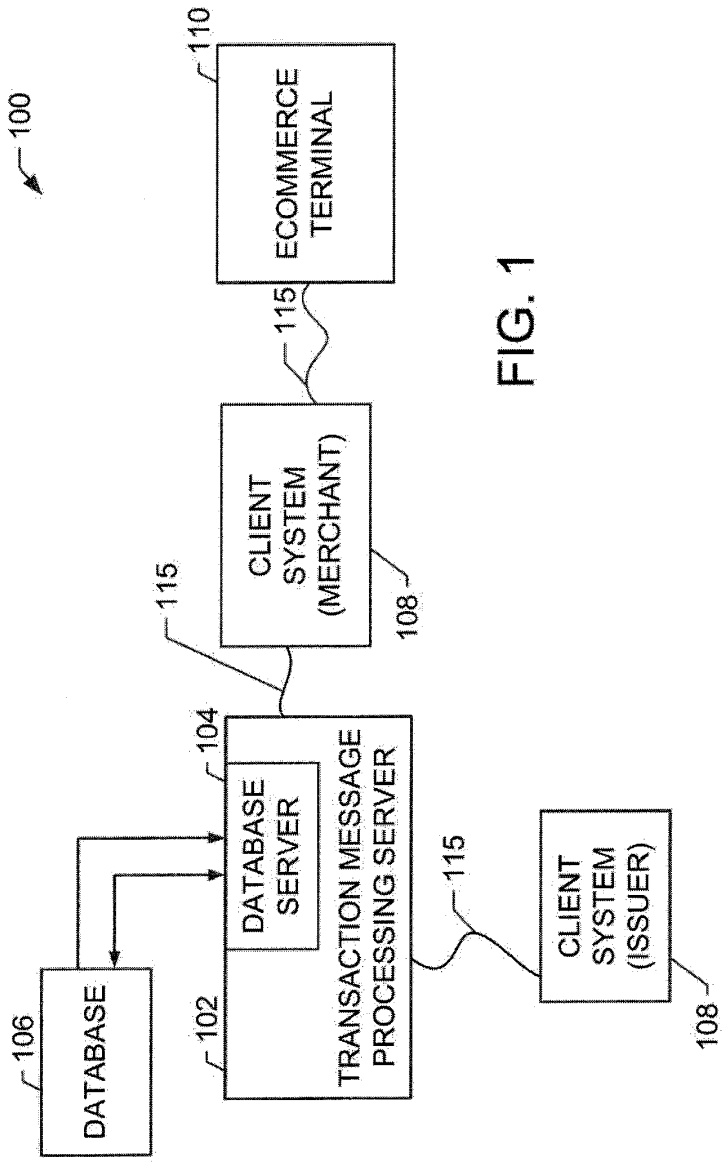

100
110
ECOMMERCE TERMINAL
115
CLIENT SYSTEM (MERCHANT)
108
115
104
DATABASE SERVER
TRANSACTION MESSAGE PROCESSING SERVER
102
115
CLIENT SYSTEM (ISSUER)
108
106
DATABASE

