
305
304
Processor
I/O component
Communication port
Network
301
Disk
ROM
RAM
3031
3032
3033
303

FIG. 3

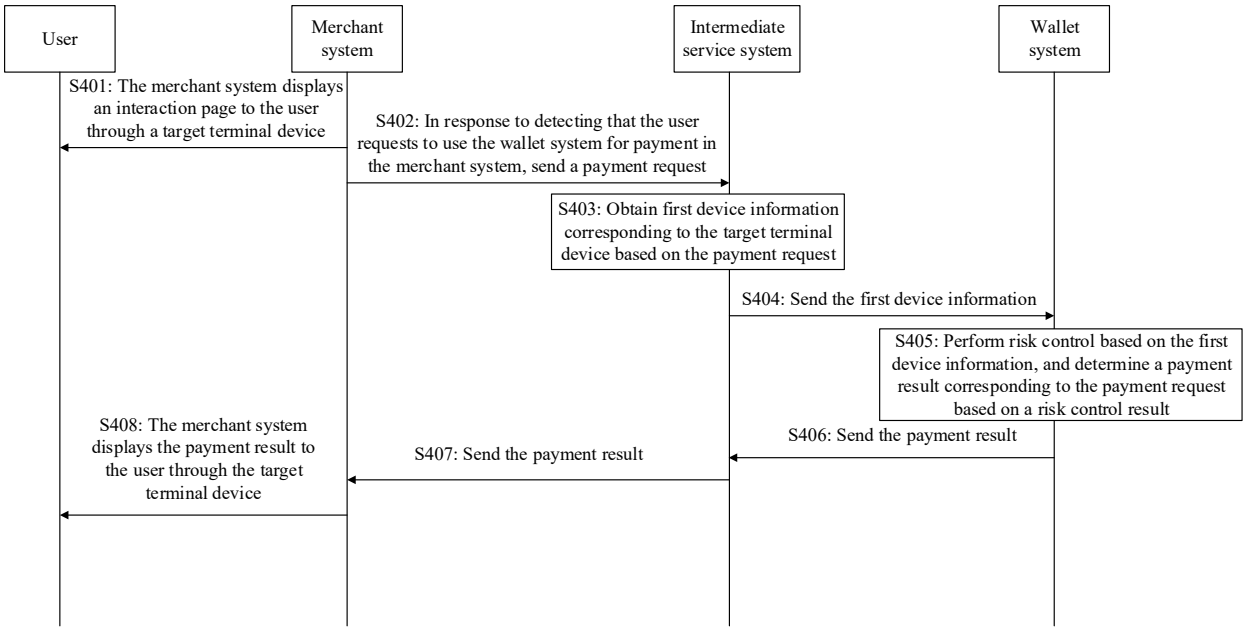

User
Merchant system
Intermediate service system
Wallet system
S401: The merchant system displays an interaction page to the user through a target terminal device
S402: In response to detecting that the user requests to use the wallet system for payment in the merchant system, send a payment request
S403: Obtain first device information corresponding to the target terminal device based on the payment request
S404: Send the first device information
S405: Perform risk control based on the first device information, and determine a payment result corresponding to the payment request based on a risk control result
S406: Send the payment result
S407: Send the payment result
S408: The merchant system displays the payment result to the user through the target terminal device

