

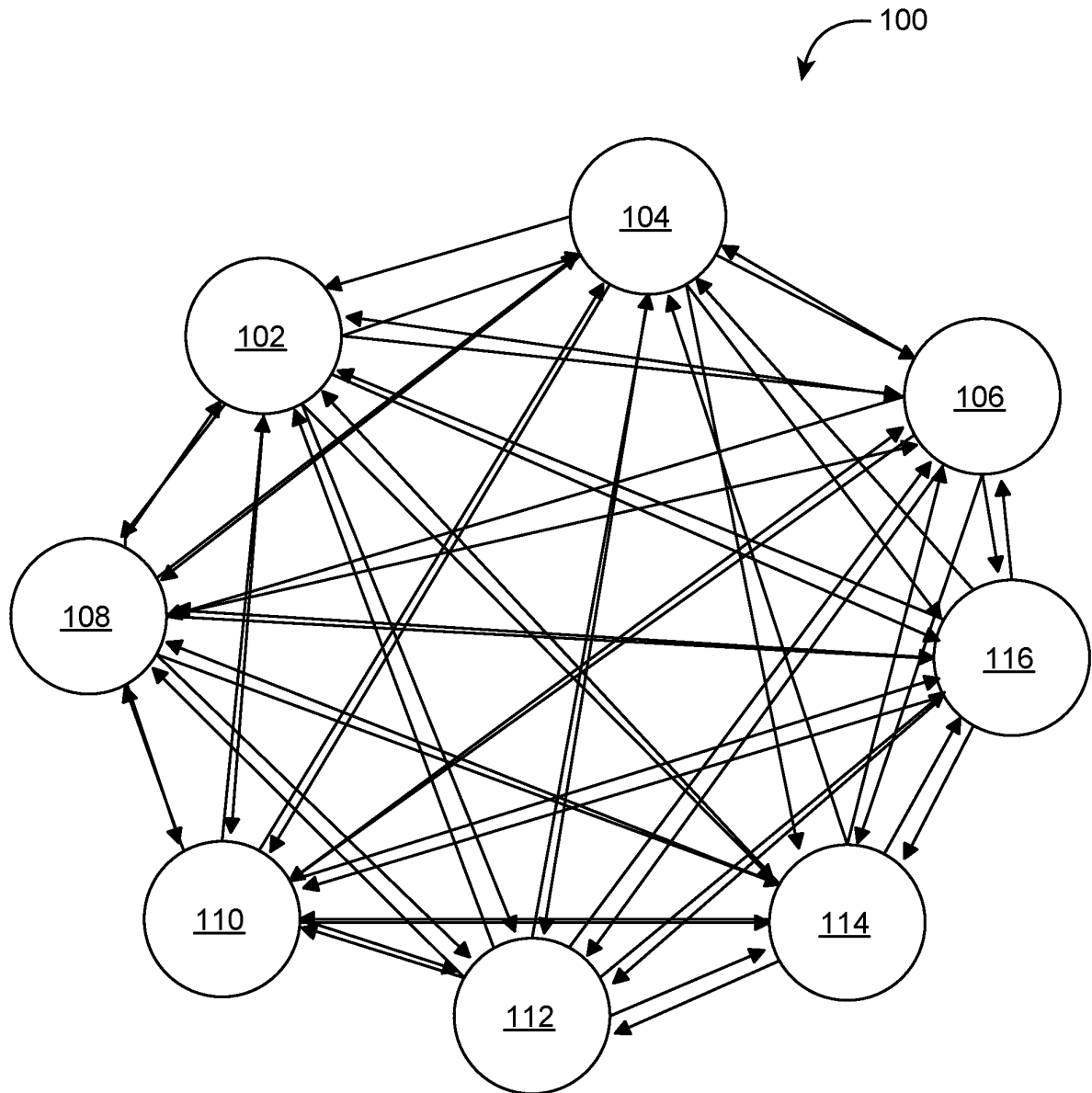


FIG. 1

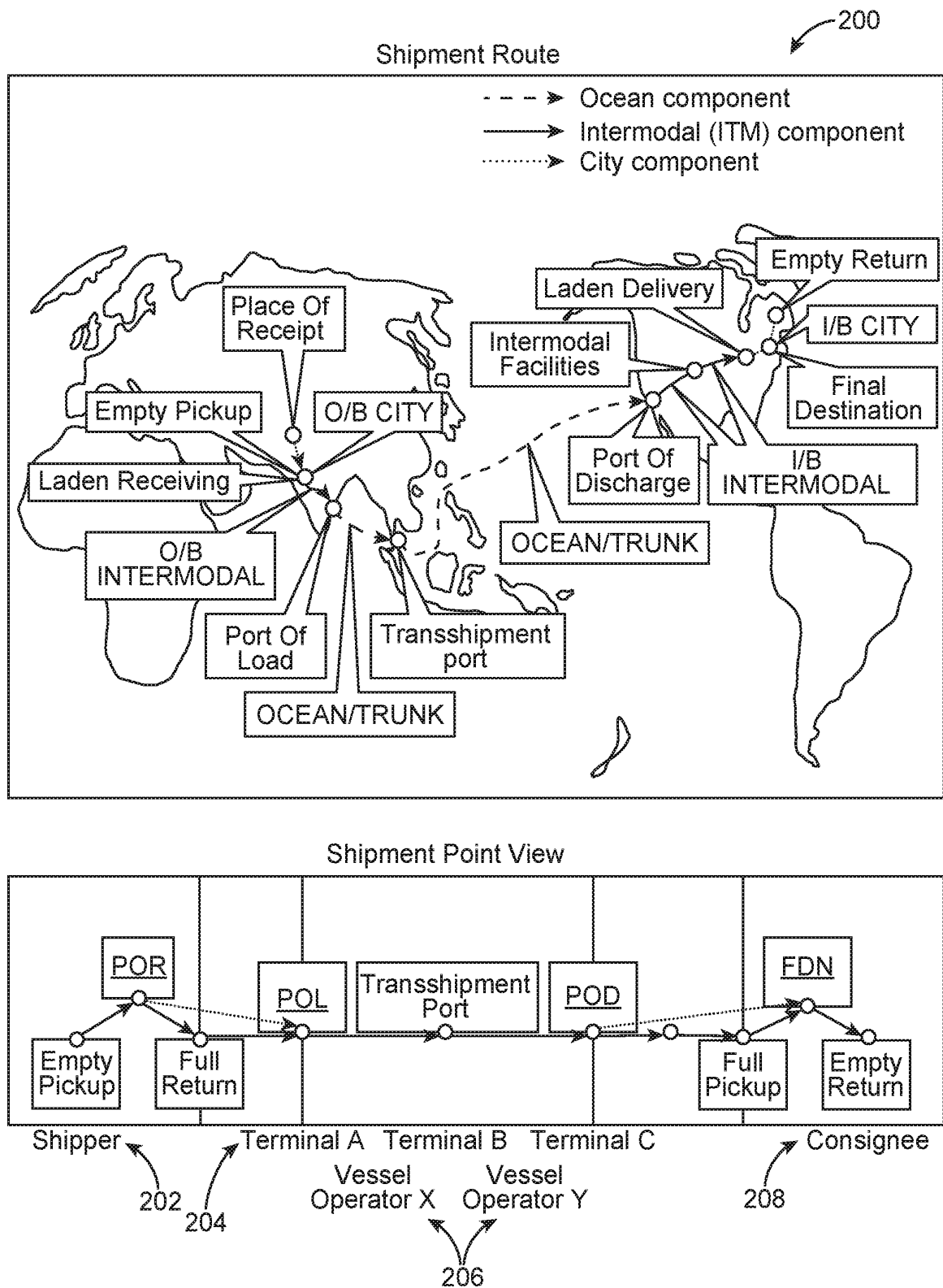
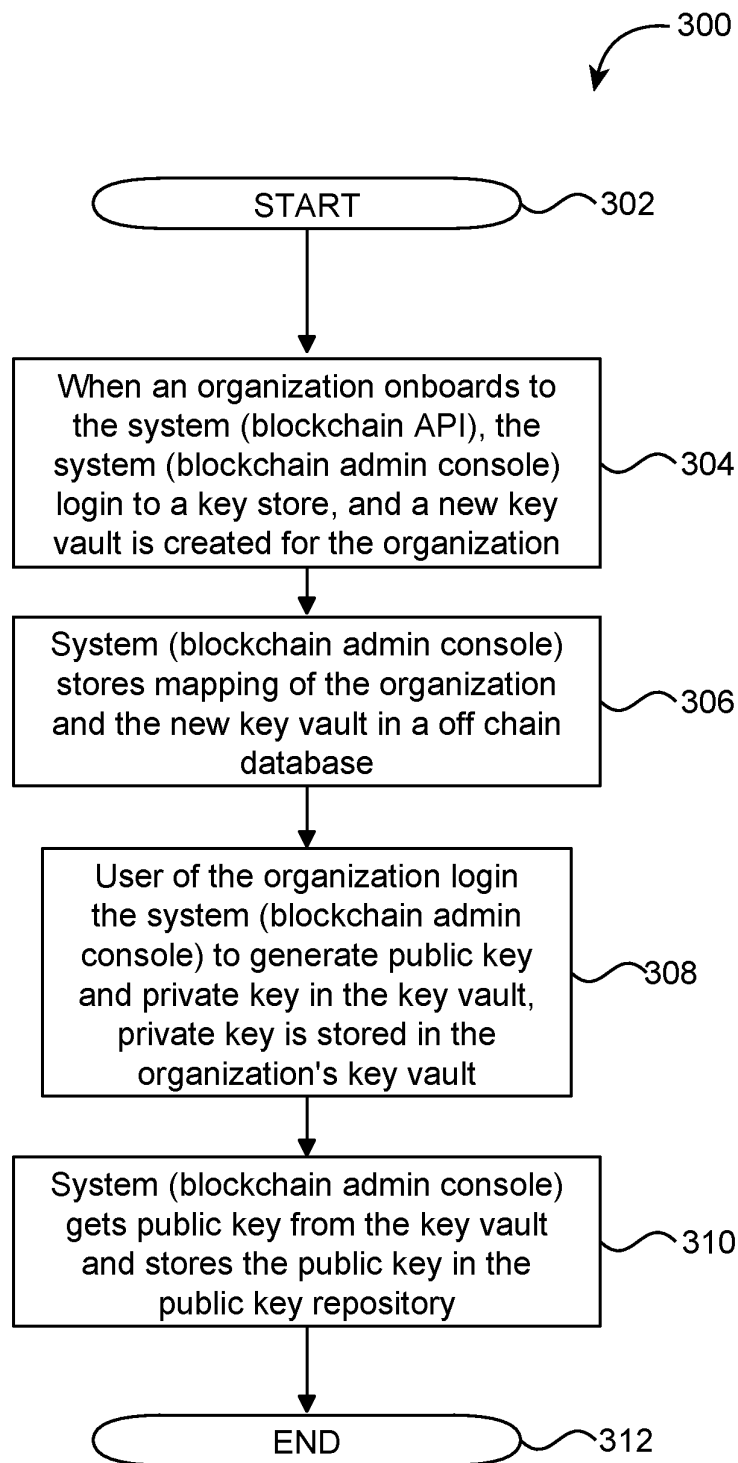
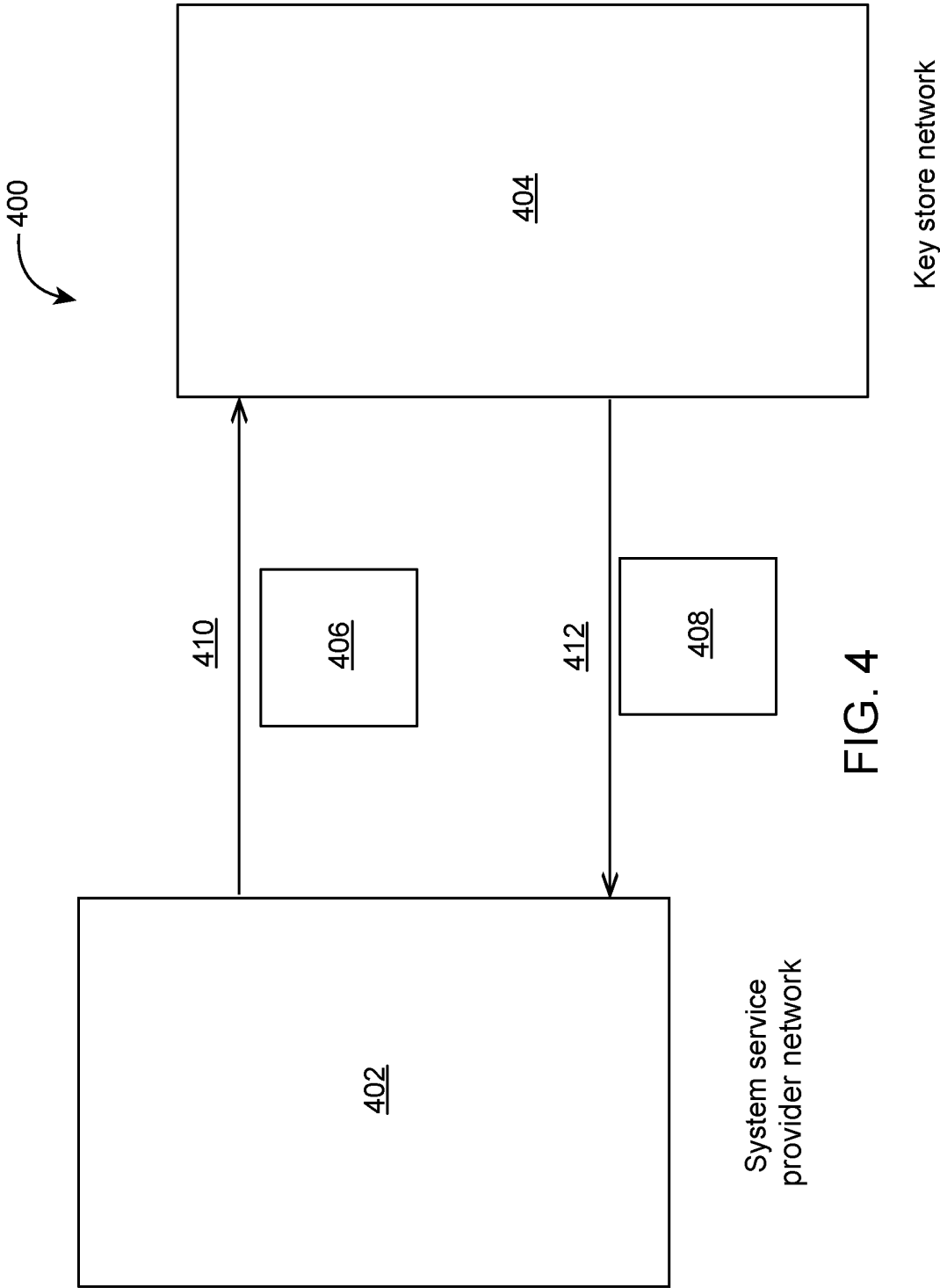


