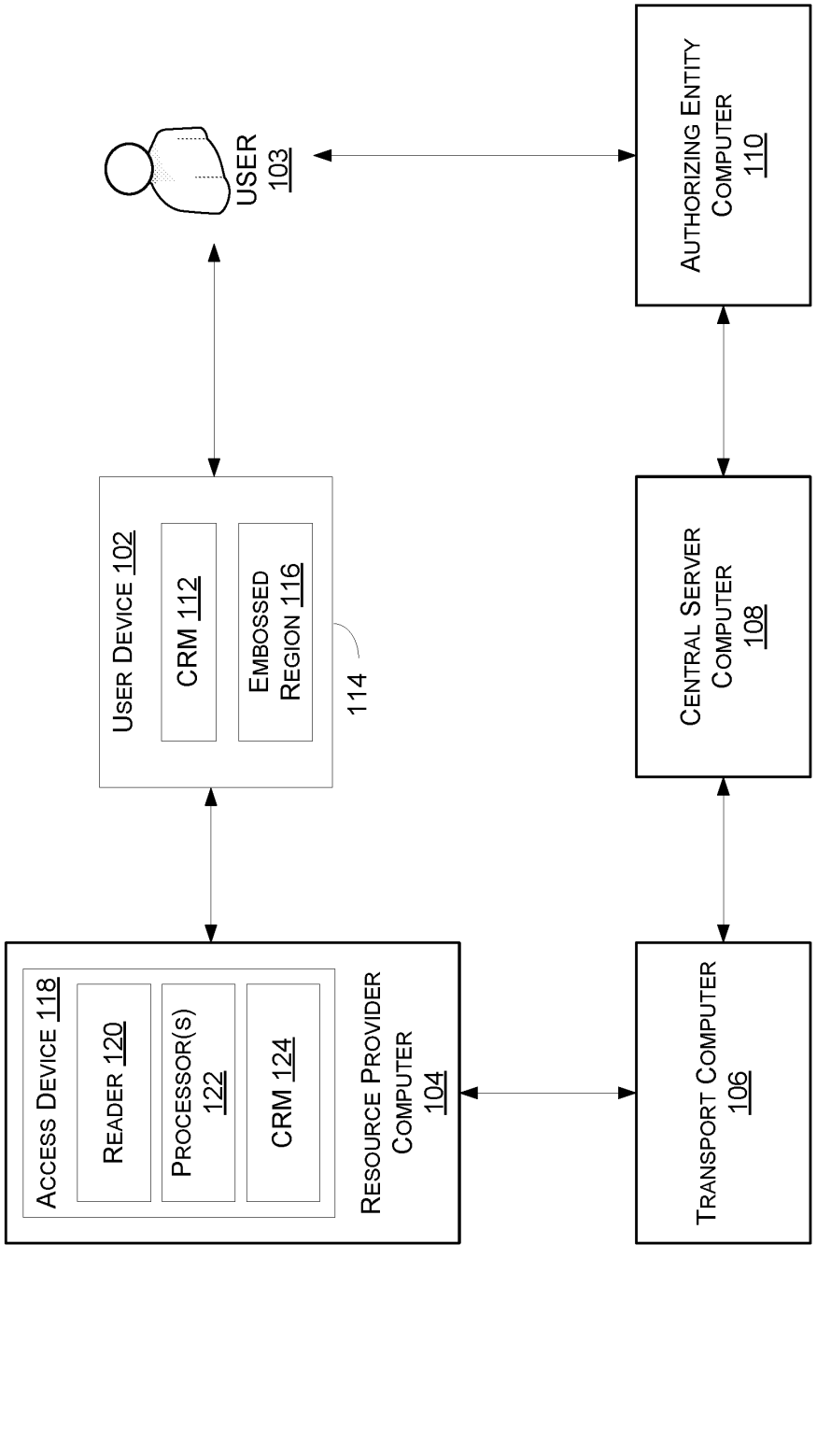

USER 103
AUTHORIZING ENTITY COMPUTER 110
USER DEVICE 102
CRM 112
EMBOSSED REGION 116
114
CENTRAL SERVER COMPUTER 108
ACCESS DEVICE 118
READER 120
PROCESSOR(S) 122
CRM 124
RESOURCE PROVIDER COMPUTER 104
TRANSPORT COMPUTER 106
100

