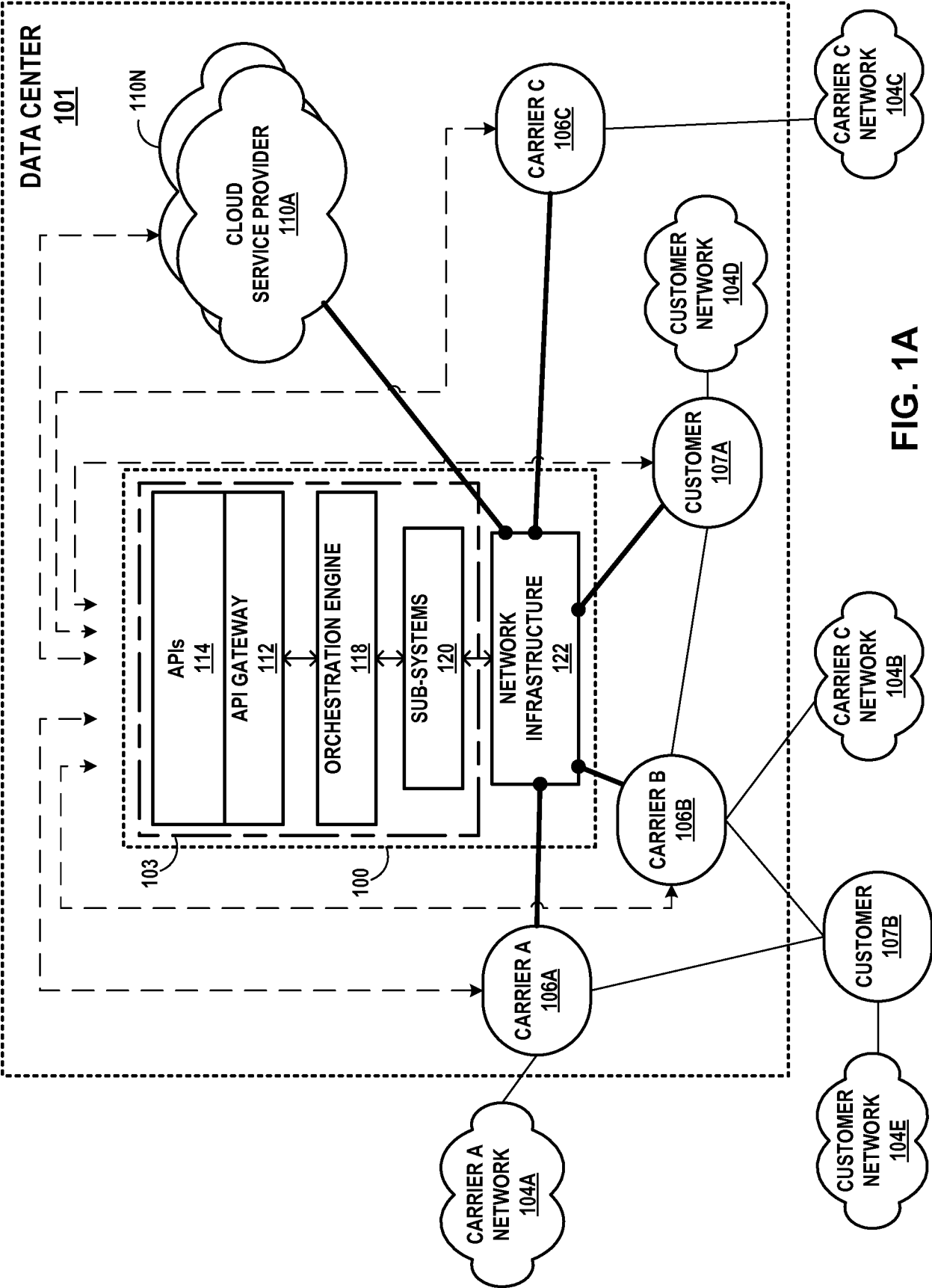




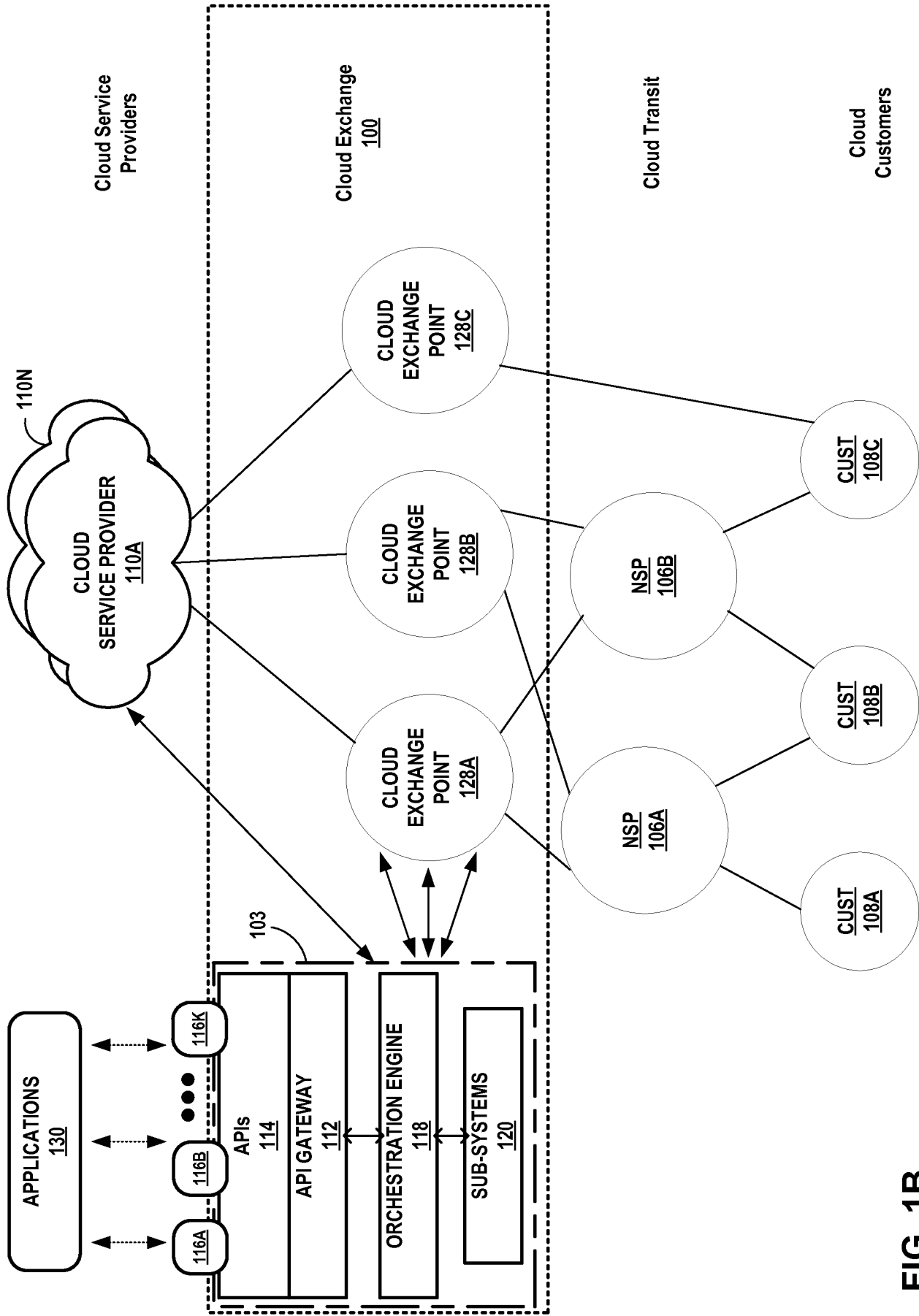


FIG. 1B

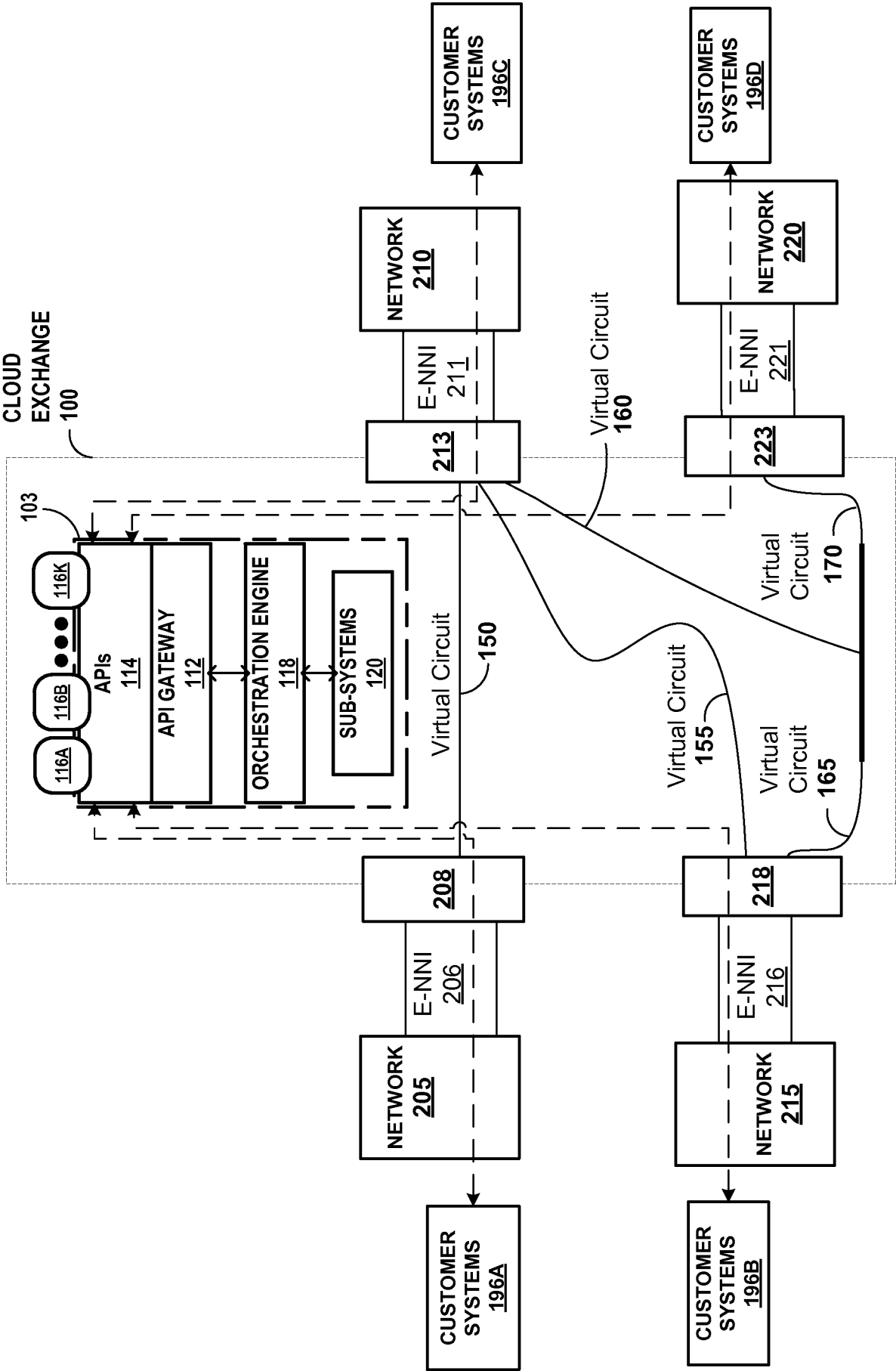