FIG. 2





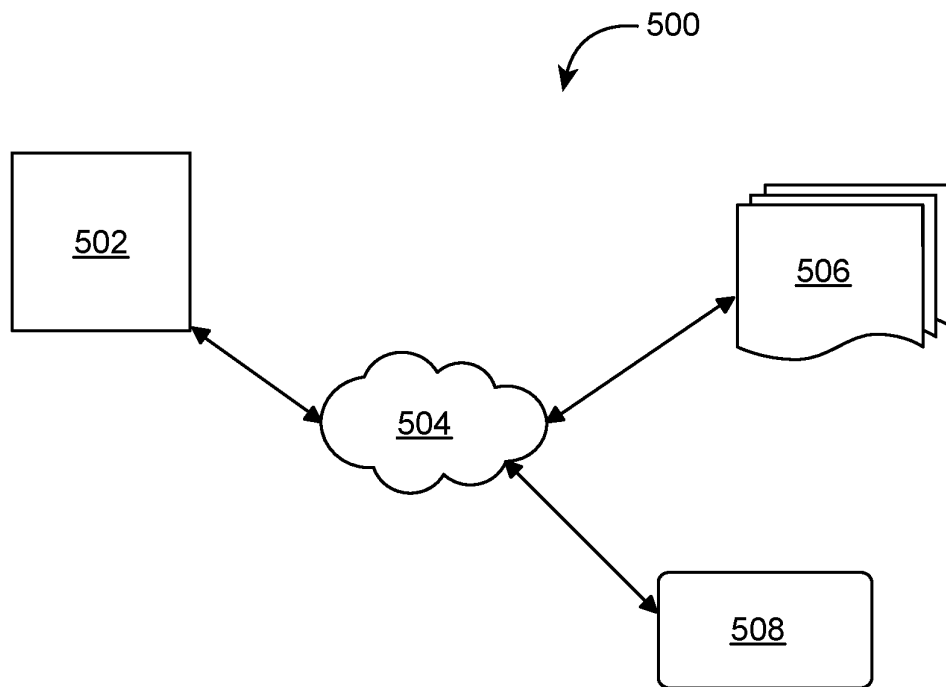


FIG. 5

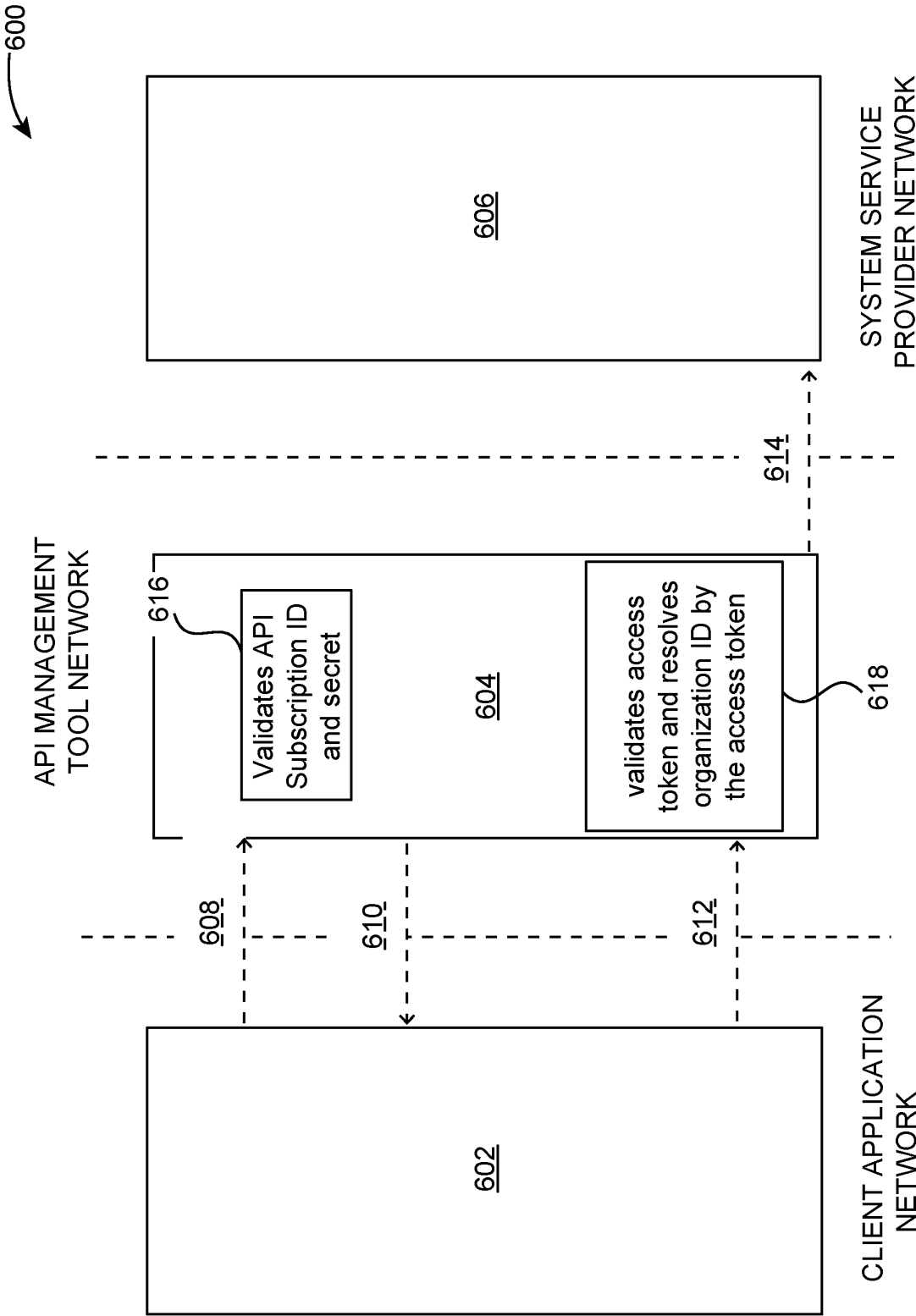


FIG. 6

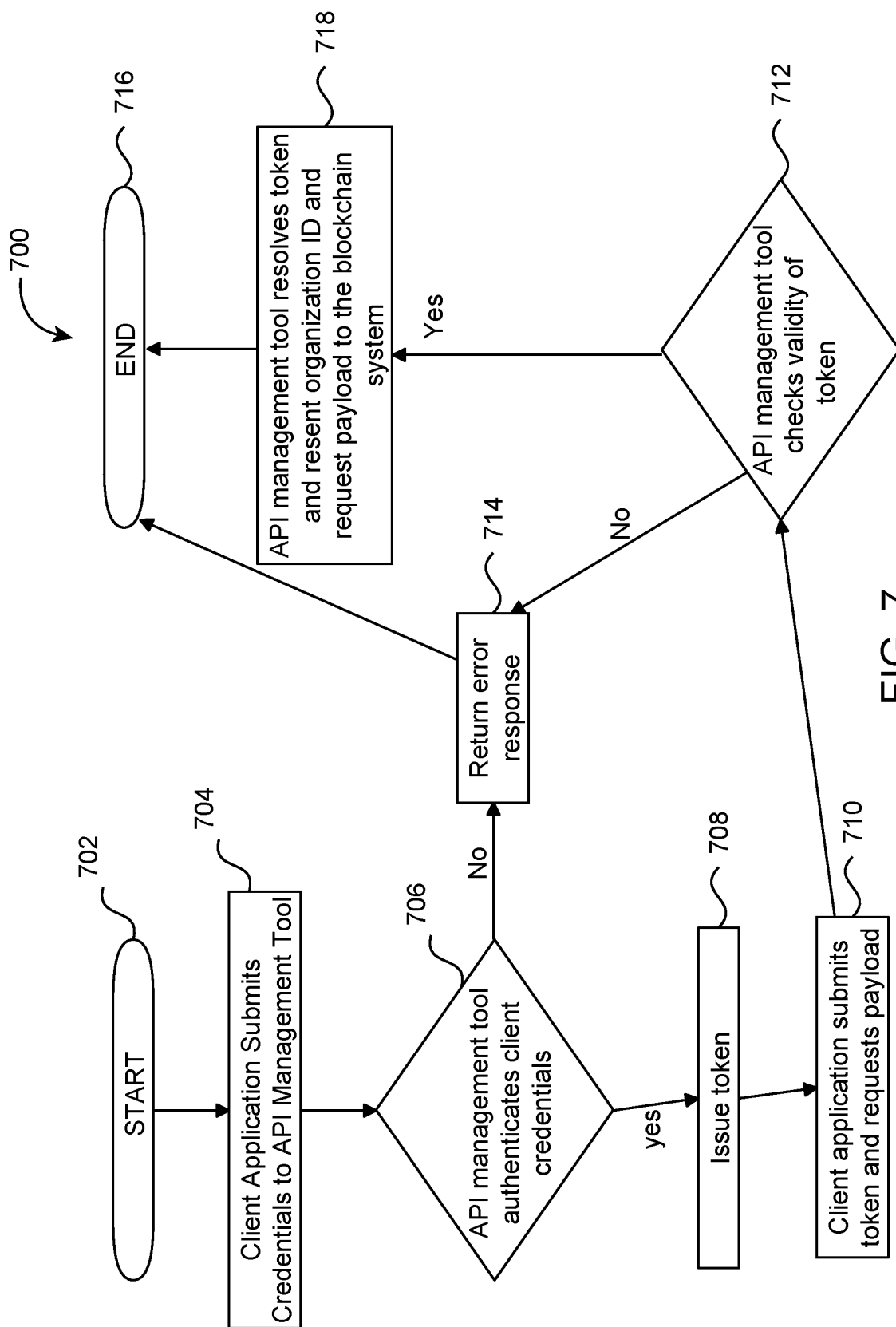


FIG. 7

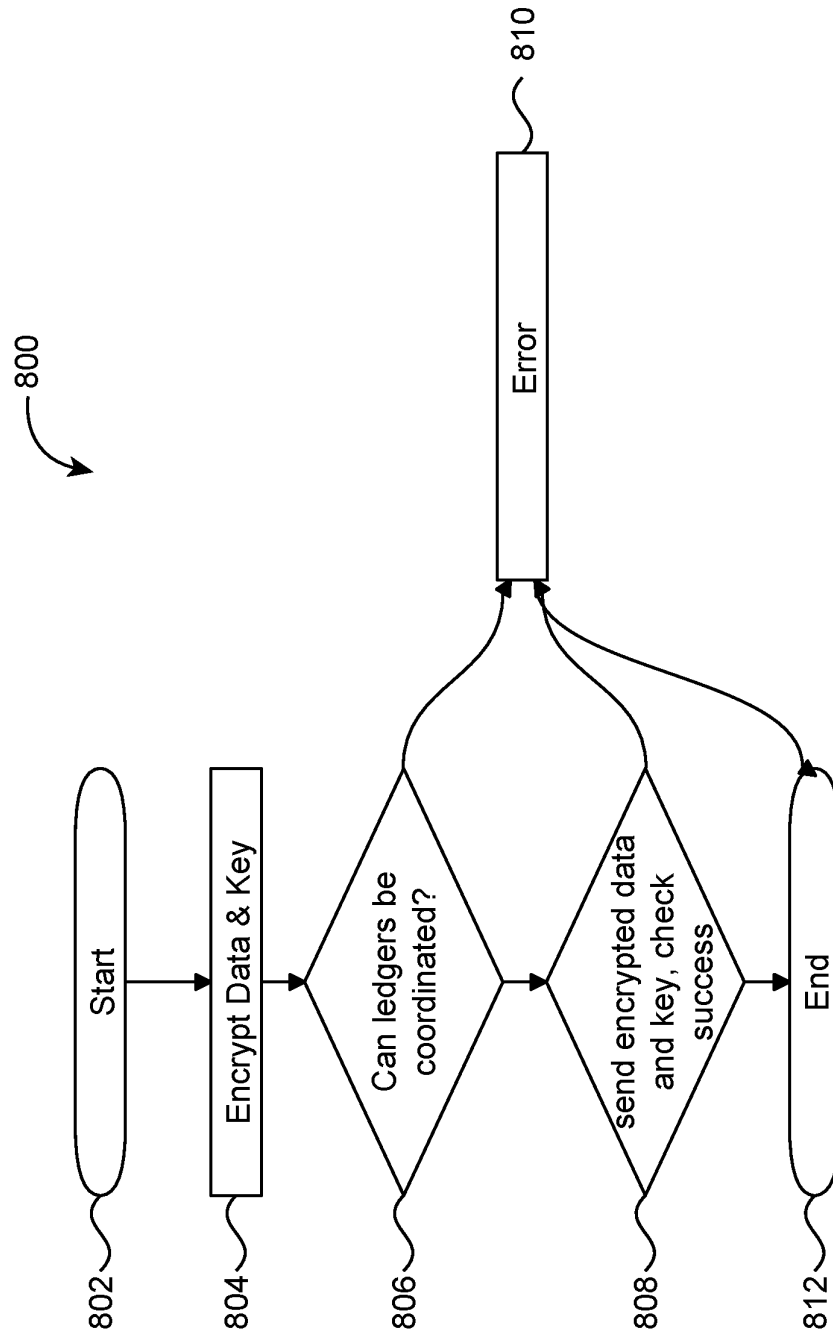


FIG. 8

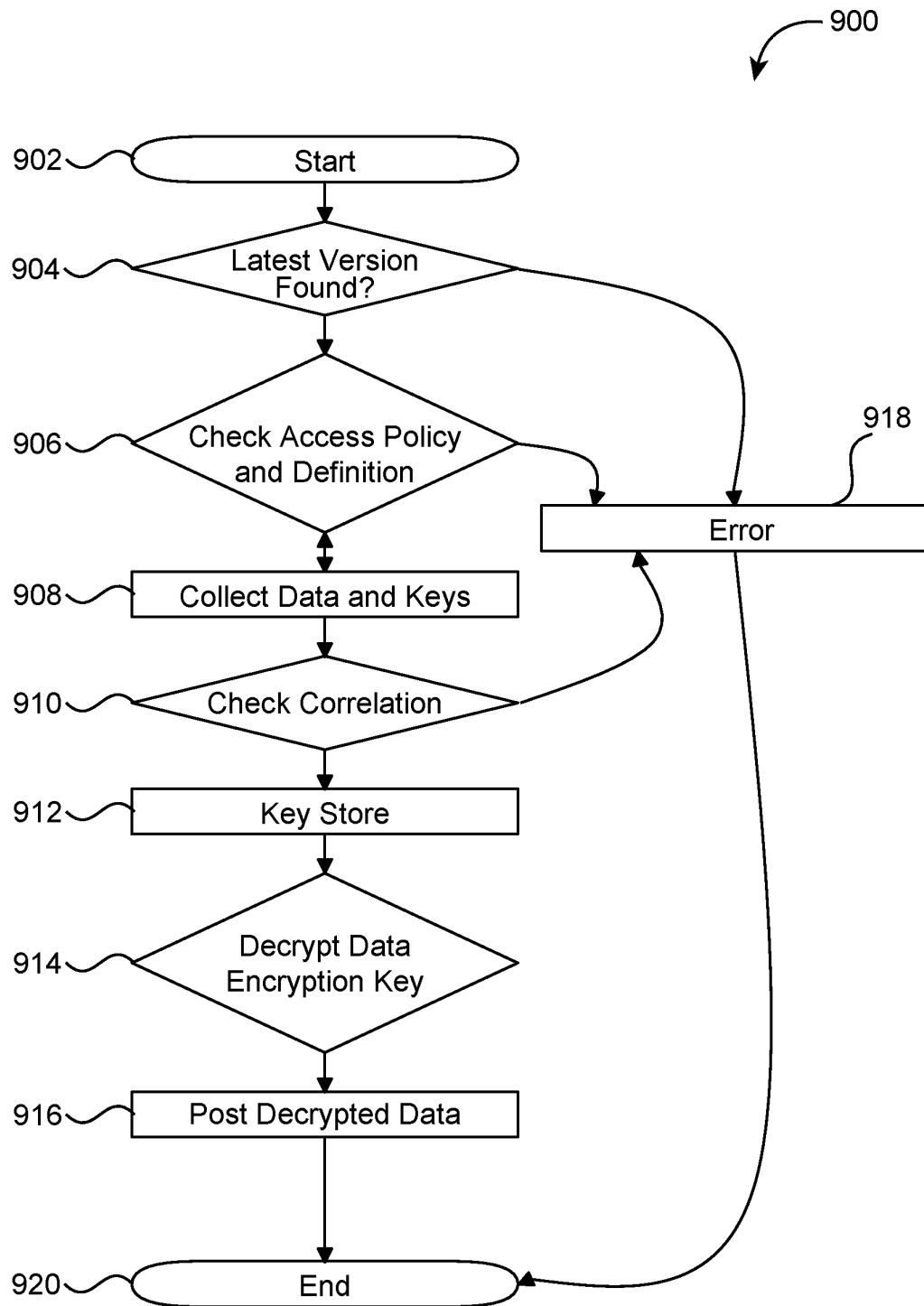


FIG. 9

ms [37] No Pending Action Items (4)