FIG. 1

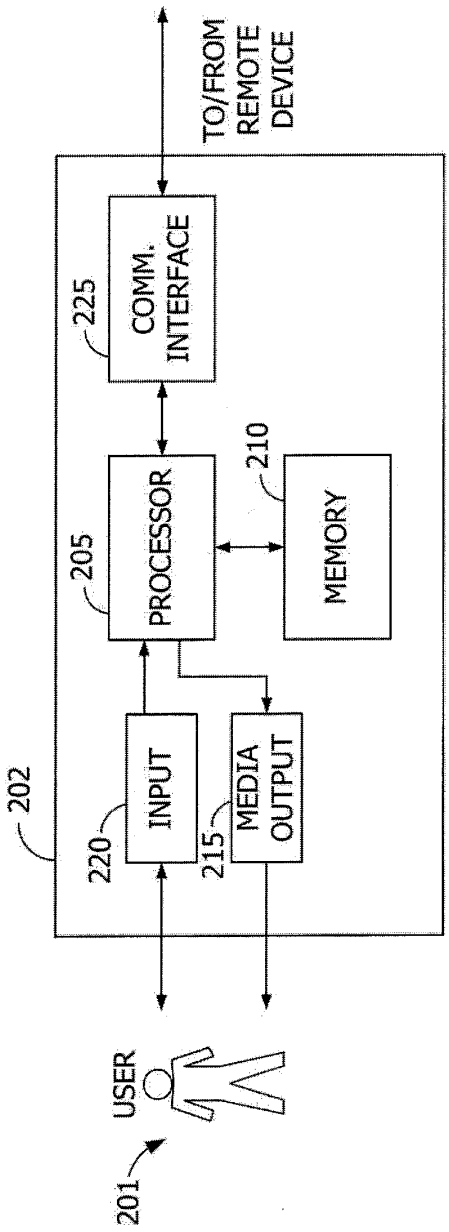

TO/FROM REMOTE DEVICE
COMM. INTERFACE
225
PROCESSOR
205
MEMORY
210
INPUT
220
MEDIA OUTPUT
215
202
USER
201

FIG. 2

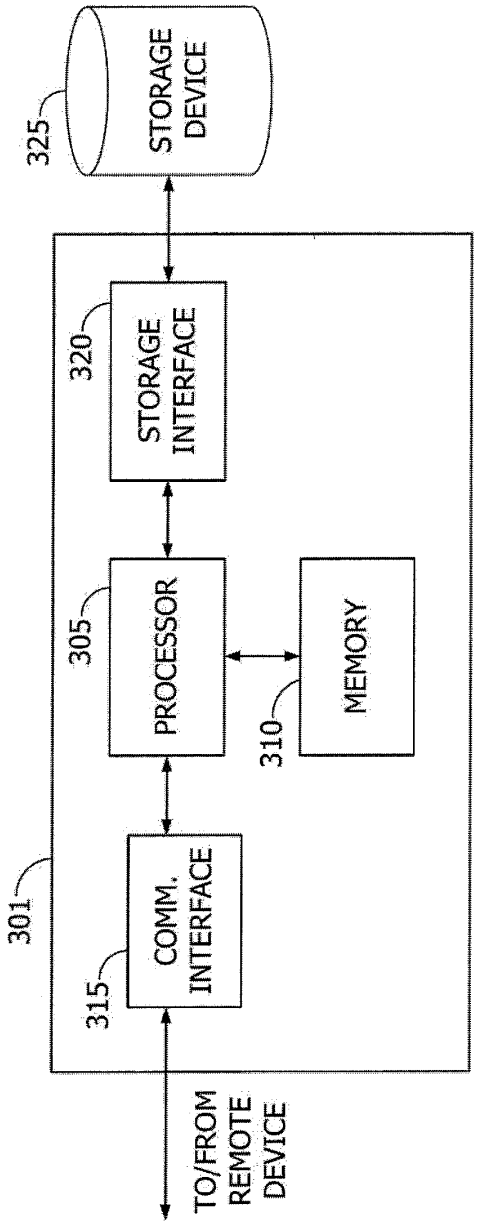

325
STORAGE DEVICE
320
STORAGE INTERFACE
305
PROCESSOR
310
MEMORY
301
315
COMM. INTERFACE
TO/FROM REMOTE DEVICE

FIG. 3

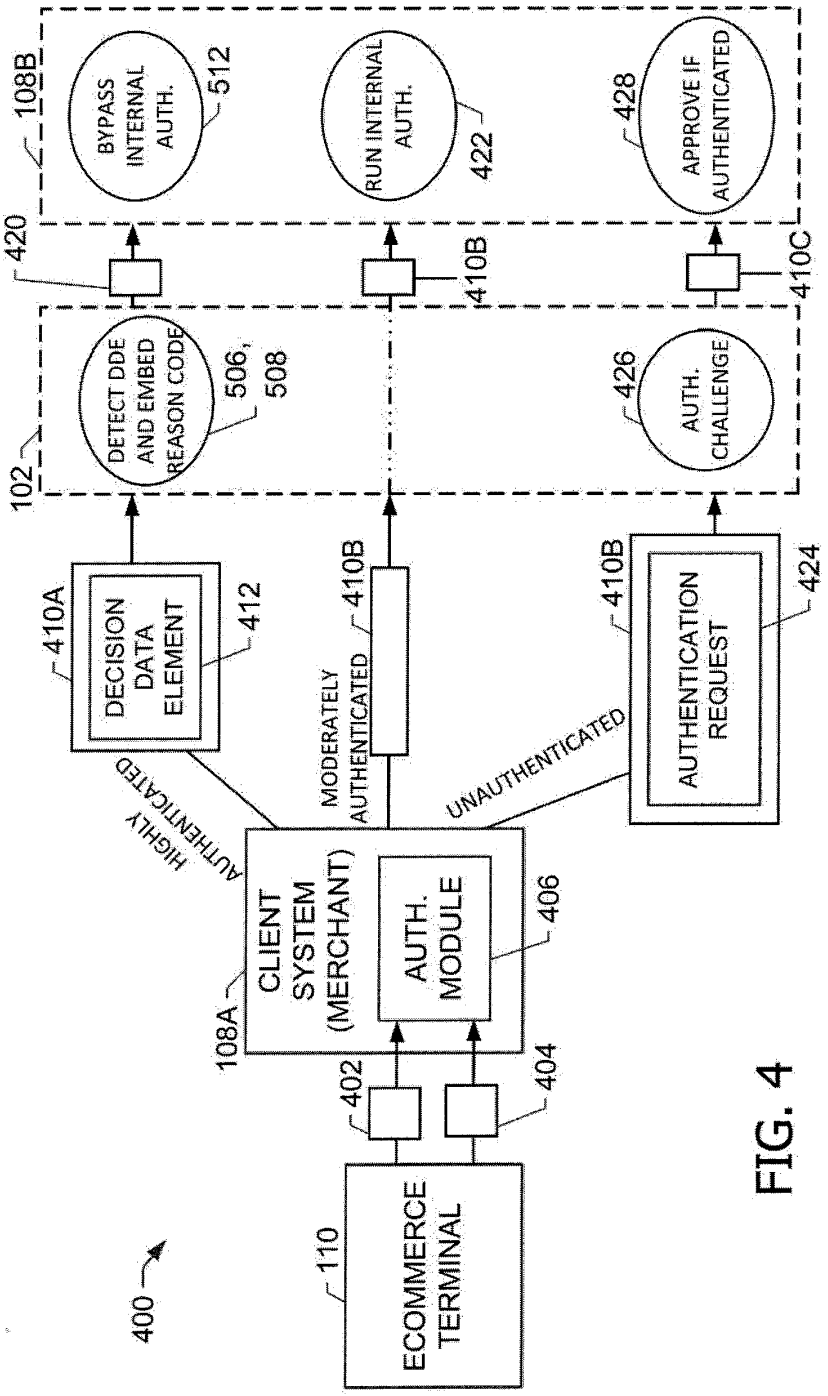

400
110
ECOMMERCE TERMINAL
402
404
108A
CLIENT SYSTEM (MERCHANT)
AUTH. MODULE
406
HIGHLY AUTHENTICATED
MODERATELY AUTHENTICATED
UNAUTHENTICATED
410A
DECISION DATA ELEMENT
412
410B
410B
AUTHENTICATION REQUEST
424
102
DETECT DDE AND EMBED REASON CODE
506, 508
AUTH. CHALLENGE
426
420
410B
410C
108B
BYPASS INTERNAL AUTH.
512
RUN INTERNAL AUTH.
422
428
APPROVE IF AUTHENTICATED

