FIG. 1

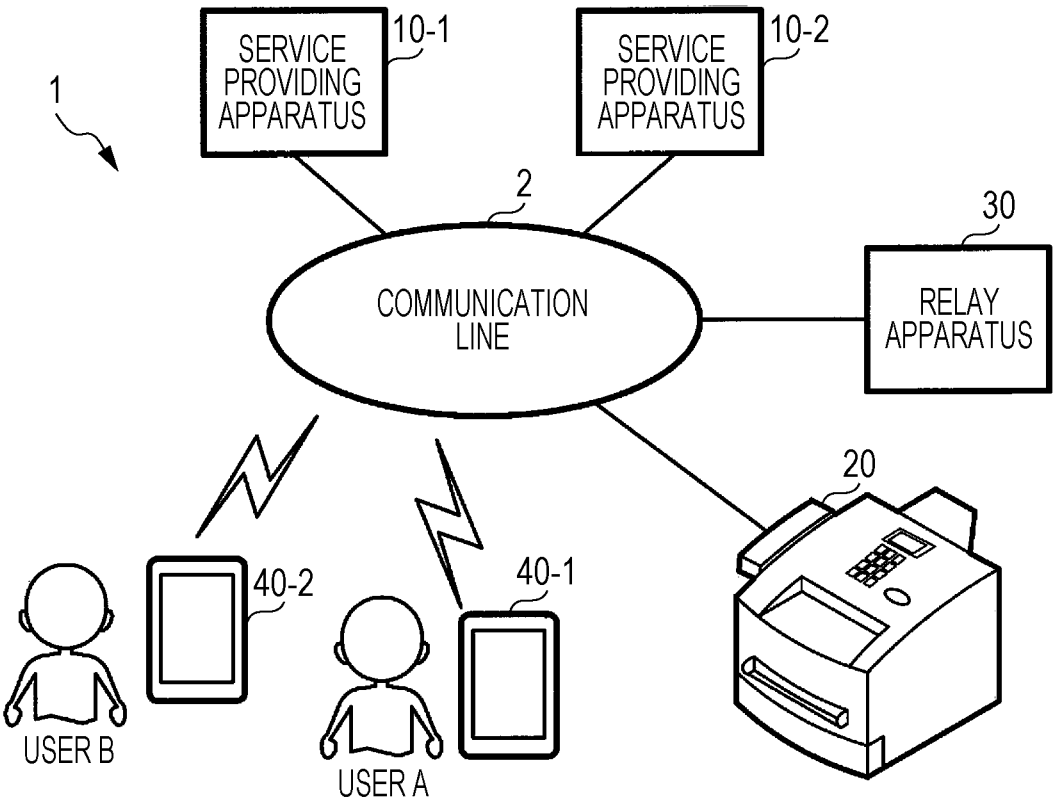
1
SERVICE PROVIDING APPARATUS
10-1
SERVICE PROVIDING APPARATUS
10-2
2
30
COMMUNICATION LINE
RELAY APPARATUS
20
40-2
40-1
USER B
USER A

