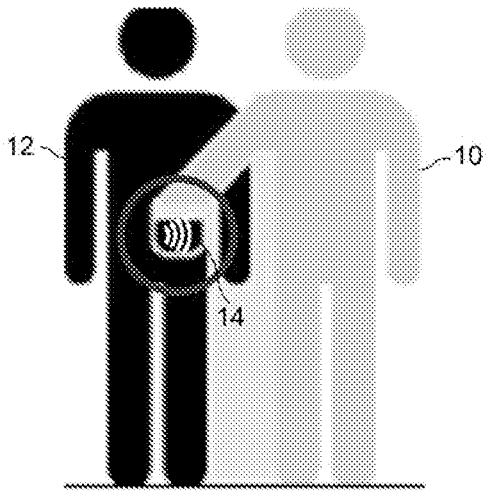

12
10
14

FIG. 1

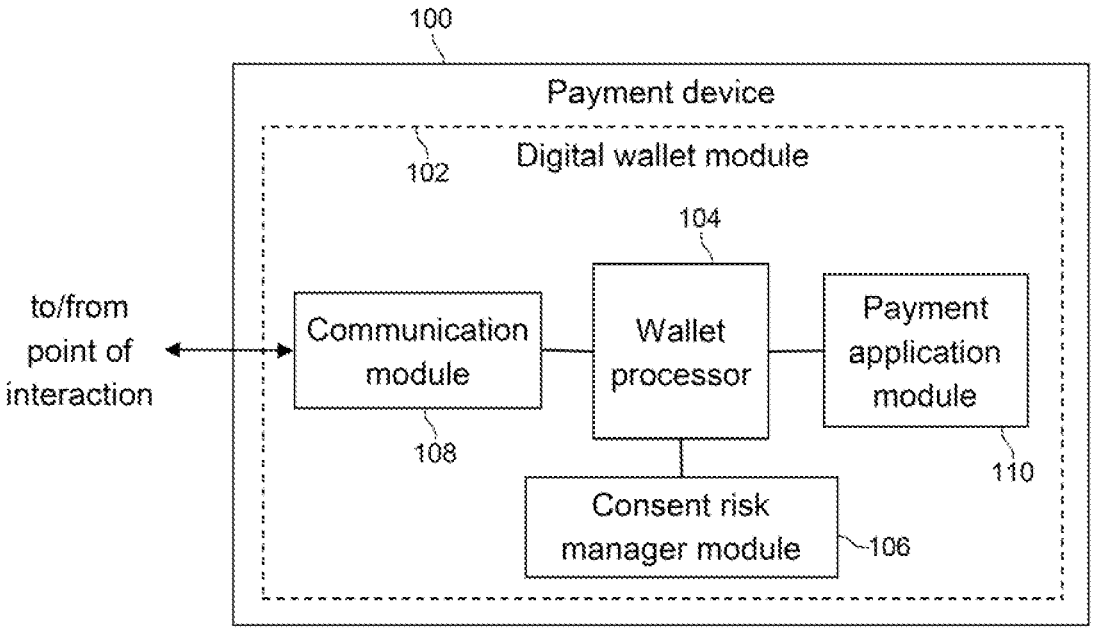

100
Payment device
102
Digital wallet module
104
to/from point of interaction
Communication module
Wallet processor
Payment application module
108
110
Consent risk manager module
106

