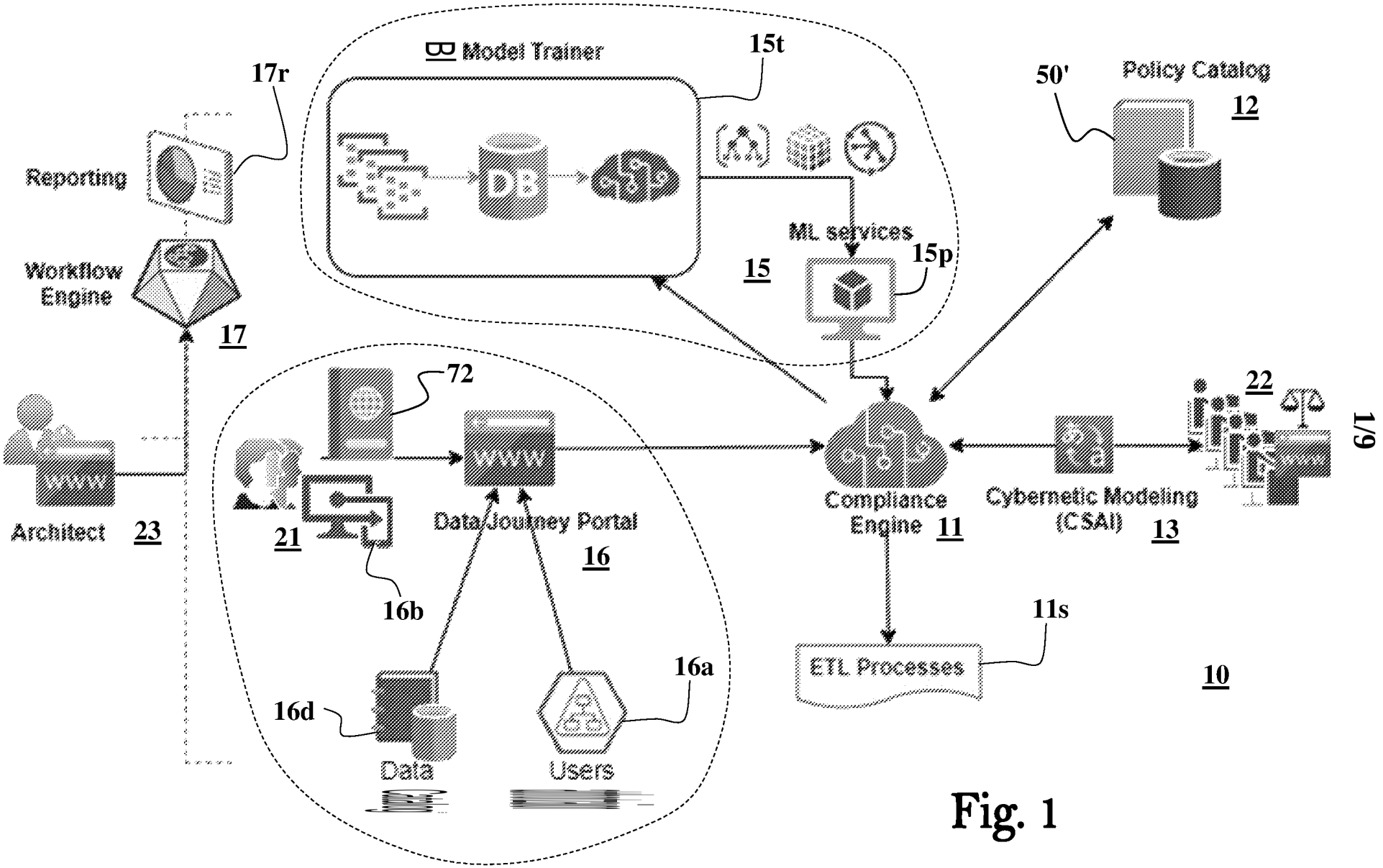

BI Model Trainer
15t
17r
Reporting
Workflow Engine
17
DB
ML services
15p
15
50'
Policy Catalog
12
72
Architect
23
21
16b
Data Journey Portal
16
Compliance Engine 11
Cybernetic Modeling (CSAI)
13
22
ETL Processes
11s
10
16a
16d
Data
Users