FIG. 4

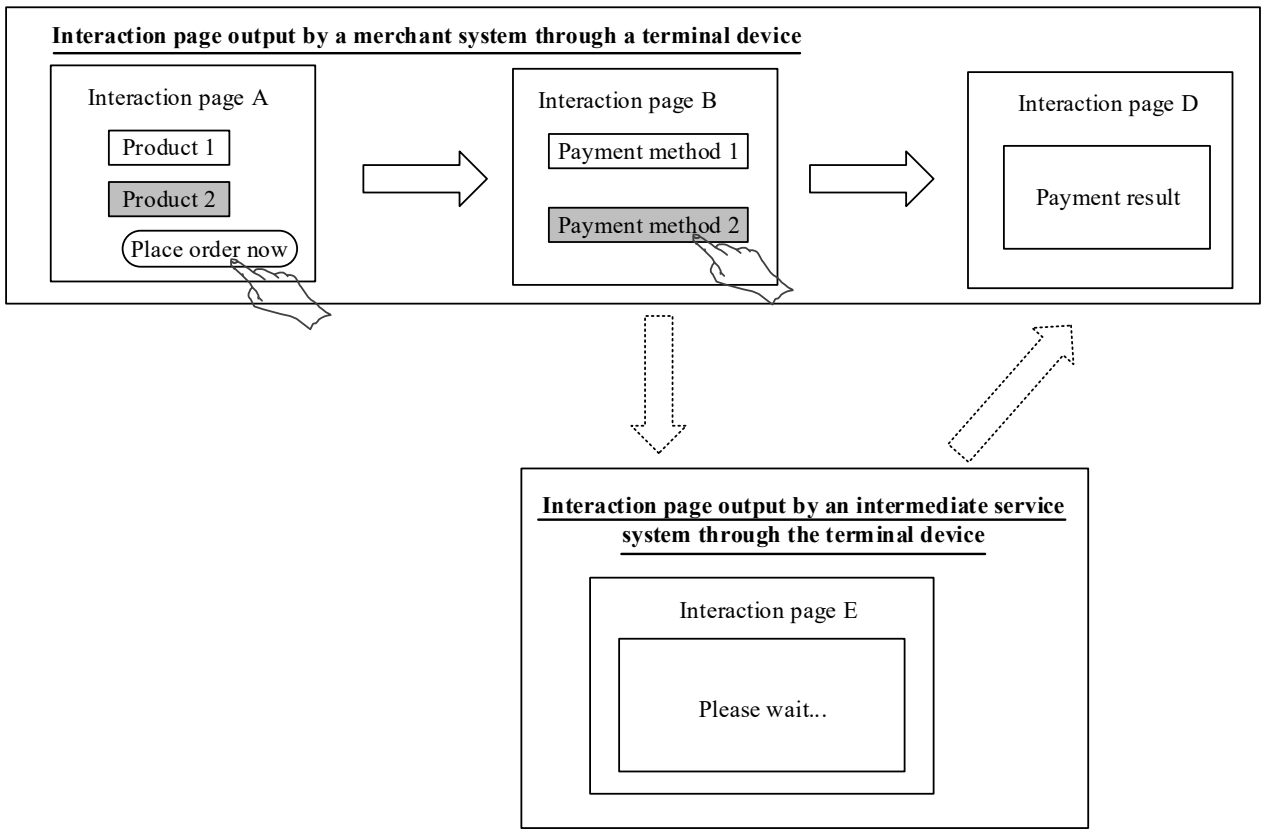

Interaction page output by a merchant system through a terminal device
Interaction page A
Product 1
Product 2
Place order now
Interaction page B
Payment method 1
Payment method 2
Interaction page D
Payment result
Interaction page output by an intermediate service system through the terminal device
Interaction page E
Please wait...

