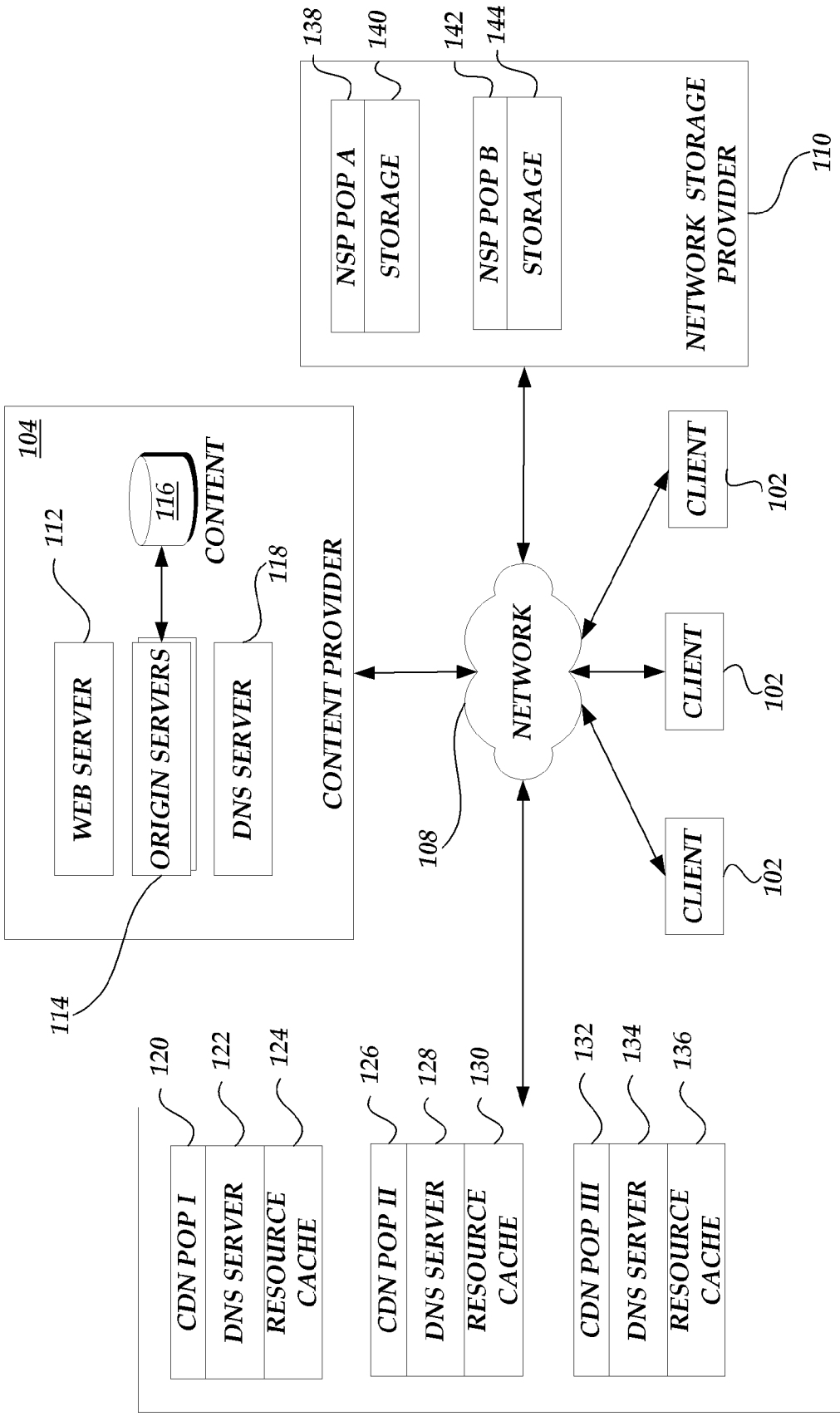
104
CONTENT PROVIDER
WEB SERVER
112
ORIGIN SERVERS
114
116
CONTENT
DNS SERVER
118
NETWORK STORAGE PROVIDER
110
NSP POP A
138
STORAGE
140
NSP POP B
142
STORAGE
144
NETWORK
108
CLIENT
102
CLIENT
102
CLIENT
102
SERVICE PROVIDER
106
CDN POP I
120
DNS SERVER
122
RESOURCE CACHE
124
CDN POP II
126
DNS SERVER
128
RESOURCE CACHE
130
CDN POP III
132
DNS SERVER
134
RESOURCE CACHE
136

Fig.1.

