FIG. 1

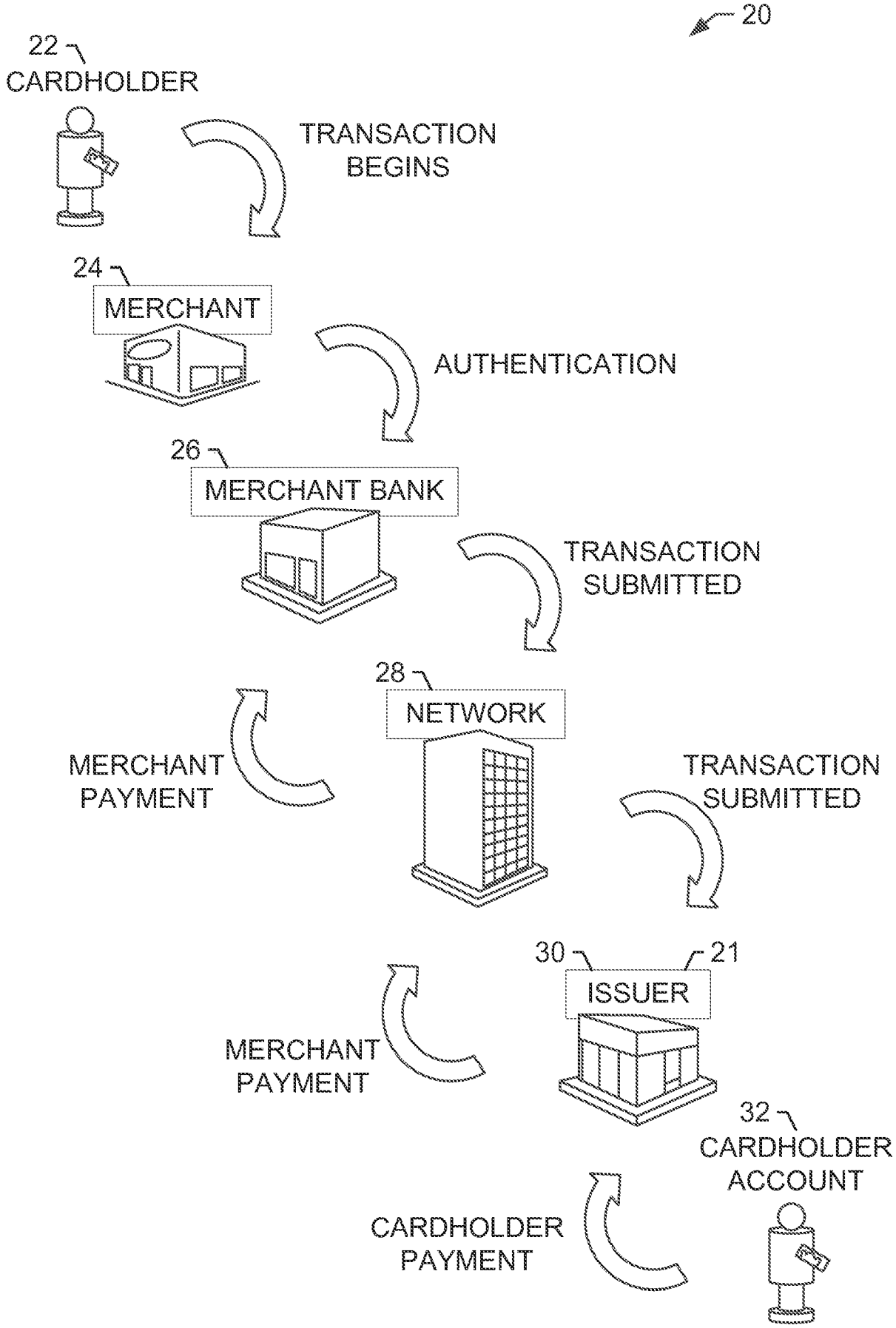

20
22
CARDHOLDER
TRANSACTION BEGINS
24
MERCHANT
AUTHENTICATION
26
MERCHANT BANK
TRANSACTION SUBMITTED
28
NETWORK
MERCHANT PAYMENT
TRANSACTION SUBMITTED
30
21
ISSUER
MERCHANT PAYMENT
32
CARDHOLDER ACCOUNT
CARDHOLDER PAYMENT