FIG. 2

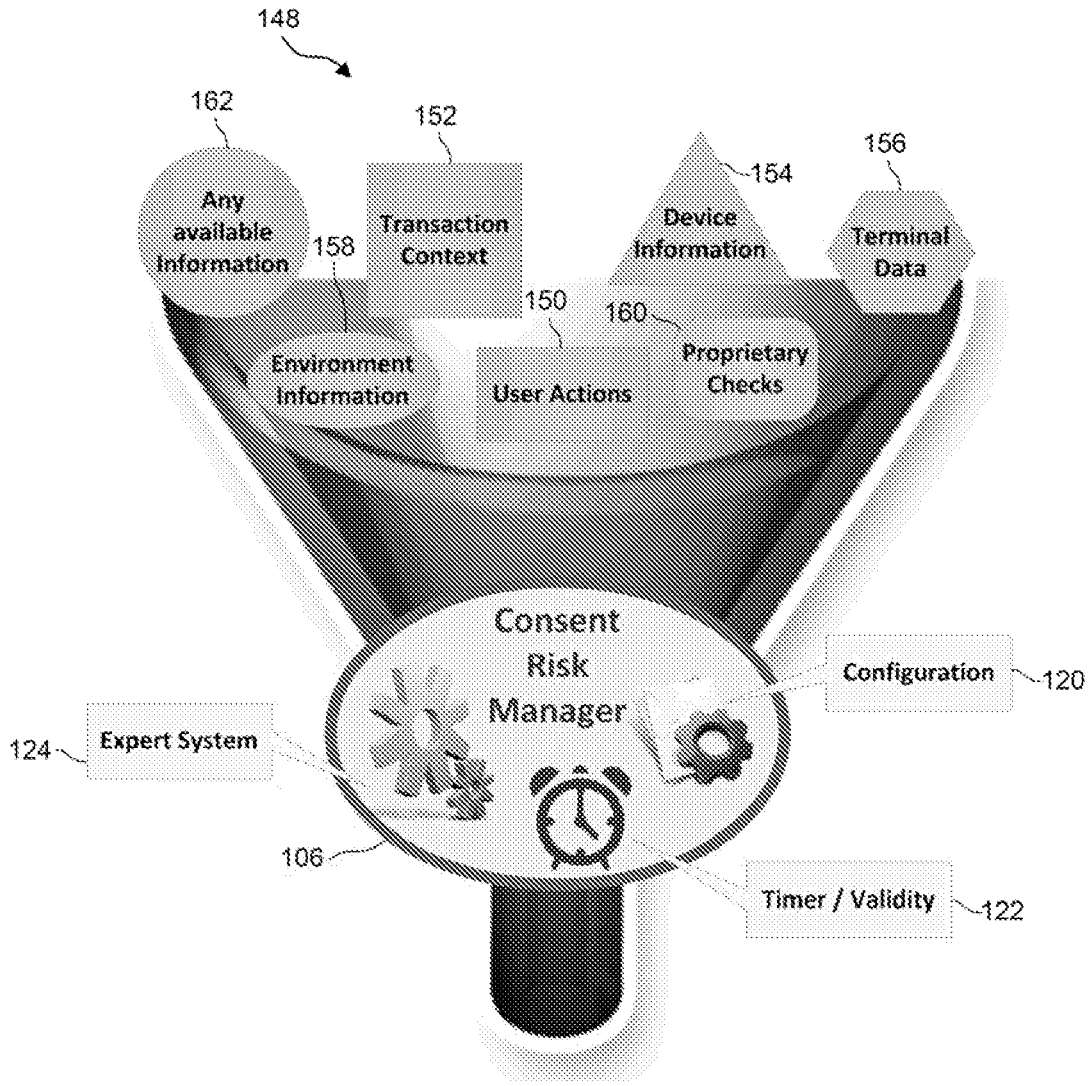

148
162
Any available Information
152
Transaction Context
154
Device Information
156
Terminal Data
158
Environment Information
150
User Actions
160
Proprietary Checks
Consent Risk Manager
Configuration
120
124
Expert System
106
Timer / Validity
122