FIG. 5

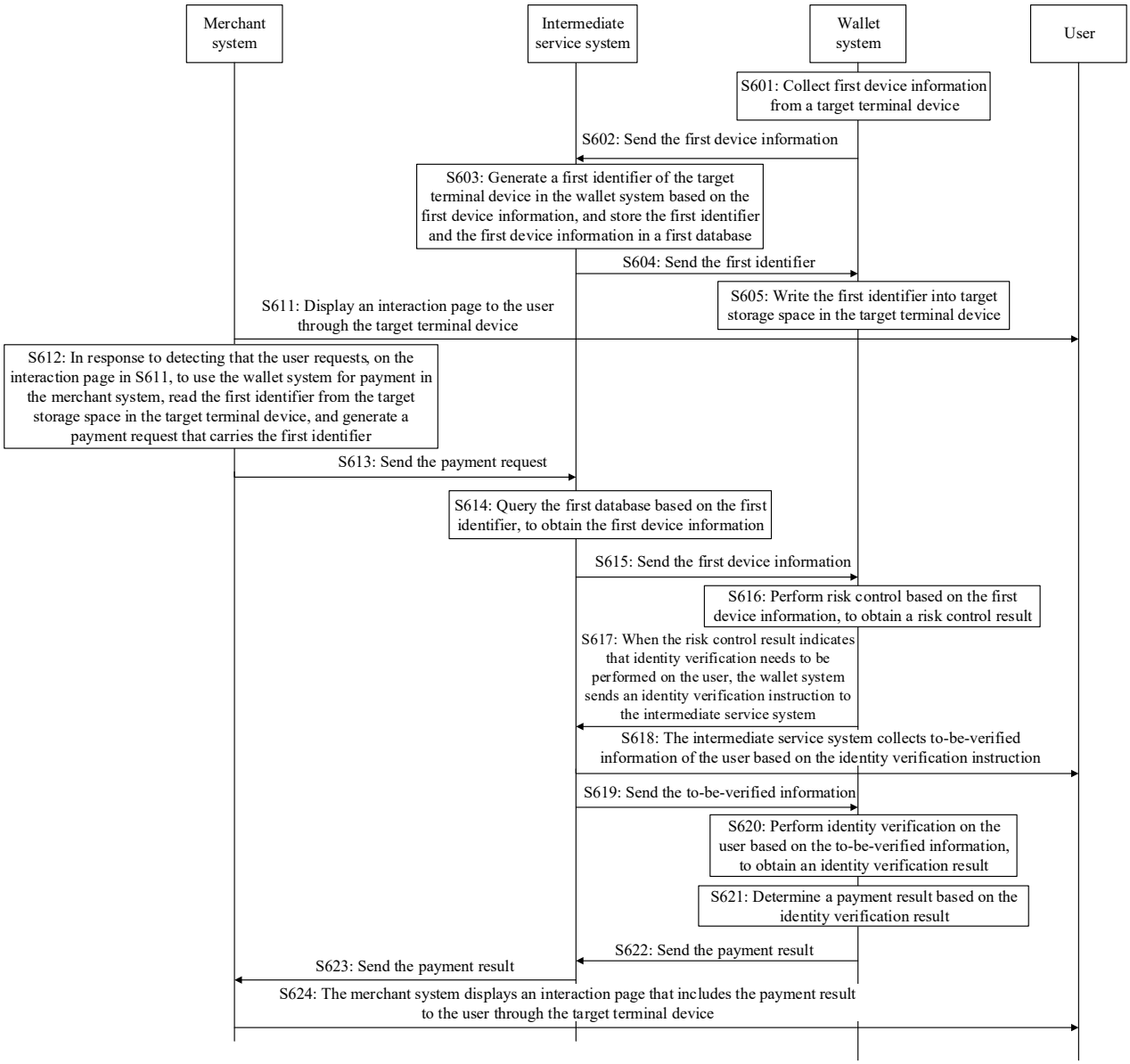

Merchant system
Intermediate service system
Wallet system
User
S601: Collect first device information from a target terminal device
S602: Send the first device information
S603: Generate a first identifier of the target terminal device in the wallet system based on the first device information, and store the first identifier and the first device information in a first database
S604: Send the first identifier
S605: Write the first identifier into target storage space in the target terminal device
S611: Display an interaction page to the user through the target terminal device
S612: In response to detecting that the user requests, on the interaction page in S611, to use the wallet system for payment in the merchant system, read the first identifier from the target storage space in the target terminal device, and generate a payment request that carries the first identifier
S613: Send the payment request
S614: Query the first database based on the first identifier, to obtain the first device information
S615: Send the first device information
S616: Perform risk control based on the first device information, to obtain a risk control result
S617: When the risk control result indicates that identity verification needs to be performed on the user, the wallet system sends an identity verification instruction to the intermediate service system
S618: The intermediate service system collects to-be-verified information of the user based on the identity verification instruction
S619: Send the to-be-verified information
S620: Perform identity verification on the user based on the to-be-verified information, to obtain an identity verification result
S621: Determine a payment result based on the identity verification result
S622: Send the payment result
S623: Send the payment result
S624: The merchant system displays an interaction page that includes the payment result to the user through the target terminal device