DATA PROVIDER BOOKING #	PENDING ACTION	ACTION BOOKING VERSION	ACTION DUE DATE	BOOKING STATUS	SHIPPER	FORWARDER
19030726781243	Review DG Application	1	3d 18h 52m ago Mar 8 2019 3:22am	New	Company A	Forward Inc
19030726781243	Upload DG Certificate	1	23h 59m left Mar 12 2019 11:15pm	New	Company A	Forward Inc
19030726781236	Submit DG Application	1	3d 9h 48m ago Mar 8 2019 12:26pm	New	Company B	Forward Inc
19030726781236	Upload DG Certificate	1	23h 59m left Mar 12 2019 11:15pm	New	Shipper 99	Forward Inc
1903072678123	Submit DG Application	1	4d 4h 4m ago Mar 7 2019 6:11pm	New	Shipper 99	Forward Inc
1903072678123	Upload DG Certificate	1	23h 59m left Mar 12 2019 11:15pm	New	Company B	Forward Inc
19030626781311	Submit DG Application	1	4d 8h 22m ago Mar 7 2019 1:52pm	New	Company A	Forward Inc
19030534581375	Review DG Application	3	5d 18h 36m ago Mar 6 2019 3:38pm	Confirmed		
1903052678911	Review DG Application	1	6d 2h 59m ago Mar 5 2019 7:25pm	New	Shipper 23	A Fore Ltd
1903052678911	Upload DG Certificate	1	23h 59m left Mar 12 2019 11:15pm	New	Shipper 99	A Fore Ltd
190226267889	Upload DG Certificate	1	23h 59m left Mar 12 2019 11:15pm	New	Company B	B Fore Ltd
190226267887	Upload DG Certificate	1	23h 59m left Mar 12 2019 11:15pm	New	Company A	B Fore Ltd
190226267878	Upload DG Certificate	1	23h 59m left Mar 12 2019 11:15pm	New	Company A	Forward Inc

FIG. 10

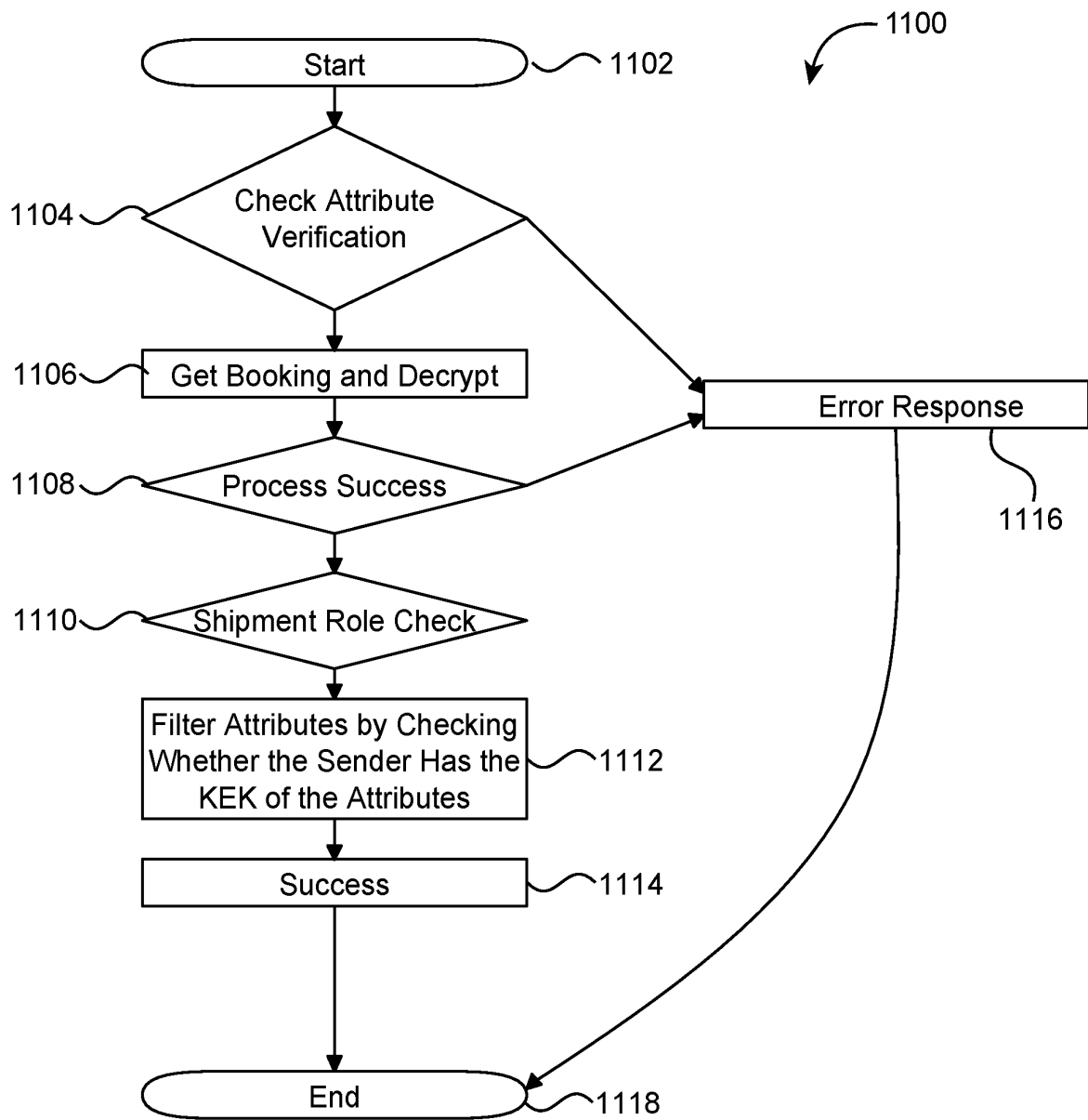


FIG. 11

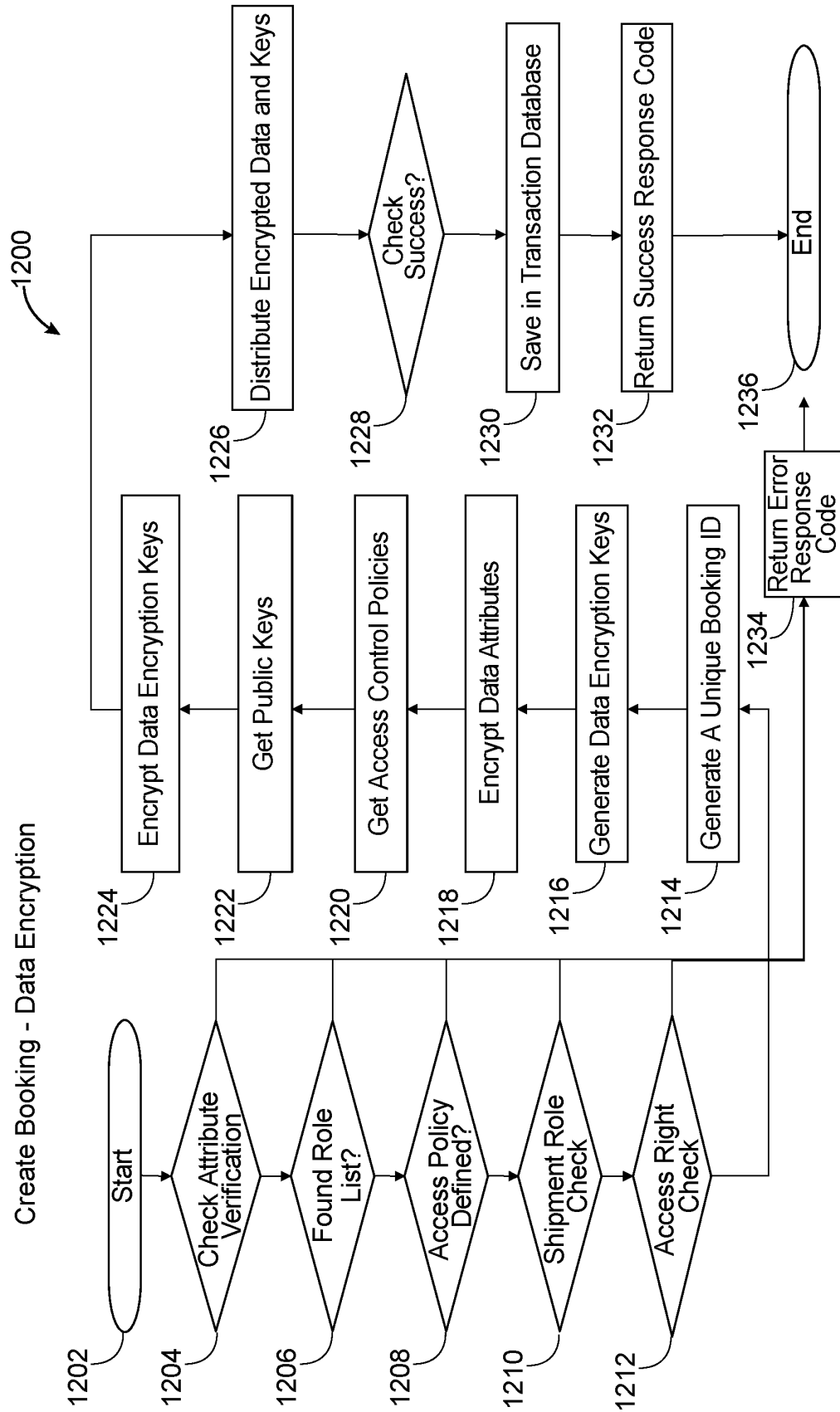


FIG. 12

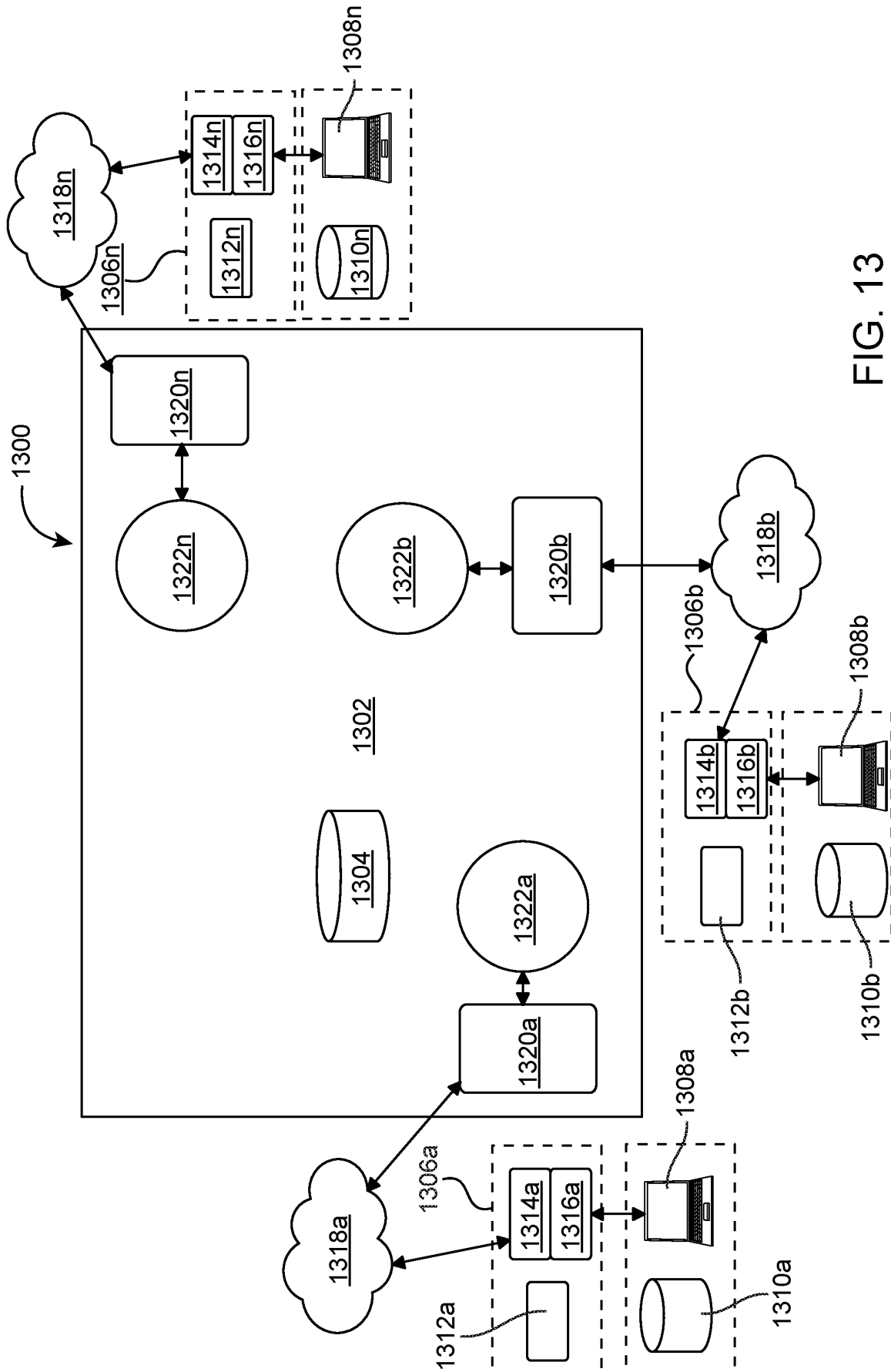


FIG. 13

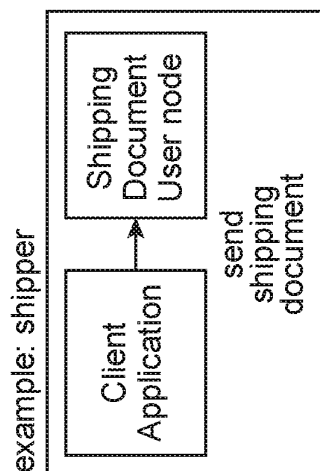
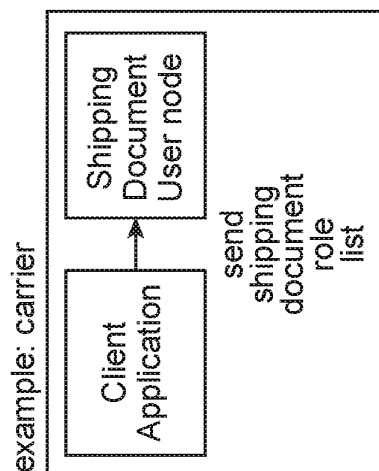
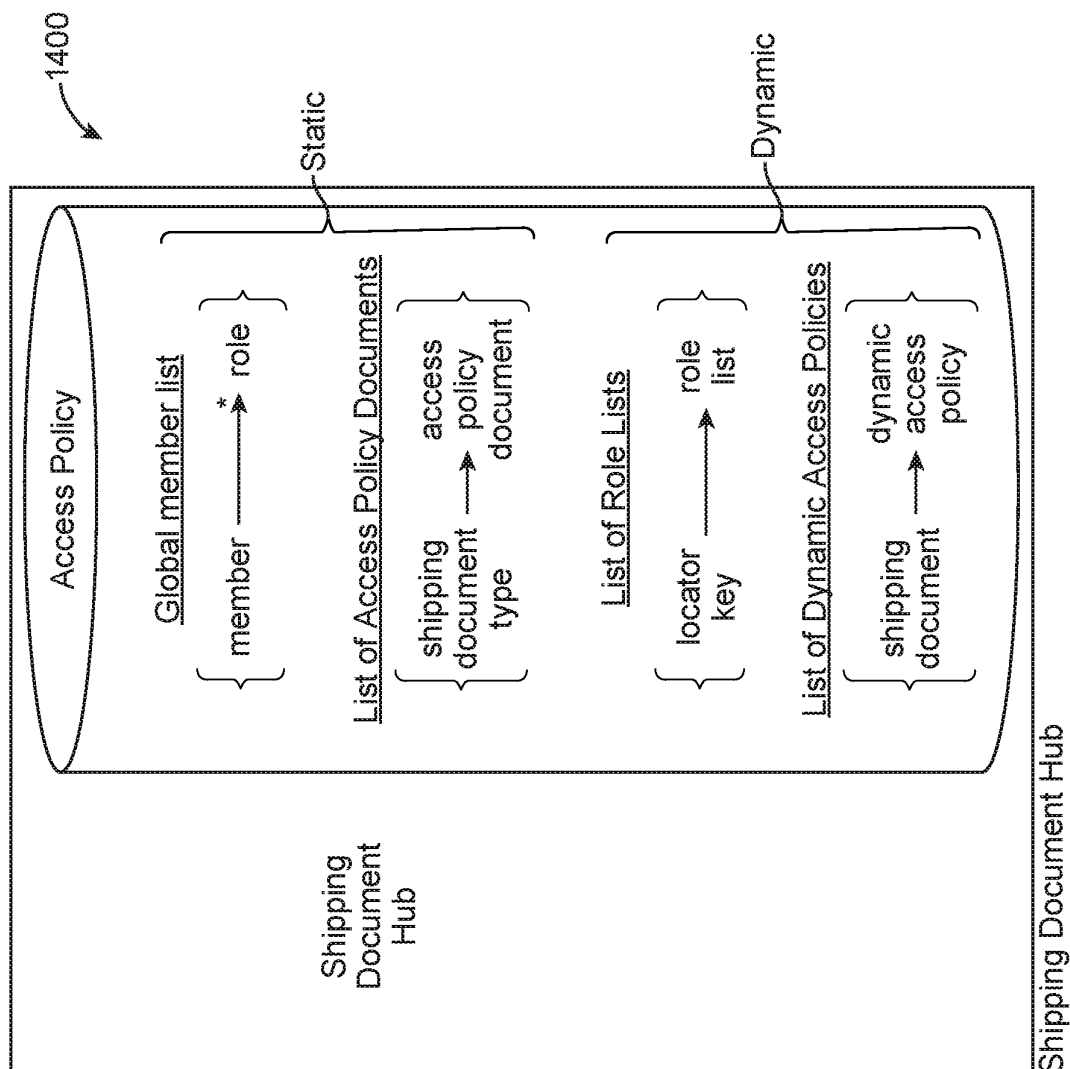