FIG. 1C

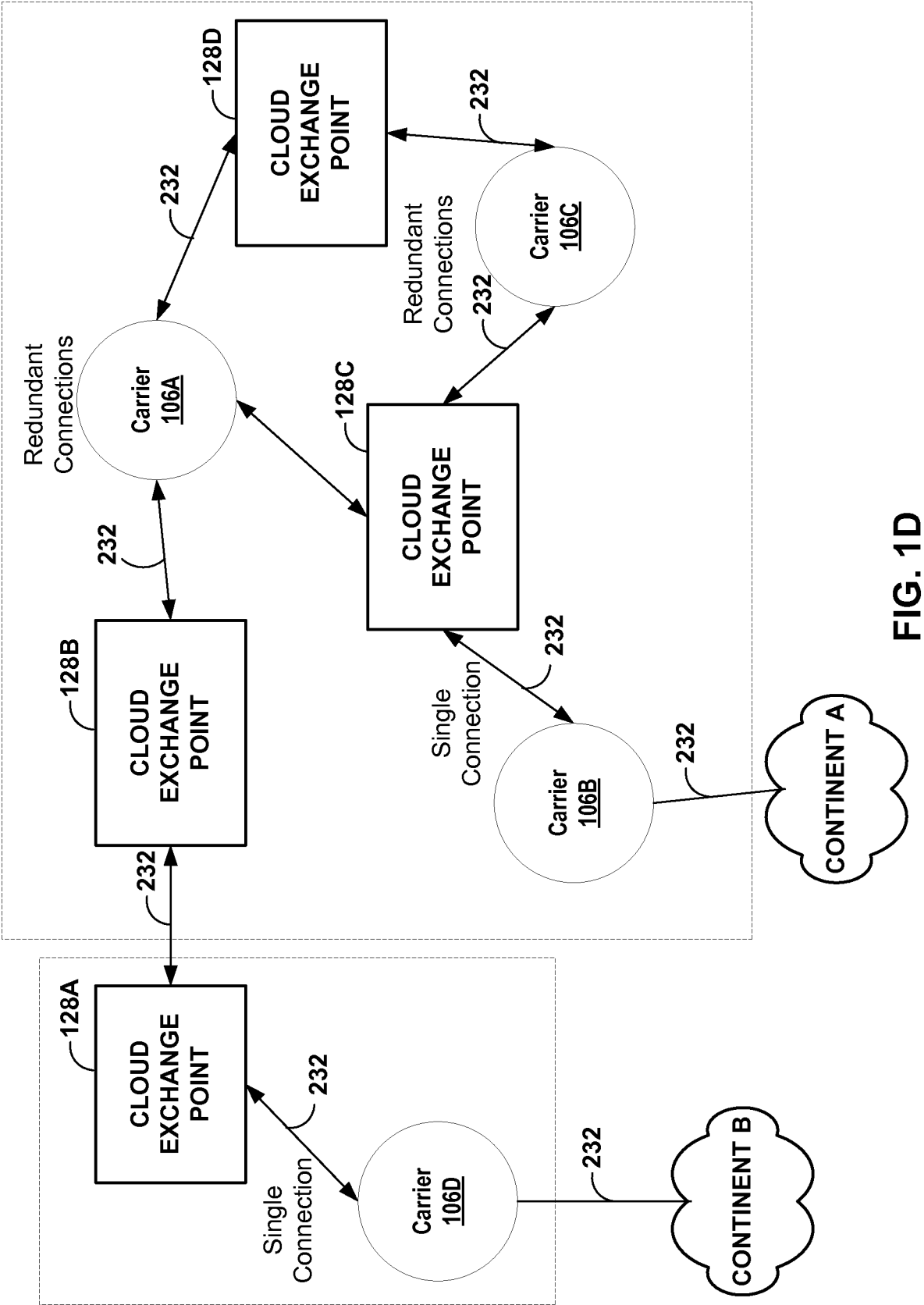


FIG. 1D

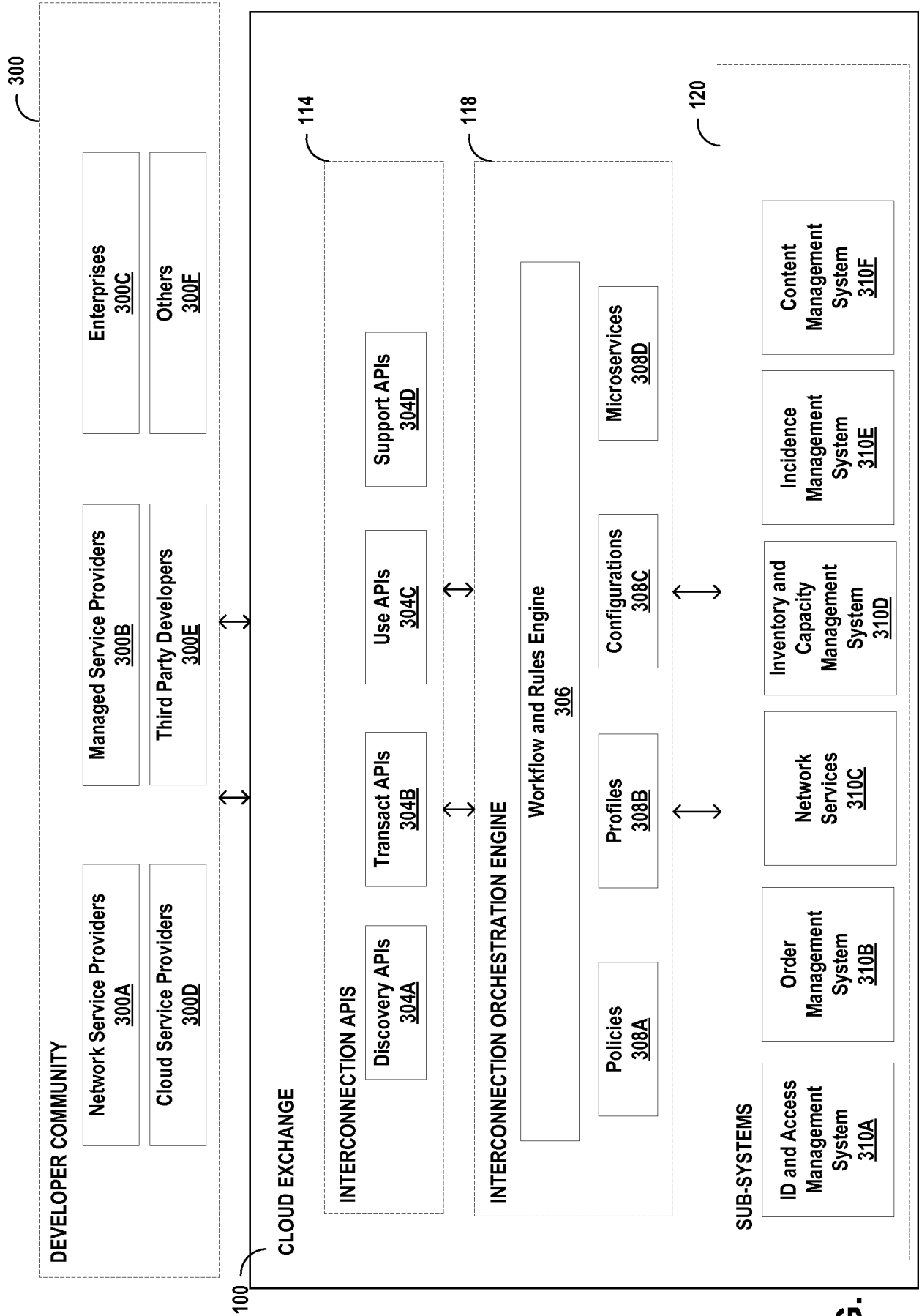
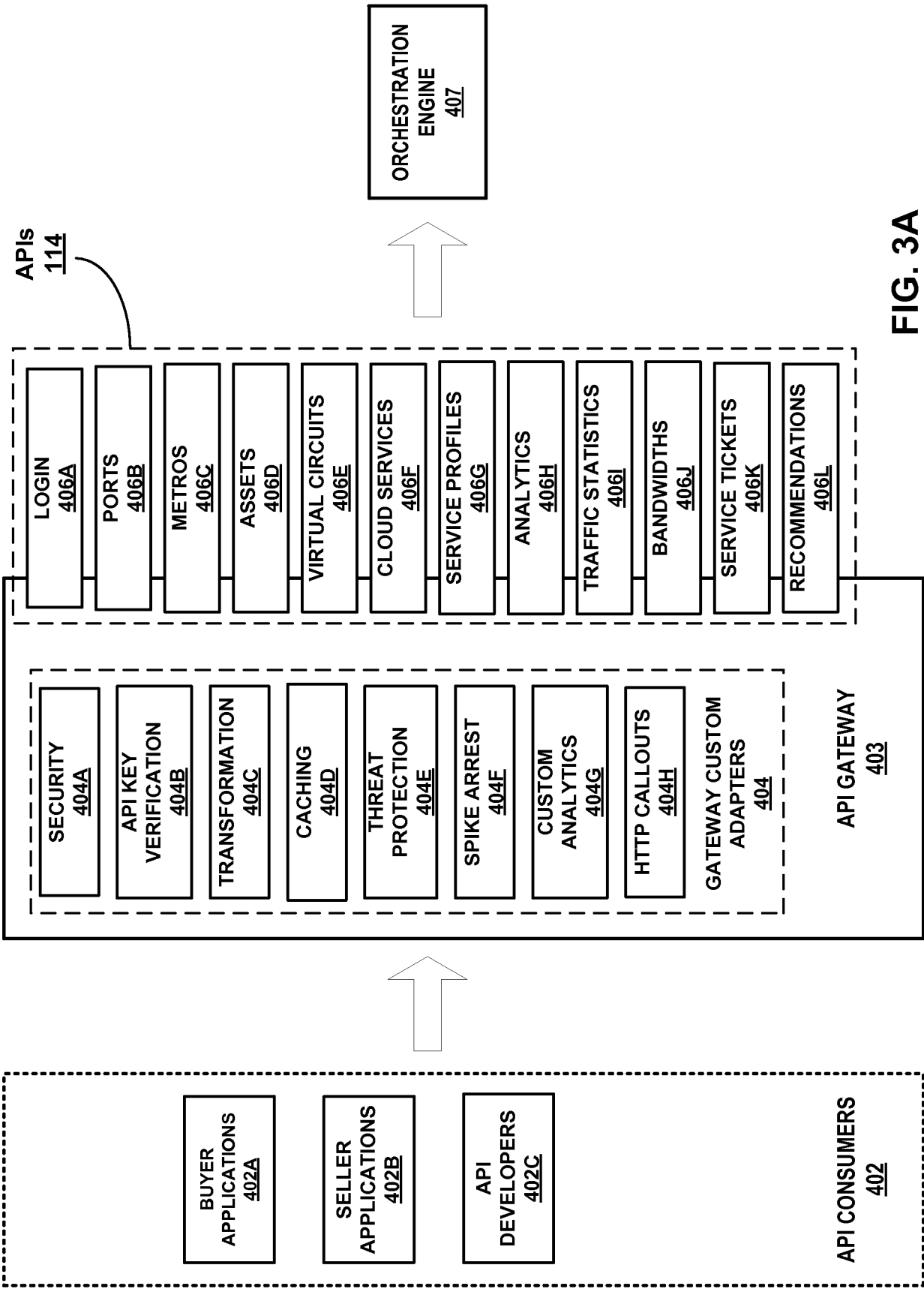