Fig. 1

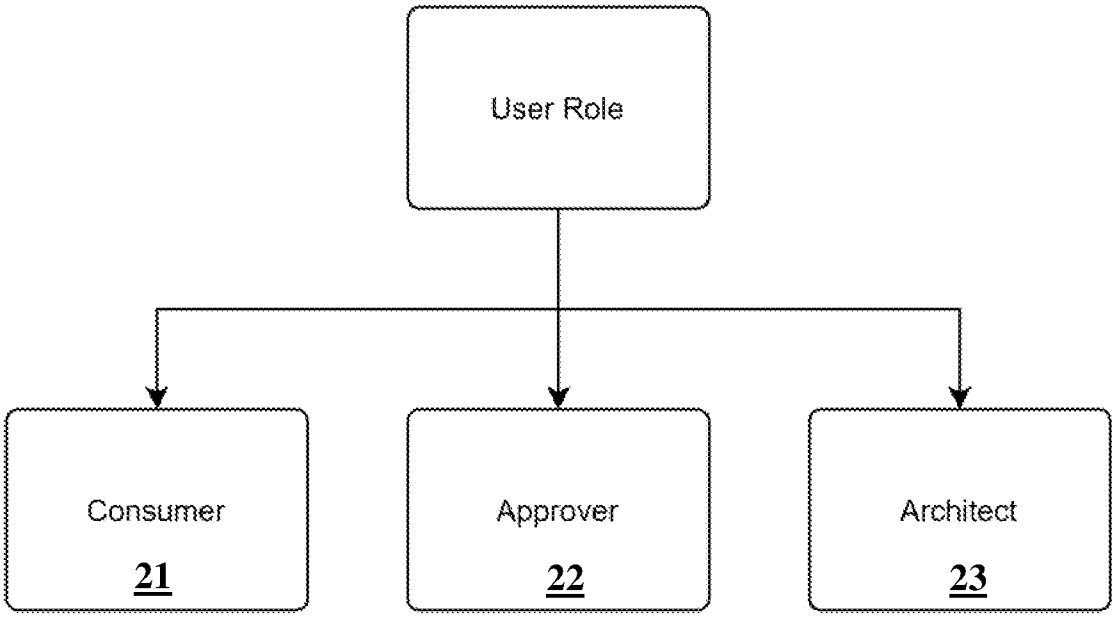

User Role
Consumer
21
Approver
22
Architect
23

Fig. 2

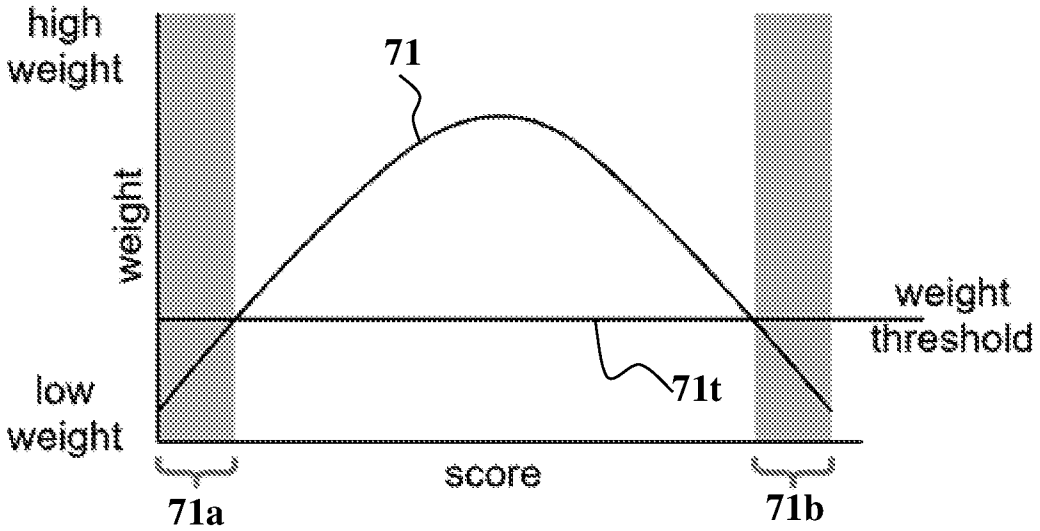

high weight
weight
low weight
71
weight threshold
71t
score
71a
71b

Fig. 7

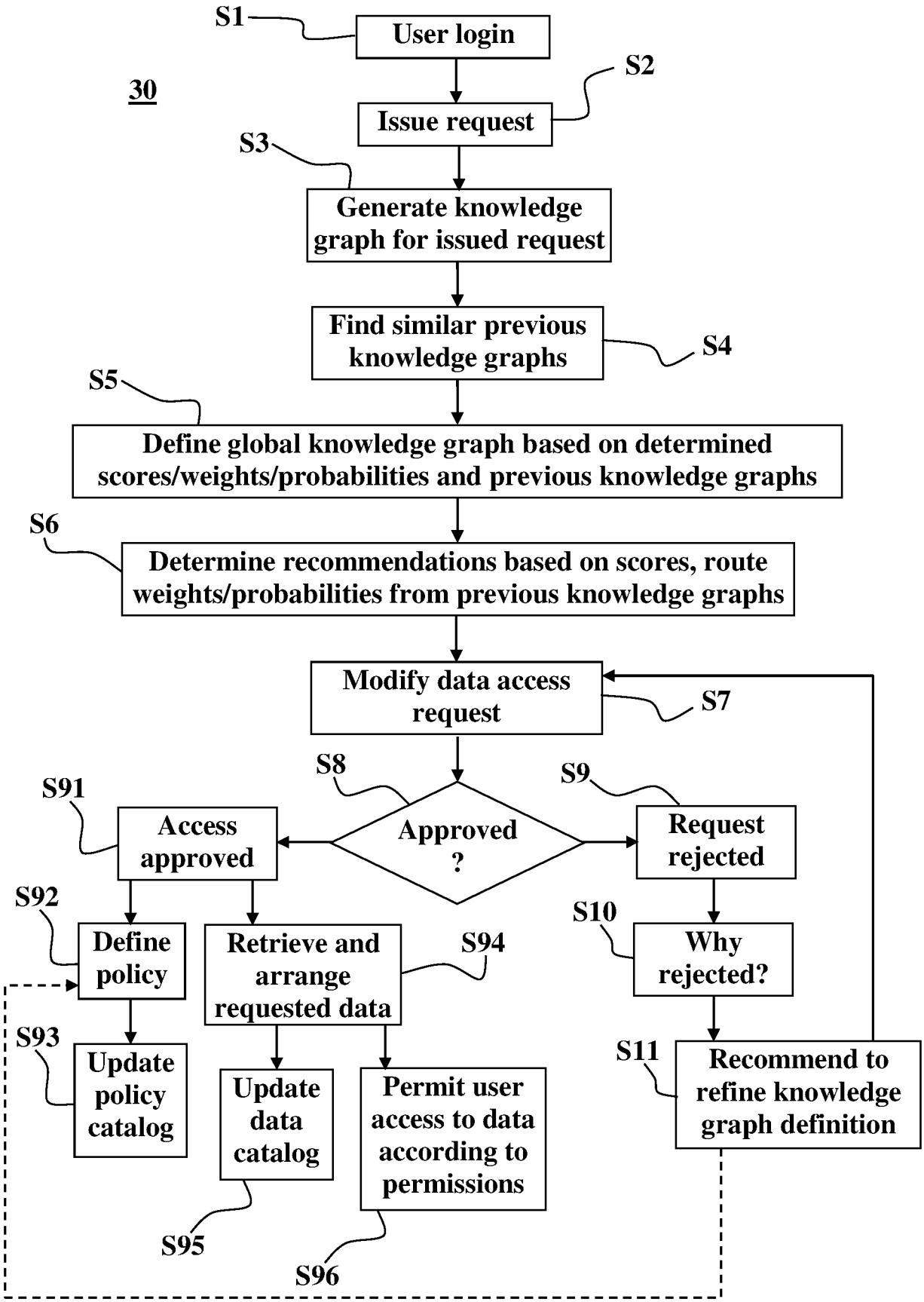

30
S1
User login
S2
Issue request
S3
Generate knowledge graph for issued request
Find similar previous knowledge graphs
S4
S5
Define global knowledge graph based on determined scores/weights/probabilities and previous knowledge graphs
S6
Determine recommendations based on scores, route weights/probabilities from previous knowledge graphs
Modify data access request
S7
S8
Approved ?
S9
S91
Access approved
Request rejected
S92
Define policy
Retrieve and arrange requested data
S94
S10
Why rejected?
S93
Update policy catalog
Update data catalog
Permit user access to data according to permissions
S11
Recommend to refine knowledge graph definition
S95
S96