FIG. 2

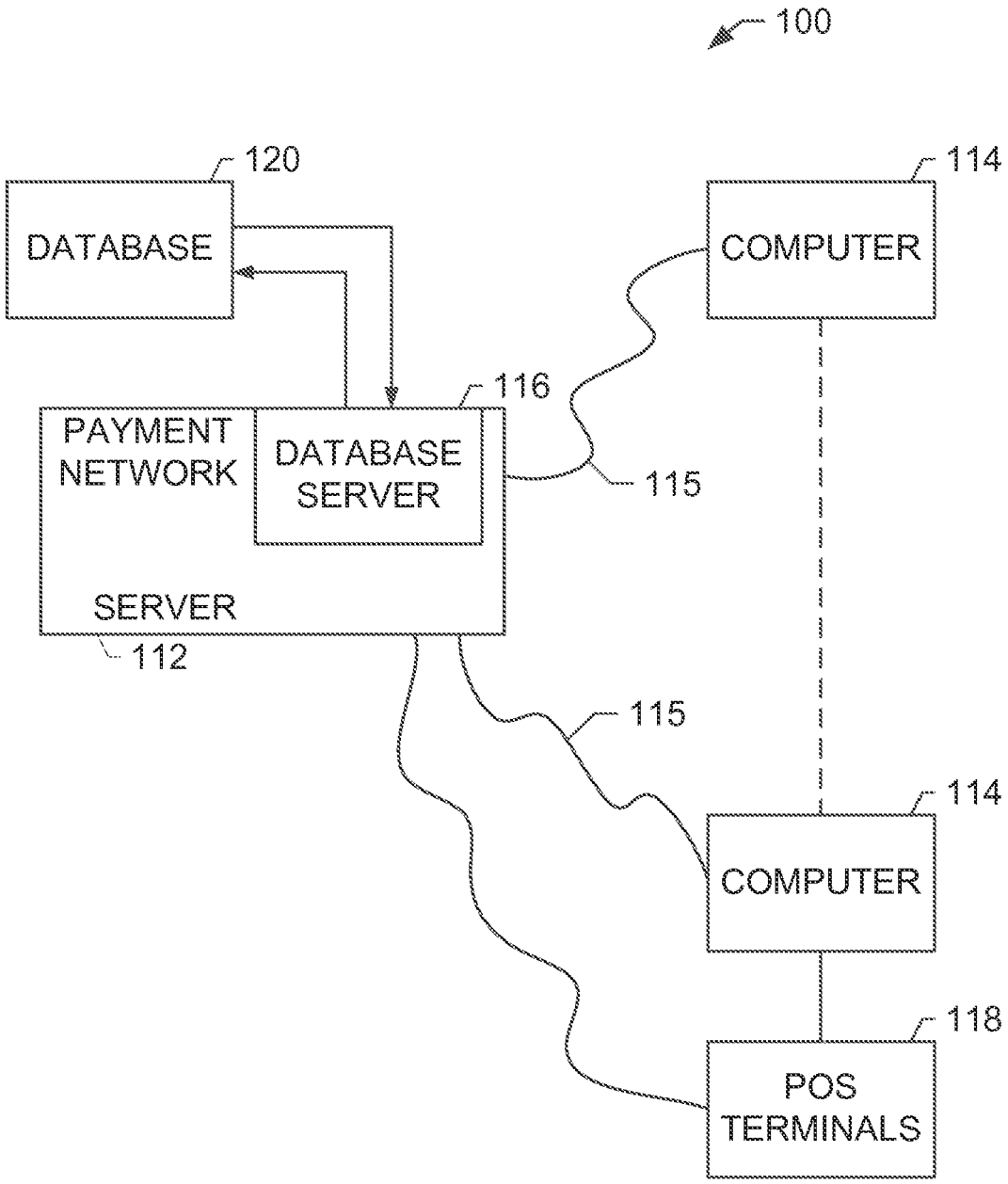