FIG. 2



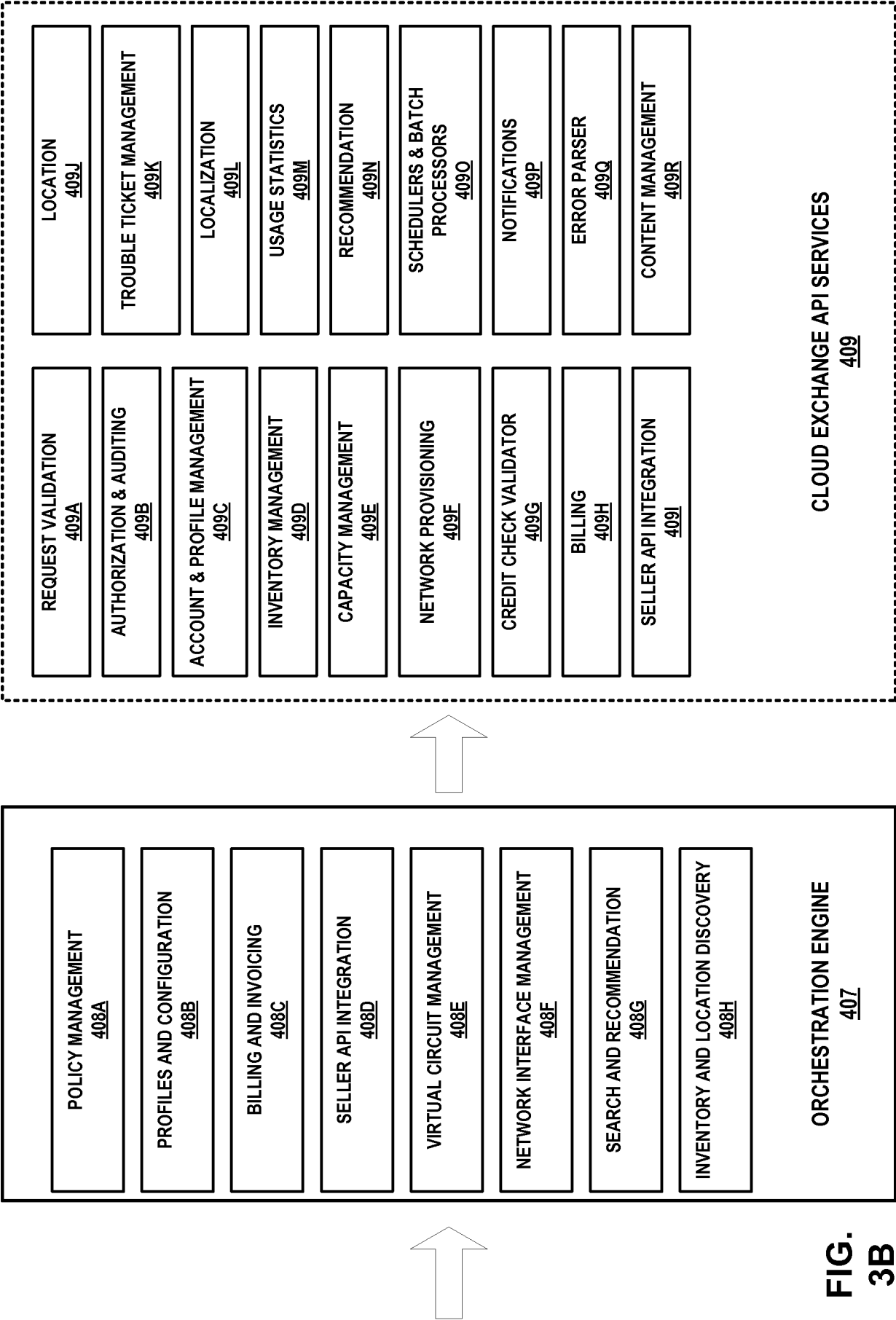


FIG.
3B

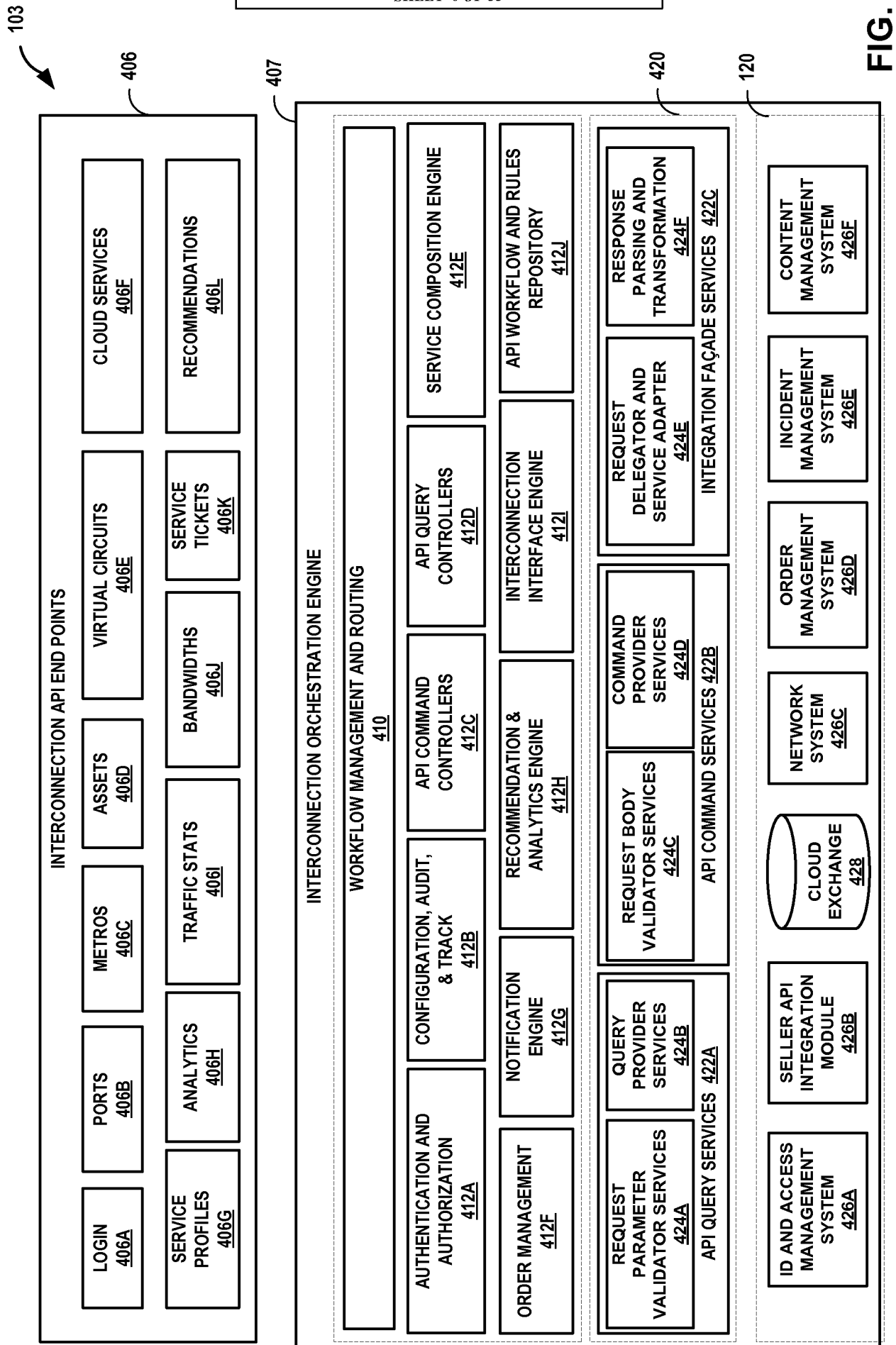


FIG. 4

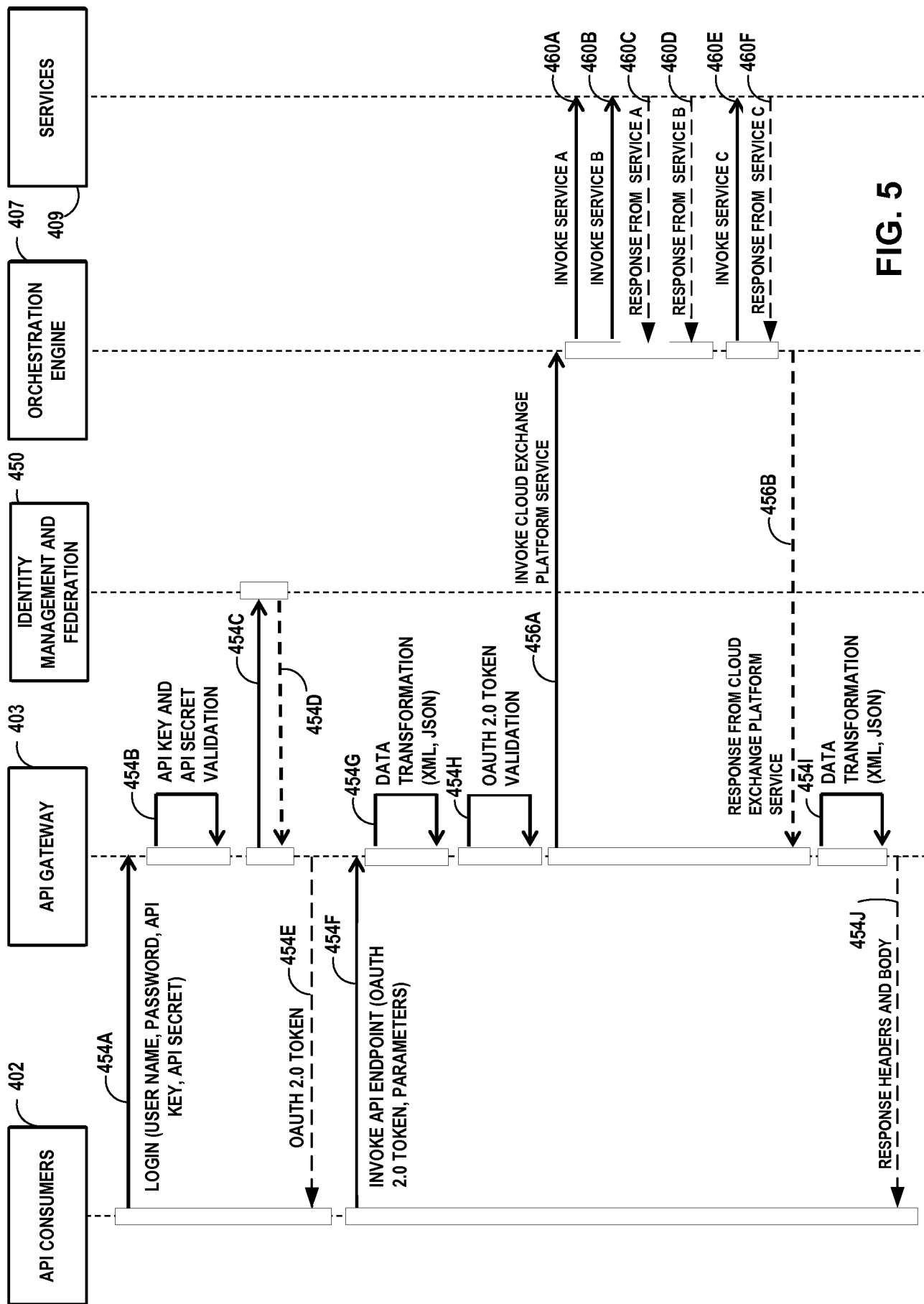


FIG. 5

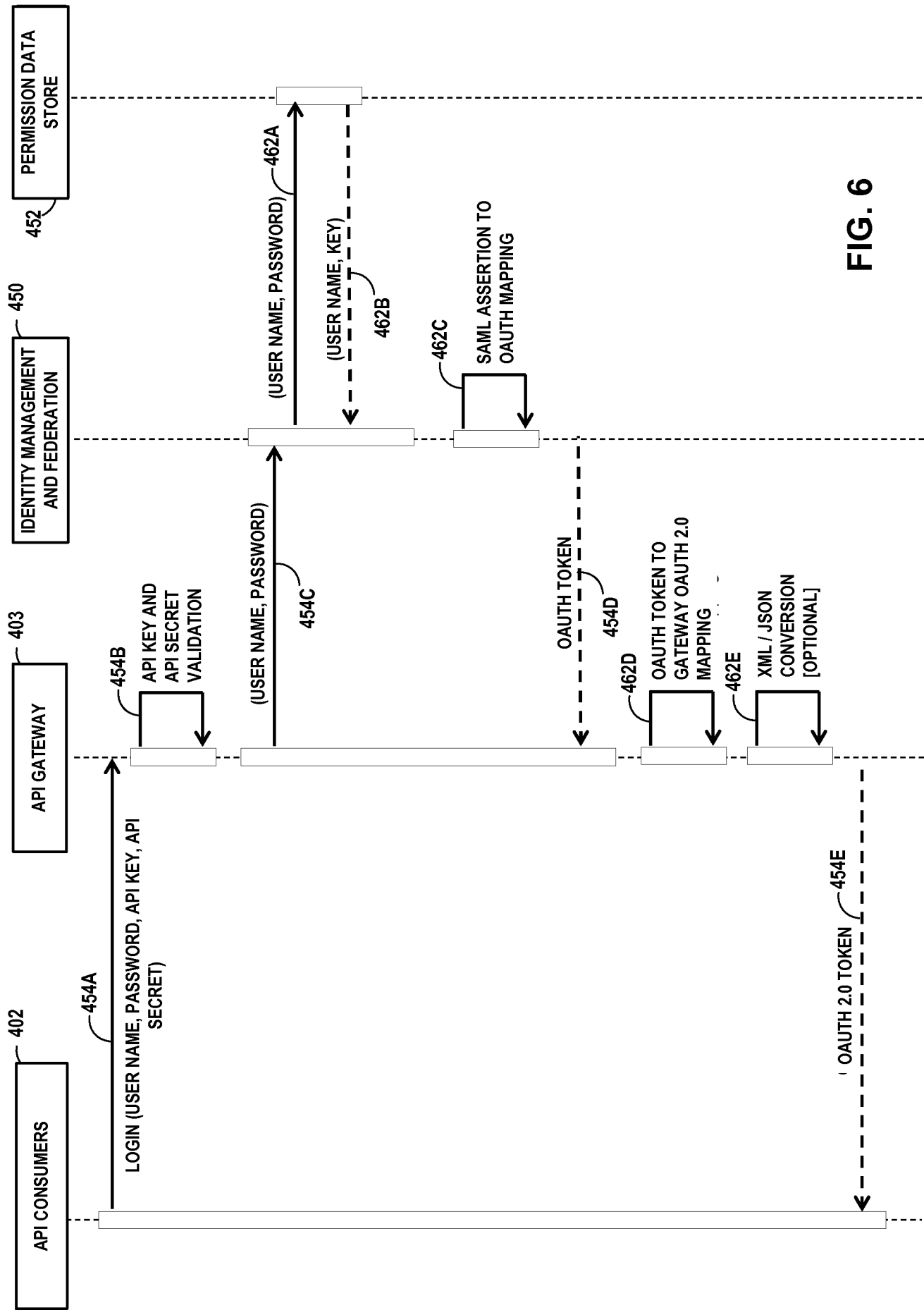


FIG. 6