FIG. 1

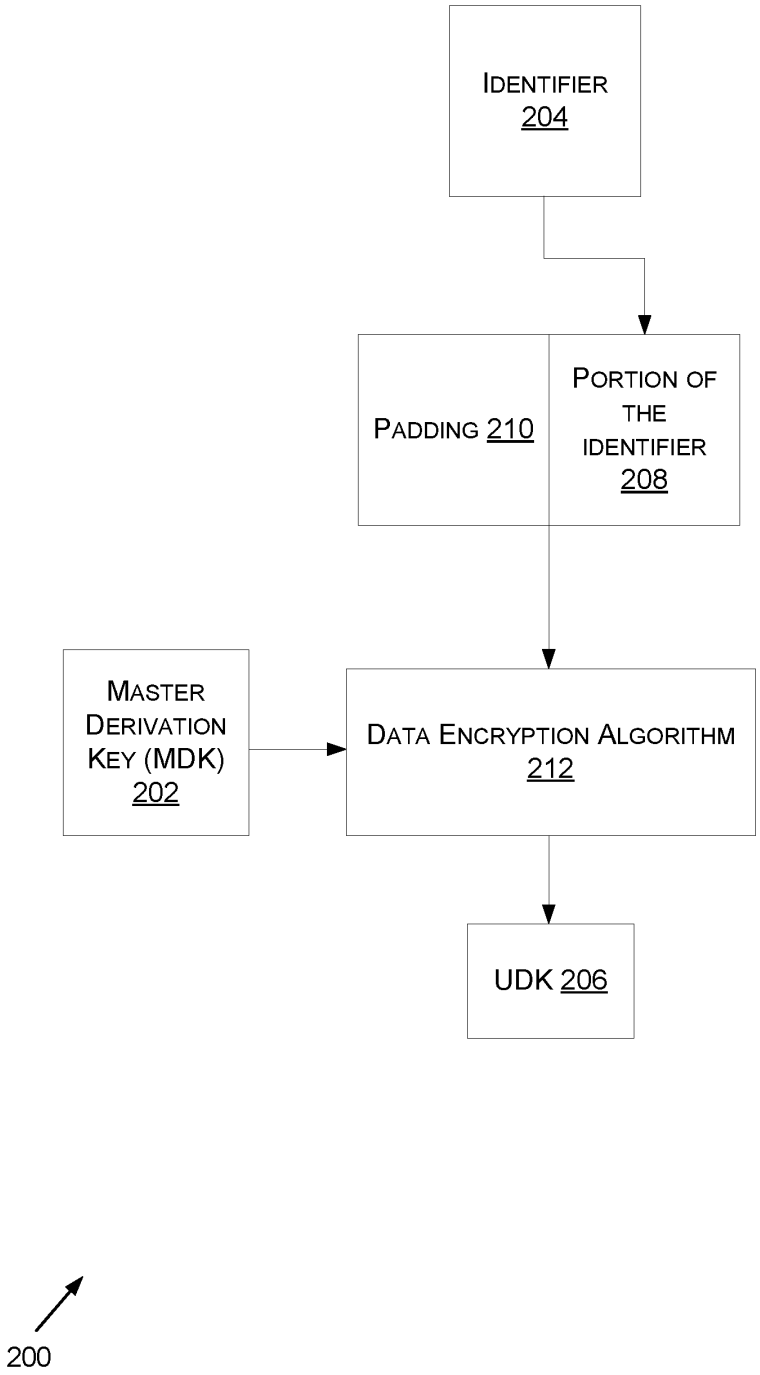

IDENTIFIER
204
PADDING 210
PORTION OF THE IDENTIFIER
208
MASTER DERIVATION KEY (MDK)
202
DATA ENCRYPTION ALGORITHM
212
UDK 206
200