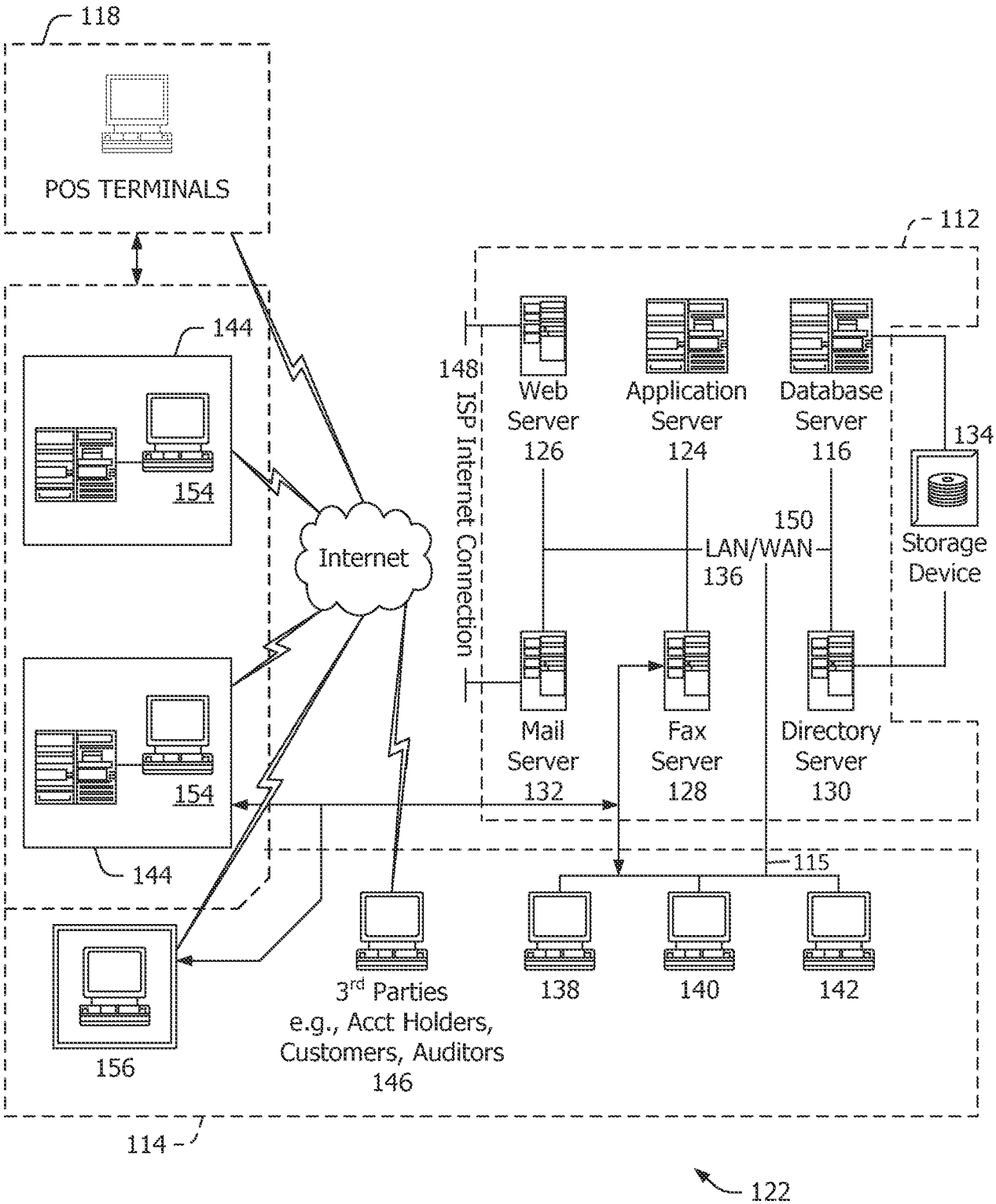