FIG. 2

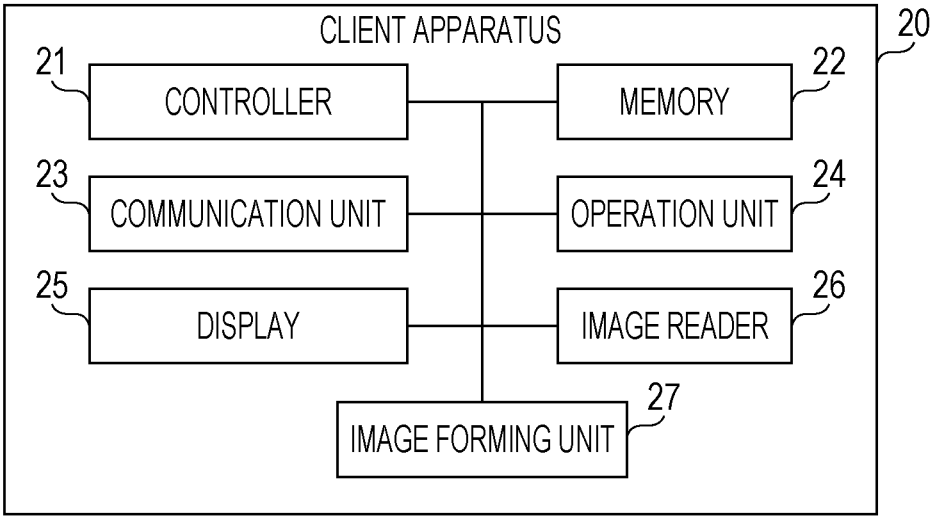

FIG. 3

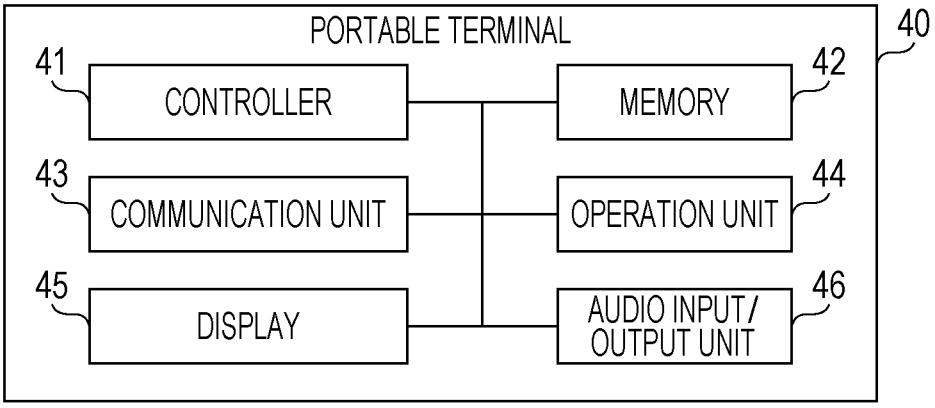

FIG. 4

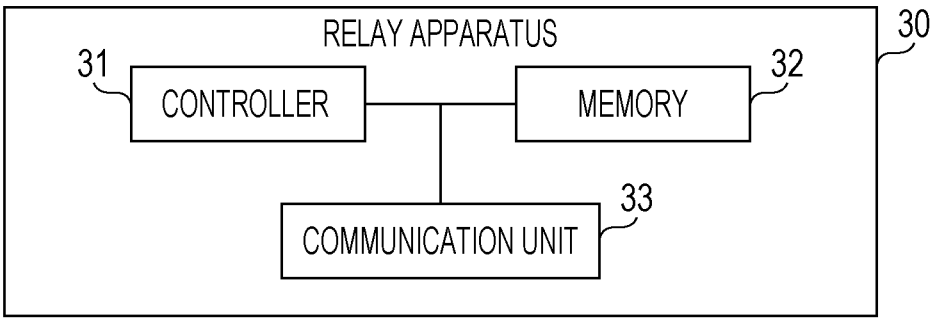

FIG. 5

321

MAIL ADDRESS	SERVICE	ACCESS TOKEN	AUTHORITY
a@example.com	Service 1	Token 1A	FULL
		Token 1a	LIMITED
	Service 2	Token 2A	FULL
		Token 2a	LIMITED
b@example.com	Service 1	Token 1B	FULL
		Token 1b	LIMITED
	Service 2	Token 2B	FULL
		Token 2b	LIMITED
•••	•••	•••	•••