FIG. 3

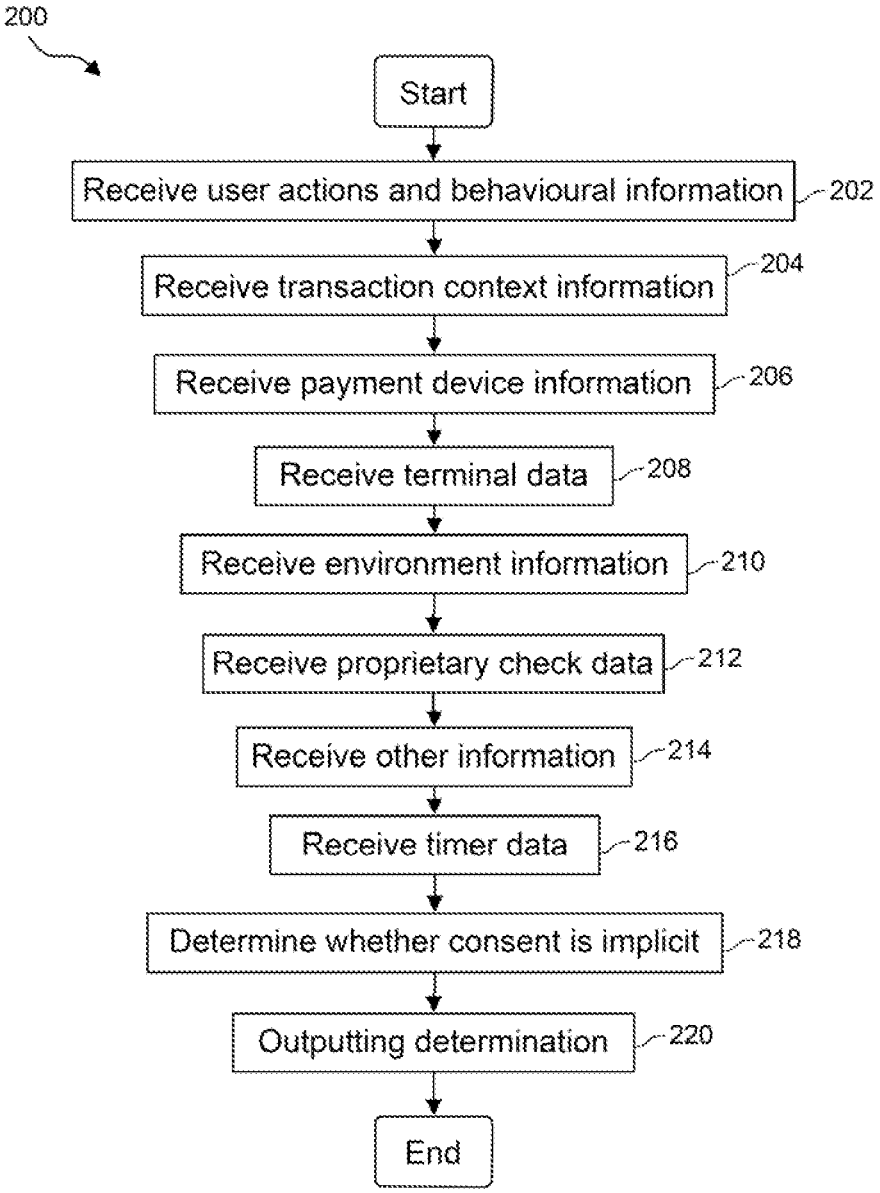

200
Start
Receive user actions and behavioural information
202
Receive transaction context information
204
Receive payment device information
206
Receive terminal data
208
Receive environment information
210
Receive proprietary check data
212
Receive other information
214
Receive timer data
216
Determine whether consent is implicit
218
Outputting determination
220
End