100
120
DATABASE
114
COMPUTER
116
PAYMENT NETWORK
DATABASE SERVER
115
SERVER
112
115
114
COMPUTER
118
POS TERMINALS

FIG. 3


118
POS TERMINALS
112
144
154
154
144
Internet
148
ISP Internet Connection
Web Server 126
Application Server 124
Database Server 116
134
Storage Device
150
LAN/WAN 136
Mail Server 132
Fax Server 128
Directory Server 130
115
3rd Parties e.g., Acct Holders, Customers, Auditors 146
138
140
142
156
114
122

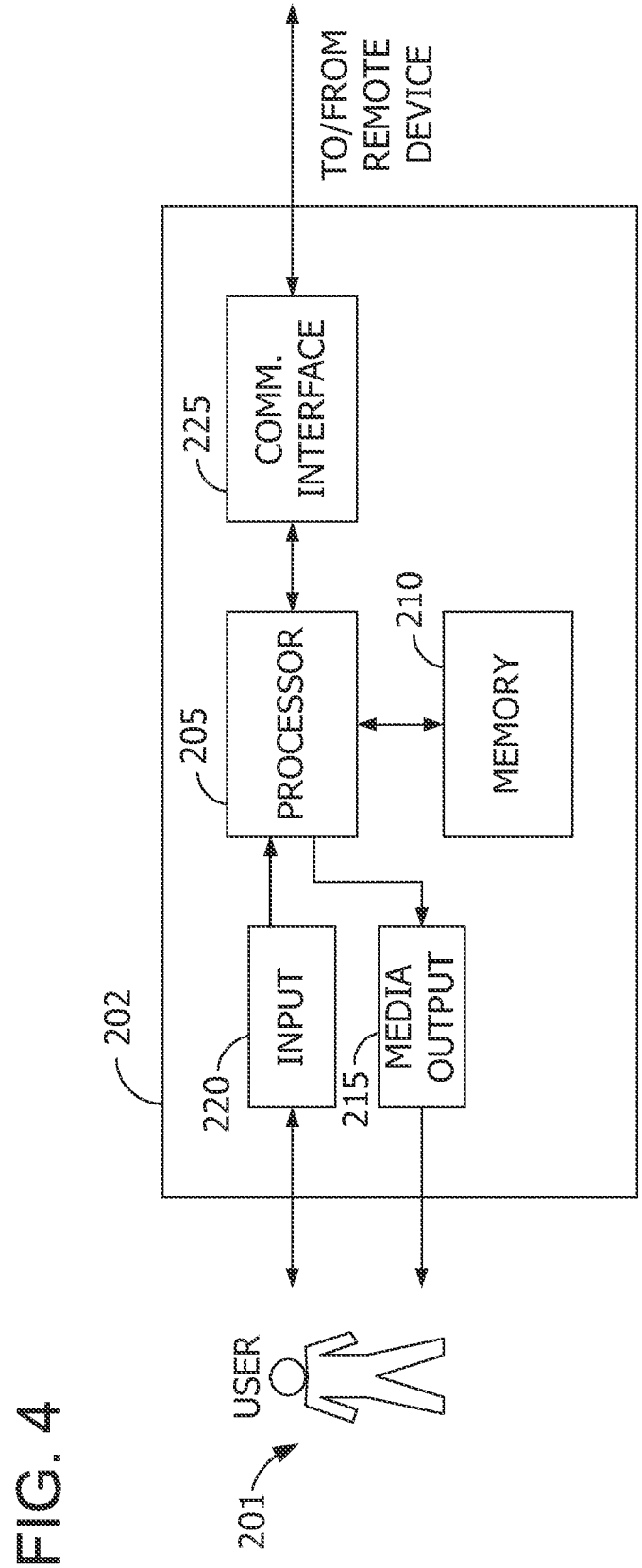

TO/FROM REMOTE DEVICE
COMM. INTERFACE
225
PROCESSOR
205
MEMORY
210
INPUT
220
MEDIA OUTPUT
215
202
USER
201

FIG. 4

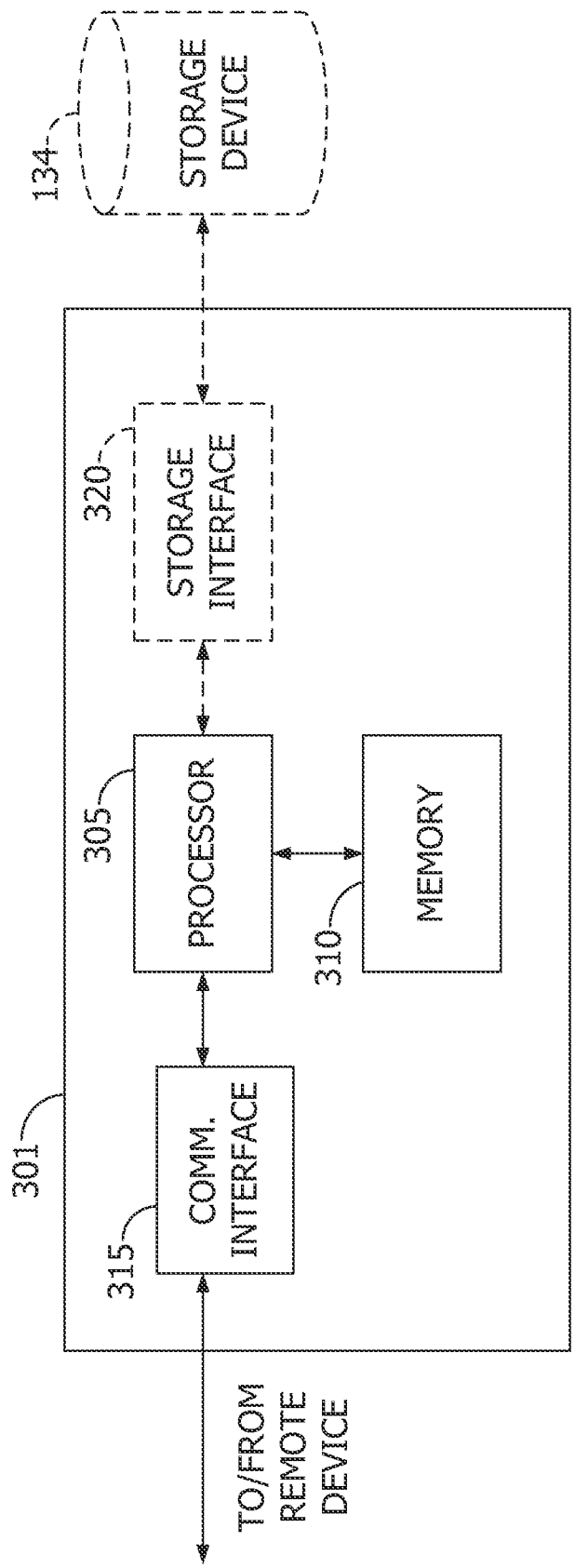