FIG. 6

322

APPARATUS ID	MAIL ADDRESS	REGISTRATION STATUS
•••	•••	•••
•••	•••	•••

FIG. 7

323

APPARATUS ID	MAIL ADDRESS	AUTHENTICATION STATUS
•••	•••	•••
•••	•••	•••

FIG. 8

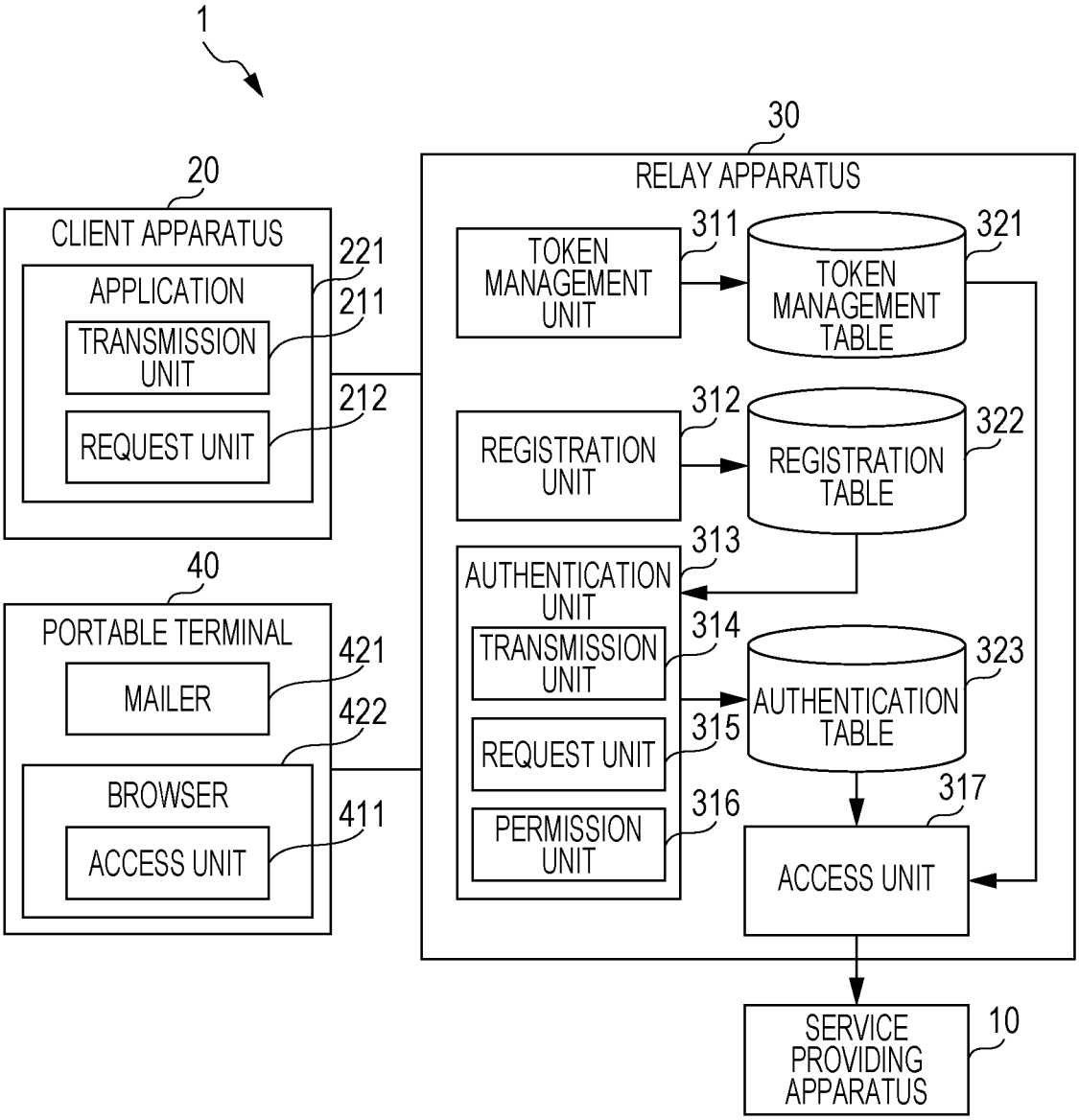
1
30
RELAY APPARATUS
20
CLIENT APPARATUS
221
APPLICATION
211
TRANSMISSION UNIT
212
REQUEST UNIT
311
TOKEN MANAGEMENT UNIT
321
TOKEN MANAGEMENT TABLE
312
REGISTRATION UNIT
322
REGISTRATION TABLE
313
AUTHENTICATION UNIT
314
TRANSMISSION UNIT
315
REQUEST UNIT
316
PERMISSION UNIT
323
AUTHENTICATION TABLE
317
ACCESS UNIT
40
PORTABLE TERMINAL
421
MAILER
422
BROWSER
411
ACCESS UNIT
SERVICE PROVIDING APPARATUS
10