FIG. 6

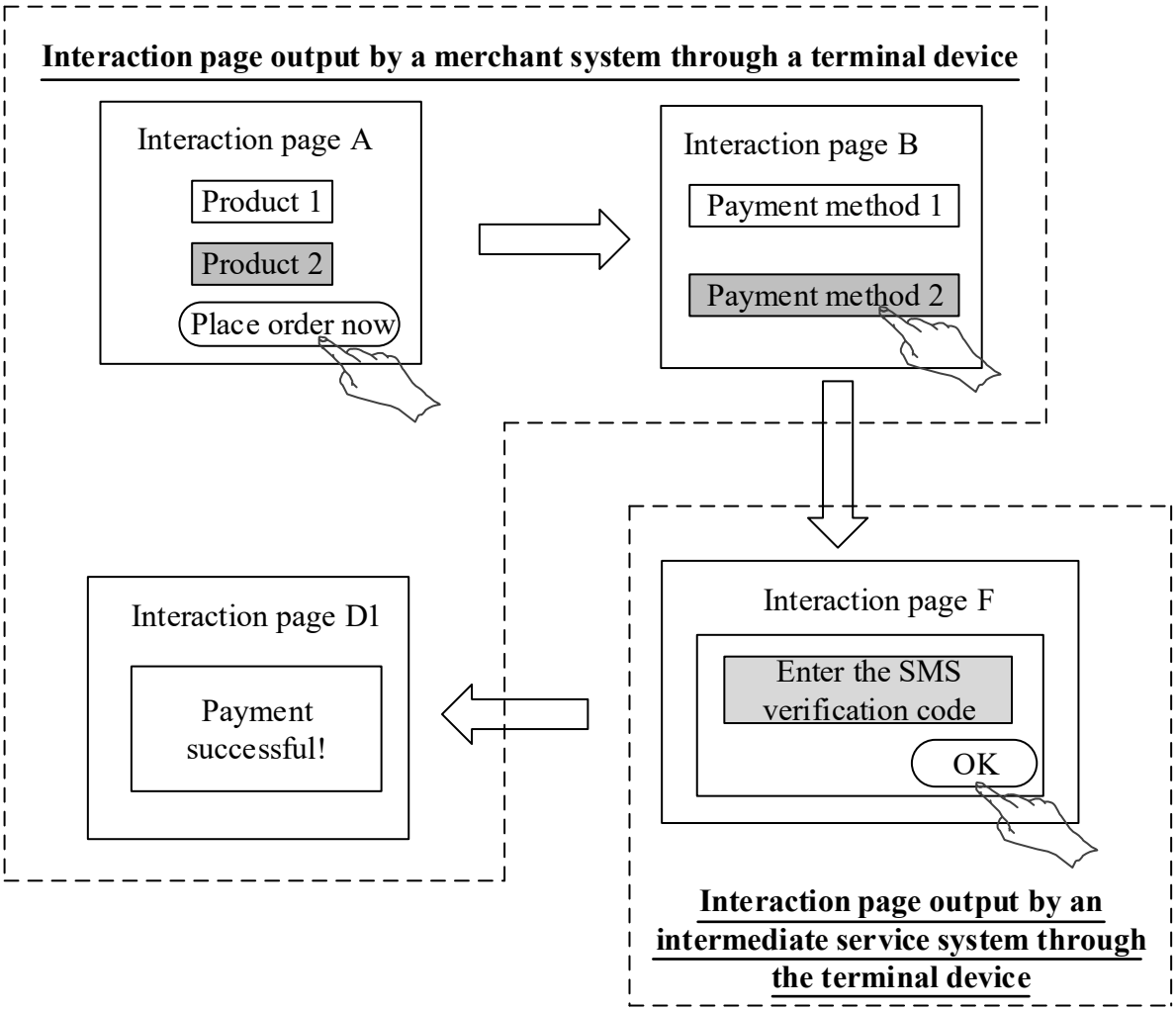

Interaction page output by a merchant system through a terminal device
Interaction page A
Product 1
Product 2
Place order now
Interaction page B
Payment method 1
Payment method 2
Interaction page D1
Payment successful!
Interaction page F
Enter the SMS verification code
OK
Interaction page output by an intermediate service system through the terminal device