FIG. 14

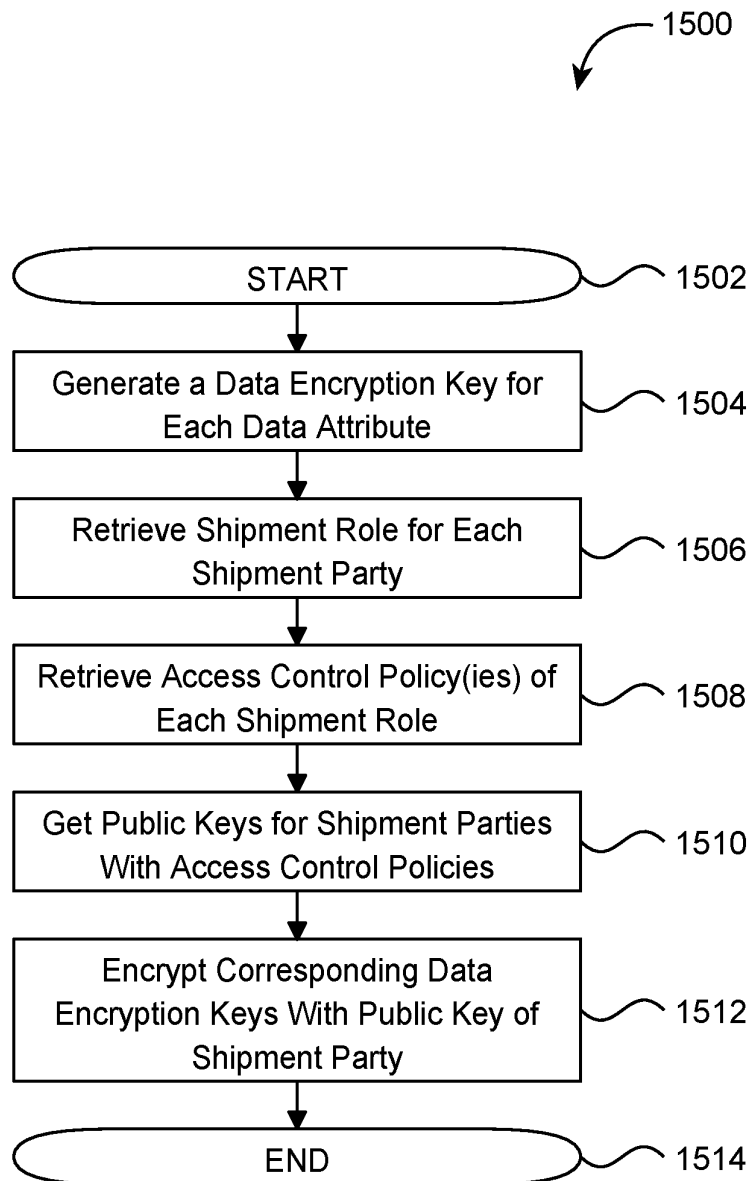


FIG. 15

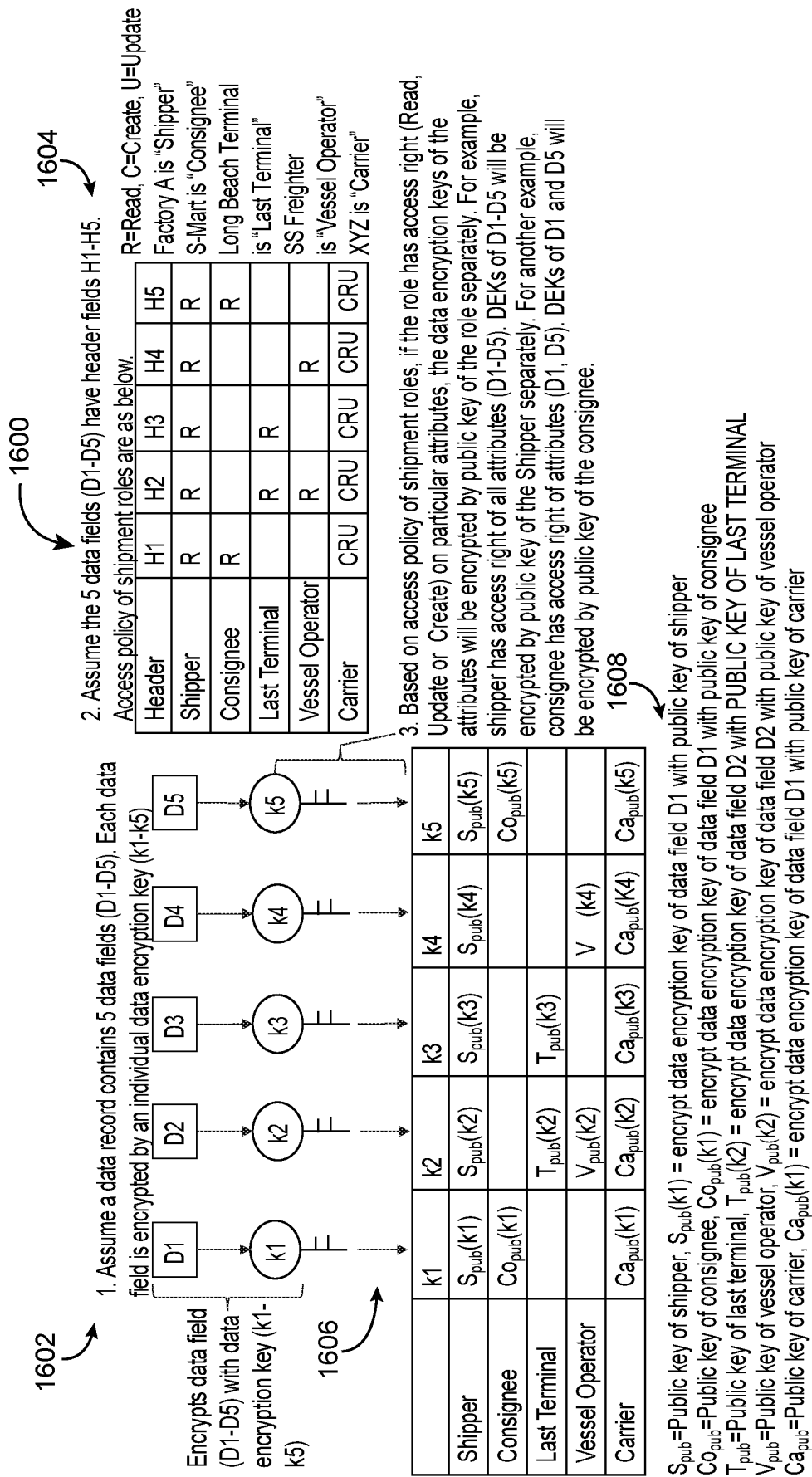


FIG. 16

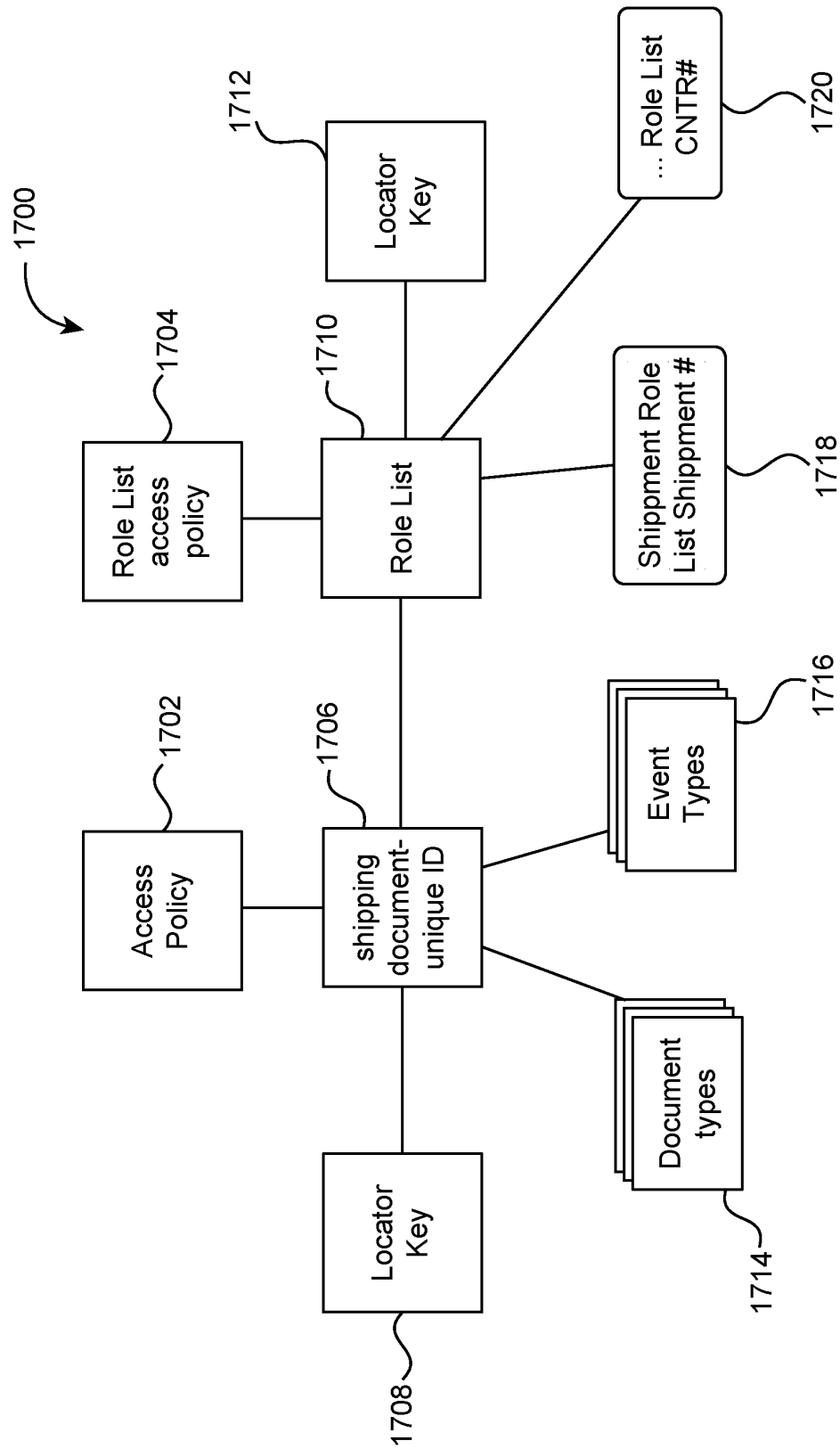
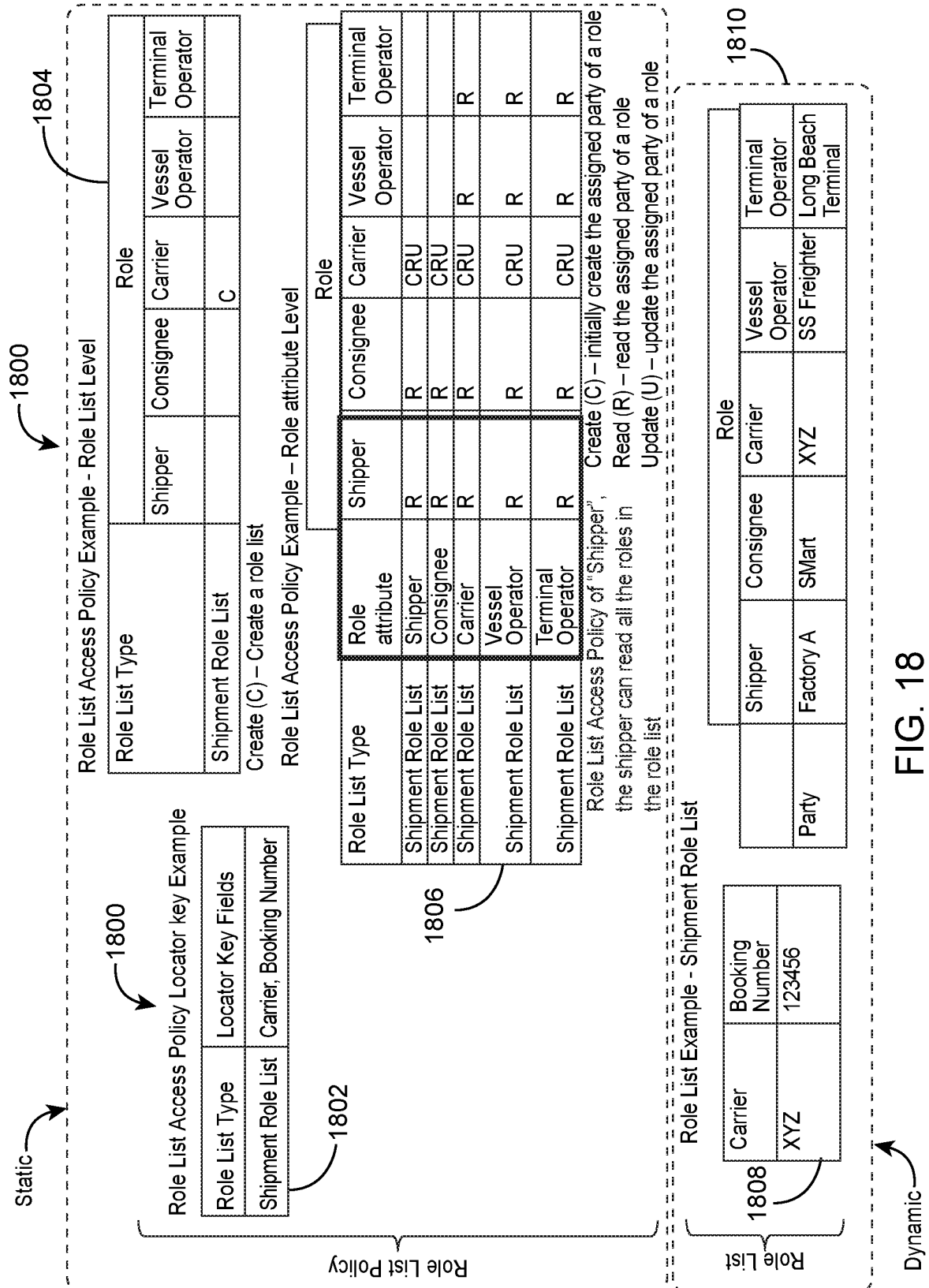