Fig. 3

Request Definition Example

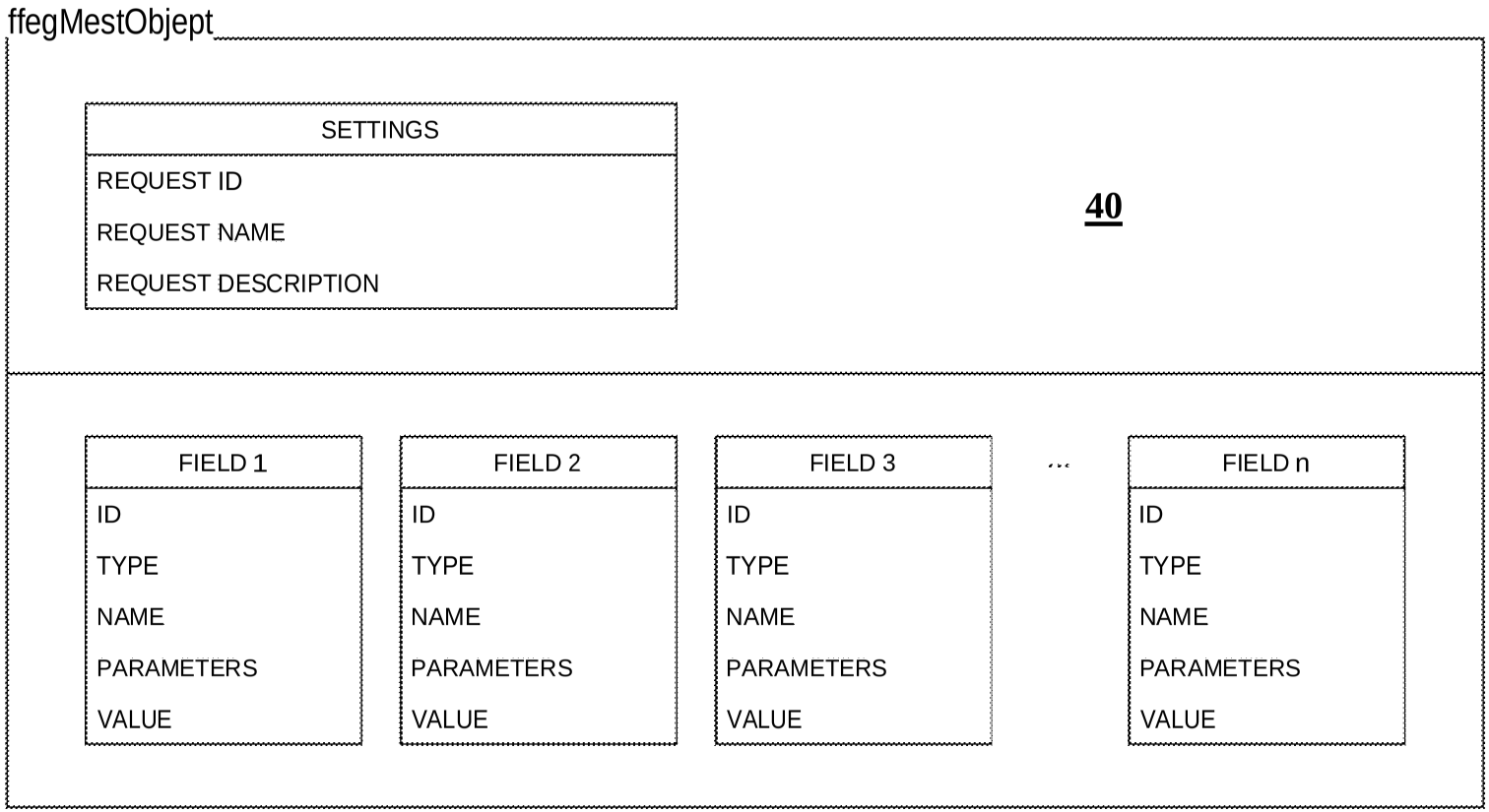


Fig. 4A

Request Definition Example

SETTINGS
REQUEST ID = RJ0001
REQUEST NAME » Data Access Request
REQUEST DESCRIPTION = Request access to data source

41

HELD 1
ID = ©001
TYPE = STRING
NAME = Request issuer Name

HELD 2
©=©002
TYPE = STRING
NAME = Request Issuer Region
PARAMETERS = HIDDEN, FIXED, FILL RY SYSTEM
VALUE = TMEA, LATAM, NA, APAC]

REID 3
©a ©003
TYPE = ENUM
NAME = Request Purpose
VALUE = [Marketing, Audit, Analytics]

REID 4
ID = ID004
TYPE -ENUM
NAME = Classification
VALUE ~ [Confidential, Internal, External]