FIG. 7

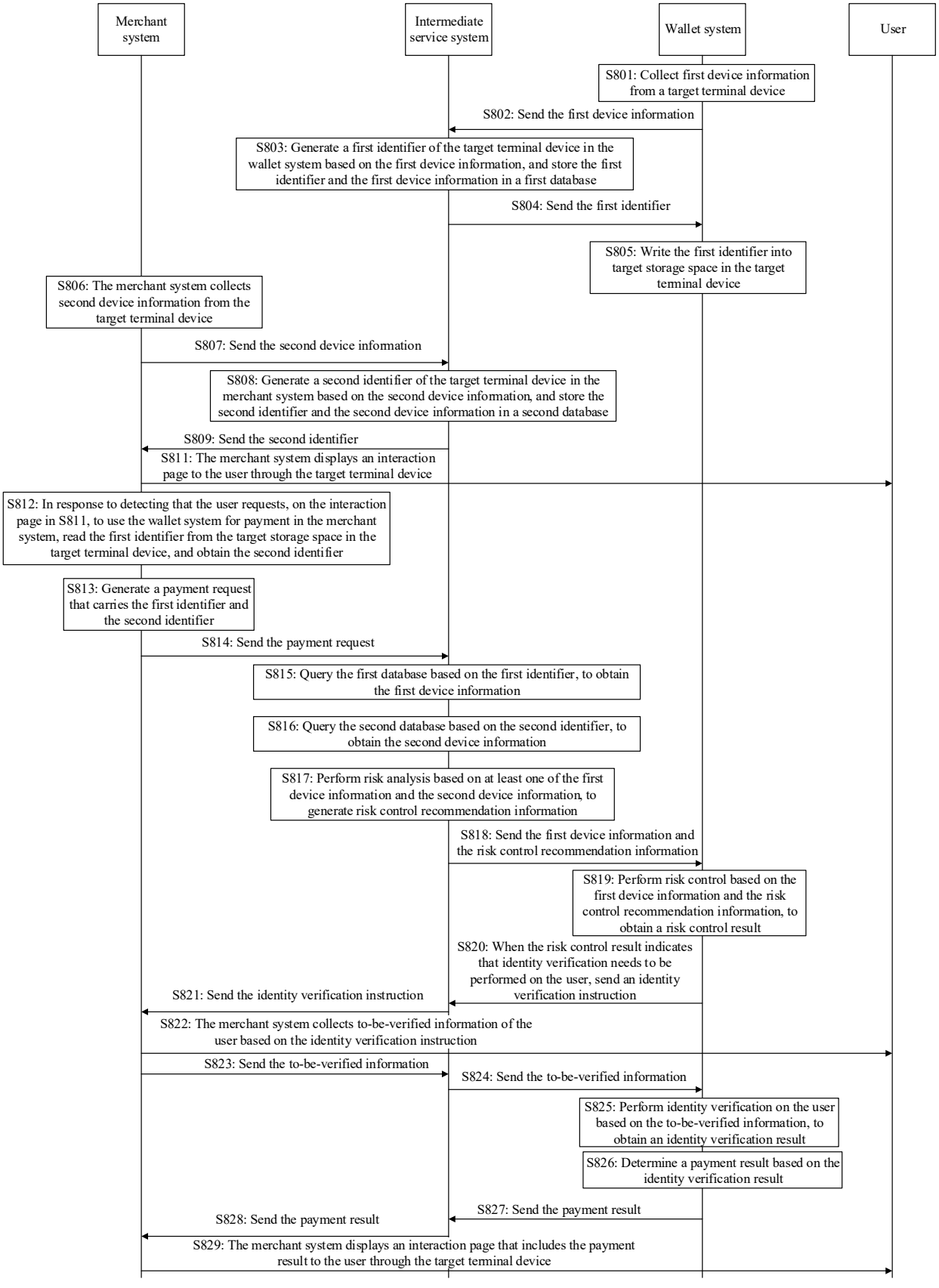

Merchant system
Intermediate service system
Wallet system
User
S801: Collect first device information from a target terminal device
S802: Send the first device information
S803: Generate a first identifier of the target terminal device in the wallet system based on the first device information, and store the first identifier and the first device information in a first database
S804: Send the first identifier
S805: Write the first identifier into target storage space in the target terminal device
S806: The merchant system collects second device information from the target terminal device
S807: Send the second device information
S808: Generate a second identifier of the target terminal device in the merchant system based on the second device information, and store the second identifier and the second device information in a second database
S809: Send the second identifier
S811: The merchant system displays an interaction page to the user through the target terminal device
S812: In response to detecting that the user requests, on the interaction page in S811, to use the wallet system for payment in the merchant system, read the first identifier from the target storage space in the target terminal device, and obtain the second identifier
S813: Generate a payment request that carries the first identifier and the second identifier
S814: Send the payment request
S815: Query the first database based on the first identifier, to obtain the first device information
S816: Query the second database based on the second identifier, to obtain the second device information
S817: Perform risk analysis based on at least one of the first device information and the second device information, to generate risk control recommendation information
S818: Send the first device information and the risk control recommendation information
S819: Perform risk control based on the first device information and the risk control recommendation information, to obtain a risk control result
S820: When the risk control result indicates that identity verification needs to be performed on the user, send an identity verification instruction
S821: Send the identity verification instruction
S822: The merchant system collects to-be-verified information of the user based on the identity verification instruction
S823: Send the to-be-verified information
S824: Send the to-be-verified information
S825: Perform identity verification on the user based on the to-be-verified information, to obtain an identity verification result
S826: Determine a payment result based on the identity verification result
S827: Send the payment result
S828: Send the payment result
S829: The merchant system displays an interaction page that includes the payment result to the user through the target terminal device