FIG. 17



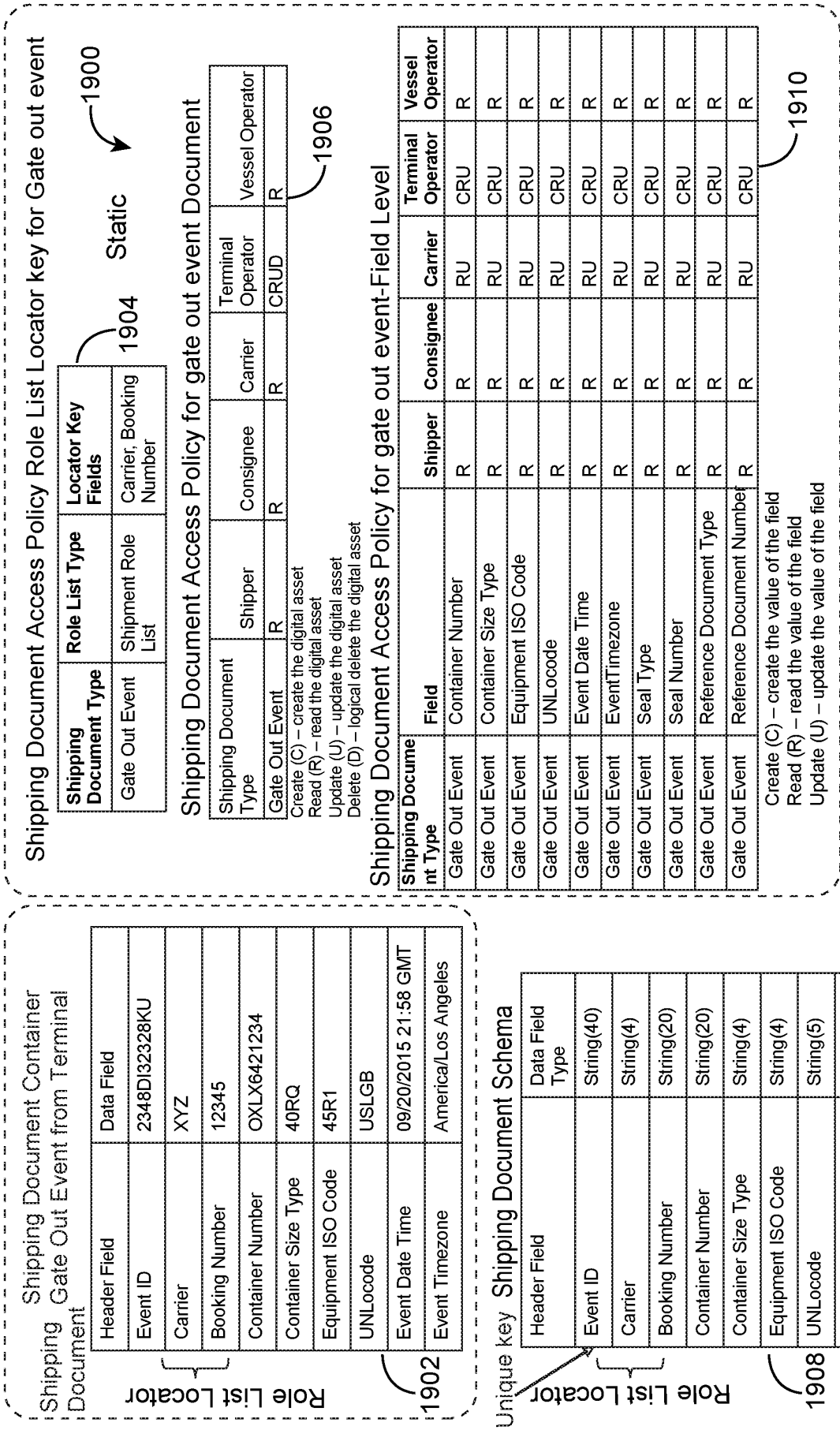


FIG. 19

Shipping Document Access Policy Role List Locator key example for DG cert

Shipping Document Type	Role List Type	Locator Key Fields
Gate Out Event	Shipment Role List	Carrier, Booking Number

2002

Role List Locator

Shipping Document Access Policy for DG cert-Document Level

Shipping Document Type	Shipper	Consignee	Carrier	Terminal Operator	Vessel Operator
DG Cert	CRUD	R	RU	R	R

Create (C) – create the digital asset

Read (R) – read the digital asset

Update (U) – update the digital asset

Delete (D) – logical delete the digital asset

2006

Shipping Document Access Policy for DG cert-Field Level

Shipping Document Type	Field	Shipper	Consignee	Carrier	Terminal Operator	Vessel Operator
DG Cert	Vessel Name	CRU	R	RU	R	R
DG Cert	Voyage Number	CRU	R	RU	R	R
DG Cert	Port of Loading	CRU	R	R	R	R
DG Cert	Port of Discharge	CRU	R	R	R	R
DG Cert	Cargo Description	CRU	R	R	R	R
DG Cert	Gross Weight	CRU	R	R	R	R
DG Cert	Gross Weight Unit	CRU	R	R	R	R
DG Cert	Approval Status	CRU	R	R	R	R

Create (C) – create the value of the field

Read (R) – read the value of the field

Update (U) – update the value of the field

2008

Shipping Document-DG Cert submission

Header Field	Data Field
DG Cert ID	SDFHIO32489
Version	1
Carrier	XYZ
Booking Number	12345
Vessel Name	SS ASIA
Voyage Number	107E
Port of Loading	HKHKG
Port of Discharge	USLGB
Cargo Description	30230064 UN 2912, CORROSIVE SOLID, FLAMMABLE, N.O.S. (POTASSIUM-TERT BUTANOLATE), 8(4.1), PG (ERG 134)
Gross Weight	13123
Gross Weight Unit	KG
Approval Status	Submitted

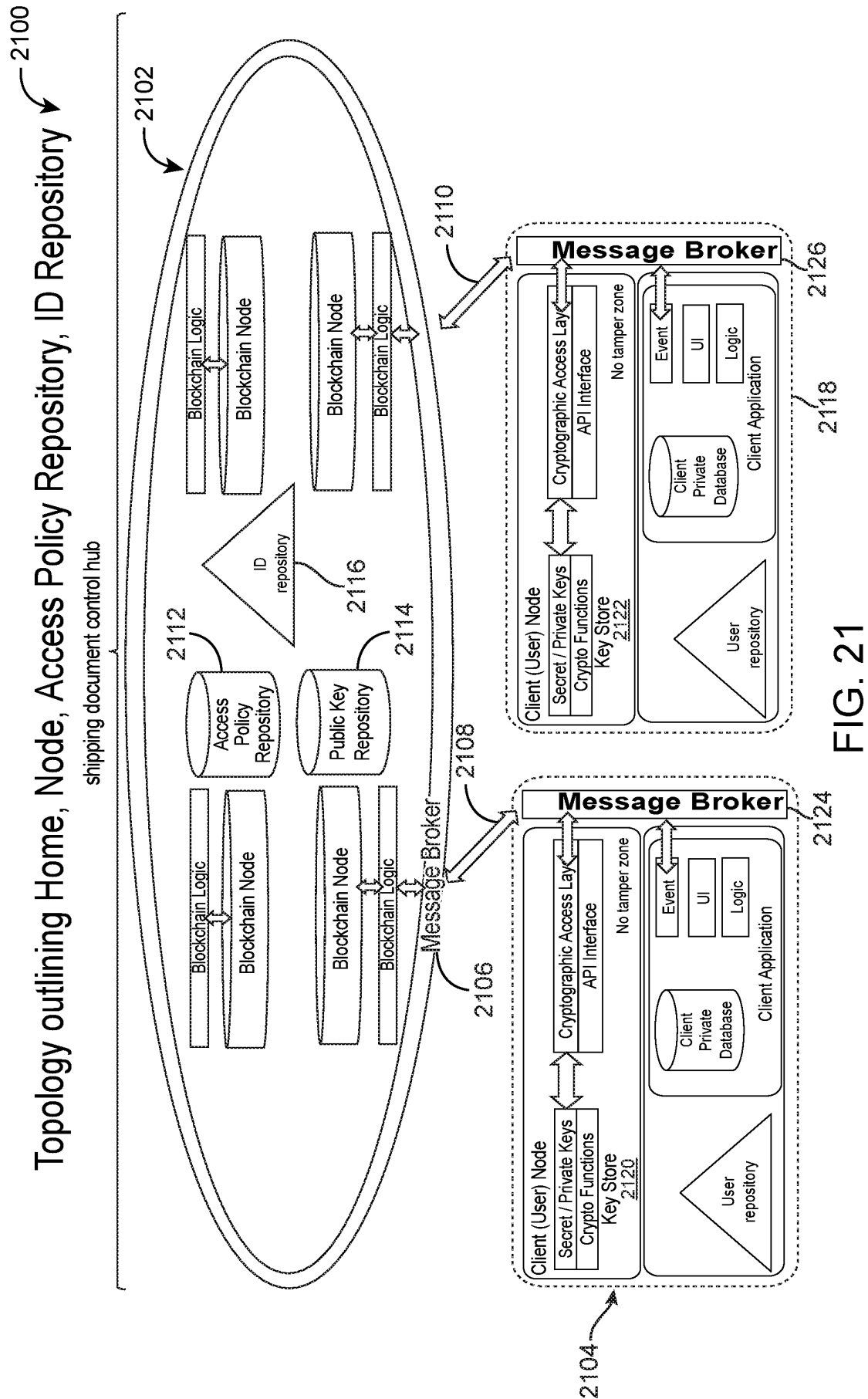
2002

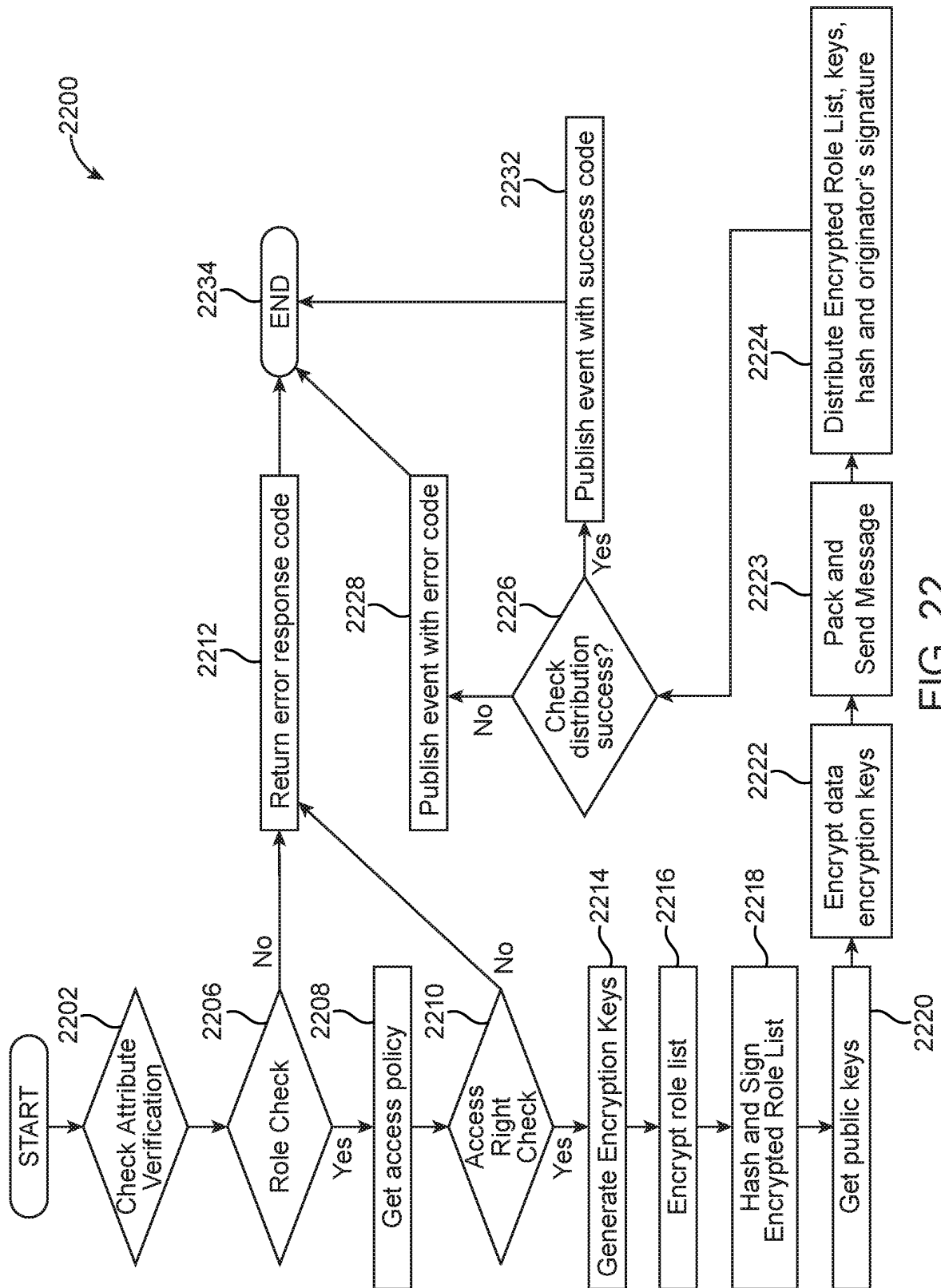
Shipping Document Schema

Header Field	Data Field Type
DG Cert ID	String(40)
Version	Integer
Carrier	String(4)
Booking Number	String(20)
Vessel Name	String(20)
Voyage Number	String(4)
Port of Loading	String(5)
Port of Discharge	String(5)
Cargo Description	String(1000)