FIG. 9

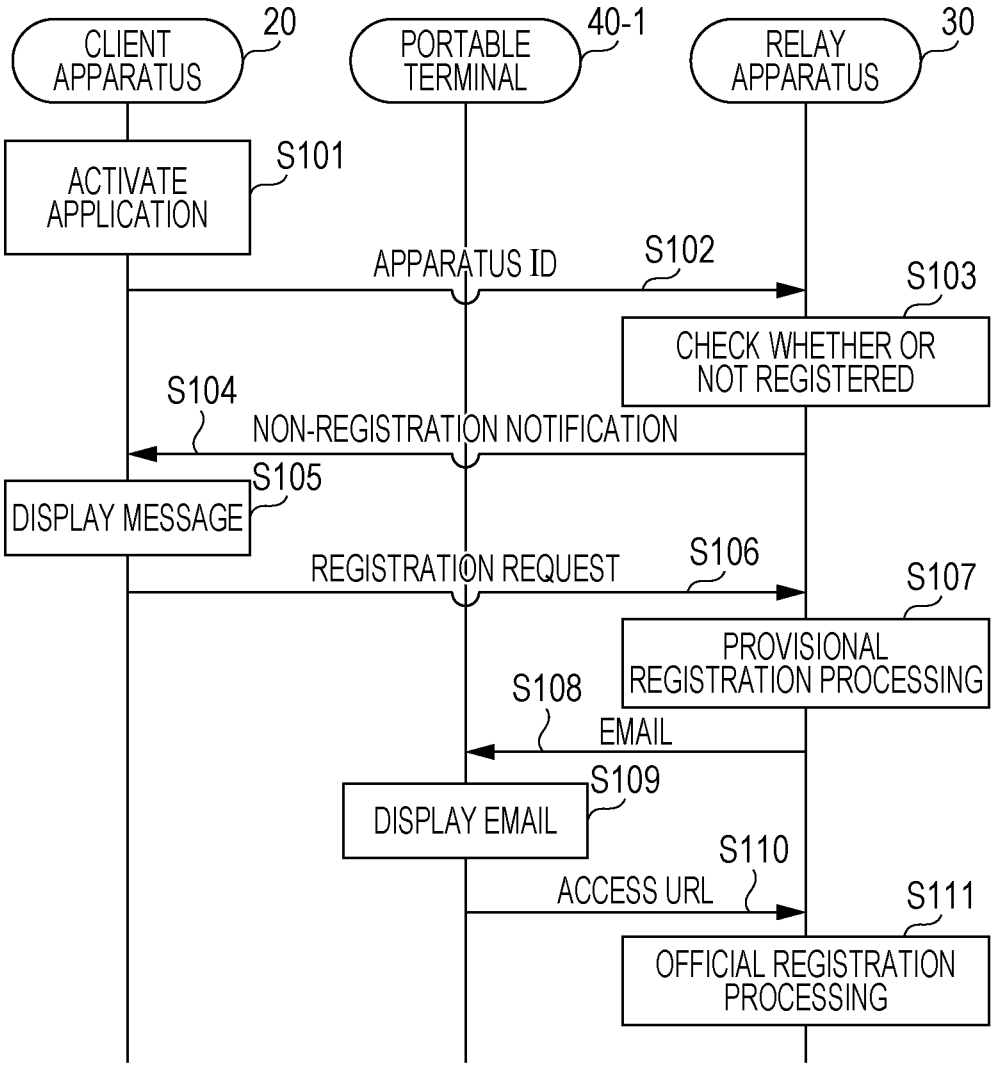

FIG. 10

322

APPARATUS ID	MAIL ADDRESS	REGISTRATION STATUS
XXX	a@example.com	CHECKING
•••	•••	•••

FIG. 11

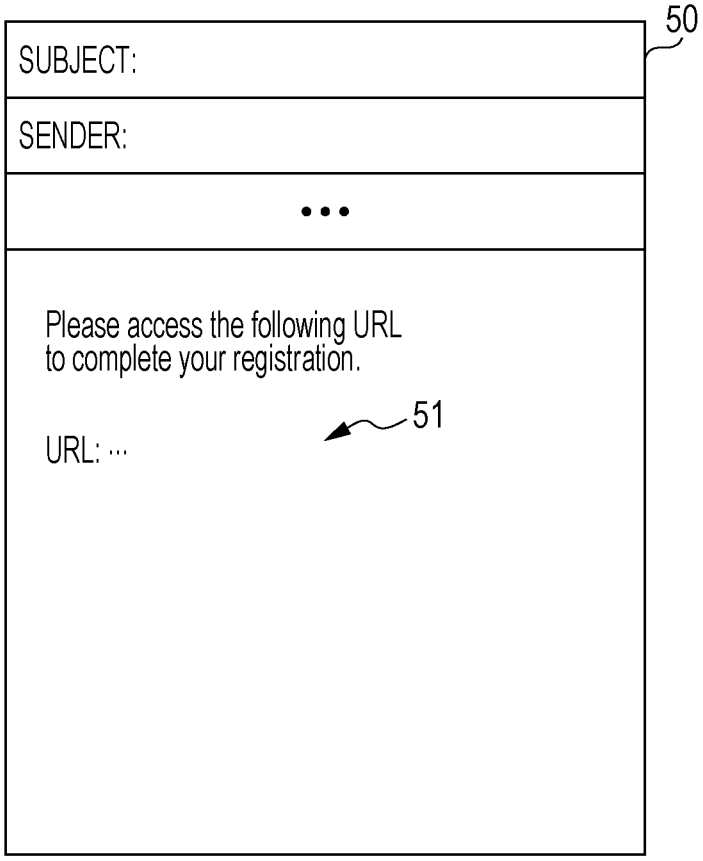

FIG. 12

322

APPARATUS ID	MAIL ADDRESS	REGISTRATION STATUS
XXX	a@example.com	REGISTRATION COMPLETED
• • •	• • •	• • •

FIG. 13

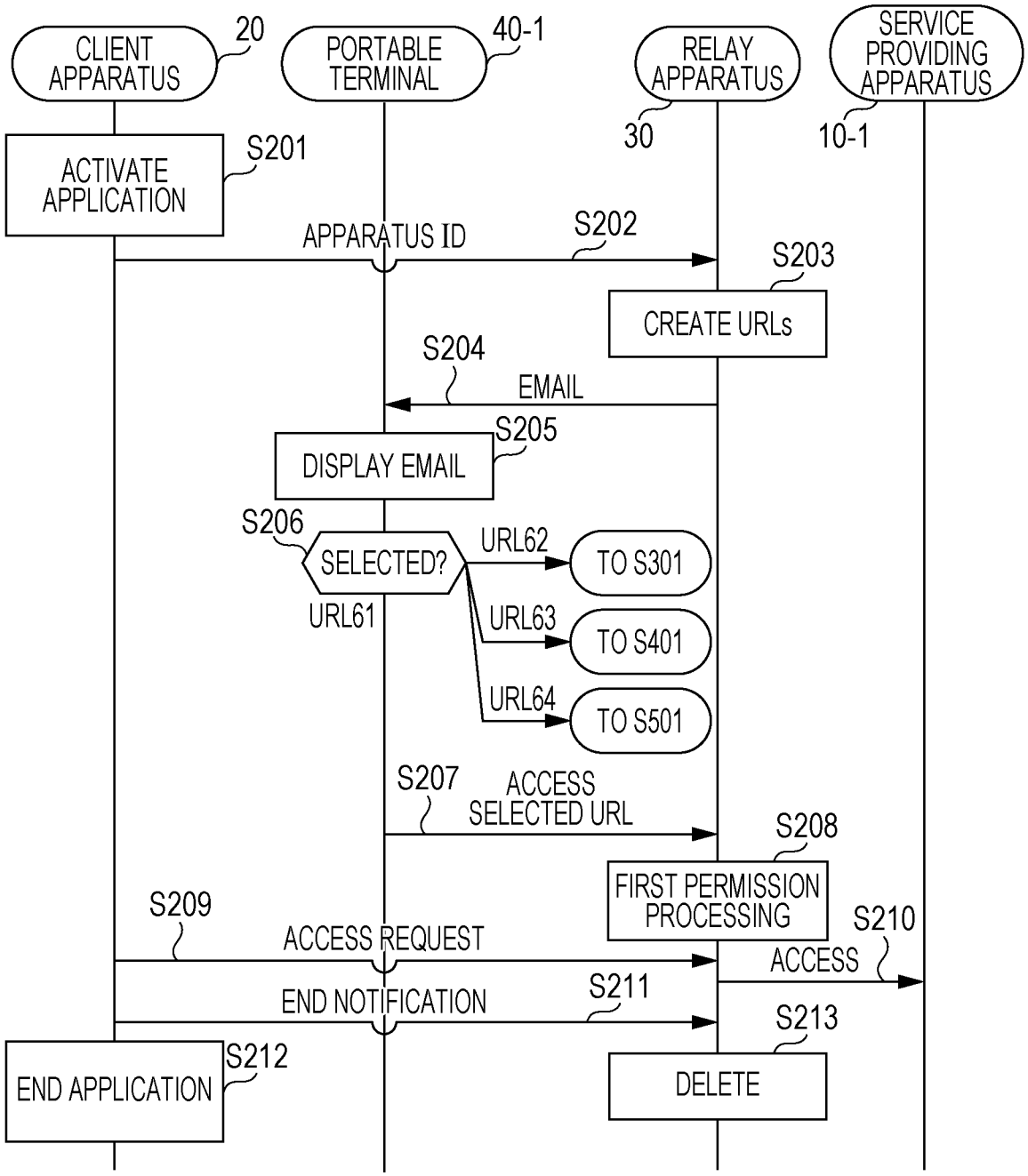
CLIENT APPARATUS
20
PORTABLE TERMINAL
40-1
RELAY APPARATUS
30
SERVICE PROVIDING APPARATUS
10-1
ACTIVATE APPLICATION
S201
APPARATUS ID
S202
S203
CREATE URLs
S204
EMAIL
DISPLAY EMAIL
S205
S206
SELECTED?
URL62
TO S301
URL61
URL63
TO S401
URL64
TO S501
S207
ACCESS SELECTED URL
S208
FIRST PERMISSION PROCESSING
S209
ACCESS REQUEST
S210
ACCESS
END NOTIFICATION
S211
S213
END APPLICATION
S212
DELETE