FIG. 8

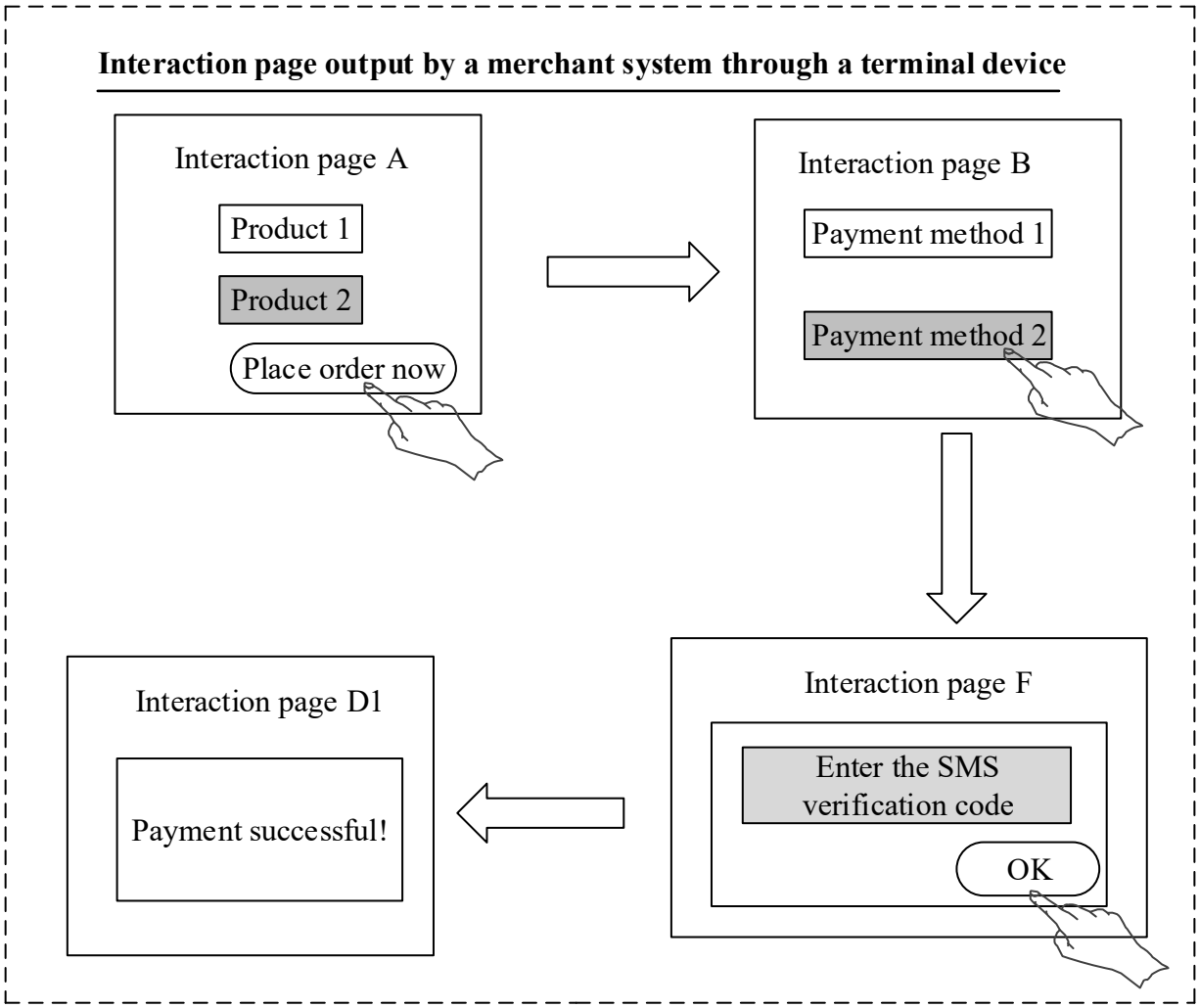

Interaction page output by a merchant system through a terminal device
Interaction page A
Product 1
Product 2
Place order now
Interaction page B
Payment method 1
Payment method 2
Interaction page F
Enter the SMS verification code
OK
Interaction page D1
Payment successful!

FIG. 9