134
STORAGE DEVICE
320
STORAGE INTERFACE
305
PROCESSOR
310
MEMORY
301
315
COMM. INTERFACE
TO/FROM REMOTE DEVICE

FIG. 5

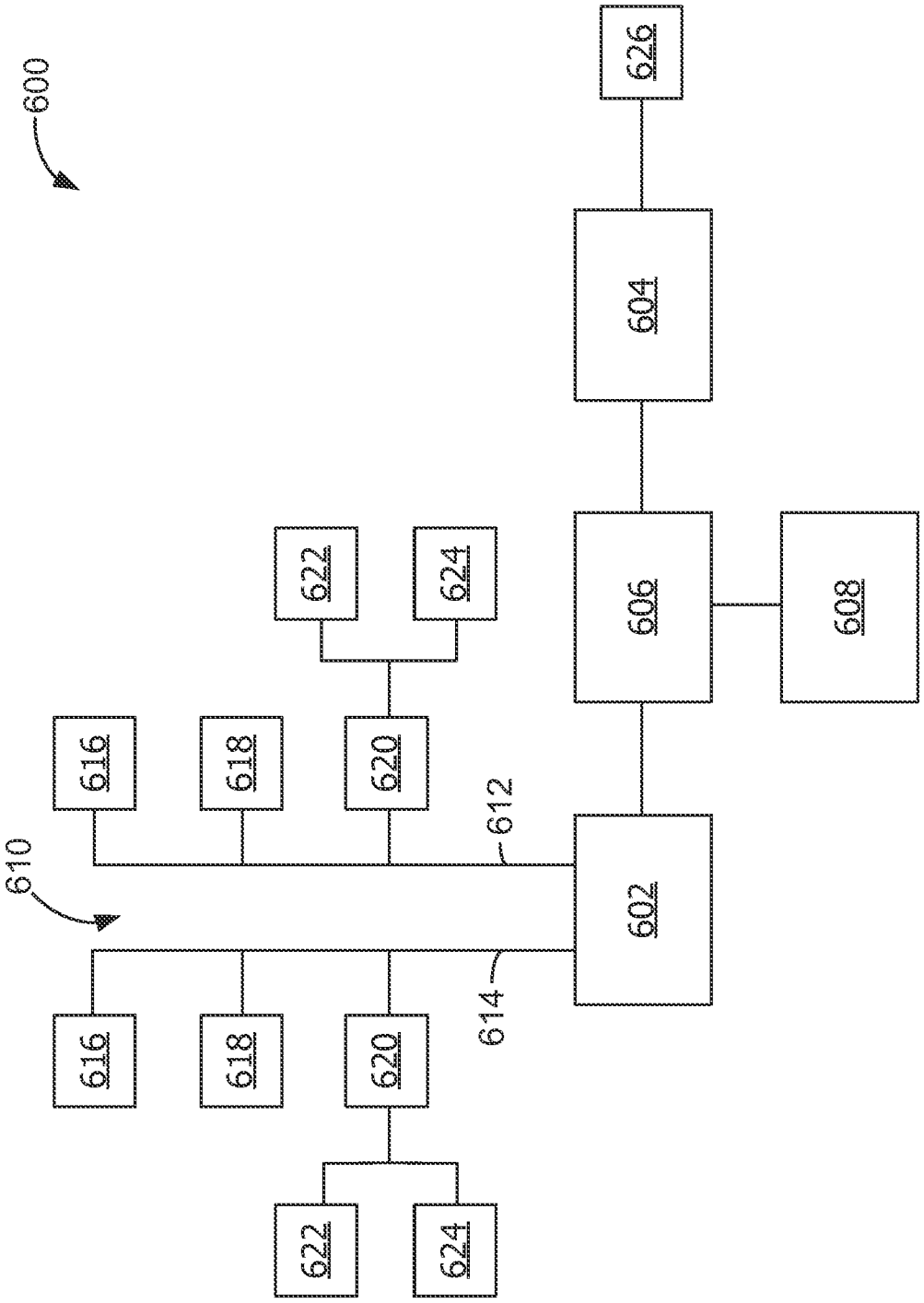

600
626
604
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602
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616
618
620
622
624