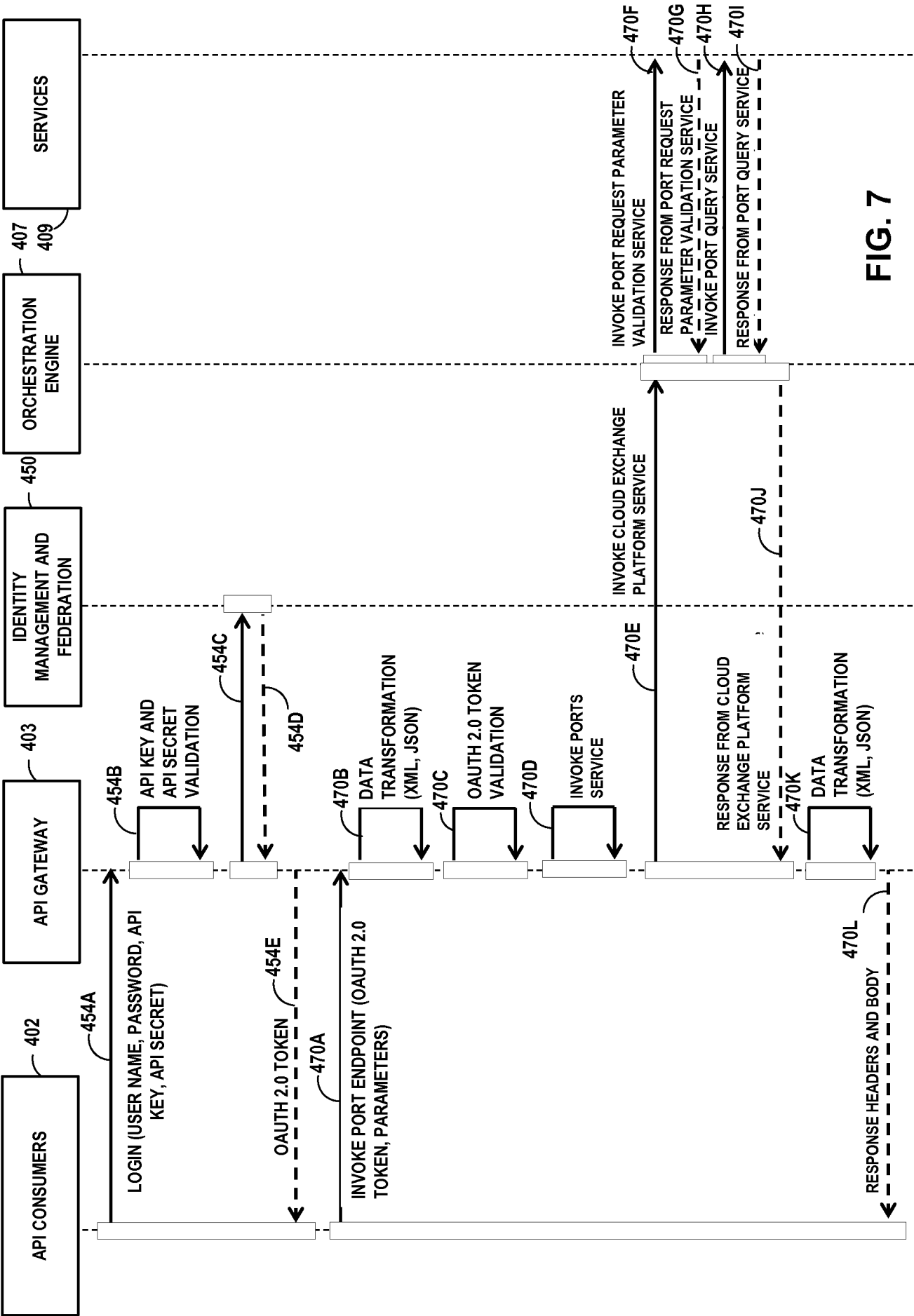


FIG. 7

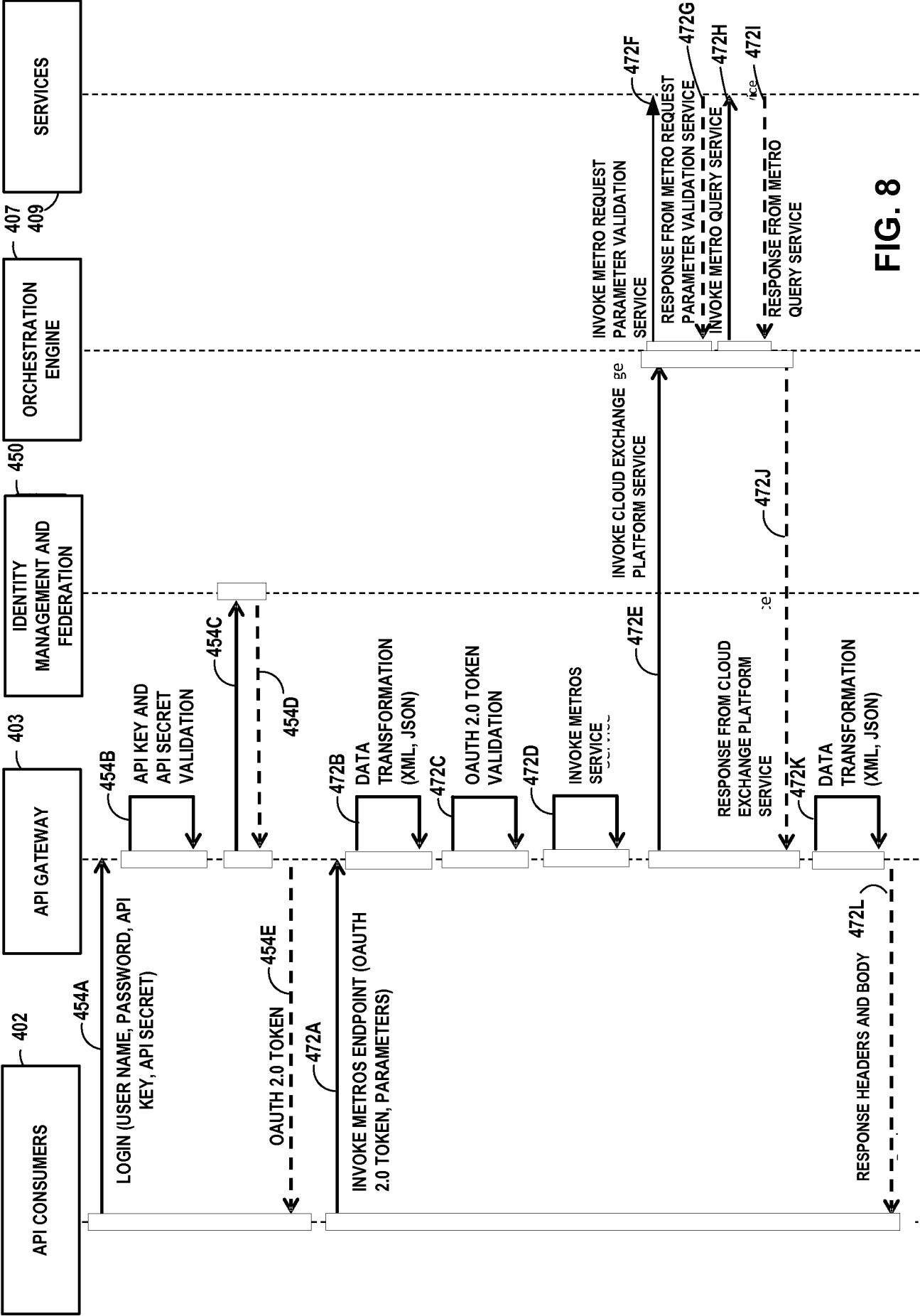


FIG. 8

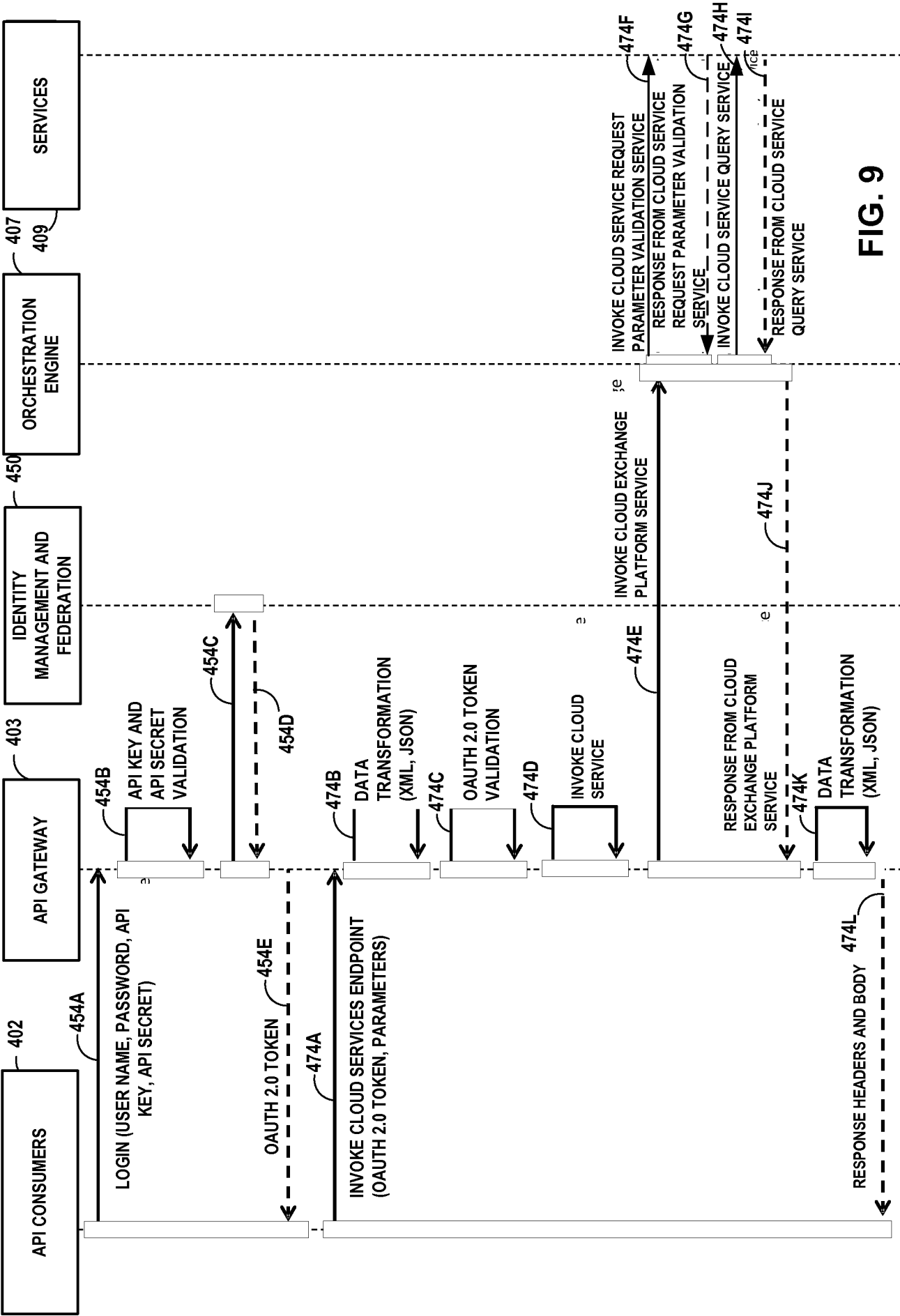


FIG. 9

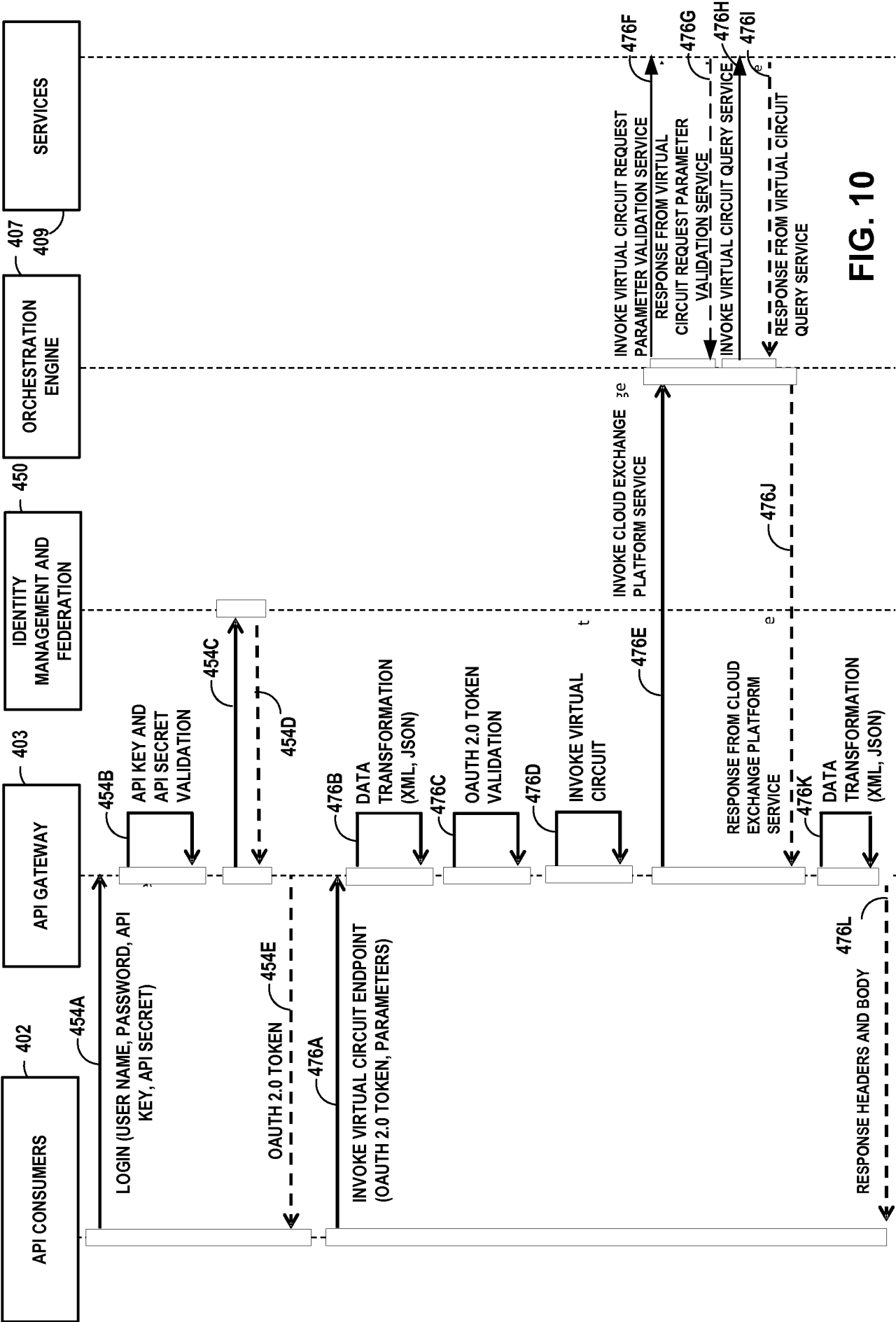


FIG. 10