HELD 5
© = ©005
TYPE = STRING
NAME » Data source name

Fig. 4B

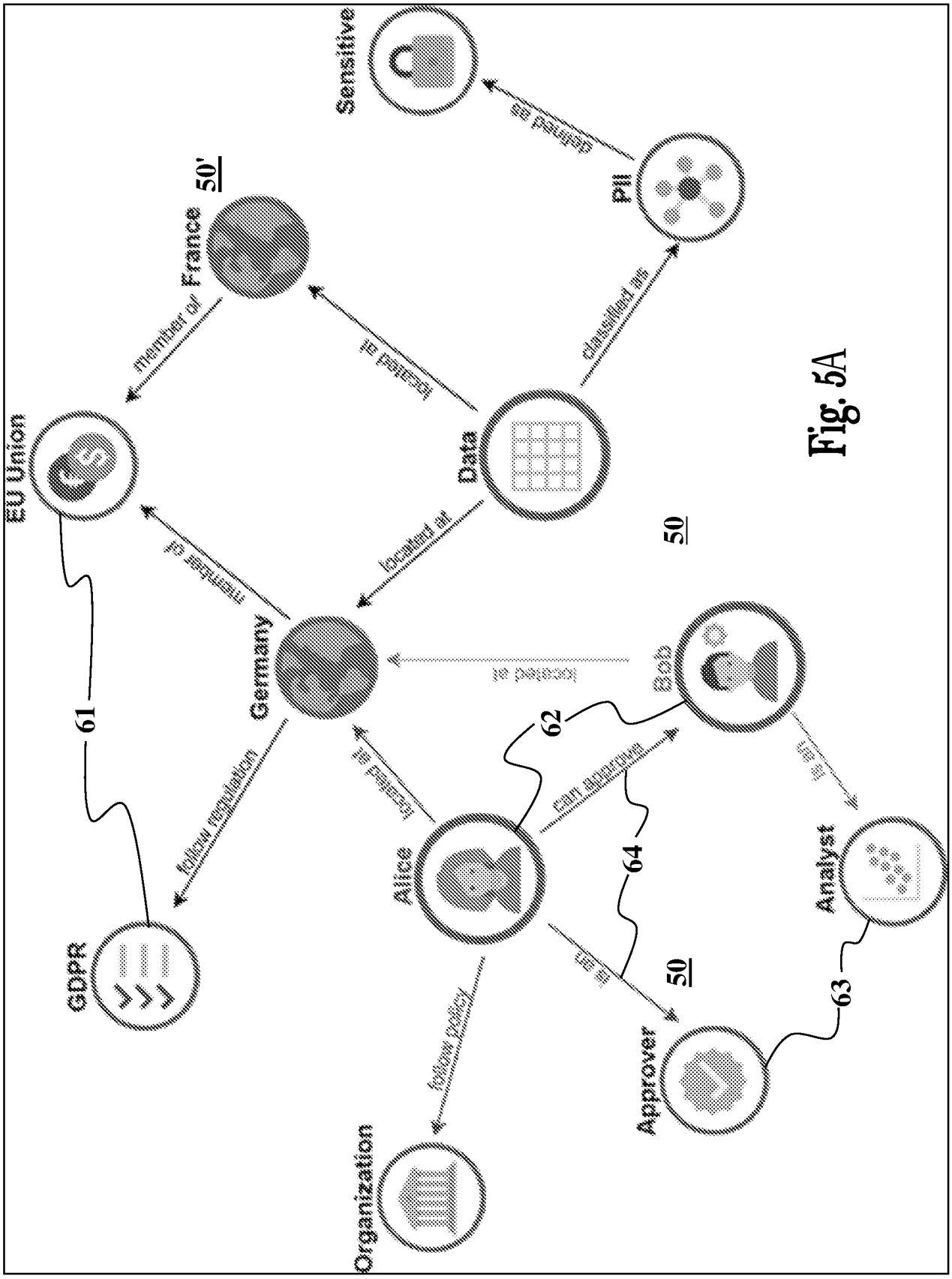

Sensitive
is related as
PII
50'
France
member of
is related
classified as
EU Union
Data
is required as
located at
Germany
50
located at
Bob
61
62
follow regulation
is related
can approve
use as
Alice
64
use as
Analyst
GDPR
follow policy
50
Approver
63
Organization