FIG. 6

FIG. 7

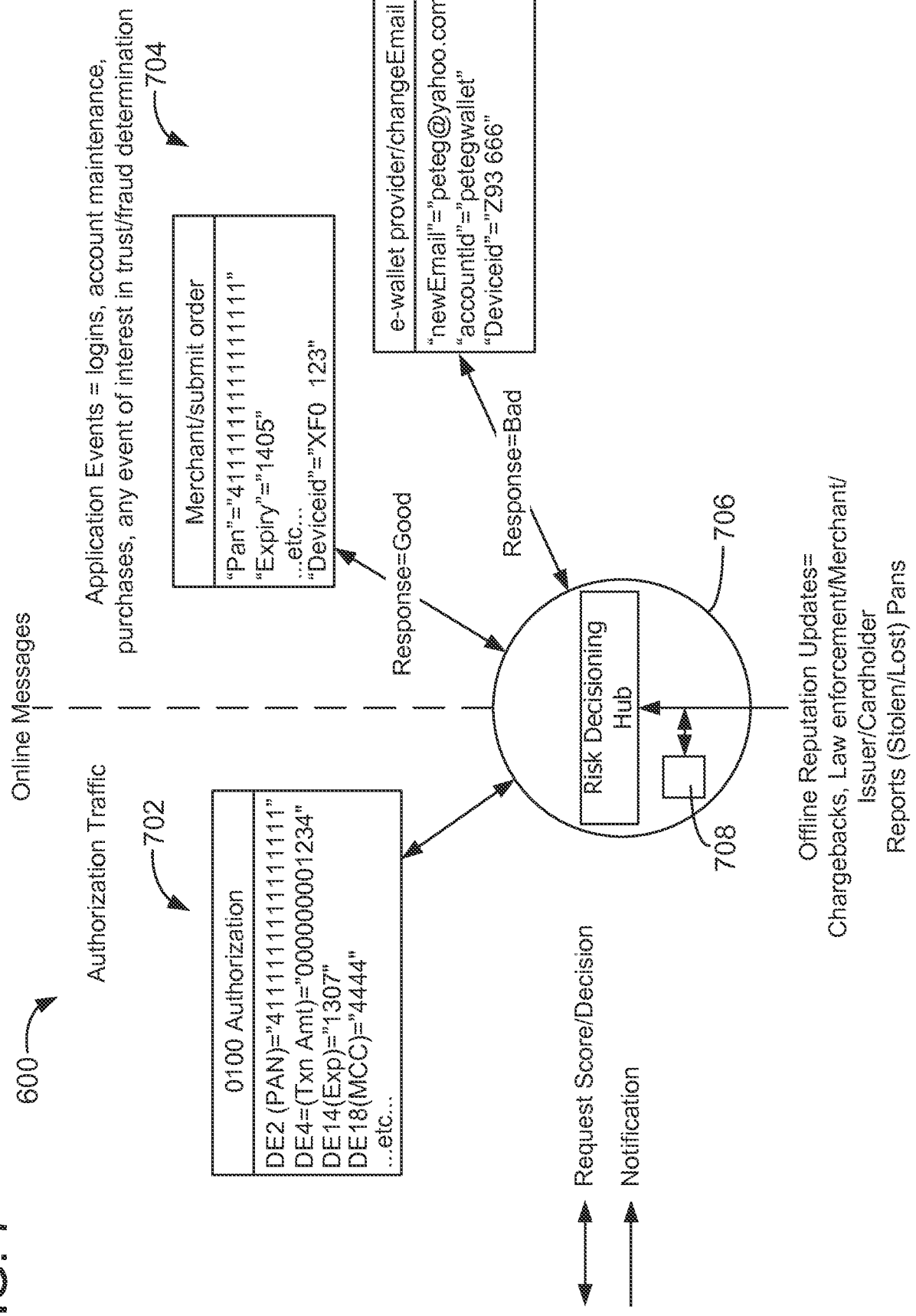

600
Online Messages
Authorization Traffic
Application Events = logins, account maintenance, purchases, any event of interest in trust/fraud determination
702
704
0100 Authorization
DE2 (PAN)="4111111111111111"
DE4=(Txn Amt)="000000001234"
DE14(Exp)="1307"
DE18(MCC)="4444"
...etc...
Merchant/submit order
"Pan"="4111111111111111"
"Expiry"="1405"
...etc...
"Deviceid"="XF0 123"
e-wallet provider/changeEmail
"newEmail"="peteg@yahoo.com"
"accountId"="petegwallet"
"Deviceid"="Z93 666"
Response=Good
Response=Bad
Risk Decisioning Hub
706
708
Request Score/Decision
Notification
Offline Reputation Updates= Chargebacks, Law enforcement/Merchant/ Issuer/Cardholder Reports (Stolen/Lost) Pans