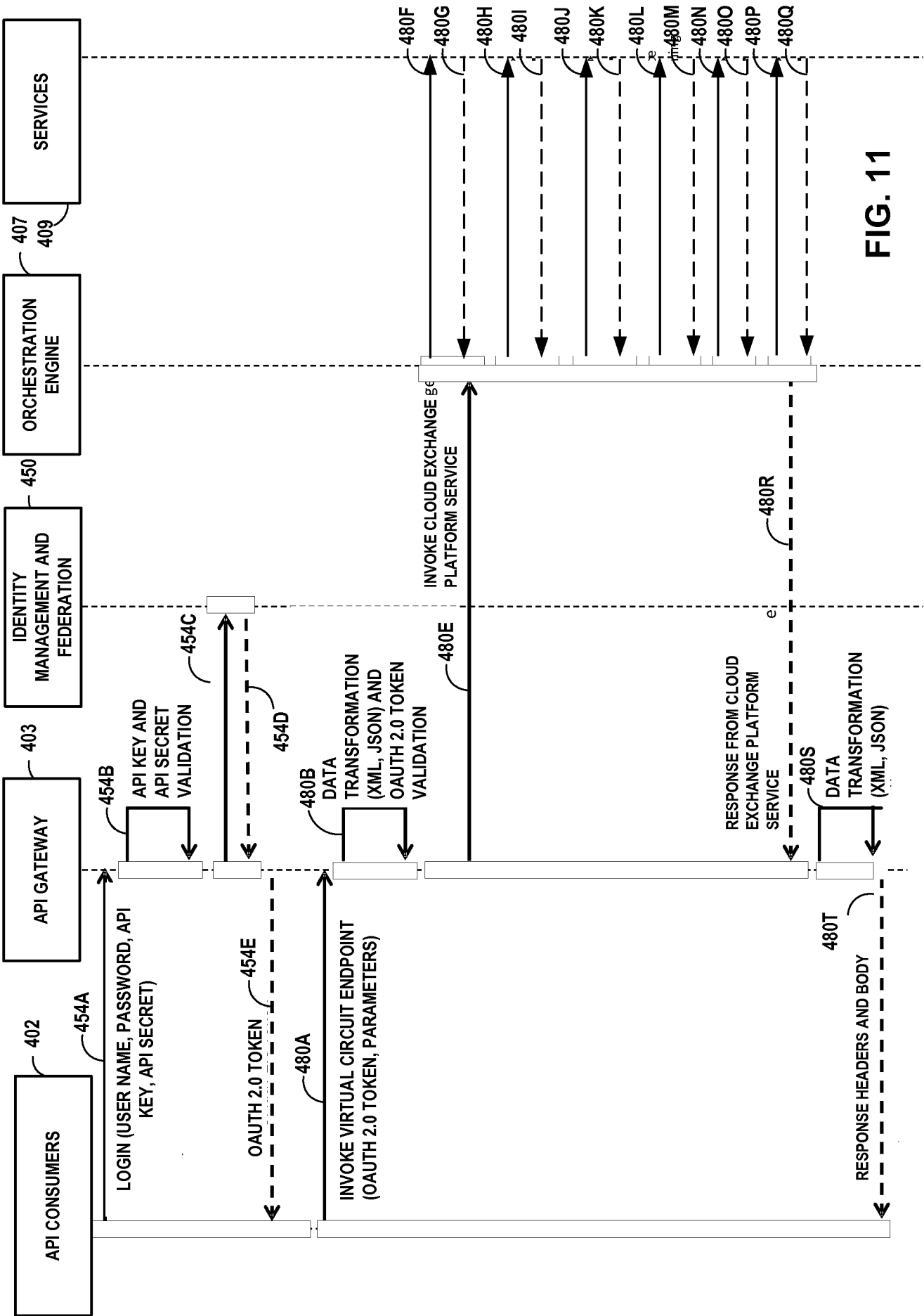


FIG. 11

DOCKET NO.: 1209-002WO01
SHEET 16 OF 33

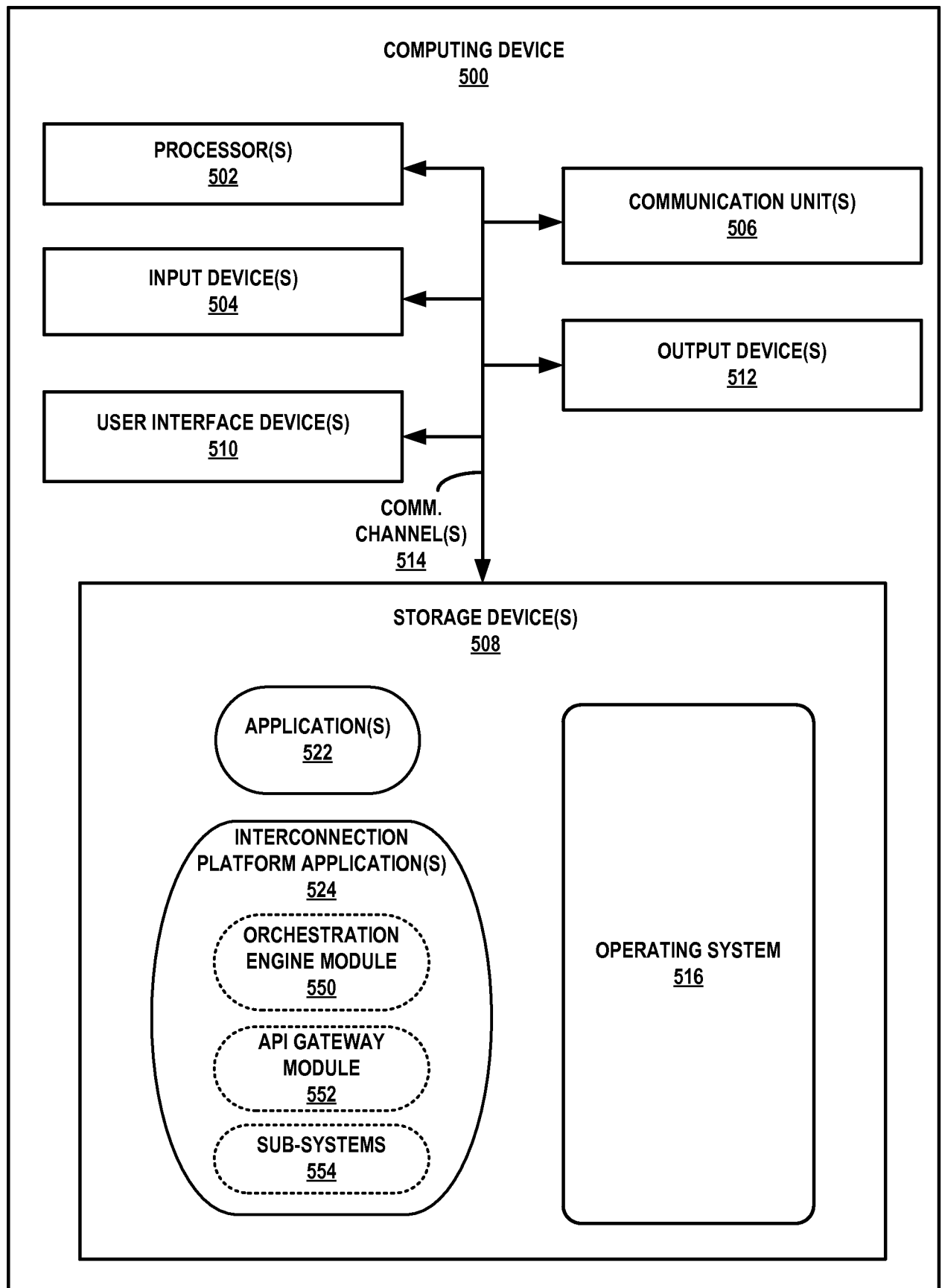


FIG. 12

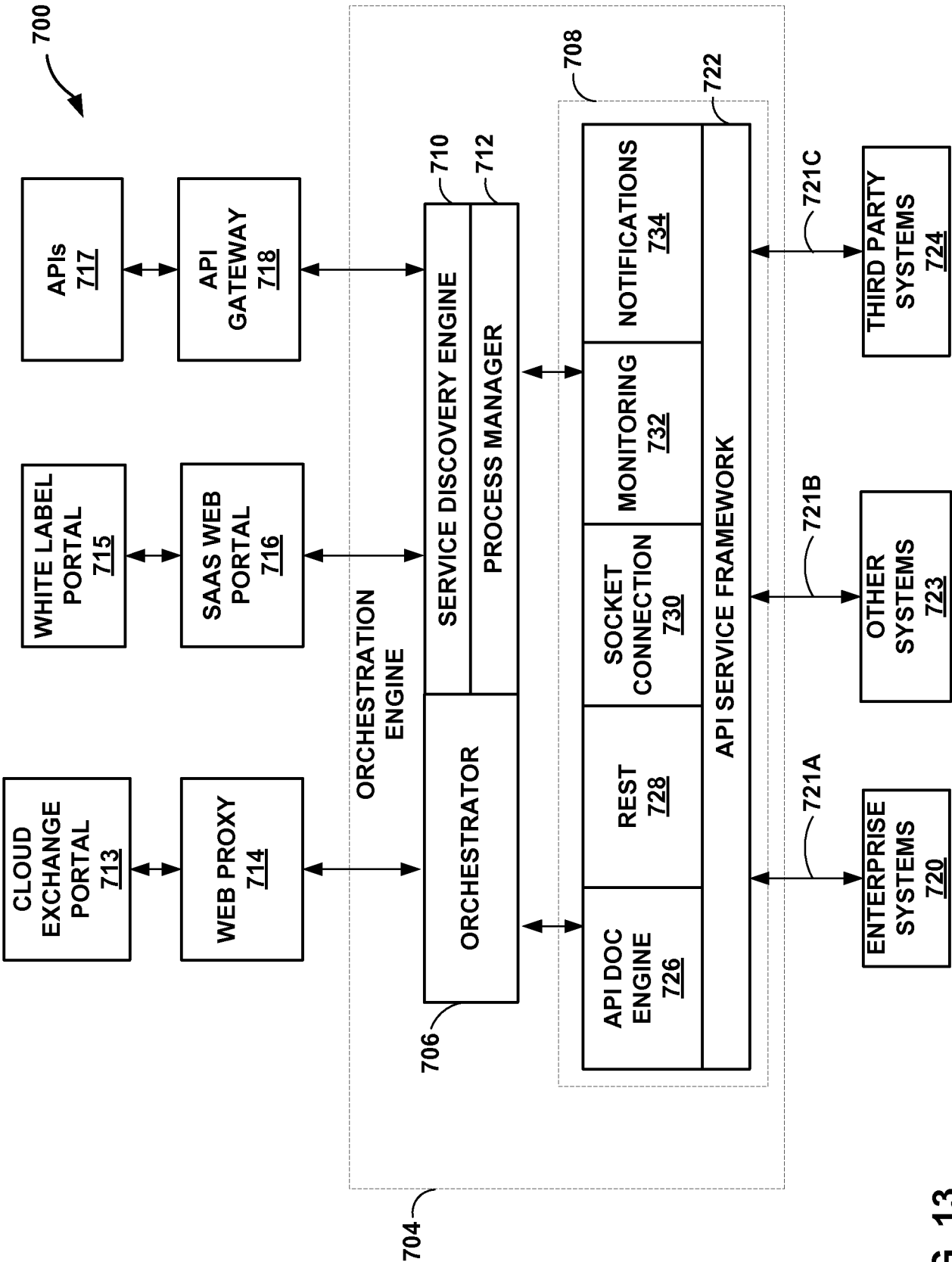


FIG. 13

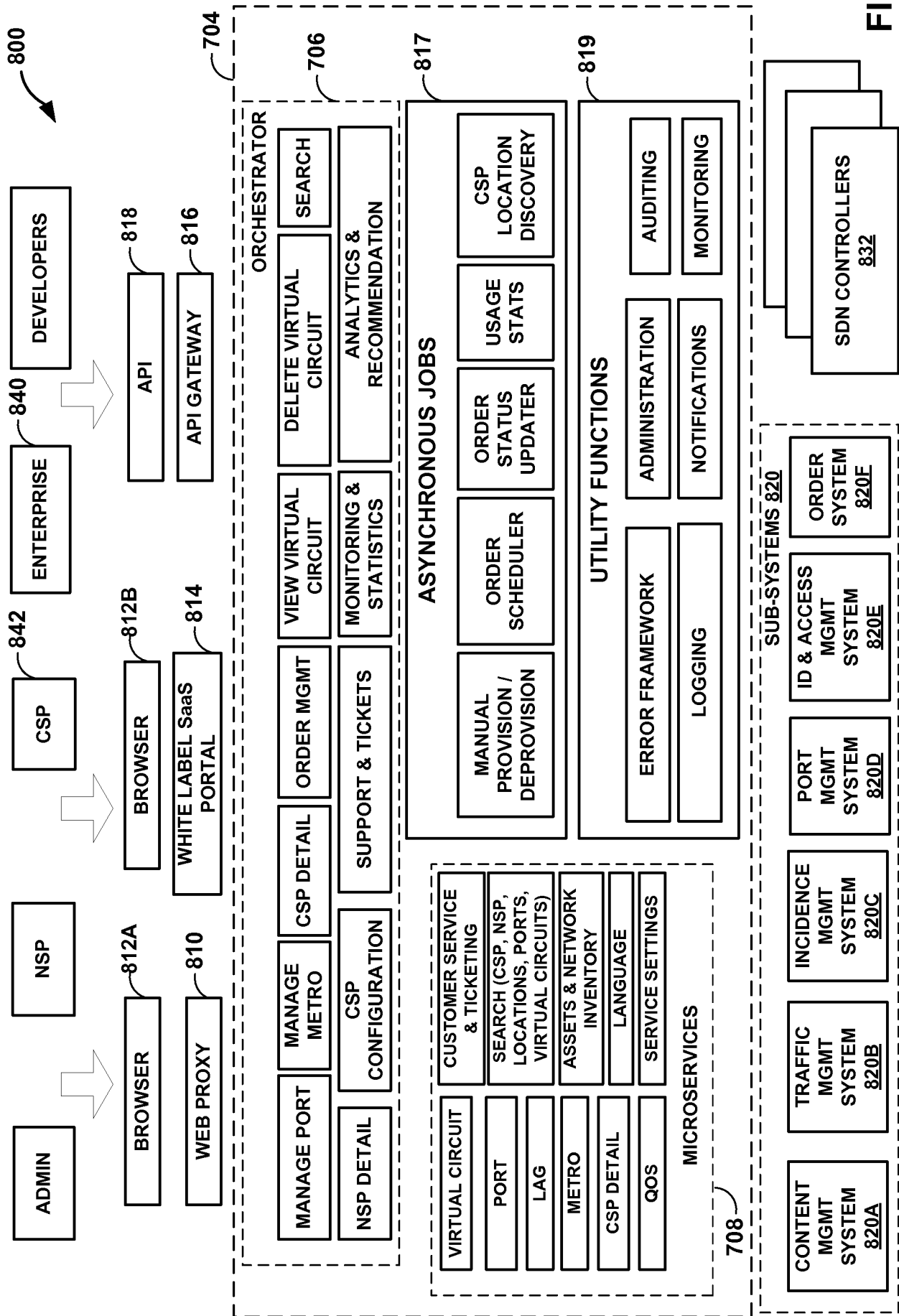