FIG. 4

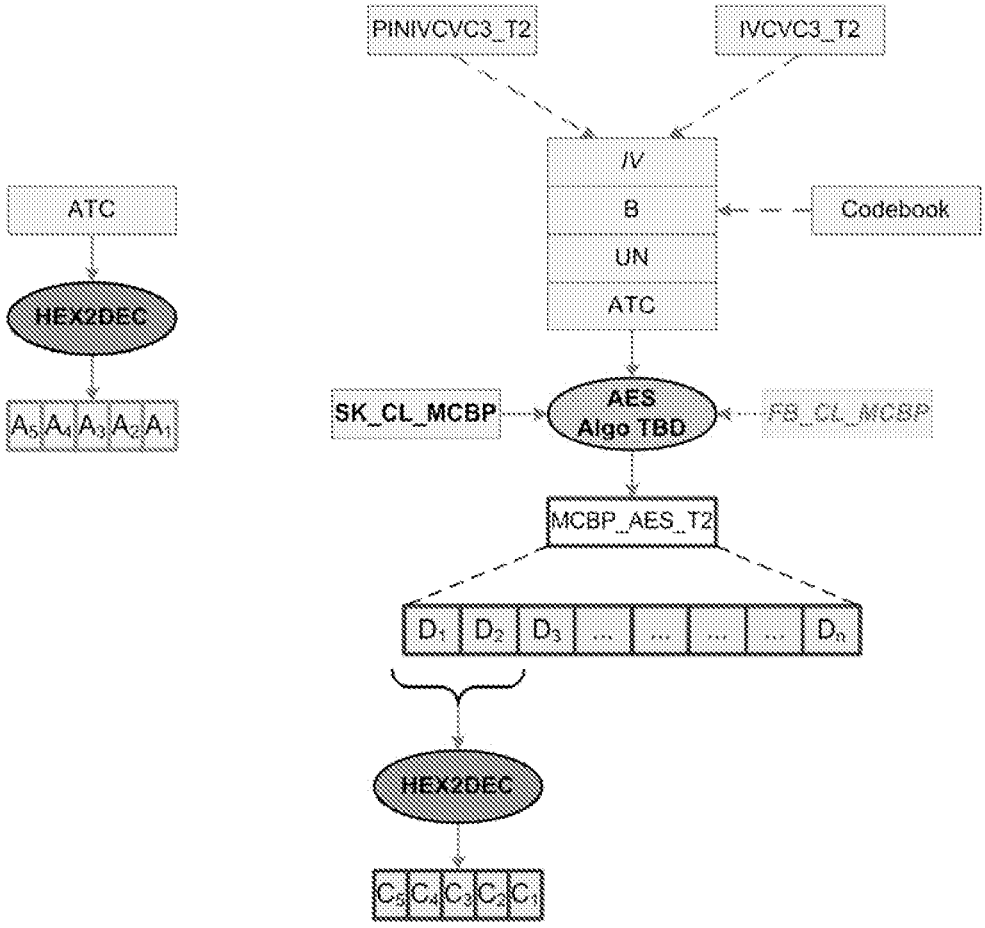

PINIVCVC3_T2
IVCVC3_T2
IV
B
UN
ATC
Codebook
ATC
HEX2DEC
A5 A4 A3 A2 A1
SK_CL_MCBP
AES
Algo TBD
FB_CL_MCBP
MCBP_AES_T2
D1 D2 D3 ... ... Dn
HEX2DEC
C5 C4 C3 C2 C1

FIG. 5

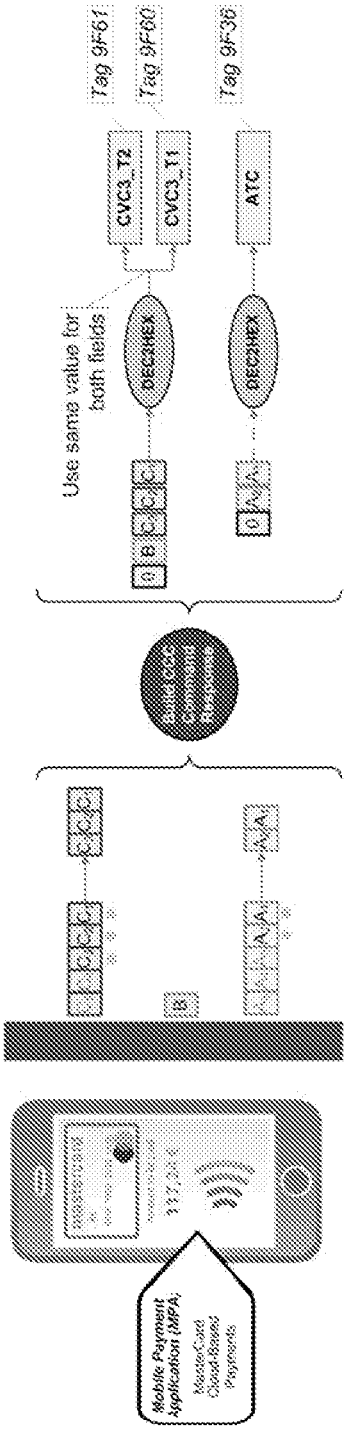

Tag 9F61
Tag 9F60
Tag 9F36
CVC3_T2
CVC3_T1
ATC
Use same value for both fields
DES2HEX
DES2HEX
Mobile Payment Application (MPA)
MasterCard Cloud-Based Payments