FIG. 8

802

Parameter	804 Example 1: Scoring Request of an e-wallet Purchase (Decision=Good)	808 Example 2: Notification of a Successful E-wallet Login	810 Example 3: Scoring Request of an e-wallet EmailEdit (Decision=Bad)
ClientApplication	Acme e-wallet	Acme e-wallet	Acme e-wallet
ServiceMethod	**ScoringRequest**	**Notification**	**ScoringRequest**
AppAccountId	Petegwallet	Petegwallet	Petegwallet
AppMsgType	formFill	pkmsLogin	SaveEmail
EventType*	Purchase	Login	UpdateEmail
PAN	5111111111111		
ExternalScore	0, 1, 2 =Good, Bad, Unknown		0, 1, 2 =Good, Bad, Unknown
IPAddress	178.68.68.230	178.68.68.230	123.45.56.89
Email	pg@yahoo.com	pg@yahoo.com	jesse_james@aol.com
Telephone	+353861230321	+353861230321	
Address	123 Hope St., Birmingham, AL, US	123 Hope St., Birmingham, AL, US	683 Garden Villas, St. Louis, MO, US
DeviceFingerprint	FF0793...	FF0793...	AB666...
FingerprintProvider	Blah corporation	Blah corporation	Blah corporation
TxnAmount	80.25		
TxnCurrCode	840		
MerchantName	AcmeToys		
MerchantId	512341234567890		
MCC	4455		
NotificationOutcome		**Success**	
ServiceDecision	**Good**		**Bad**
ServiceScore	**150**		**850**

806

FIG. 9

Parameter	Example 4: Notification of a Successful PAReq/PARes	Example 5: Scoring Request of an 0100	Example 6: Notification of a 0120 Last Decline
ClientApplication	3DS	Authorization	CIS
ServiceMethod	**Notification**	**ScoringRequest**	**Notification**
AppAccountId			
AppMsgType	PARes	0100	0120
EventType	Purchase	Purchase	Purchase
DeviceFingerprint	FF0793...		
FingerprintProvider	41st, MasterCard...etc.		
PAN	5111111111111	5111111111111	5111111111111
ExternalScore			
Email	pg@yahoo.com		
Telephone	+353861230321		
Address	123 Hope St., Birmingham, AL, US		
TxnAmount	80.25	80.25	80.25
TxnCurrCode	840	840	840
MerchantName	AcmeToys	AcmeToys	AcmeToys
MerchantId	512341234567890	512341234567890	512341234567890
MCC	4455	4455	4455
UCAF	**9F03**	**9F03**	4455
Txn Identifier		**7878787878123**	**7878787878123**
NotificationOutcome	**Success**		**Failure**
ServiceDecision		**Good**	
ServiceScore		**150**	
ServiceReasonCode		**A1**	

FIG. 10

Parameter	Example 7: Notification of a Successful Payment Gateway Order
ClientApplication	Foo Payment Gateway
ServiceMethod	**Notification**
AppAccountId	Peteg
AppMsgType	Purchase
AppMsgSubtype	
EventType	Purchase
DeviceFingerprint	FF0793...
FingerprintProvider	41st, MasterCard...etc.
PAN	5111111111111
ExternalScore	
Email	pg@yahoo.com
Telephone	+353861230321
Address	123 Hope St., Birmingham, AL, US
TxnAmount	80.25
TxnCurrCode	840
MerchantName	AcmeToys
MerchantId	512341234567890
MCC	4455
UCAF	9F03
BankNetRefNumber	
NotificationOutcome	**Success**
ServiceDecision	
ServiceScore	
ServiceReasonCode	