FIG. 14

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SHEET 19 OF 33

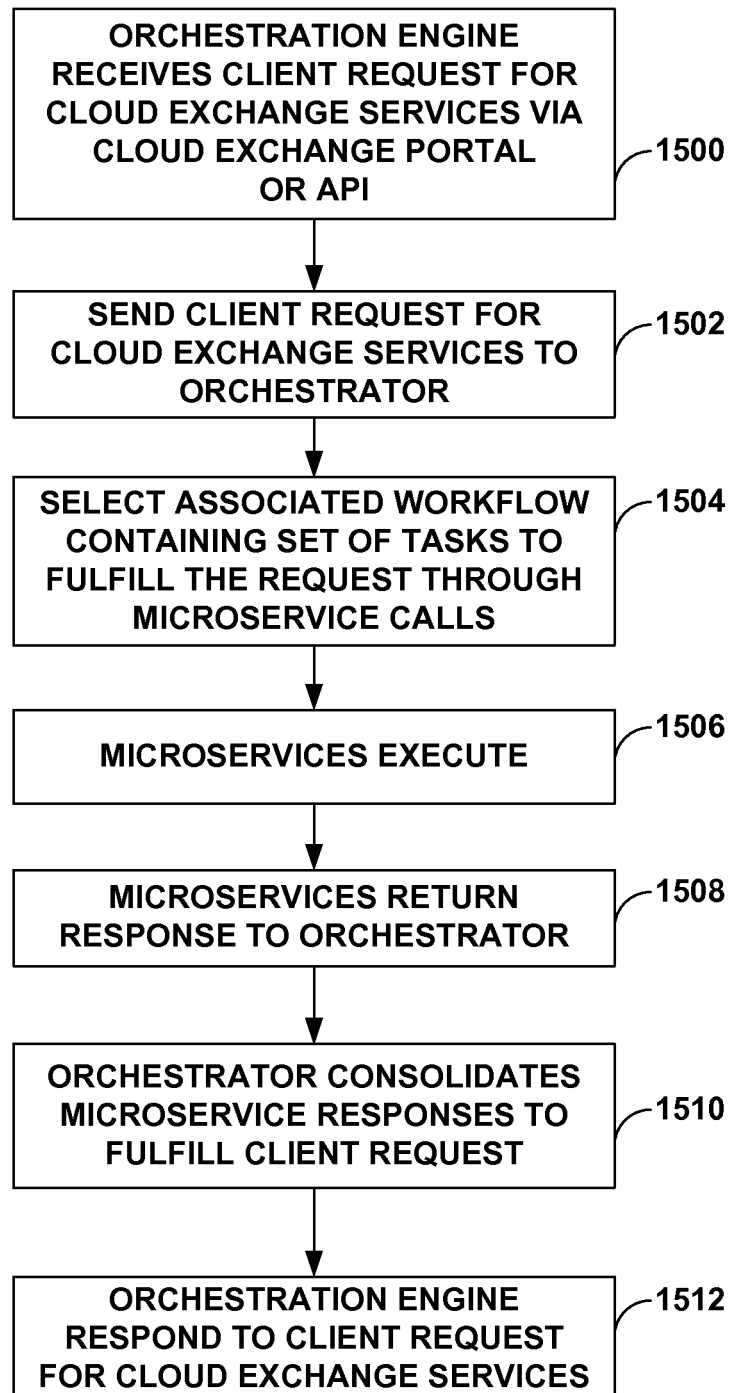
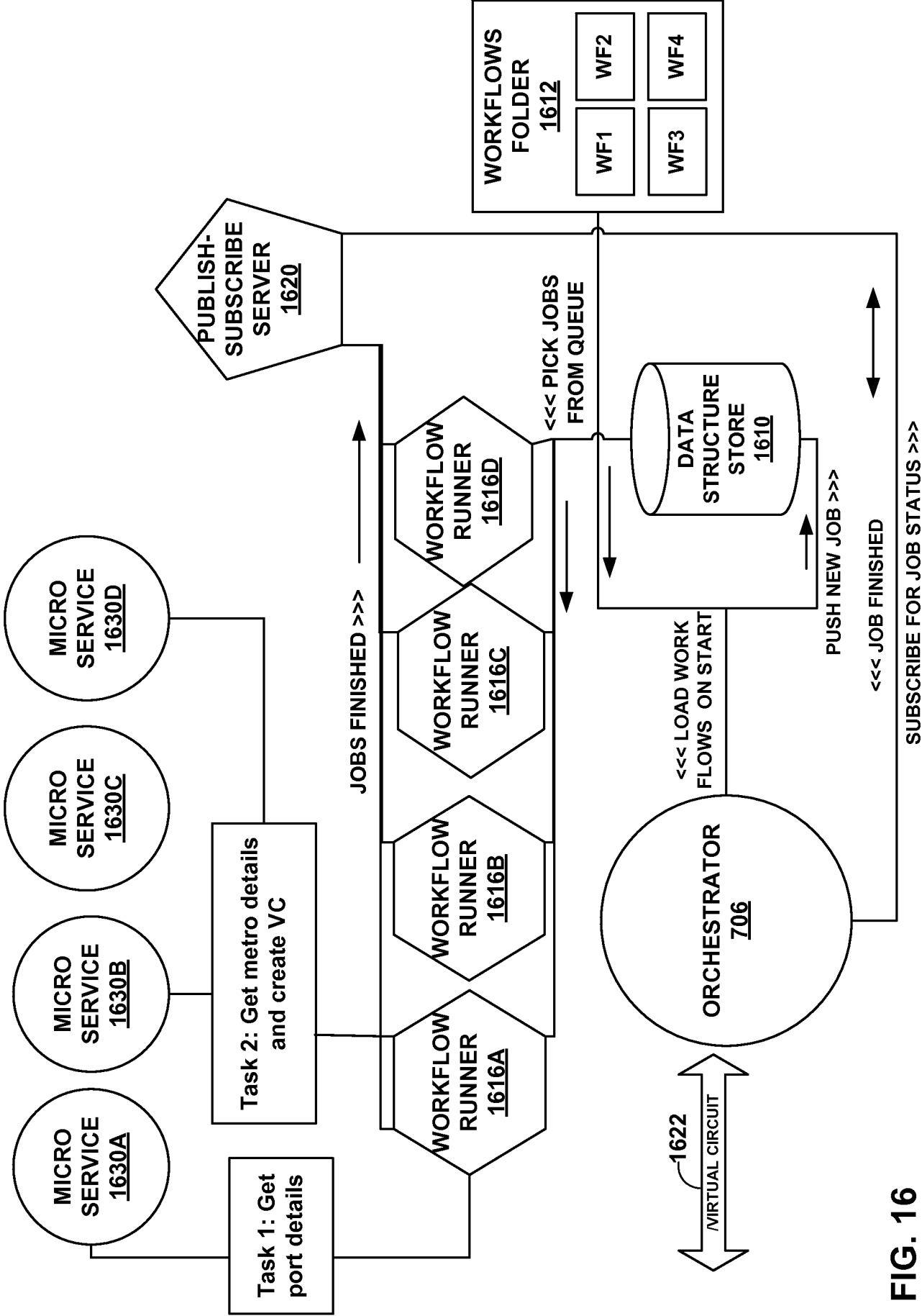
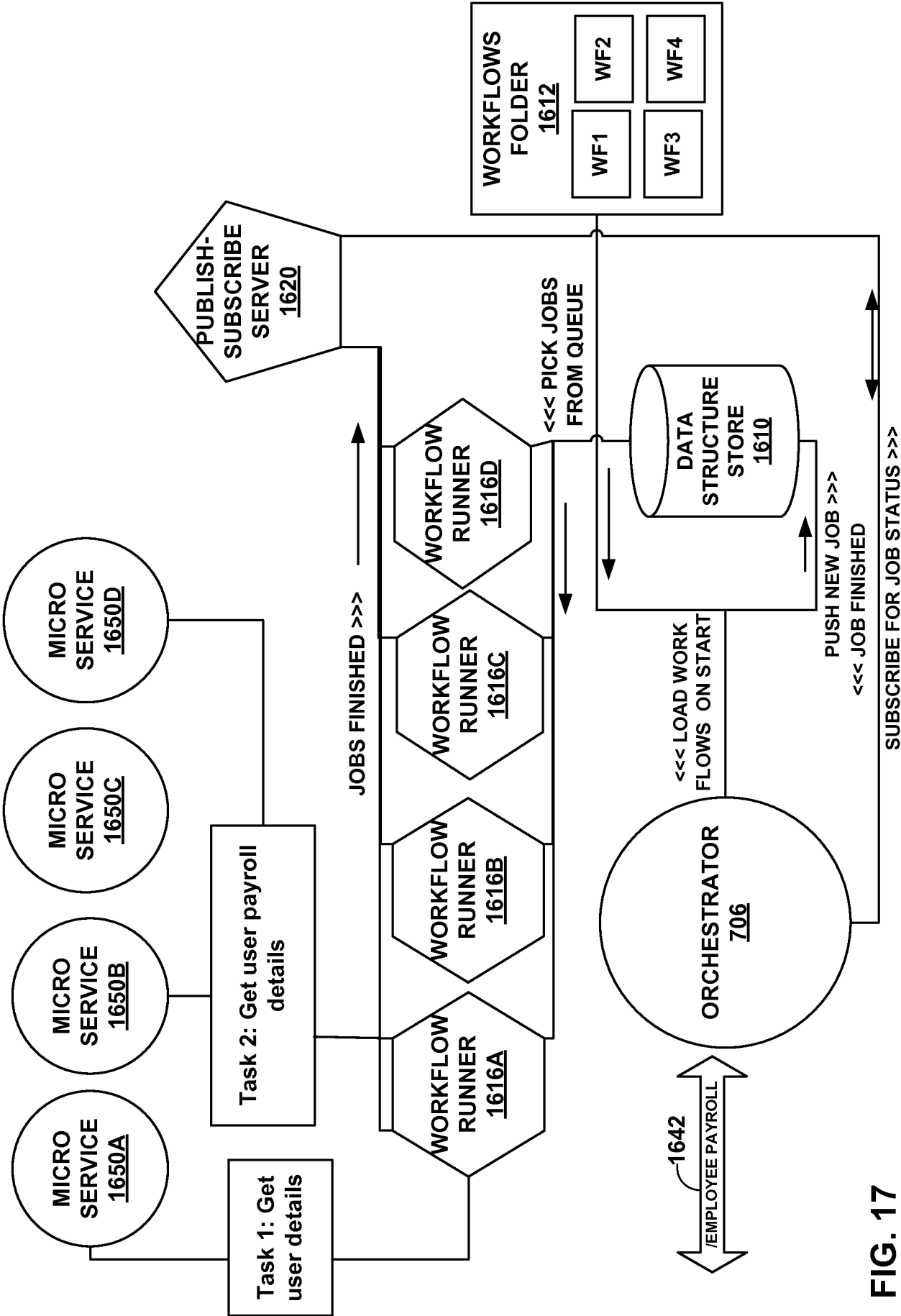