FIG. 6

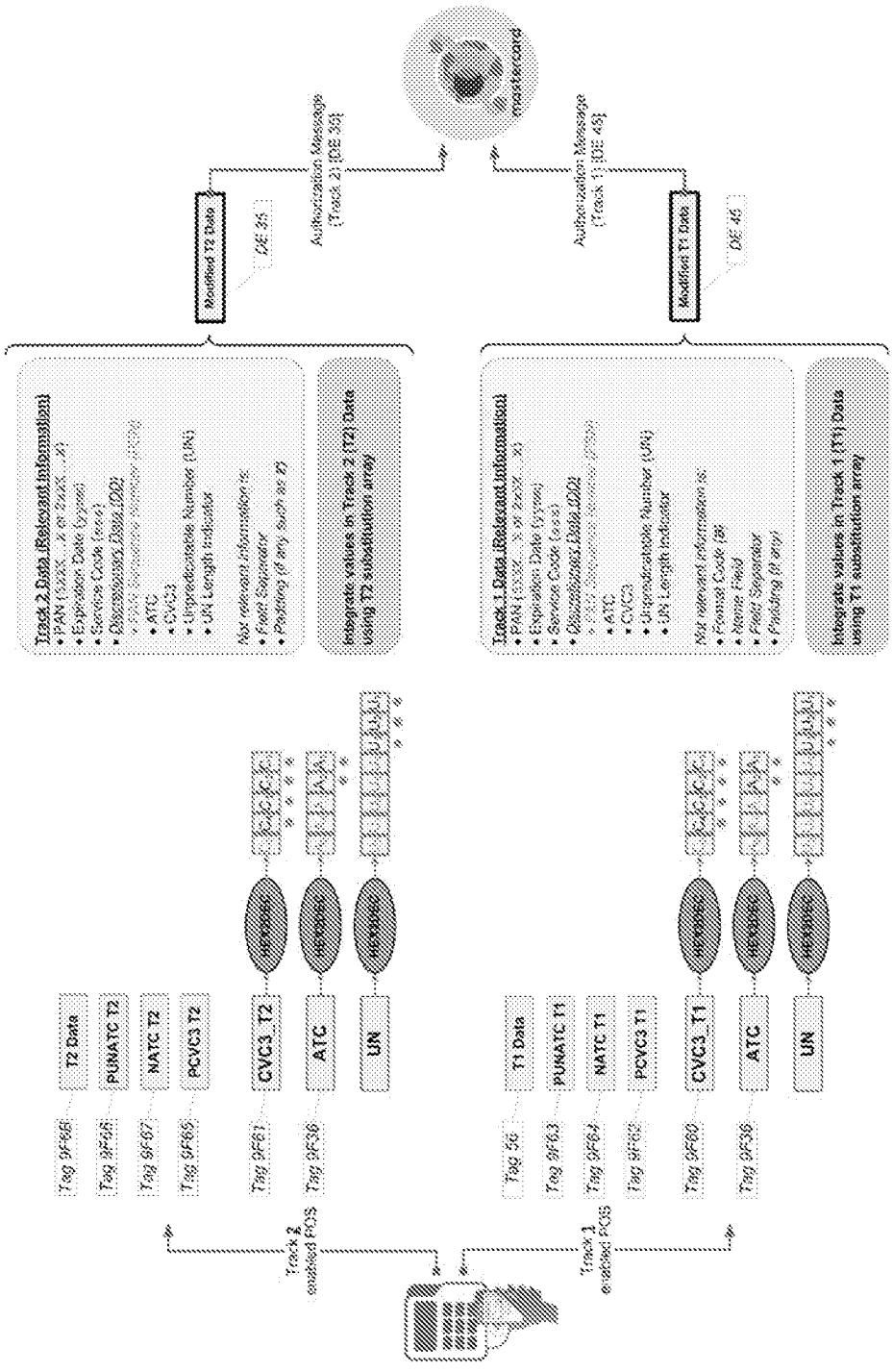

Track 2 Data (Relevant information)
• PAN (track ... as per track ... X)
• Expiration Date (4 bytes)
• Service Code (2 bytes)
• Discretionary Data (DD)
• ATC
• CVC3
• Unpredictable Number (UN)
• UN Length Indicator
Not relevant information is:
• Field Separator
• Padding (if any such as F)
Integrate value in Track 2 (T2) Data using T2 substitution array
Modified T2 Data
DE 35
Authorization Message (Track 2) [DE 35]
Track 1 Data (Relevant information)
• PAN (track ... as per track ... X)
• Expiration Date (4 bytes)
• Service Code (2 bytes)
• Discretionary Data (DD)
• ATC
• CVC3
• Unpredictable Number (UN)
• UN Length Indicator
Not relevant information is:
• Format Code (B)
• Name Field
• Field Separator
• Padding (if any)
Integrate value in Track 1 (T1) Data using T1 substitution array
Modified T1 Data
DE 45
Authorization Message (Track 1) [DE 45]
Mastercard
T2 Data
PUNATC T2
NATC T2
PCVC3 T2
CVC3_T2
ATC
UN
Tag 9F6B
Tag 9F6B
Tag 9F6C
Tag 9F6B
Tag 9F61
Tag 9F36
Track 2 enabled POS
T1 Data
PUNATC T1
NATC T1
PCVC3 T1
CVC3_T1
ATC
UN
Tag 56
Tag 9F63
Tag 9F64
Tag 9F62
Tag 9F60
Tag 9F36
Track 1 enabled POS

FIG. 7

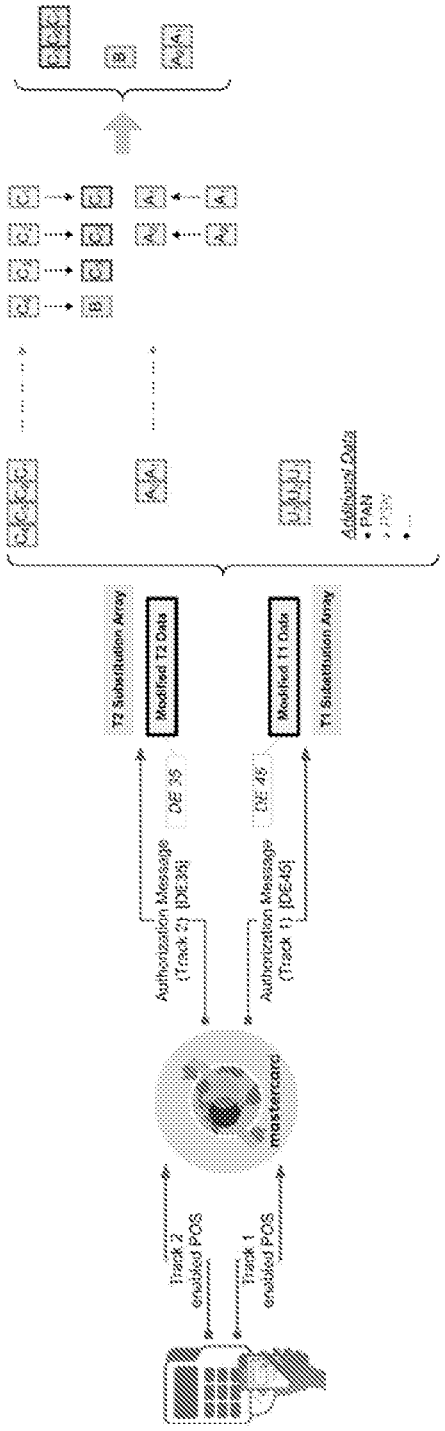

T2 Substitution Array
Modified T2 Data
DE 35
Authorization Message (Track 2) [DE35]
T1 Substitution Array
Modified T1 Data
DE 45
Authorization Message (Track 1) [DE45]
Track 2 enabled POS
Track 1 enabled POS