FIG. 14

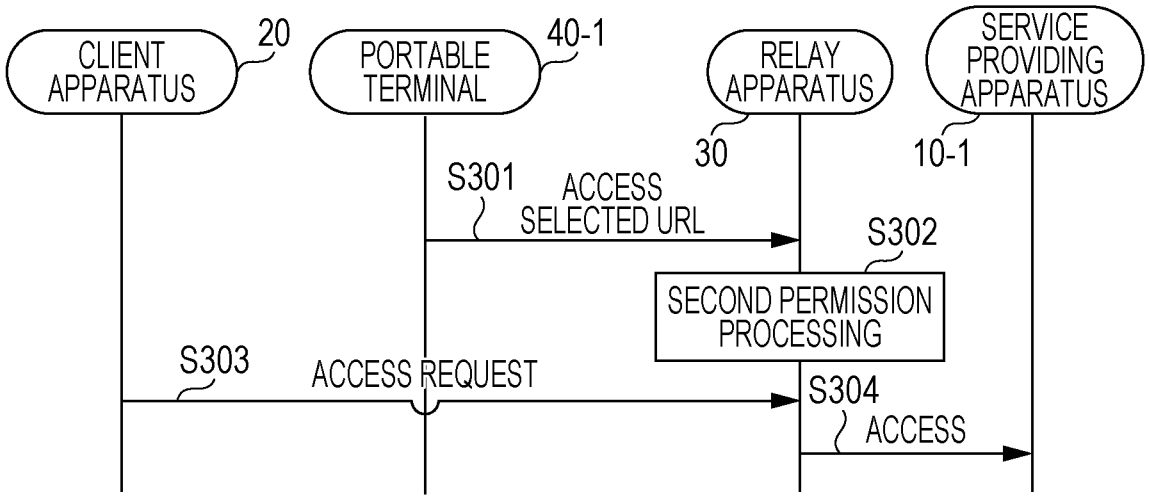
CLIENT APPARATUS
20
PORTABLE TERMINAL
40-1
RELAY APPARATUS
30
SERVICE PROVIDING APPARATUS
10-1
S301
ACCESS SELECTED URL
S302
SECOND PERMISSION PROCESSING
S303
ACCESS REQUEST
S304
ACCESS

FIG. 15

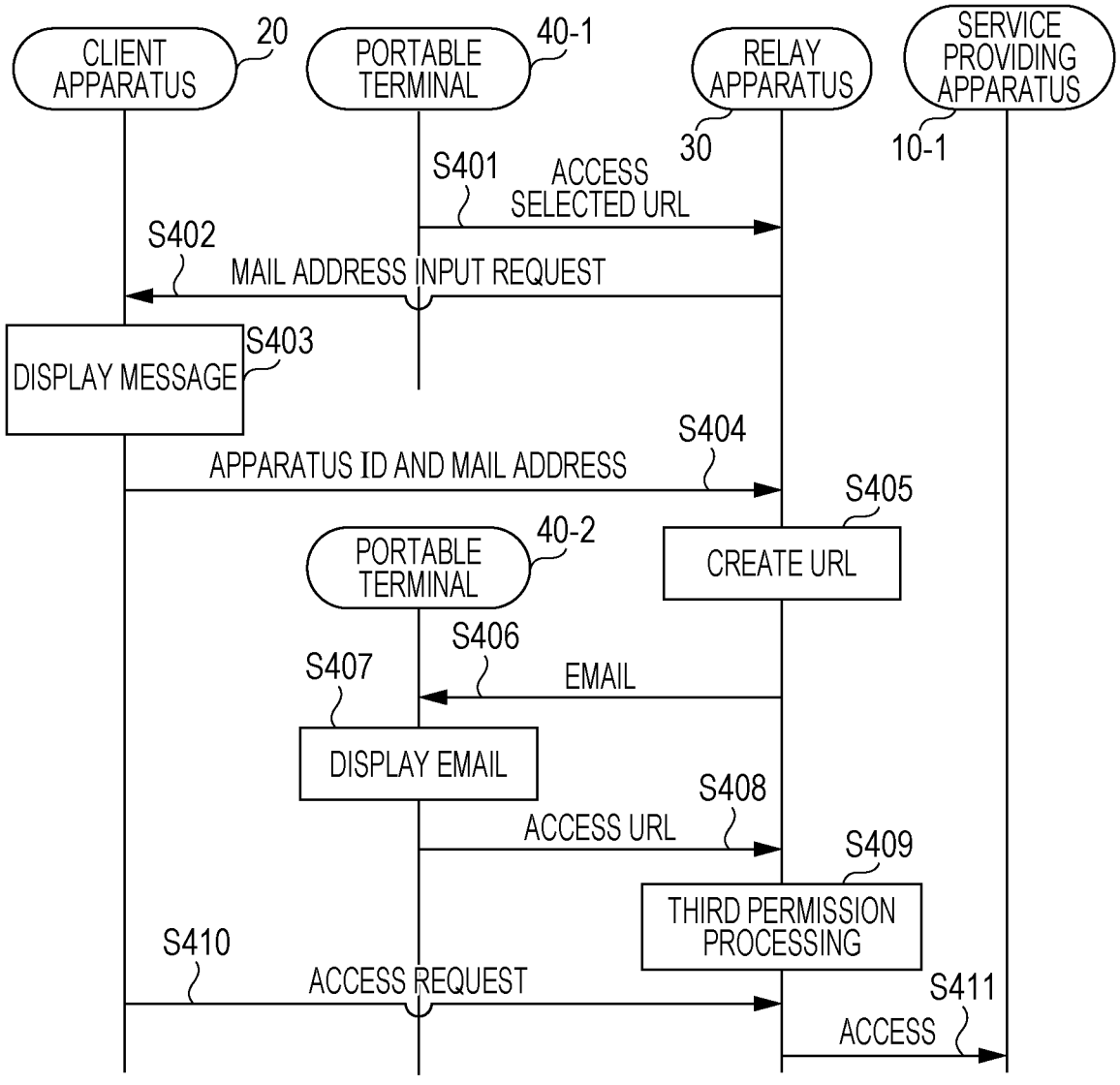
CLIENT APPARATUS
20
PORTABLE TERMINAL
40-1
RELAY APPARATUS
30
SERVICE PROVIDING APPARATUS
10-1
S401
ACCESS SELECTED URL
S402
MAIL ADDRESS INPUT REQUEST
DISPLAY MESSAGE
S403
S404
APPARATUS ID AND MAIL ADDRESS
S405
CREATE URL
PORTABLE TERMINAL
40-2
S406
EMAIL
S407
DISPLAY EMAIL
S408
ACCESS URL
S409
THIRD PERMISSION PROCESSING
S410
ACCESS REQUEST
S411
ACCESS