2010

FIG. 20





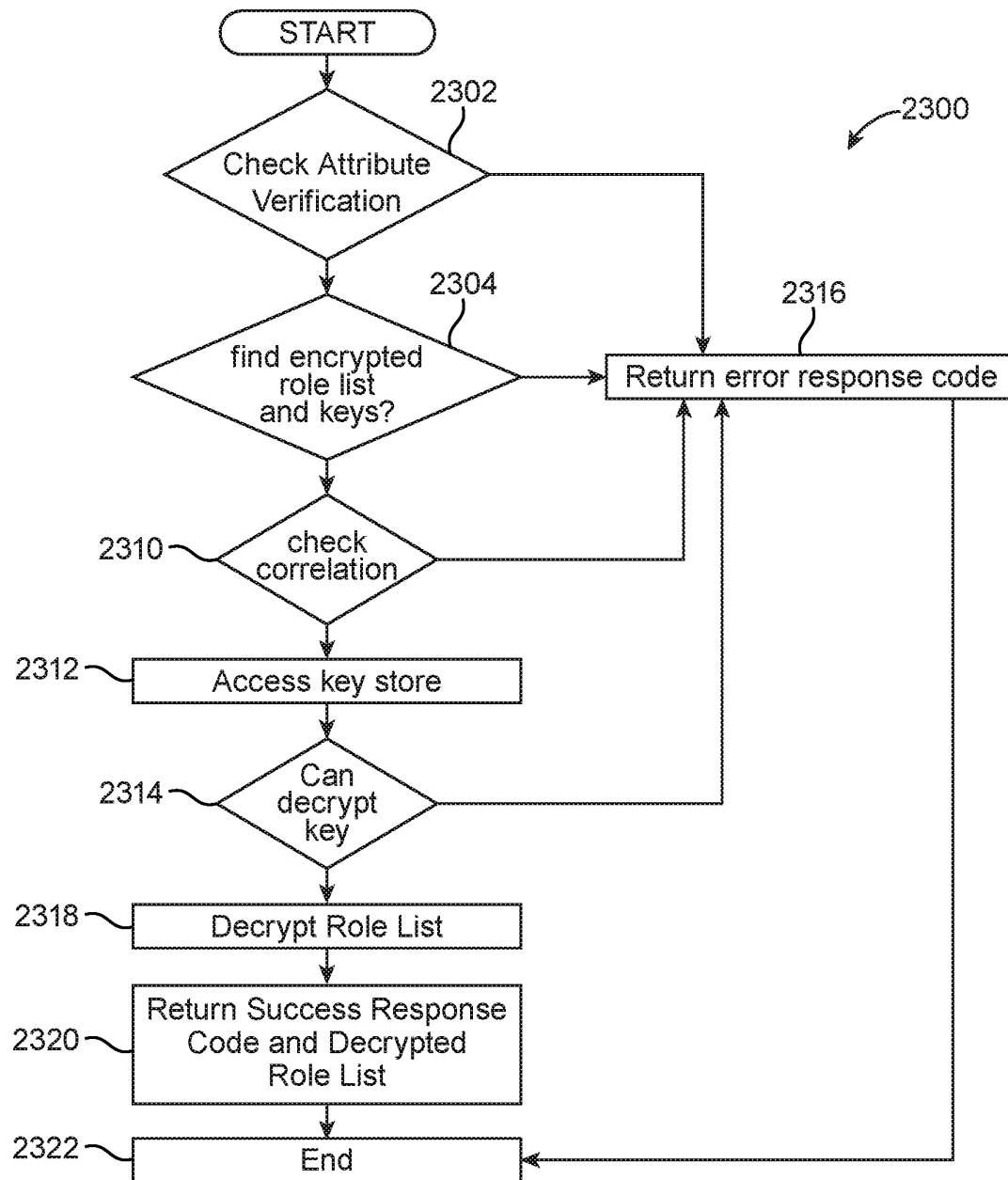
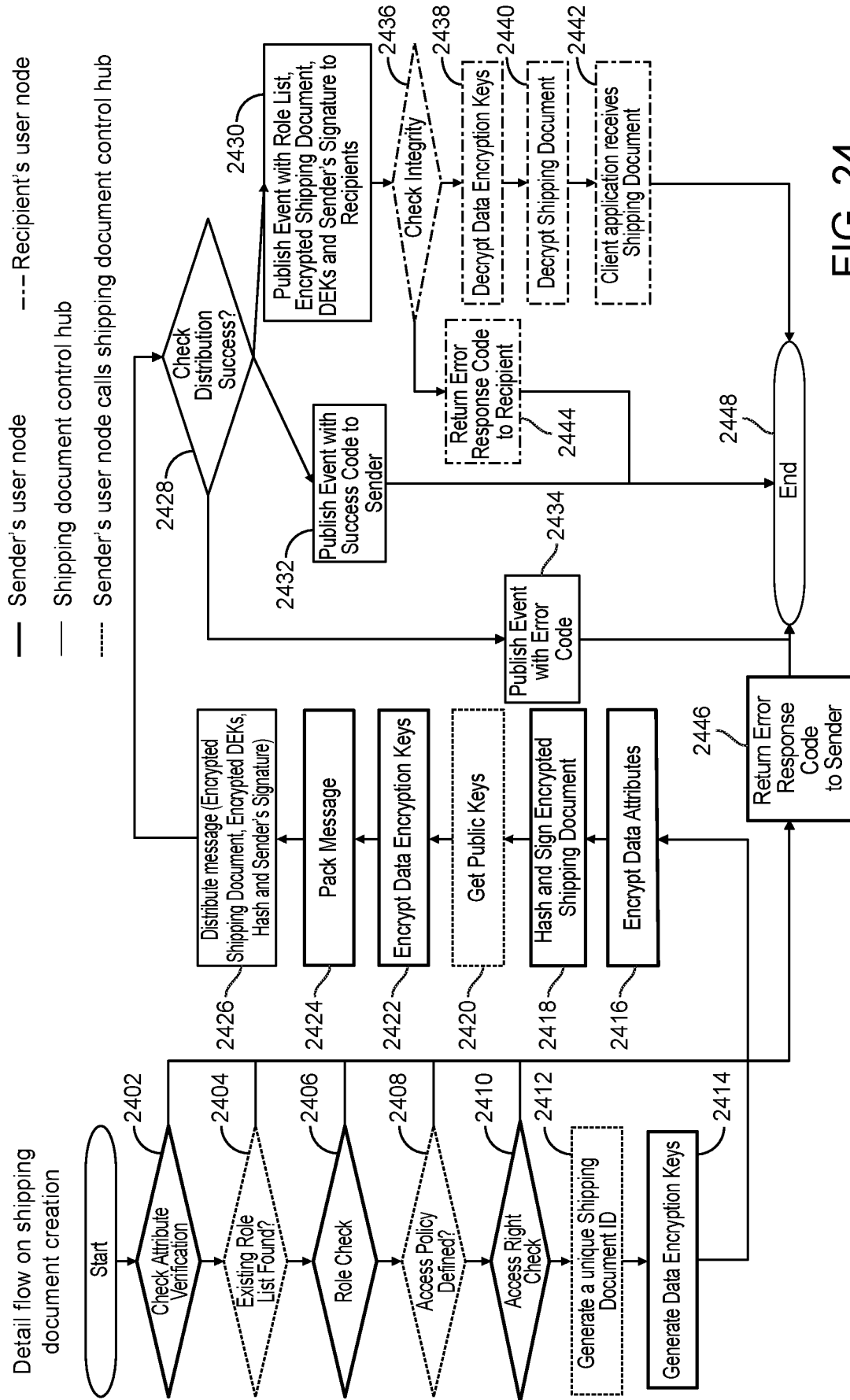


FIG. 23



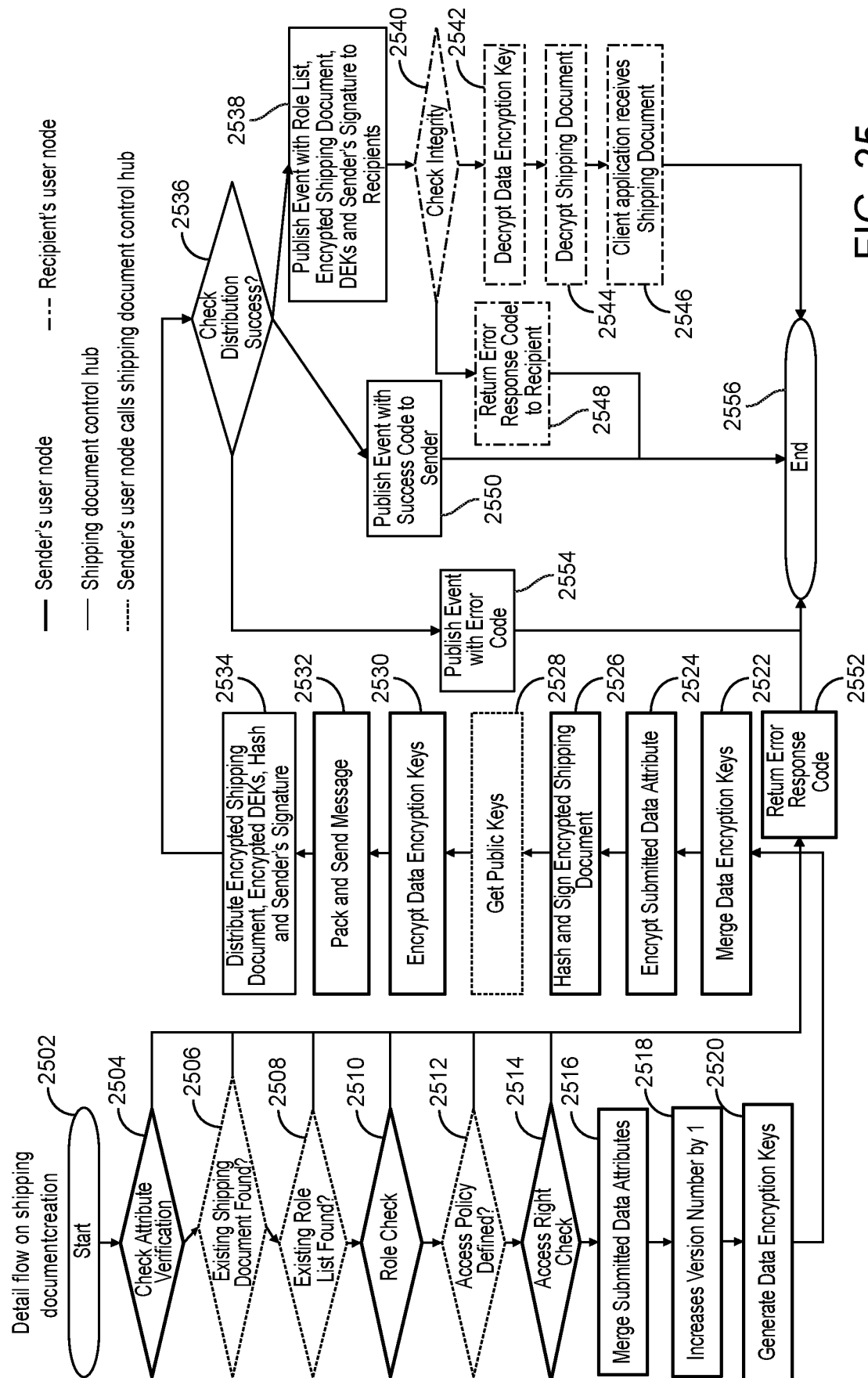


FIG. 25

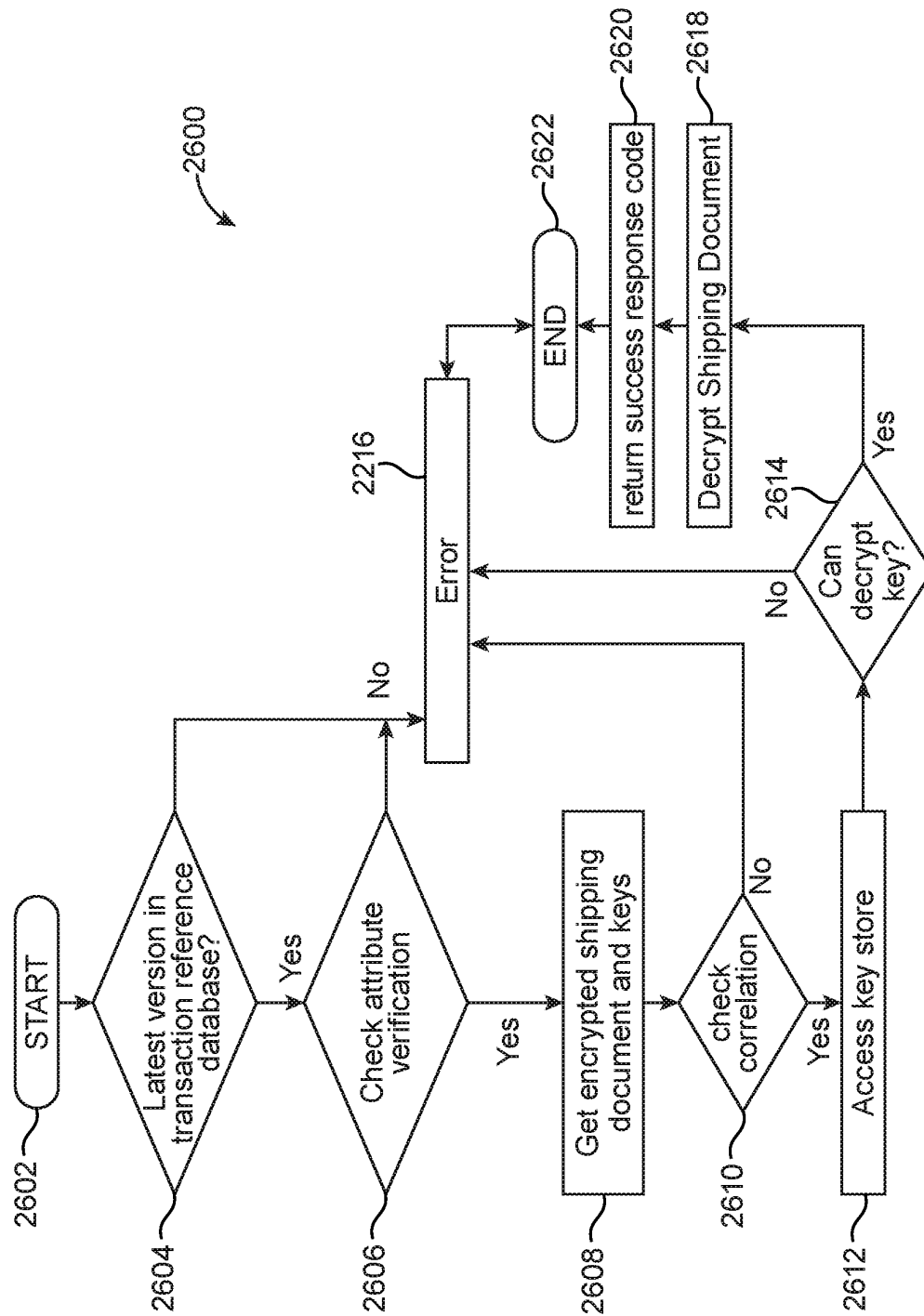
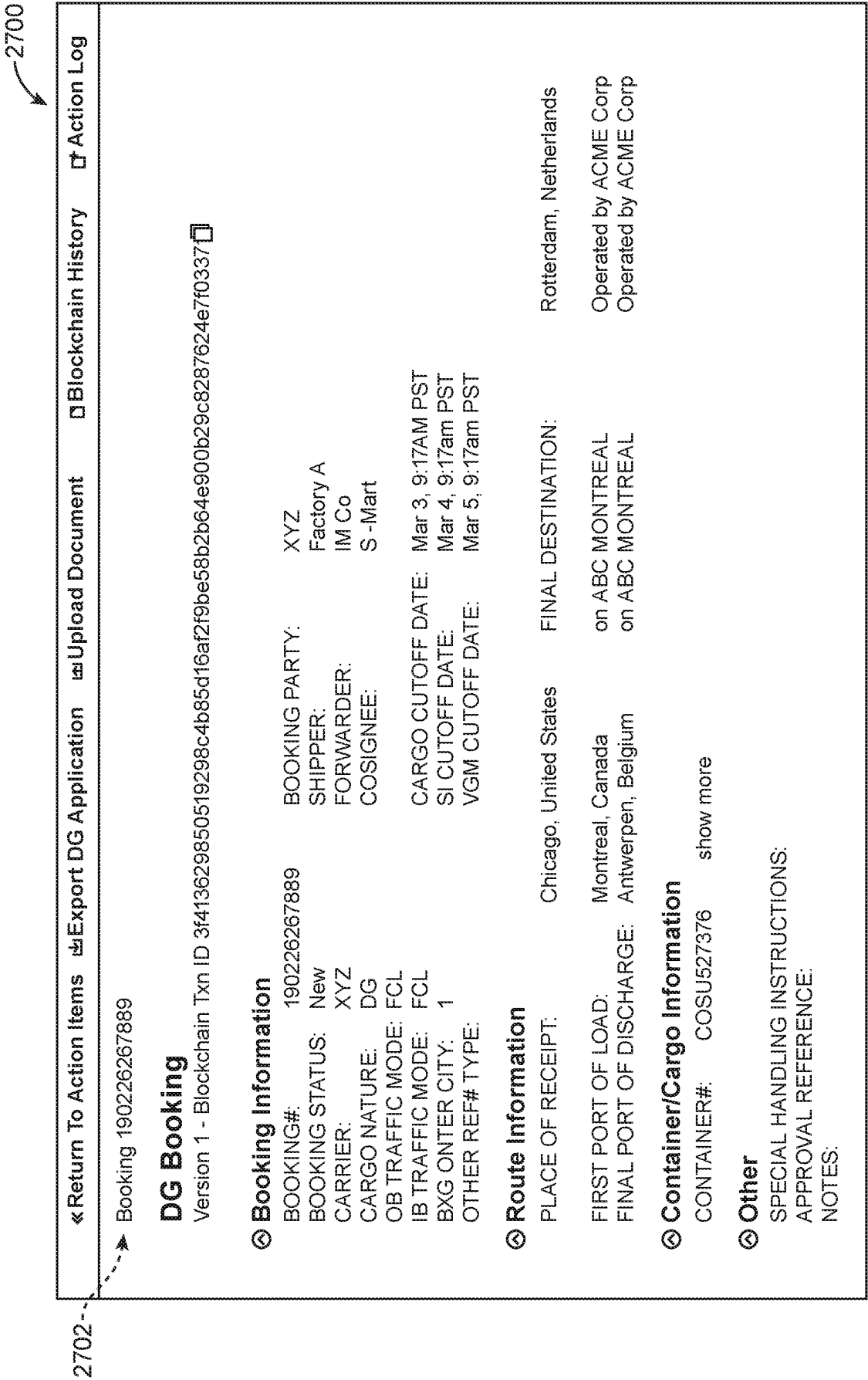