FIG. 8

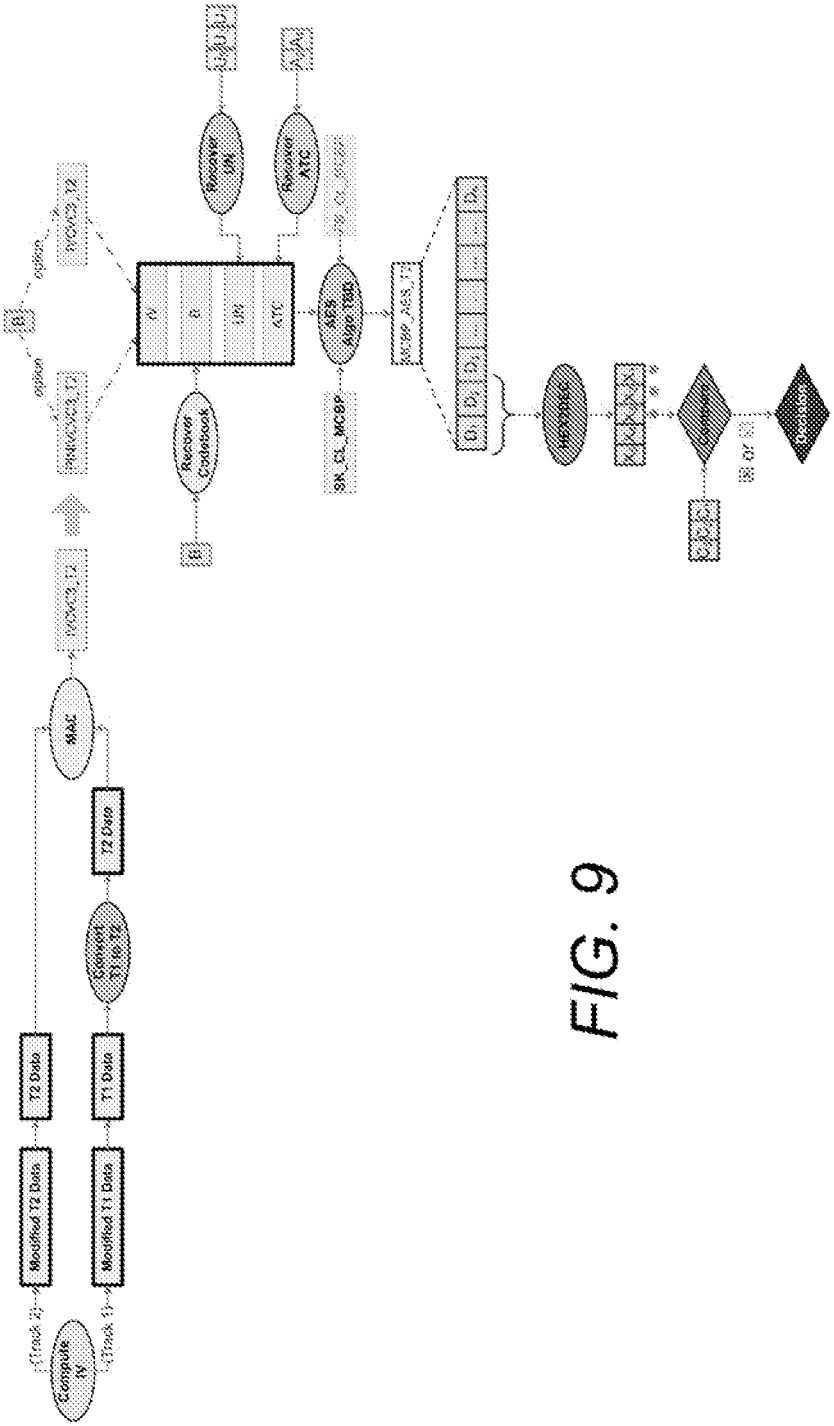

T2 Data
T1 Data
Modified T2 Data
Modified T1 Data
Compute N
Track 2
Track 1
SHA
Retrieve PK
Retrieve ATC
AES Algo 128
Recover Codebook
SR_CL_MCBP
Hashing
Encryption
Compute T1 CVC
Compute T2 CVC

FIG. 9