FIG. 4

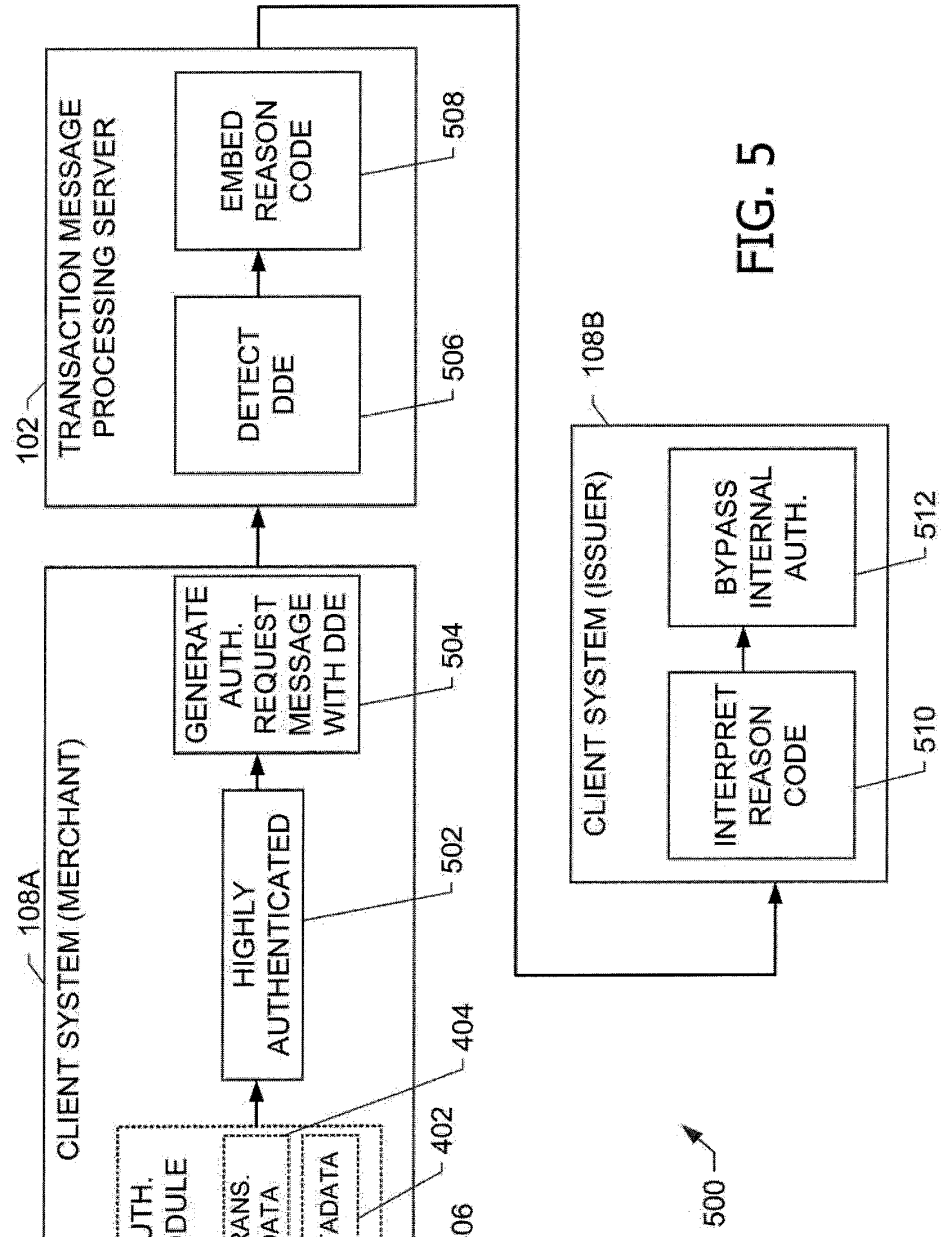

500
108A
CLIENT SYSTEM (MERCHANT)
AUTH. MODULE
TRANS. DATA
METADATA
404
402
406
HIGHLY AUTHENTICATED
502
GENERATE AUTH. REQUEST MESSAGE WITH DDE
504
102
TRANSACTION MESSAGE PROCESSING SERVER
DETECT DDE
506
EMBED REASON CODE
508
108B
CLIENT SYSTEM (ISSUER)
INTERPRET REASON CODE
510
BYPASS INTERNAL AUTH.
512