FIG. 26



2800

«Return To Action Items

Export DG Application

Upload Document

Blockchain History

Action Log

Booking 190226267889

DG Booking

Version 1 - Blockchain Txn ID 3f413629850519298c4b85d16af2f9be58b64e900b29c8287624e7f033717

⊗ Booking Information

BOOKING#: 190226267889

BOOKING STATUS: New

CARRIER: XYZ

CARGO NATURE: DG

OB TRAFFIC MODE: FCL

IB TRAFFIC MODE: FCL

BXG ONTER CITY: 1

OTHER REF# TYPE: /

BOOKING PARTY:

SHIPPER:

FORWARDER:

COSIGNEE:

CARGO CUTOFF DATE: Mar 3, 9:17AM PST

SI CUTOFF DATE: Mar 4, 9:17am PST

VGM CUTOFF DATE: Mar 5, 9:17am PST

⊗ Route Information

PLACE OF RECEIPT:

FIRST PORT OF LOAD: Montreal, Canada

FINAL PORT OF DISCHARGE: Antwerpen, Belgium

FINAL DESTINATION:

on ABC MONTREAL

on ABC MONTREAL

Operated by ACME Corp

Operated by ACME Corp

⊗ Container/Cargo Information

CONTAINER#: COSU527376

show more

⊗ Other

SPECIAL HANDLING INSTRUCTIONS:

APPROVAL REFERENCE:

NOTES:

FIG. 28

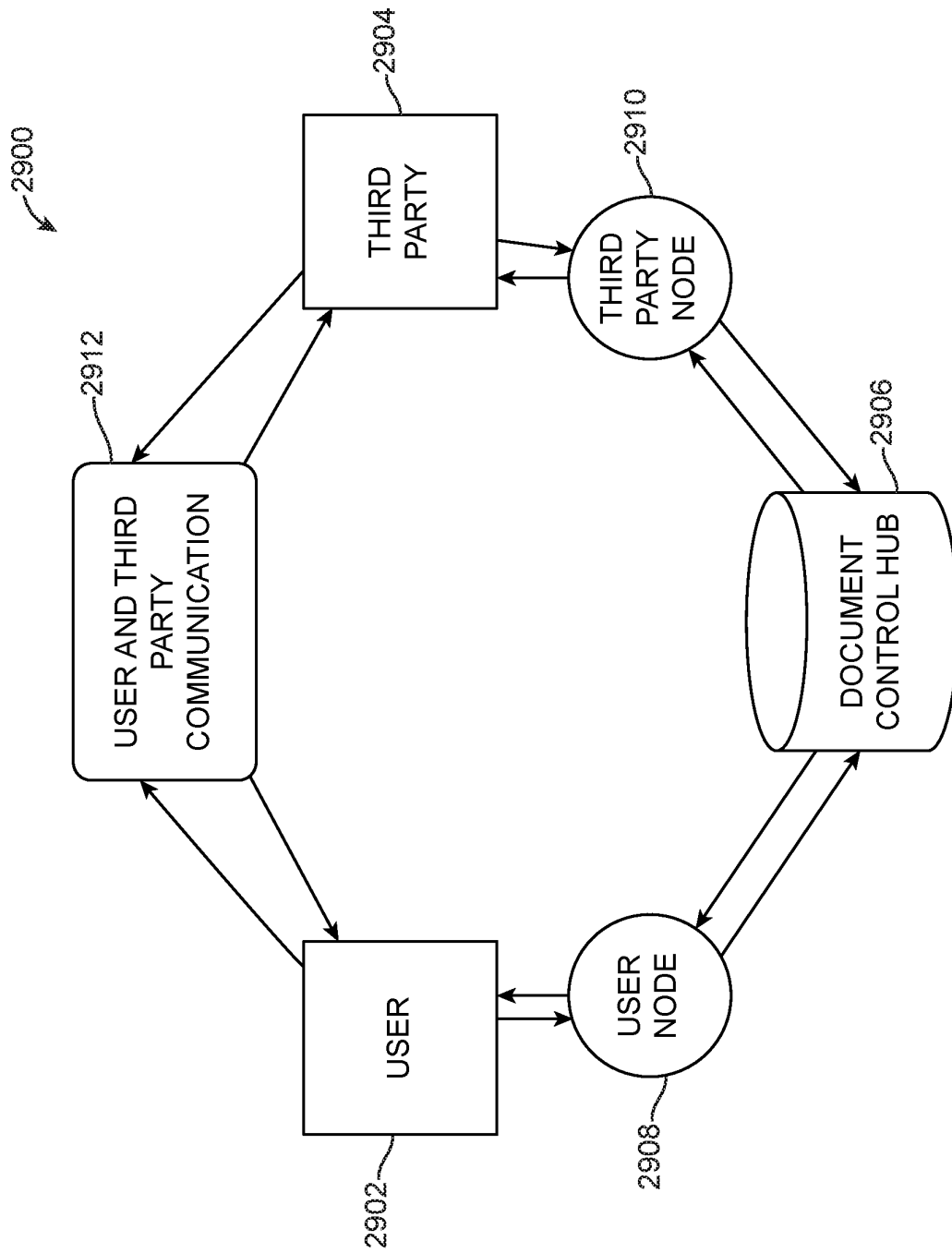
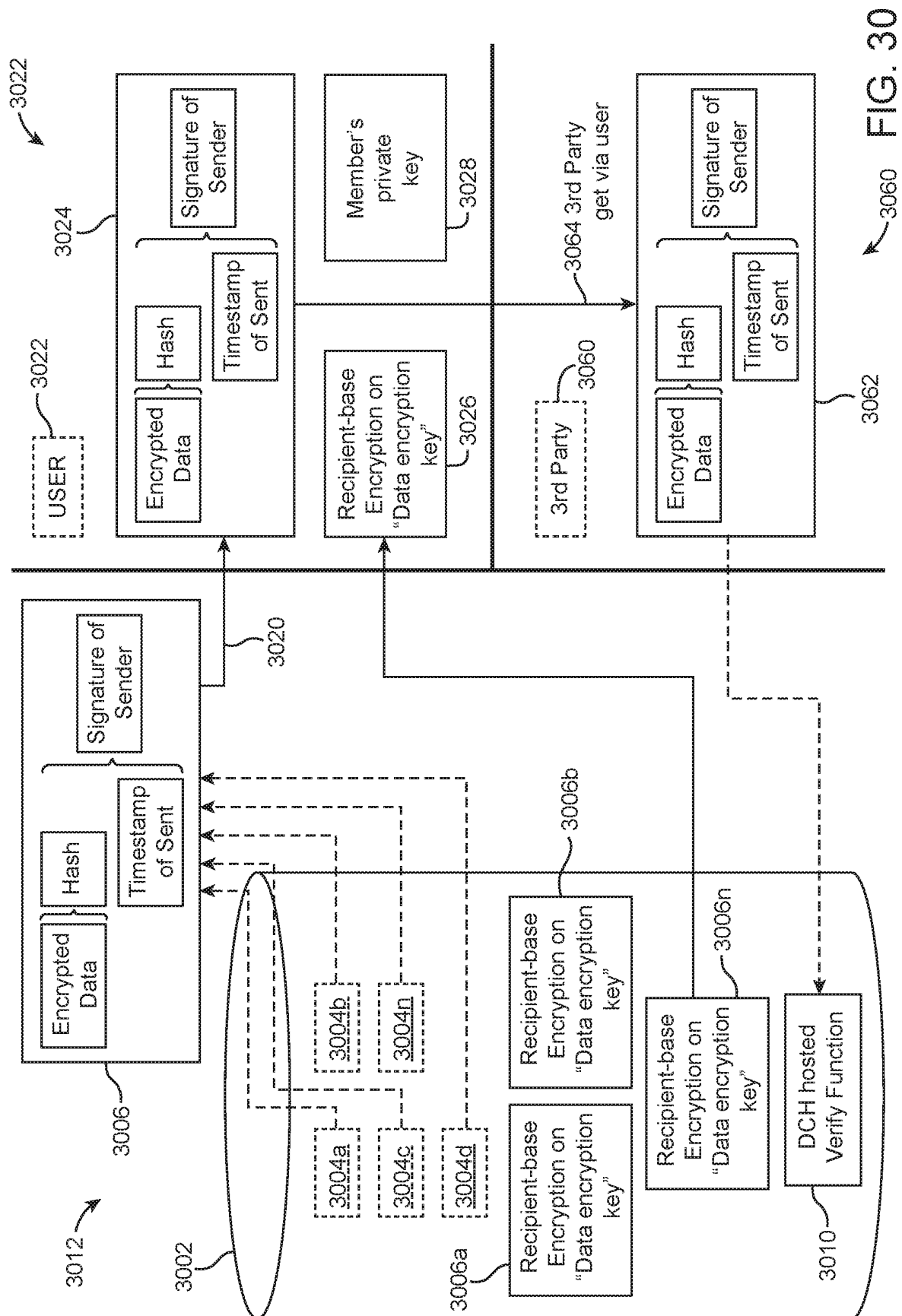