Fig. 5A

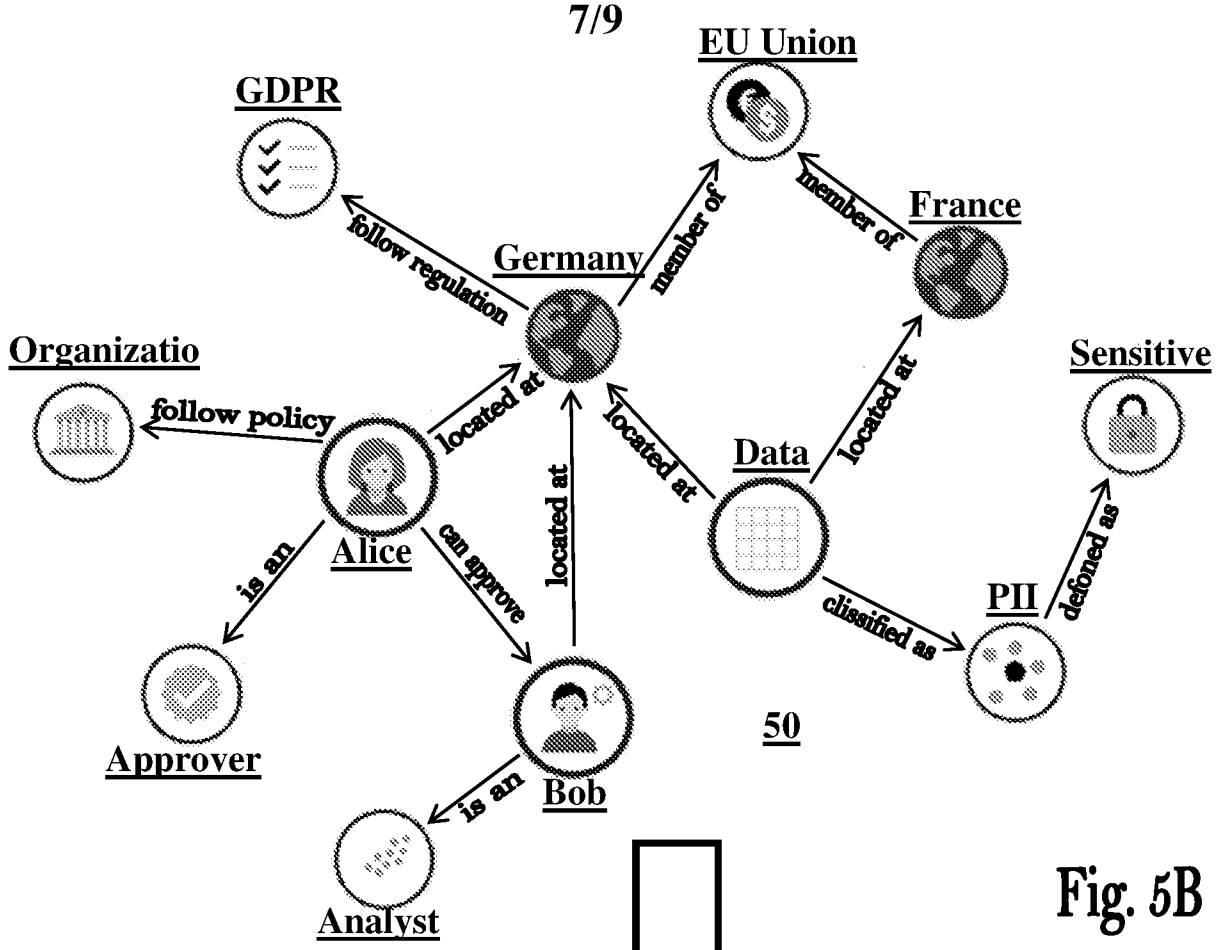
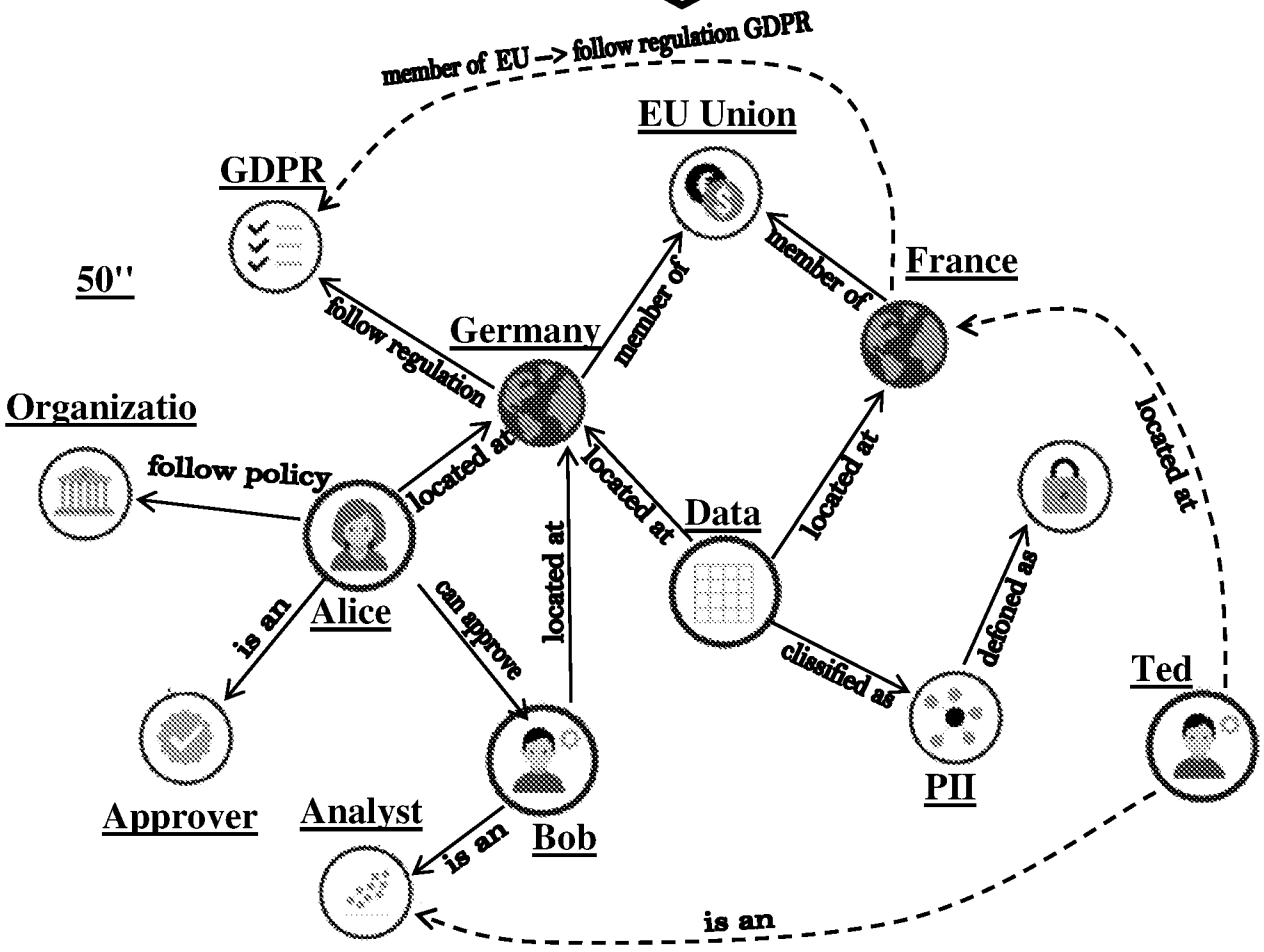