FIG. 5

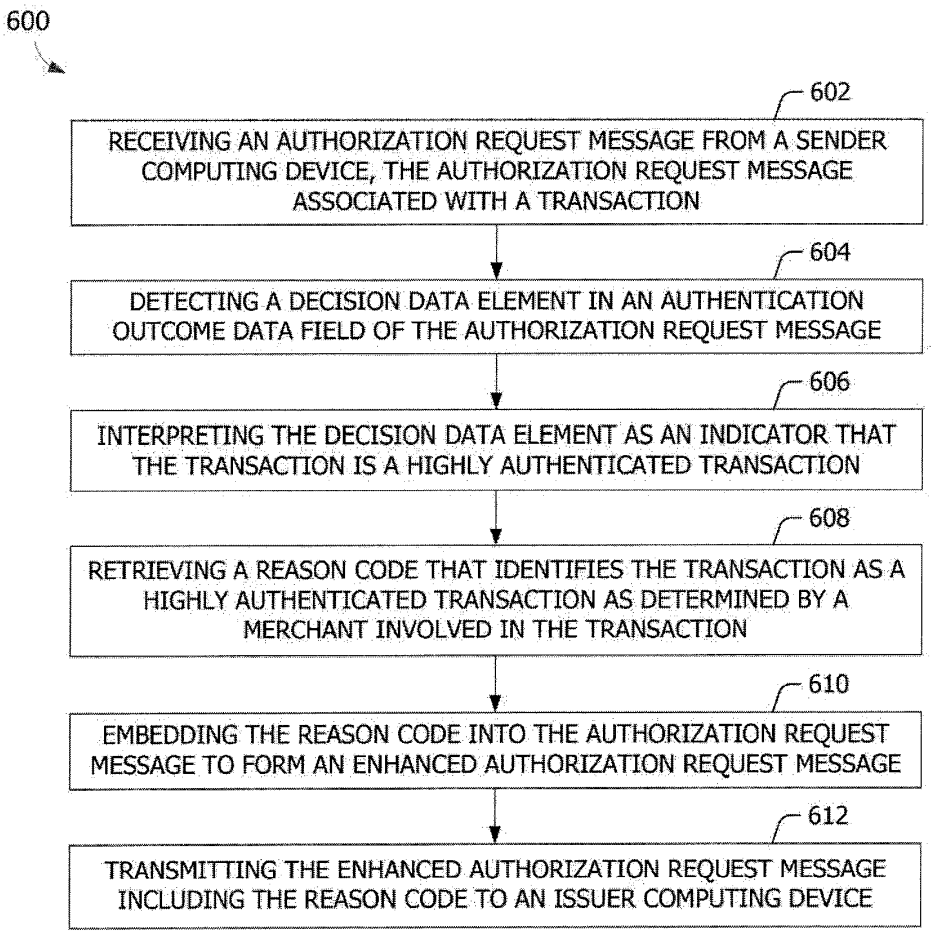

600
602
RECEIVING AN AUTHORIZATION REQUEST MESSAGE FROM A SENDER COMPUTING DEVICE, THE AUTHORIZATION REQUEST MESSAGE ASSOCIATED WITH A TRANSACTION
604
DETECTING A DECISION DATA ELEMENT IN AN AUTHENTICATION OUTCOME DATA FIELD OF THE AUTHORIZATION REQUEST MESSAGE
606
INTERPRETING THE DECISION DATA ELEMENT AS AN INDICATOR THAT THE TRANSACTION IS A HIGHLY AUTHENTICATED TRANSACTION
608
RETRIEVING A REASON CODE THAT IDENTIFIES THE TRANSACTION AS A HIGHLY AUTHENTICATED TRANSACTION AS DETERMINED BY A MERCHANT INVOLVED IN THE TRANSACTION
610
EMBEDDING THE REASON CODE INTO THE AUTHORIZATION REQUEST MESSAGE TO FORM AN ENHANCED AUTHORIZATION REQUEST MESSAGE
612
TRANSMITTING THE ENHANCED AUTHORIZATION REQUEST MESSAGE INCLUDING THE REASON CODE TO AN ISSUER COMPUTING DEVICE