FIG. 16

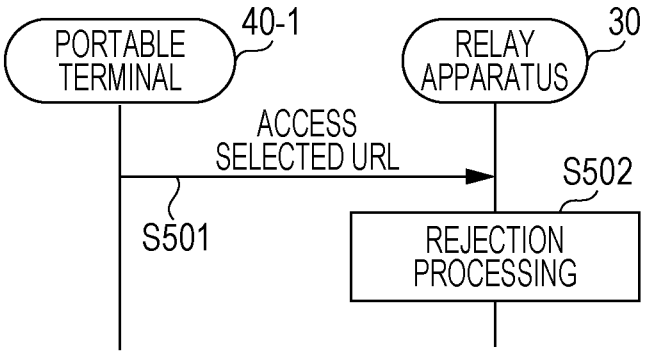
PORTABLE TERMINAL
40-1
RELAY APPARATUS
30
ACCESS SELECTED URL
S501
S502
REJECTION PROCESSING

FIG. 17

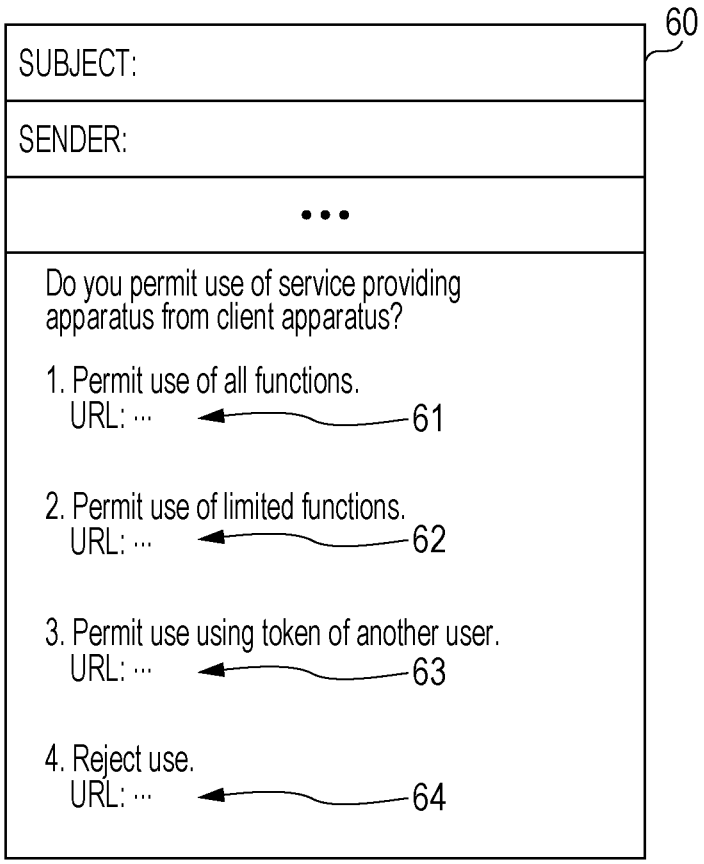
60
SUBJECT:
SENDER:
...
Do you permit use of service providing apparatus from client apparatus?
1. Permit use of all functions.
URL: ...
61
2. Permit use of limited functions.
URL: ...
62
3. Permit use using token of another user.
URL: ...
63
4. Reject use.
URL: ...
64