FIG. 2

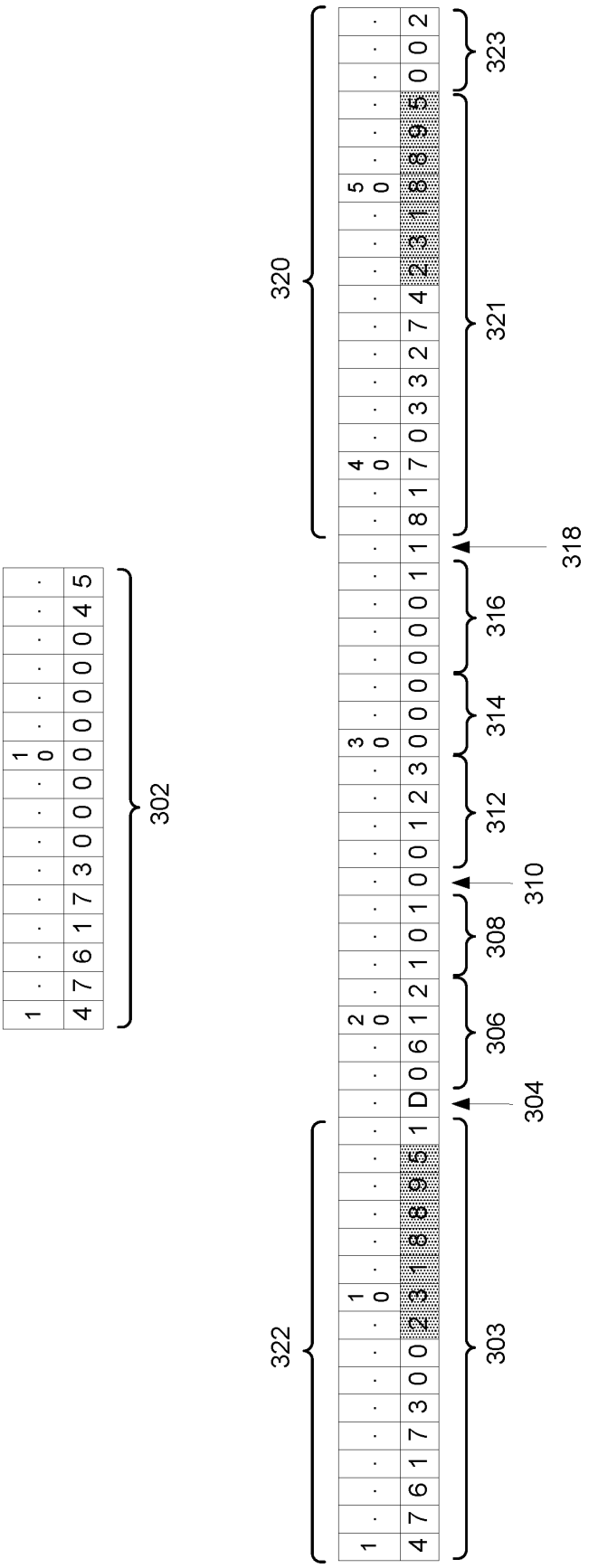


FIG. 3

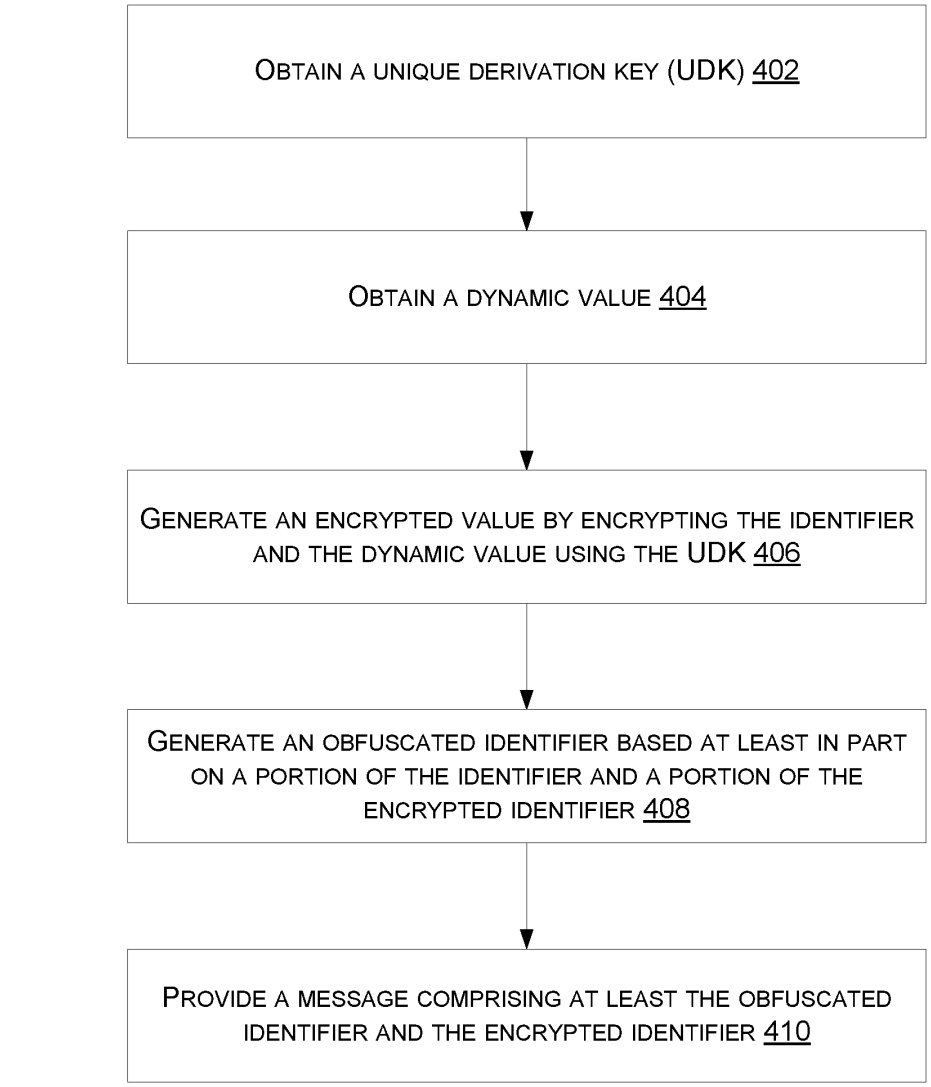
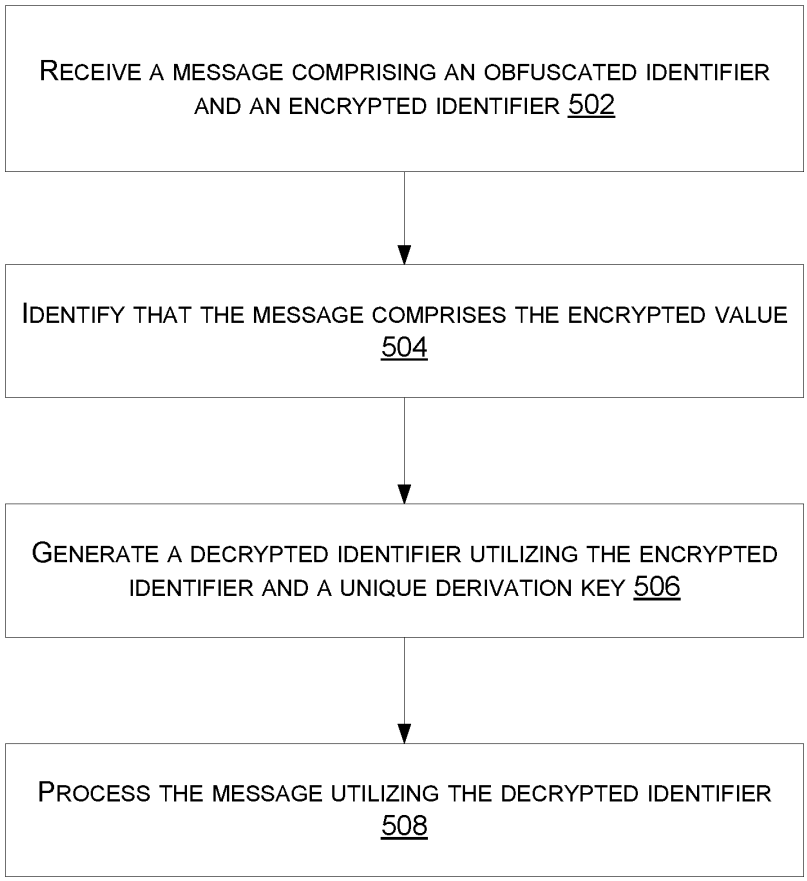

OBTAIN A UNIQUE DERIVATION KEY (UDK) 402
OBTAIN A DYNAMIC VALUE 404
GENERATE AN ENCRYPTED VALUE BY ENCRYPTING THE IDENTIFIER AND THE DYNAMIC VALUE USING THE UDK 406
GENERATE AN OBFUSCATED IDENTIFIER BASED AT LEAST IN PART ON A PORTION OF THE IDENTIFIER AND A PORTION OF THE ENCRYPTED IDENTIFIER 408
PROVIDE A MESSAGE COMPRISING AT LEAST THE OBFUSCATED IDENTIFIER AND THE ENCRYPTED IDENTIFIER 410
400

FIG. 4


RECEIVE A MESSAGE COMPRISING AN OBFUSCATED IDENTIFIER AND AN ENCRYPTED IDENTIFIER 502
IDENTIFY THAT THE MESSAGE COMPRISES THE ENCRYPTED VALUE 504
GENERATE A DECRYPTED IDENTIFIER UTILIZING THE ENCRYPTED IDENTIFIER AND A UNIQUE DERIVATION KEY 506
PROCESS THE MESSAGE UTILIZING THE DECRYPTED IDENTIFIER 508

500

FIG. 5