FIG. 6

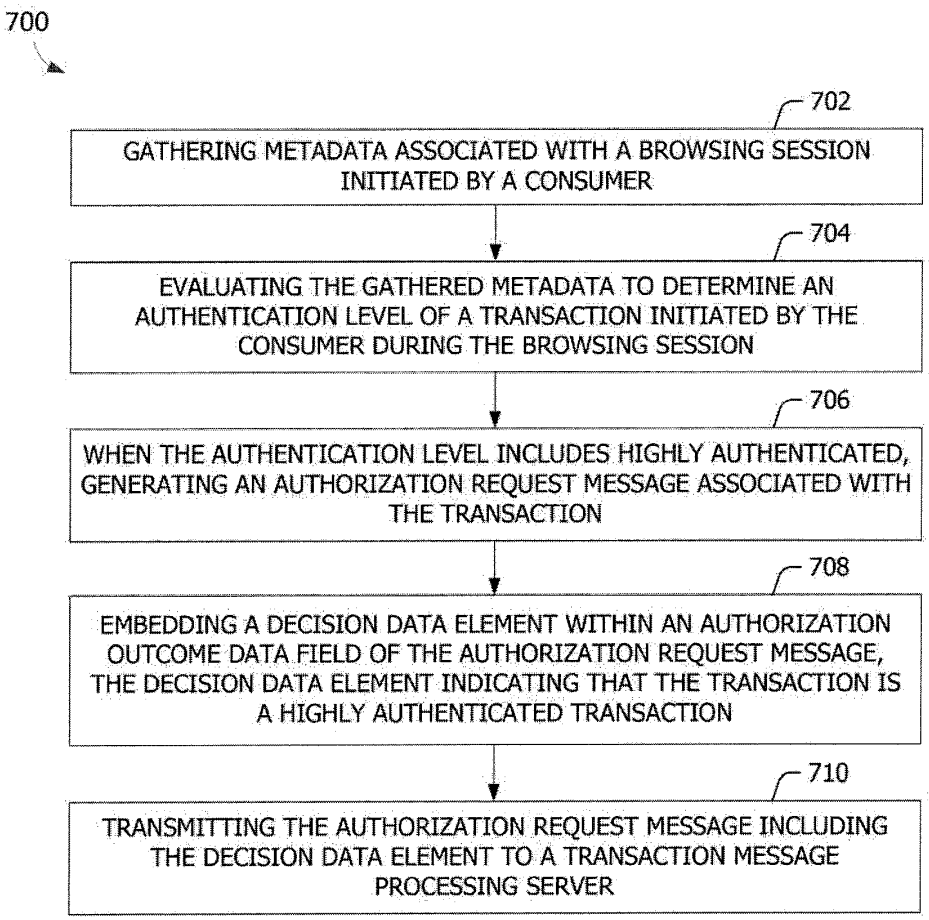

700
702
GATHERING METADATA ASSOCIATED WITH A BROWSING SESSION INITIATED BY A CONSUMER
704
EVALUATING THE GATHERED METADATA TO DETERMINE AN AUTHENTICATION LEVEL OF A TRANSACTION INITIATED BY THE CONSUMER DURING THE BROWSING SESSION
706
WHEN THE AUTHENTICATION LEVEL INCLUDES HIGHLY AUTHENTICATED, GENERATING AN AUTHORIZATION REQUEST MESSAGE ASSOCIATED WITH THE TRANSACTION
708
EMBEDDING A DECISION DATA ELEMENT WITHIN AN AUTHORIZATION OUTCOME DATA FIELD OF THE AUTHORIZATION REQUEST MESSAGE, THE DECISION DATA ELEMENT INDICATING THAT THE TRANSACTION IS A HIGHLY AUTHENTICATED TRANSACTION
710
TRANSMITTING THE AUTHORIZATION REQUEST MESSAGE INCLUDING THE DECISION DATA ELEMENT TO A TRANSACTION MESSAGE PROCESSING SERVER

FIG. 7