FIG. 29



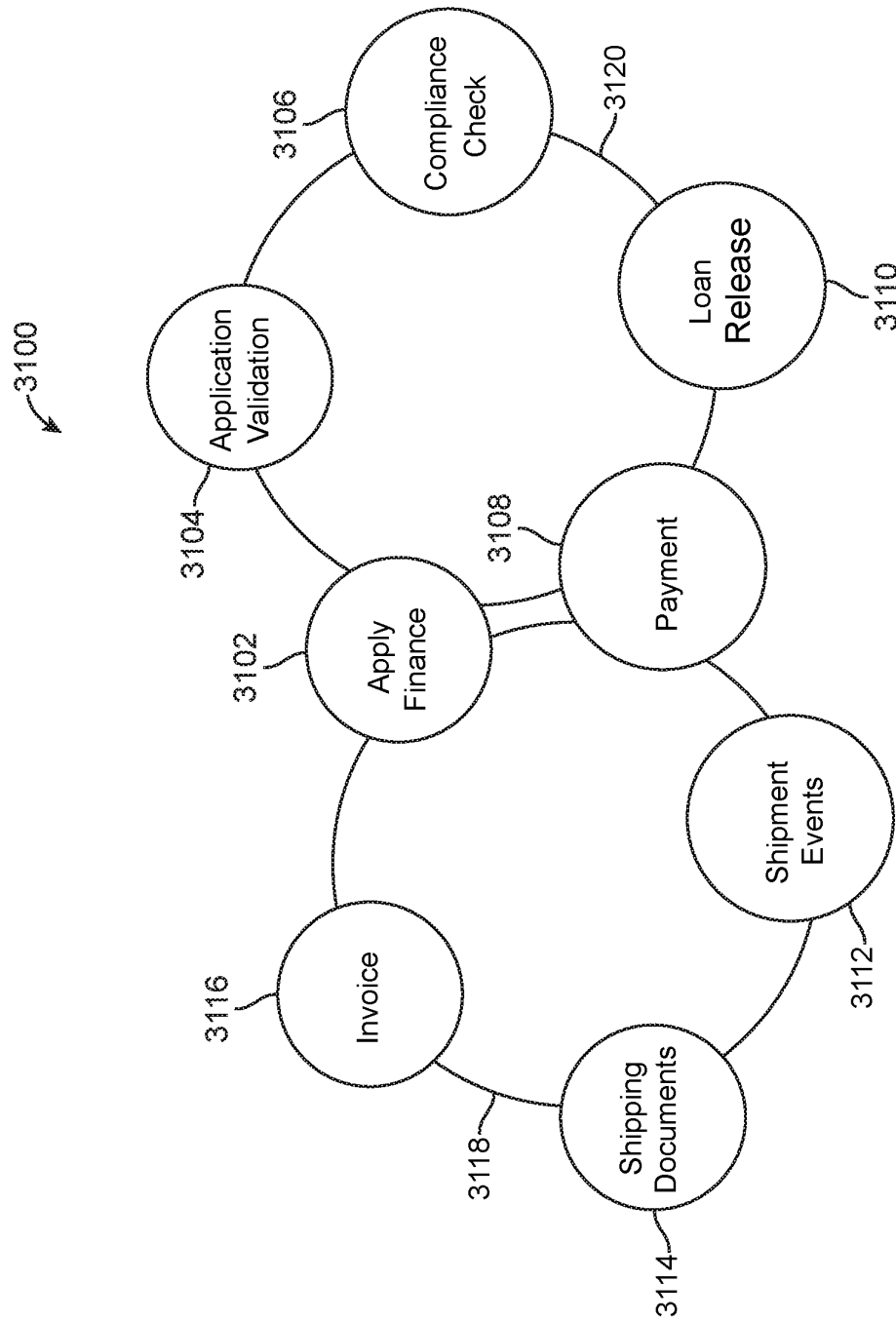


FIG. 31

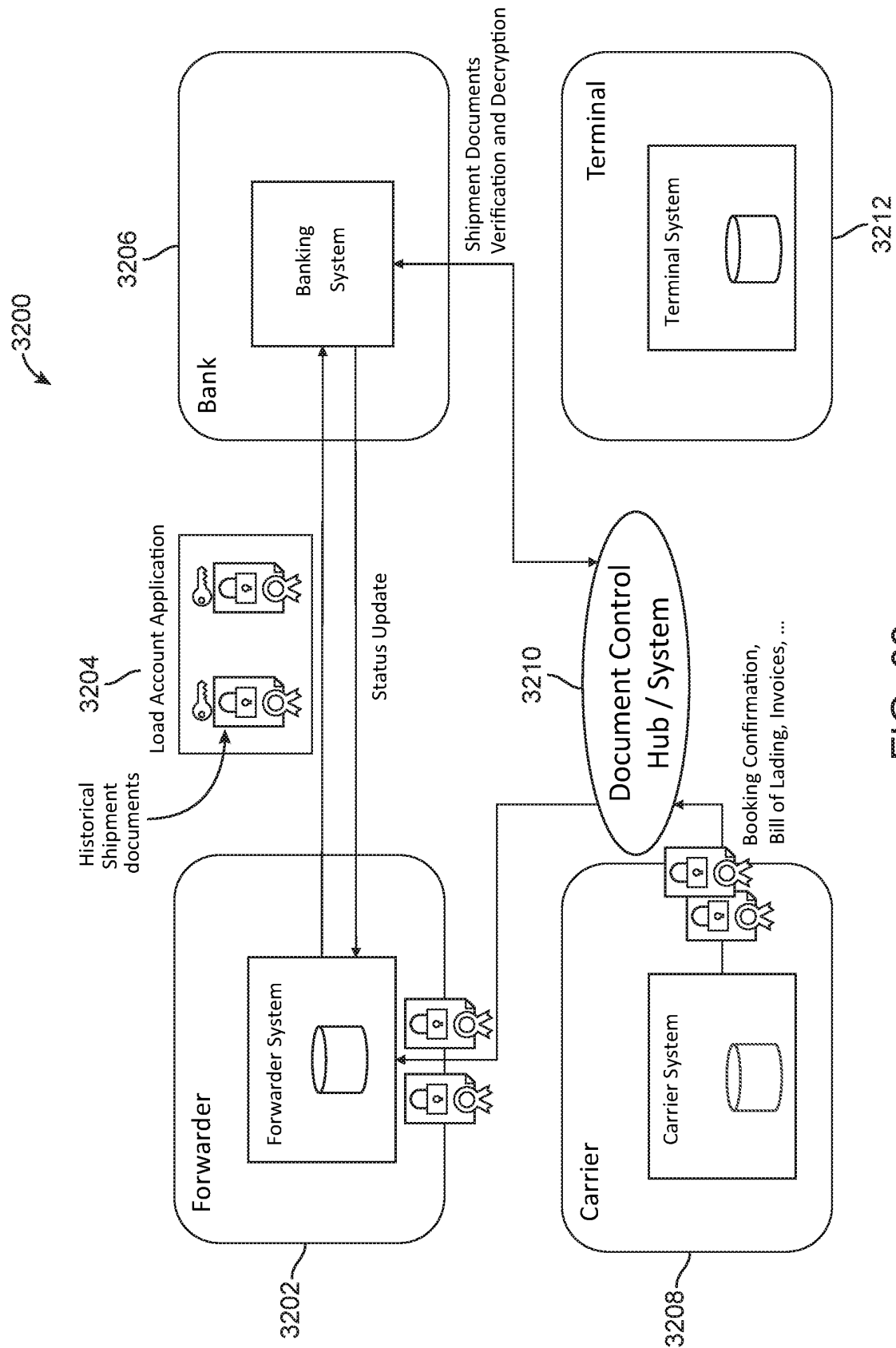


FIG. 32

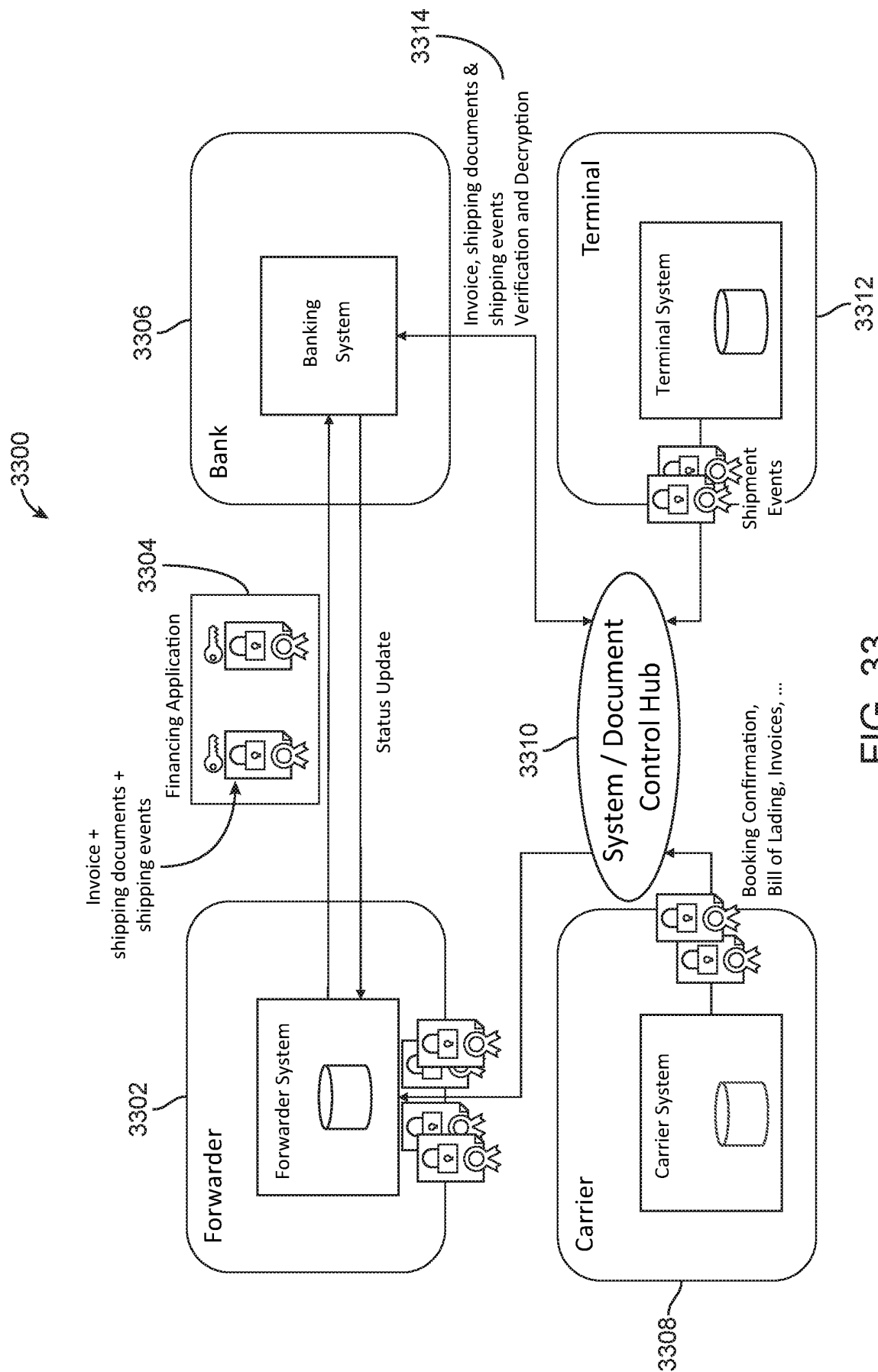


FIG. 33

3400

25%

Company A China

Total Invoice60

Outstanding Invoice60

Invoice No

Search

From

To

4158241149 - ACME

Invoice Amount\$7,876.00

Outstanding Amount\$7,876.00

StatusValidation

CurrencyUSD

Invoice DateJan 22, 2019

Invoice Due DateJan 29, 2019

Apply Financing

Direct Pay

Master Bill of Lading

6258240388 ⓘ

Charged Amount\$2,876.00

Place of receiptHong Kong

Final destinationRotterdam

6258240334 ⓘ

Charged Amount\$1,236.00

Place of receiptHong Kong

Final destinationRotterdam

6258240322 ⓘ

Charged Amount\$4,876.00

Place of receiptHong Kong

Final destinationRotterdam

Feb 11, 2019

Invoice Amount\$7,876.00

Invoice Due DateFeb 18, 2019

CarrierACME

Feb 8, 2019

Invoice Amount\$1,866.00

Invoice Due DateFeb 15, 2019

CarrierACME ⓘ

Jan 22, 2019

Invoice Amount\$1,852.00

Invoice Due DateJan 29, 2019

CarrierACME ⓘ

Feb 8, 2019

Invoice Amount\$5,866.00

Invoice Due DateJan 13, 2019

CarrierACME

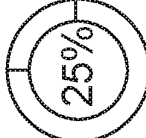
Dec 15, 2019

Invoice Amount\$5,194.00

Invoice Due DateDec 22, 2019

CarrierACME

FIG. 34

		Total Invoice 60 4158241149 - ACME																															
Outstanding Invoice		Apply Financing																															
Company A China <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Invoice No</td> <td style="width: 50%;">▼</td> </tr> <tr> <td>From</td> <td></td> </tr> </table>		Invoice No	▼	From		Invoice Number & Loan Amount 4158241228 \$3,769 USD Please select a branch for applying the financing Bank A Bank B Bank C Please select your loan account number 123-456-780-909 ▼ Cancel Submit																											
Invoice No	▼																																
From																																	
<table border="1" style="width: 100%;"> <thead> <tr> <th></th> <th>Date</th> <th>Invoice Amount</th> <th>Invoice Due Date</th> </tr> </thead> <tbody> <tr> <td></td> <td>Feb 11, 2019</td> <td>\$7,876.00</td> <td>Feb 18, 2019</td> </tr> <tr> <td></td> <td>Feb 8, 2019</td> <td>\$1,866.00</td> <td>Feb 15, 2019</td> </tr> <tr> <td></td> <td>Jan 22, 2019</td> <td>\$1,852.00</td> <td>Jan 29, 2019</td> </tr> <tr> <td></td> <td>Feb 8, 2019</td> <td>\$5,866.00</td> <td>Jan 13, 2019</td> </tr> <tr> <td></td> <td>Dec 15, 2019</td> <td>\$5,194.00</td> <td>Dec 22, 2019</td> </tr> </tbody> </table>			Date	Invoice Amount	Invoice Due Date		Feb 11, 2019	\$7,876.00	Feb 18, 2019		Feb 8, 2019	\$1,866.00	Feb 15, 2019		Jan 22, 2019	\$1,852.00	Jan 29, 2019		Feb 8, 2019	\$5,866.00	Jan 13, 2019		Dec 15, 2019	\$5,194.00	Dec 22, 2019	<table border="1" style="width: 100%;"> <tr> <td style="width: 30%;"> Charged Amount 2,236.00 </td> <td style="width: 30%;"> Place of receipt Hong Kong </td> <td style="width: 40%;"> Final destination Rotterdam </td> </tr> <tr> <td colspan="3"> 258240334① Mar 8, 2019 </td> </tr> </table>		Charged Amount 2,236.00	Place of receipt Hong Kong	Final destination Rotterdam	258240334① Mar 8, 2019		
	Date	Invoice Amount	Invoice Due Date																														
	Feb 11, 2019	\$7,876.00	Feb 18, 2019																														
	Feb 8, 2019	\$1,866.00	Feb 15, 2019																														
	Jan 22, 2019	\$1,852.00	Jan 29, 2019																														
	Feb 8, 2019	\$5,866.00	Jan 13, 2019																														
	Dec 15, 2019	\$5,194.00	Dec 22, 2019																														
Charged Amount 2,236.00	Place of receipt Hong Kong	Final destination Rotterdam																															
258240334① Mar 8, 2019																																	
		Direct Pay Apply Financing																															

35

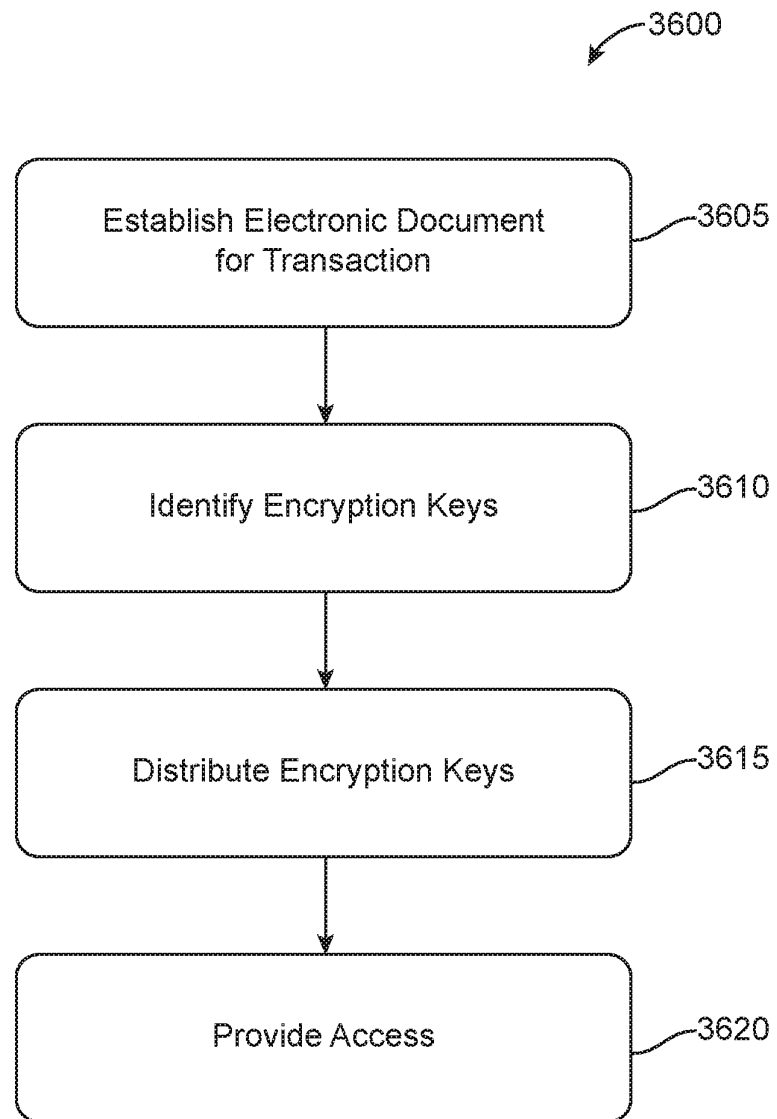


FIG. 36

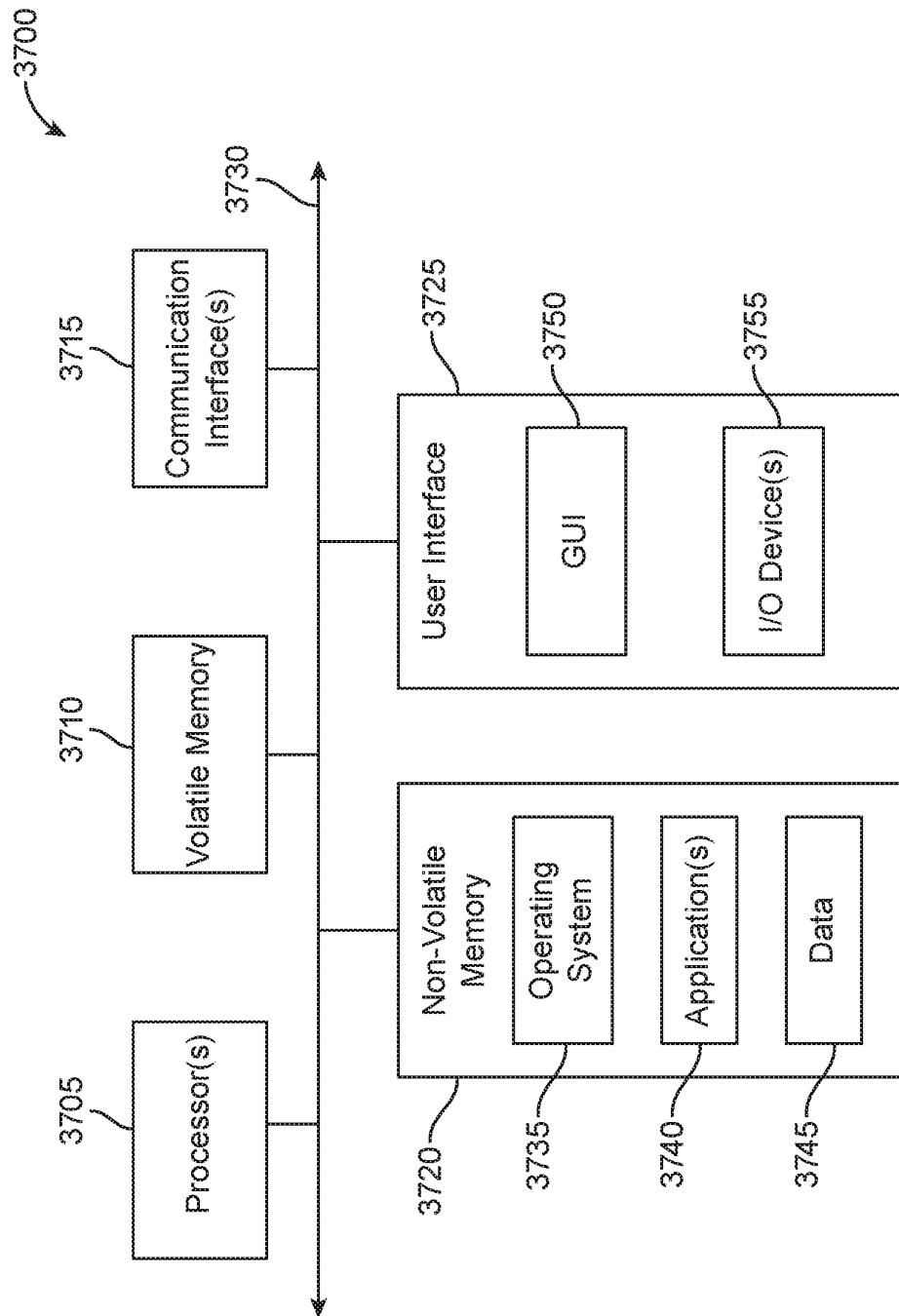


FIG. 37