FIG. 18

323

APPARATUS ID	MAIL ADDRESS	AUTHENTICATION STATUS
XXX	a@example.com	AUTHENTICATION COMPLETED
•••	•••	•••

FIG. 19

323

APPARATUS ID	MAIL ADDRESS	AUTHENTICATION STATUS
XXX	a@example.com	AUTHENTICATION WITH LIMITATION COMPLETED
•••	•••	•••

FIG. 20

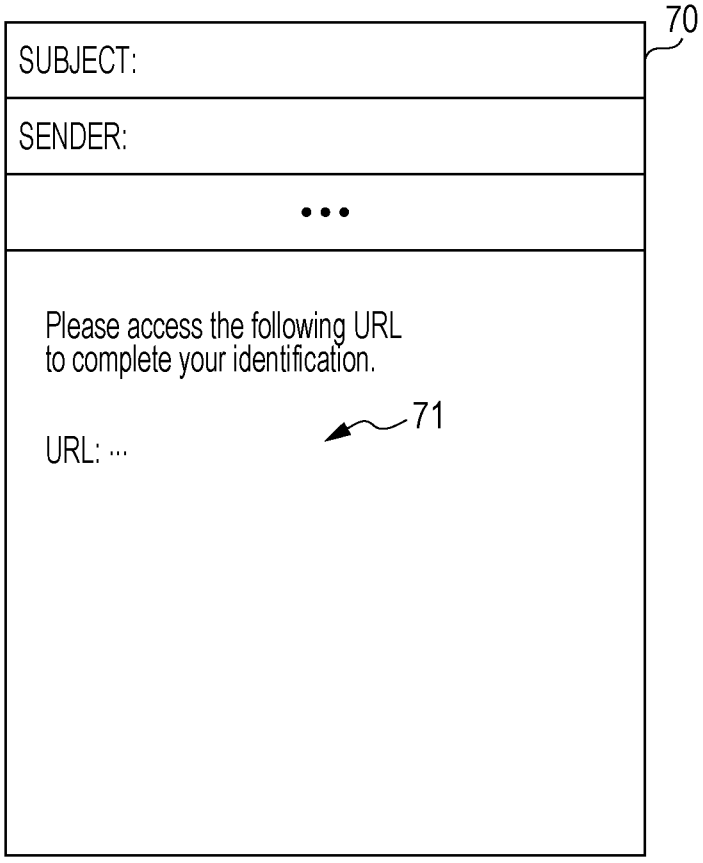

FIG. 21

323

APPARATUS ID	MAIL ADDRESS	AUTHENTICATION STATUS
XXX	a@example.com	TRANSFERRED
XXX	b@example.com	AUTHENTICATION COMPLETED
•••	•••	•••

FIG. 22

323

APPARATUS ID	MAIL ADDRESS	AUTHENTICATION STATUS
XXX	a@example.com	REJECTED
•••	•••	•••

FIG. 23

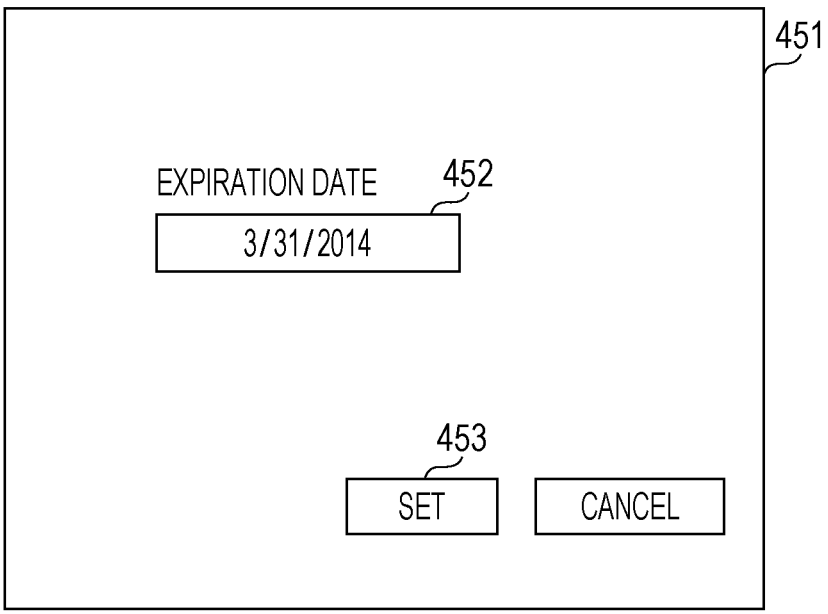

FIG. 24

324

APPARATUS ID	MAIL ADDRESS	AUTHENTICATION STATUS	EXPIRATION DATE
XXX	a@example.com	AUTHENTICATION WITH LIMITATION COMPLETED	3/31/2014
•••	•••	•••	•••