FIG. 15





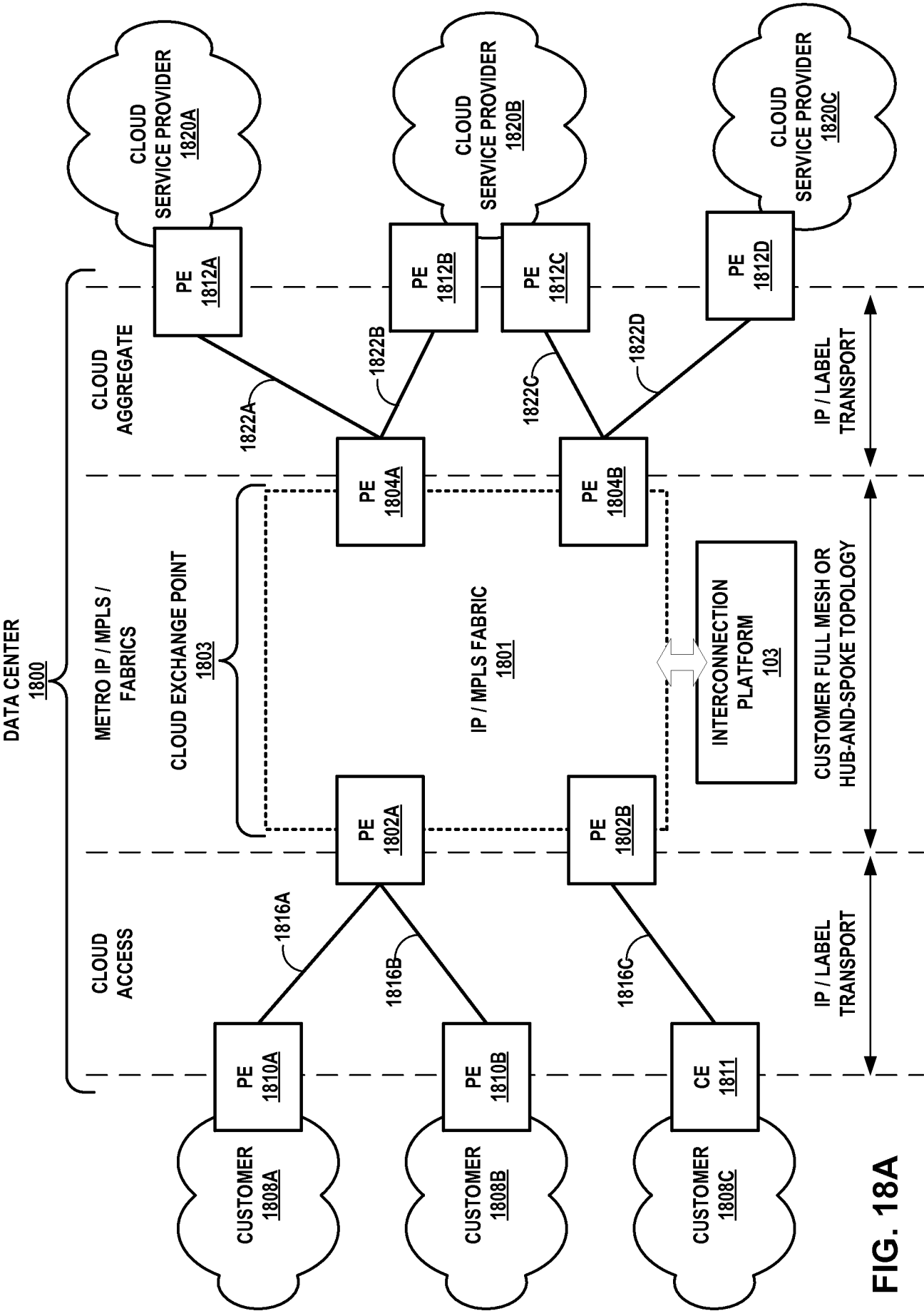


FIG. 18A

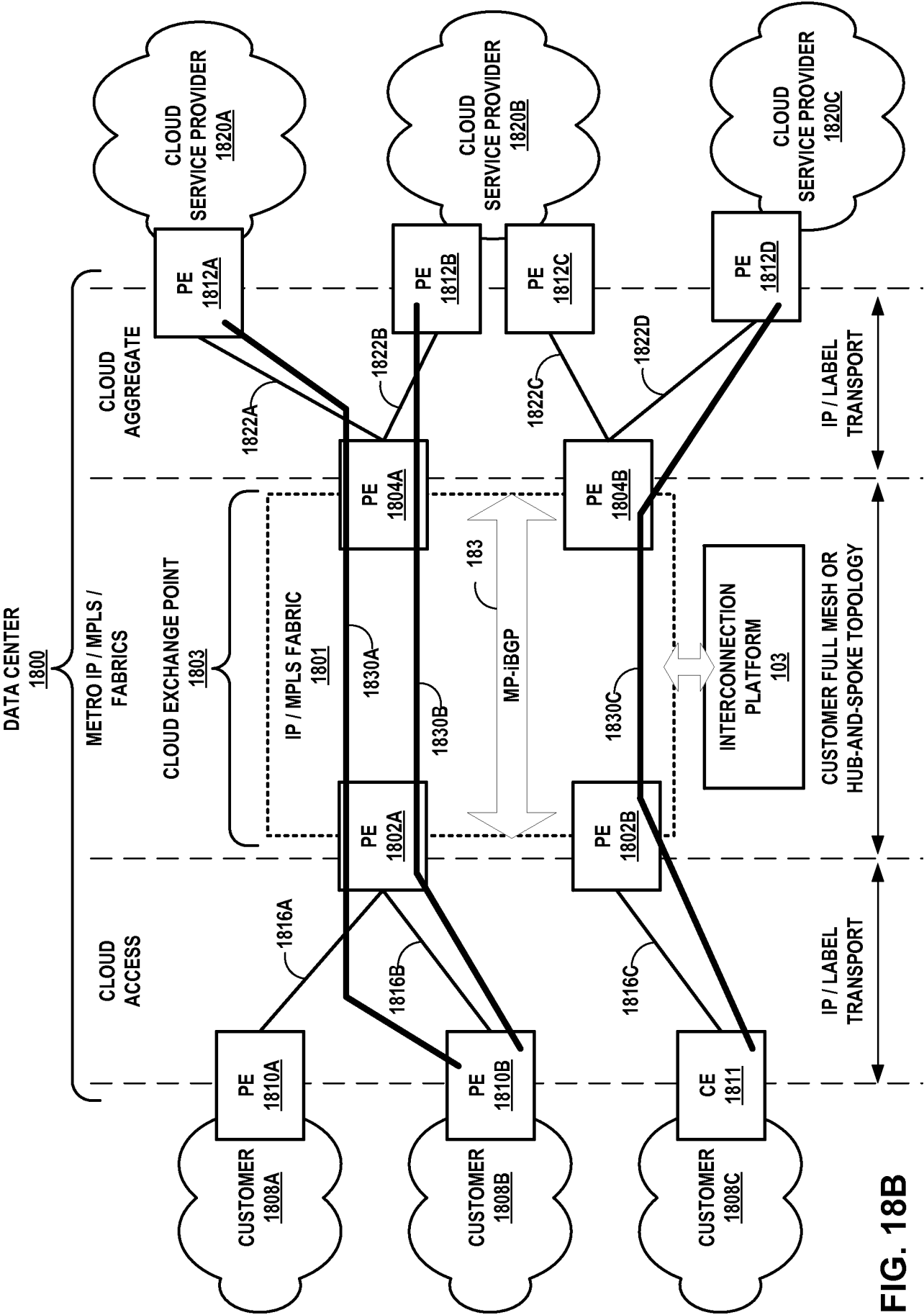


FIG. 18B

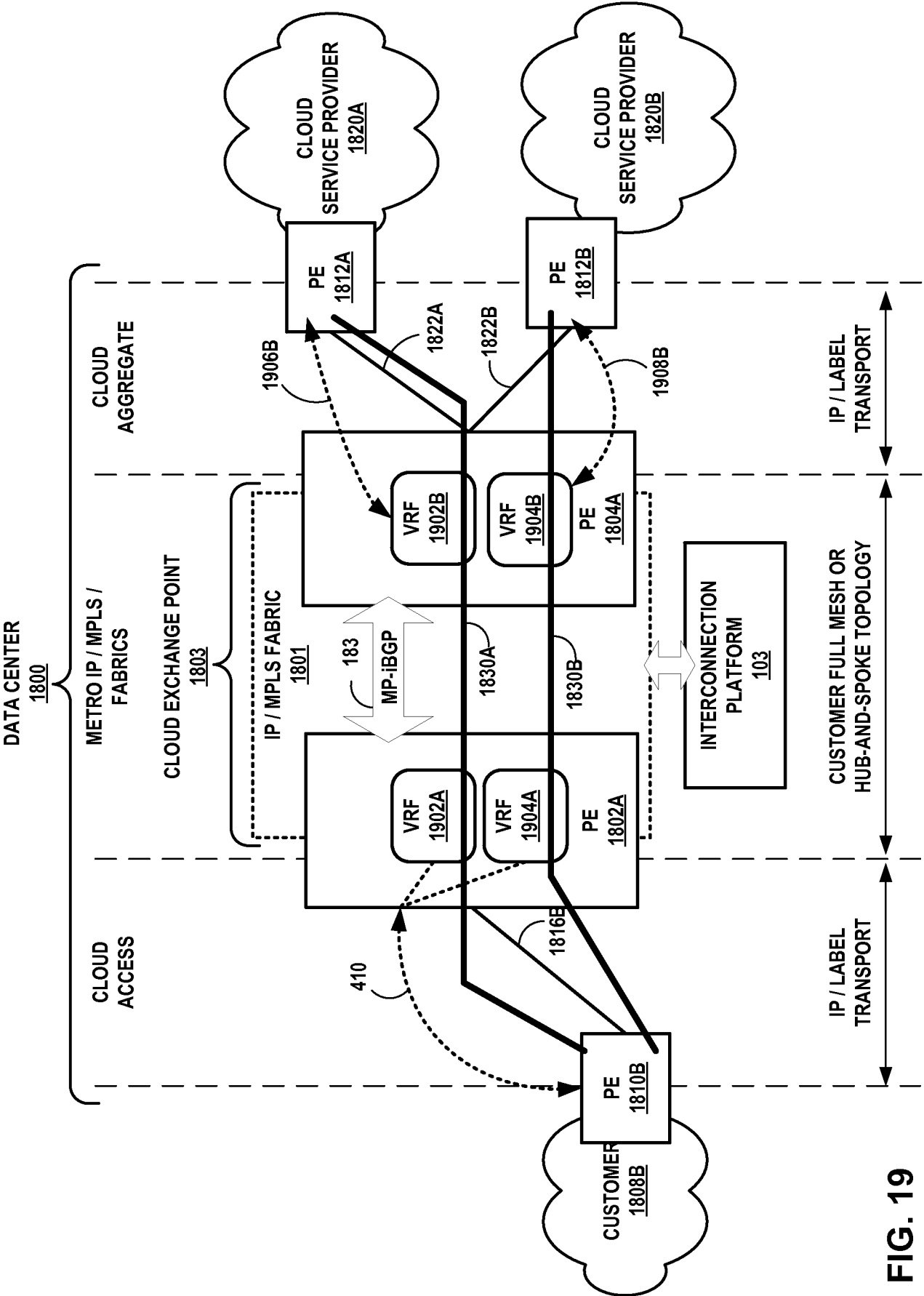


FIG. 19

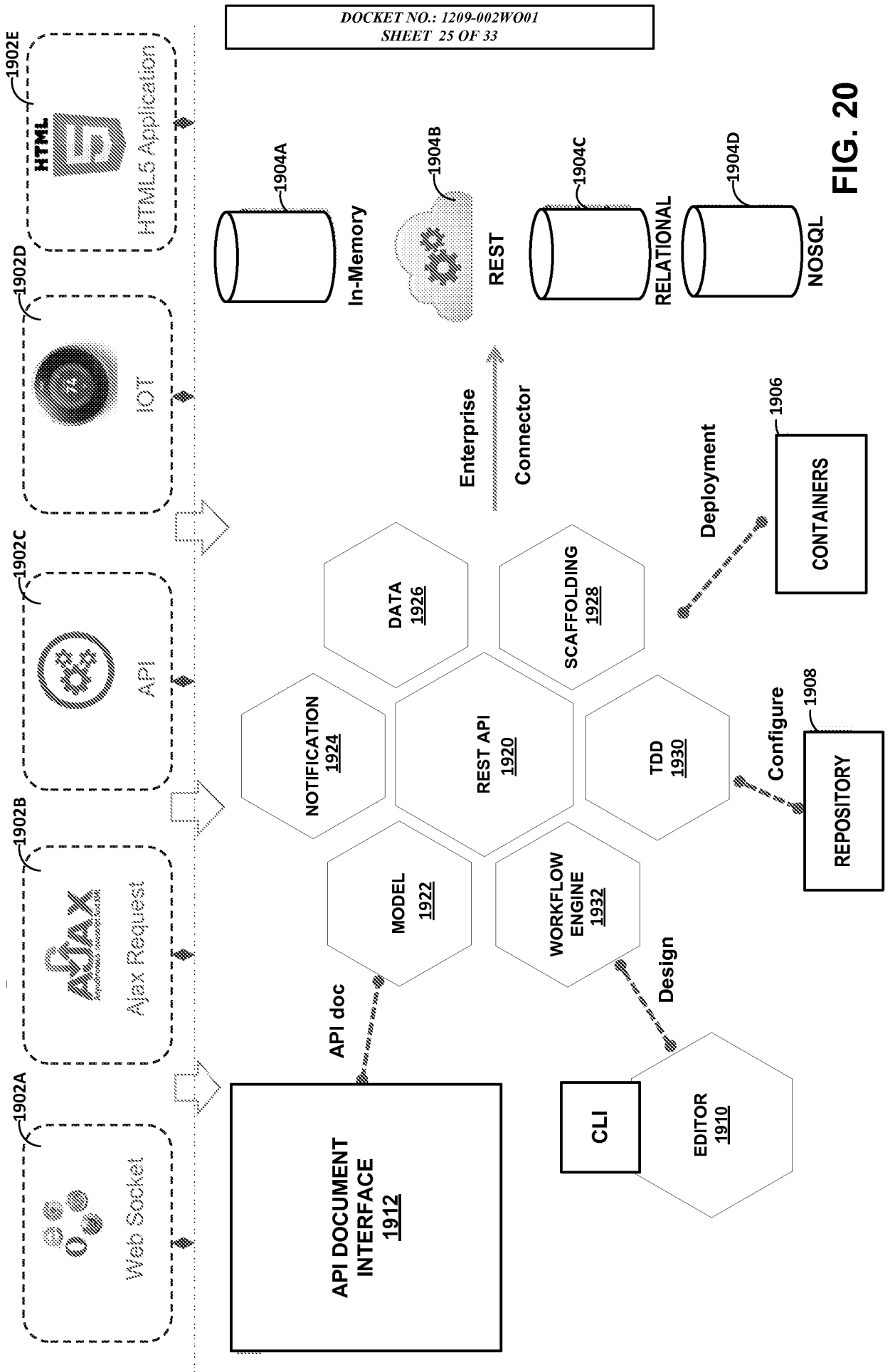
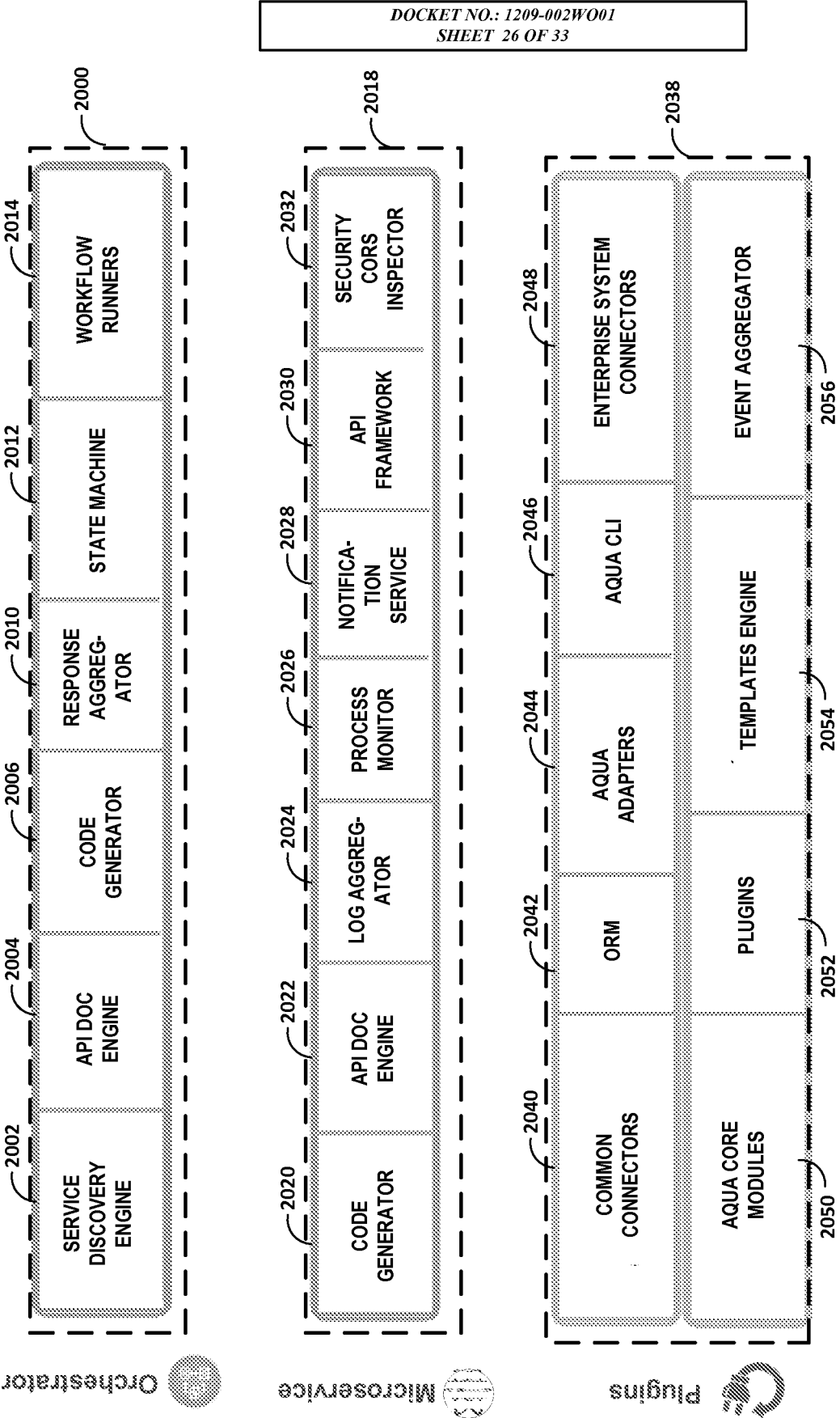