EU Union
GDPR
France
follow regulation
Germany
member of
member of
Organizatio
Sensitive
follow policy
located at
located at
Data
located at
Alice
is an
can approve
located at
PII
defined as
clissified as
Approver
50
Bob
is an
Analyst

Fig. 5B


member of EU -> follow regulation GDPR
EU Union
GDPR
50''
France
member of
follow regulation
Germany
member of
Organizatio
follow policy
located at
located at
Data
located at
located at
Alice
is an
can approve
located at
defined as
clissified as
Ted
Approver
Analyst
Bob
PII
is an
is an

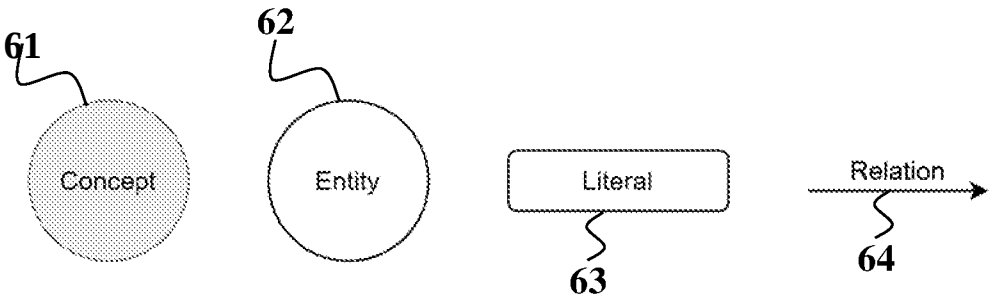


Fig. 6A

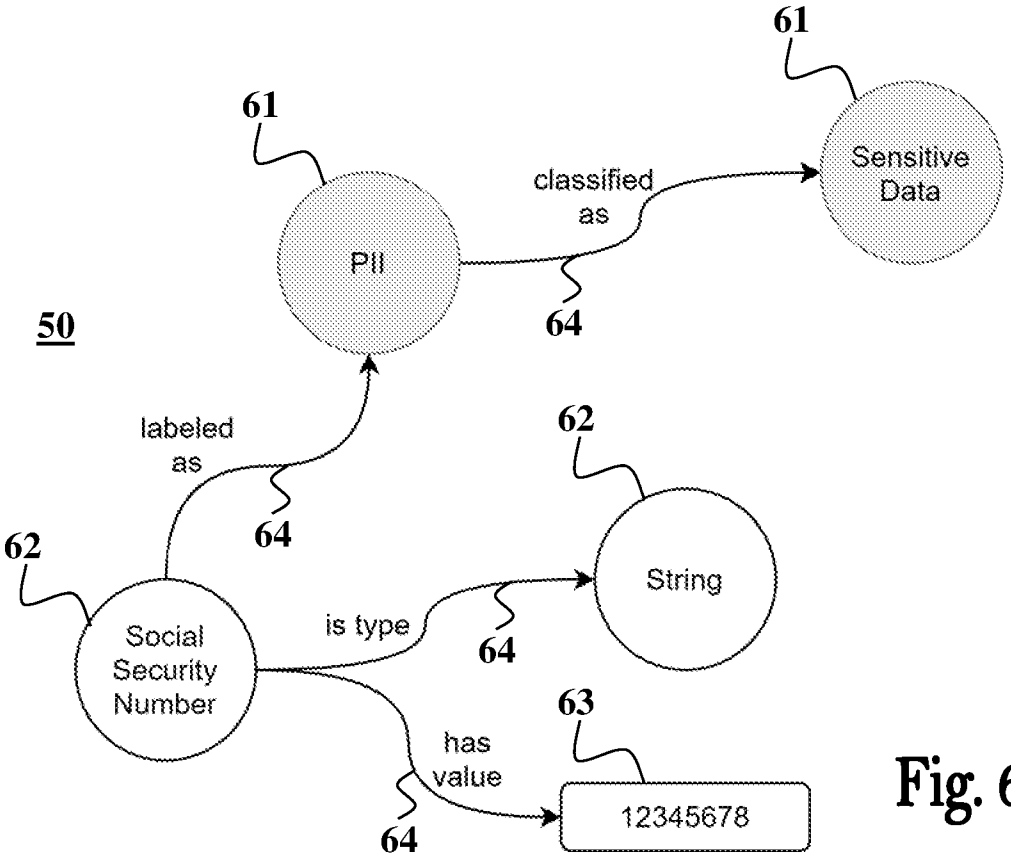


Fig. 6B

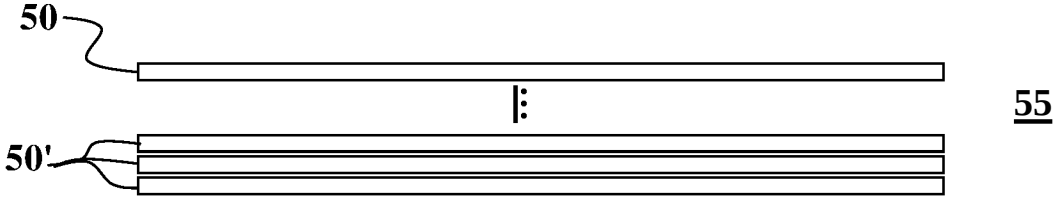


Fig. 6C

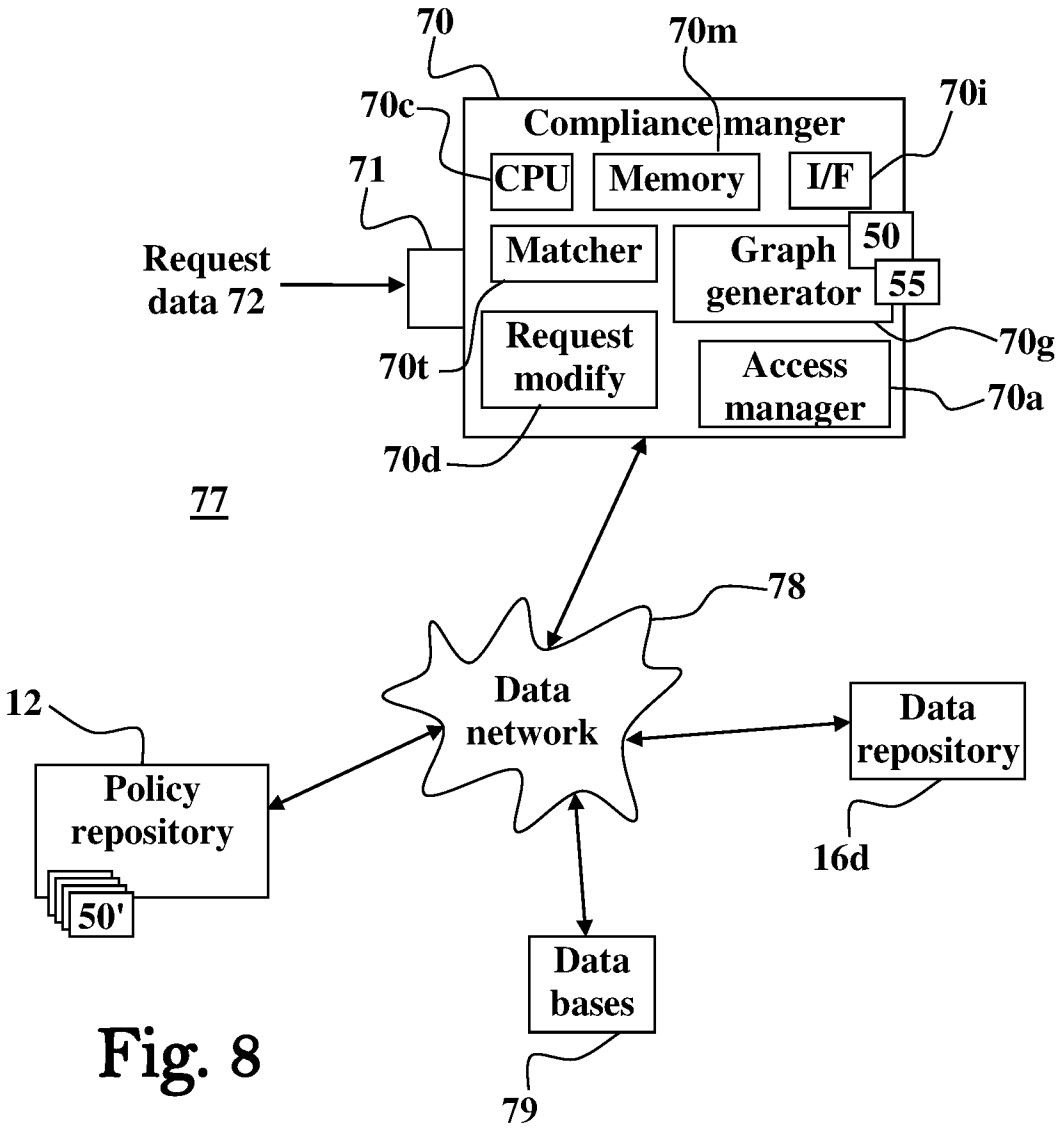

70
70m
70c
70i
Compliance manger
CPU
Memory
I/F
71
Request data 72
Matcher
Graph generator
50
55
70g
70t
Request modify
Access manager
70a
70d
77
78
Data network
12
Policy repository
50'
Data repository
16d
Data bases
79

Fig. 8