FIG. 20



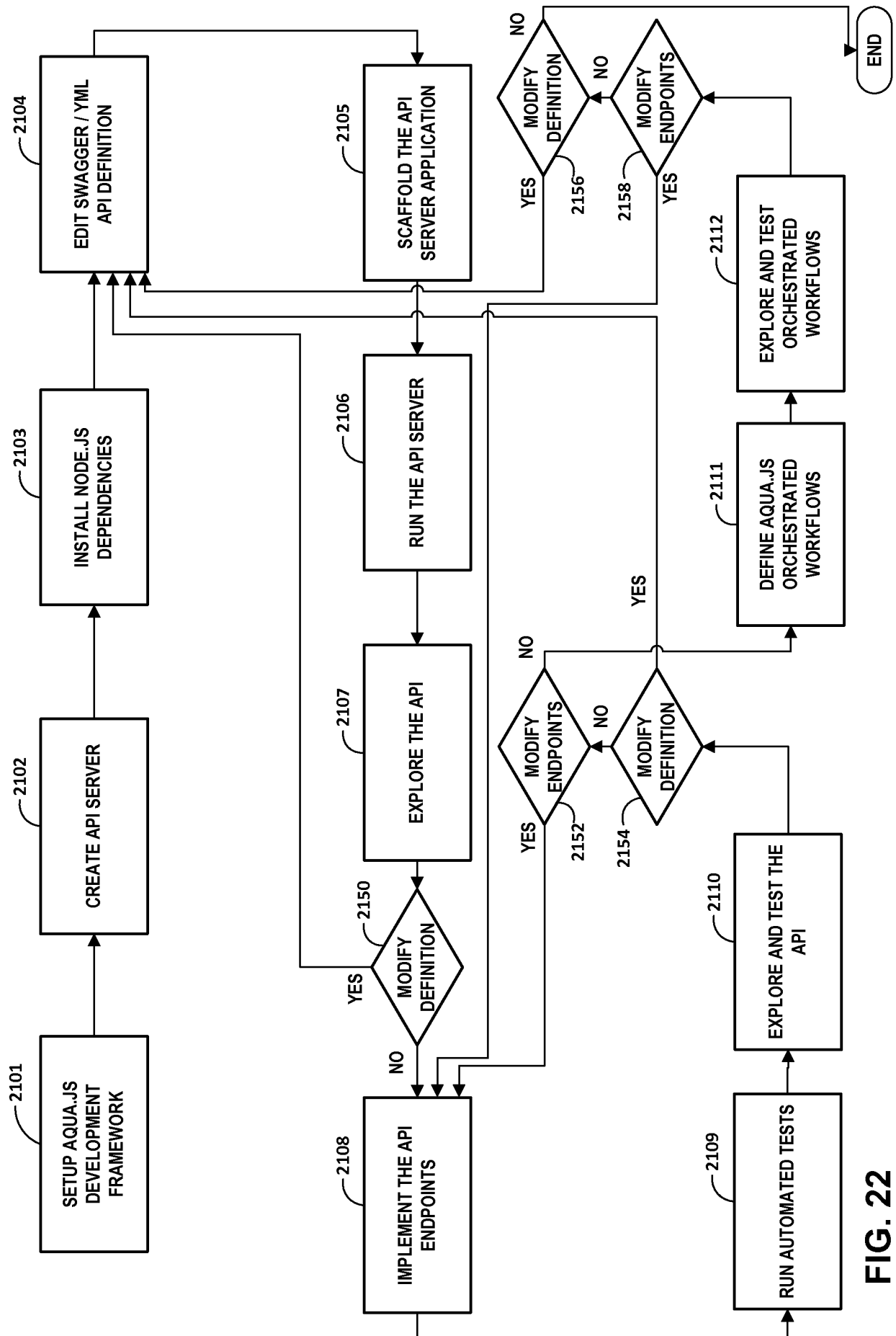


FIG. 22

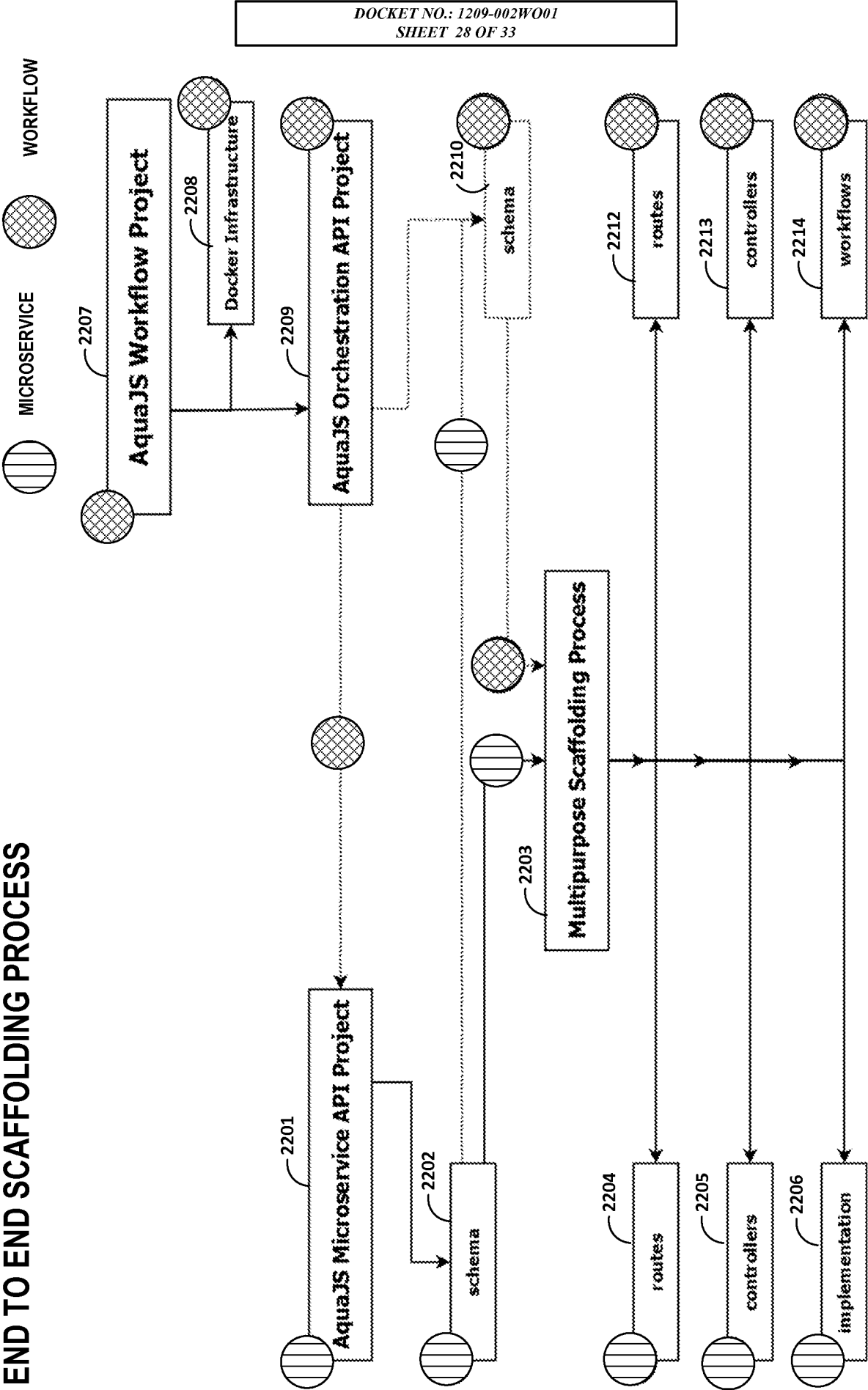


FIG. 23

CREATING A MICROSERVICE

A INSTALL AQUA.JS FROM A REPOSITORY

E CREATE MICROSERVICE STUB

2300

2302

```
aqua.js-cli@1.5 C:\Users\more\AppData\Roaming\npm\node_modules\aquajs-cli
node-serialize@0.0.4
  node-serialize@0.0.4
  commander@2.7.1 (graceful-readlink@1.0.1)
  color@1.0.3
  chalk@1.0.5 (escape-string-regexp@1.0.3, ansi-styles@1.1.0, supports-color@1.0.5)
  cli-clicolor@0.5 (clicolor@1.0, lodash@0.24, shelljs@0.5.0)
  lodash@2.4.1
  fs-extra@0.14.0 (is-buffer@0.0, ncp@1.0.1, rimraf@2.3.2)
  promise@2.0.4 (revalidator@0.1.6, pgmq@0.5.0, redis@0.5, winston@0.9)
  request@2.53.0 (caseless@0.9.6, json-stringify-safe@5.0.0, am-sign@0.5)
  6.0, is-stream@0.1.7, node-mkdir@0.1.5, call@0.3.3, combined-stream@0.0.7, mime
  tarball-extractor@0.3 (get@0.0.1, tar@1.0.3)
  js-beautify@0.1.5.5 (node@0.0.1, config-chain@1.1.6, mkdirp@0.5.0)
  swig@1.4.2 (optimist@0.6.1, uglify-js@2.4.1)
  js-select@0.6.0 (traverse@0.4.6, JSONSelect@0.2.1)
  figlet@1.1.0
  npt@0.0.3 (lodash@0.24, minimatch@0.4, tar@0.0.3, tar-stream@1.1.2, nod
  inquire@0.0.8.2 (figures@0.3.5, ansi-regex@1.1.1, cli-width@1.0.1, throug
  js-rem@0.2.7 (esprima@2.0.0, argparse@1.0.2)
  npm@2.7.3
  aquajs@0.3.6 (uid@0.0.1, cookie-parser@0.3.4, cron-parser@0.6.1, expres
  3, persist@0.2.7, thru@0.1.2, waterline@0.10.18, swagger-express@1.0.5, aqu
  C:\>mkdir microservices24
  C:\>cd microservices24
  C:\microservices24>npm create aquajs
  C:\> installing microservice packages...
```

```
C:\aquasDemo>aqua

Aqua.js
v0.1.0-beta v0.1.0-beta

Usage: aqua [options] [command]

Commands:
  apidoc      start server and open apidocs in browser
  create [options] <name> create a new microservice
  scaffold [options] scaffold the API and models from the schema file
  start       start Aqua.js server
  validate    validate schema files before scaffolding

Options:
  -h, --help      output usage information
  -v, --version    output the version number

C:\aquasDemo>
```

FIG. 24

CREATING A MICROSERVICE

D GENERATE MICROSERVICE
BLUEPRINT

C DEFINE API CONTRACT

```
2400
1 resourcePath: /sample-Example-Order.json
2 description: All about API
3 version: 1.0.0
4 target: microservice
5 host: localhost:8080
6 / api is not needed go below for endpoints see
7 > http://pika.mpsa.com:8080/swagger/index.html
8 /api:
9   - path: /orders
10     - path: /orders/{id}
11     - path: /orders/{id}
12     - path: /orders/{id}
13     - path: /orders/{id}
14     - path: /orders/{id}
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96     - path: /orders/{id}
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98     - path: /orders/{id}
99     - path: /orders/{id}
100    - path: /orders/{id}
```

```
2402
C:\aquaDemo\helloWorld>aqua scaffold
Scaffolding Started:
Generated Controller: sampleController
Generated model: Orders
Generated implementation file: sampleServiceImpl
Generated router: sampleRouter
Generated model: OrderAdd
Generated test cases for: sampleController
Generated model: Pizza
Generated model: Status
Generated sample data for: sample.yml
Generated validation file for: sampleServiceImpl
Generated configuration: QA
Generated configuration: QA
Generated configuration: production
Generated configuration: local
Scaffolding complete
C:\aquaDemo\helloWorld>
```

FIG. 25

CREATING A MICROSERVICE

MICROSERVICE INTERFACE GENERATED BASED ON API CONTRACT

2500B

GET

/ORDERS

GET ALL THE ORDERS

IMPLEMENTATION NOTES

RETURNS ALL ORDERS

RESPONSE CLASS

MODEL | MODEL SCHEMA

```
{
  "id": "int",
  "order_name": "string",
  "order_contents": "string",
  "quantity": "int",
  "order_status": "string"
}
```

2500A

POST

/ORDERS

ADD A NEW ORDER

2500B

GET

/ORDERS/{ID}

GET A PARTICULAR ORDER BY ID

2500C

DELETE

/ORDERS/{ID}

DELETE A PARTICULAR ORDER BY ID

2500D

PUT

/ORDERS/{ID}

UPDATE A PARTICULAR ORDER BY ID

2500

URL

API_KEY

FIG. 26

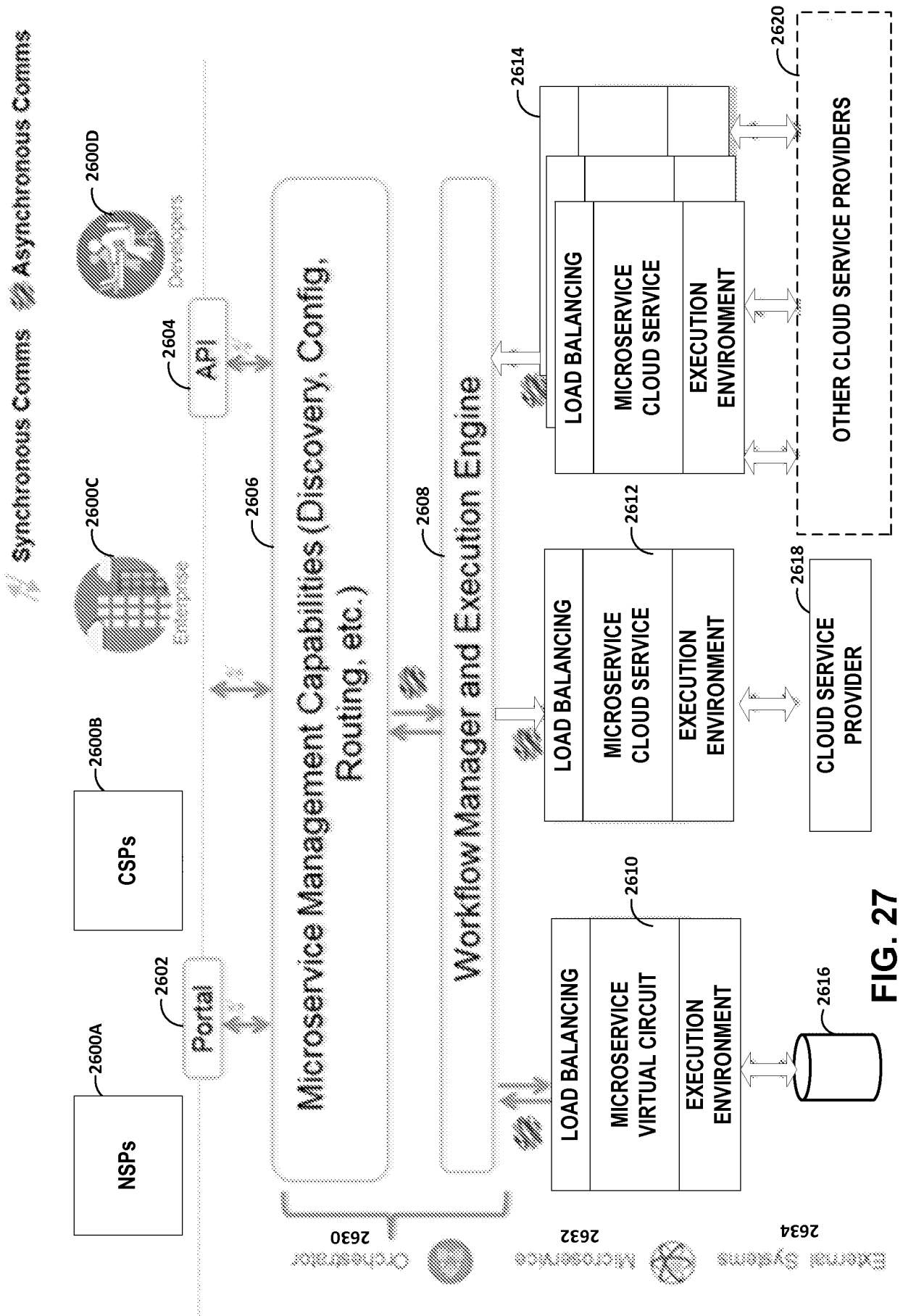


FIG. 27

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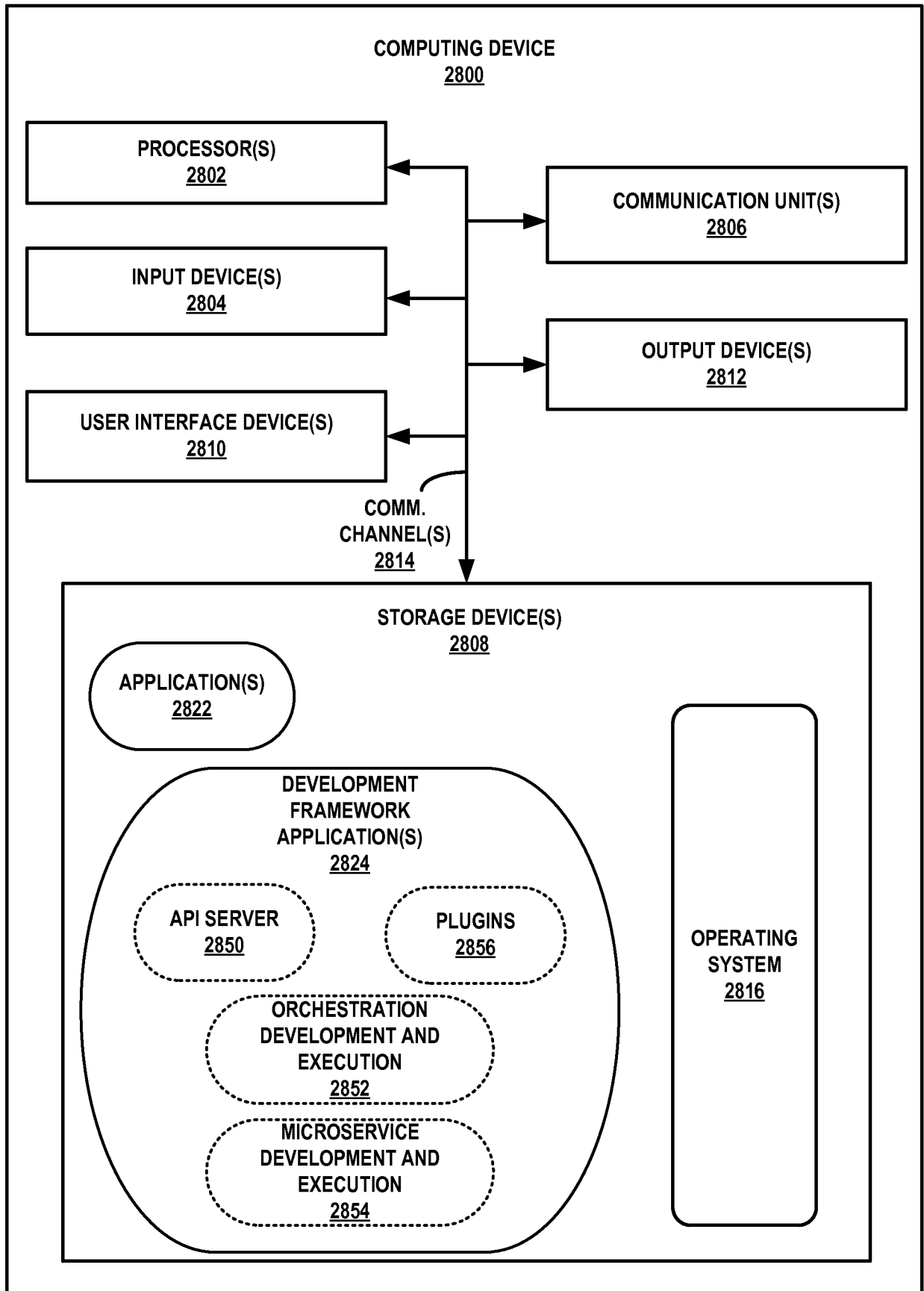


FIG. 28