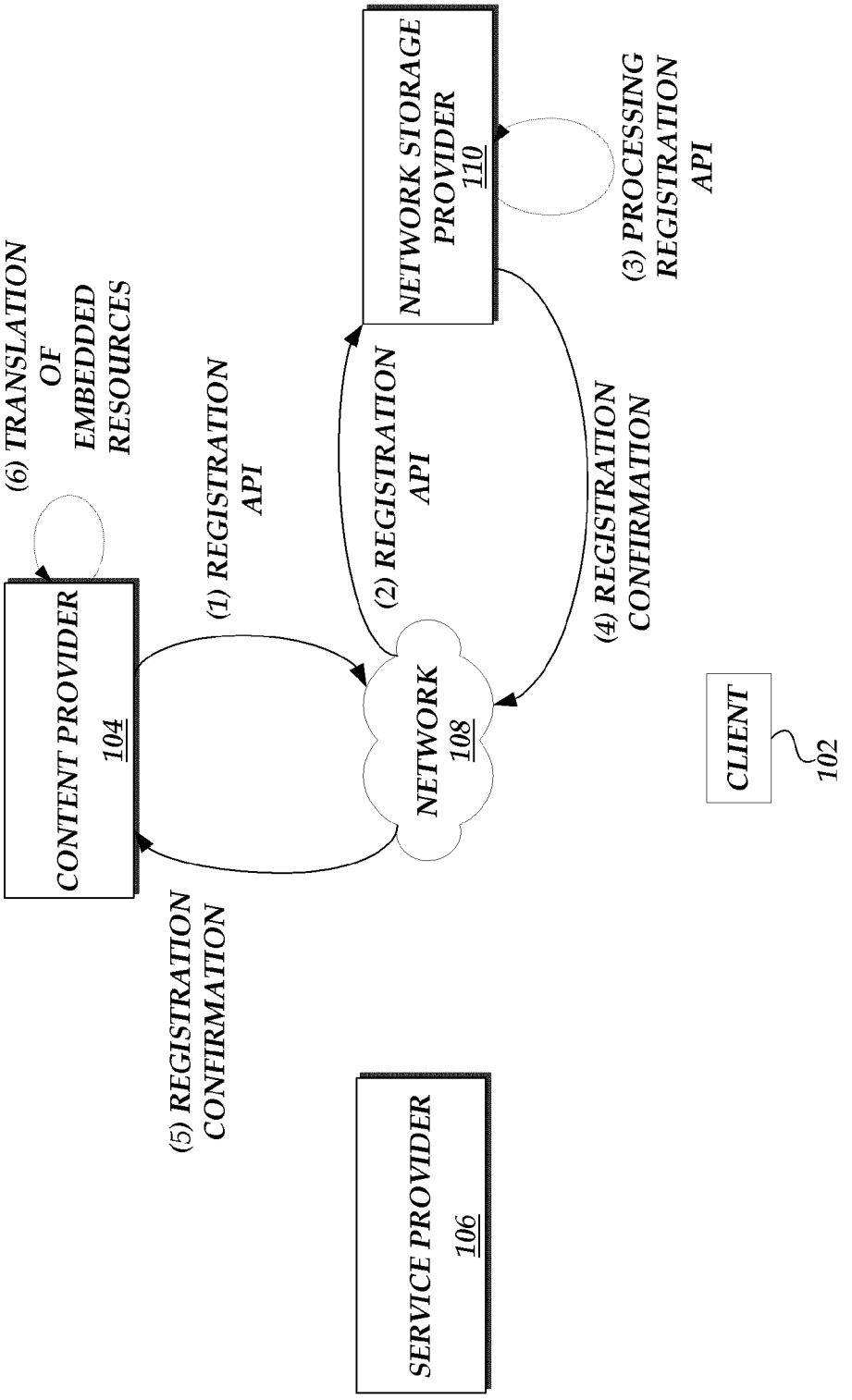
CONTENT PROVIDER
104
NETWORK STORAGE PROVIDER
110
NETWORK
108
CLIENT
102
SERVICE PROVIDER
106
(1) REGISTRATION API
(2) REGISTRATION API
(3) PROCESSING REGISTRATION API
(4) REGISTRATION CONFIRMATION
(5) REGISTRATION CONFIRMATION
(6) TRANSLATION OF EMBEDDED RESOURCES

Fig.2.

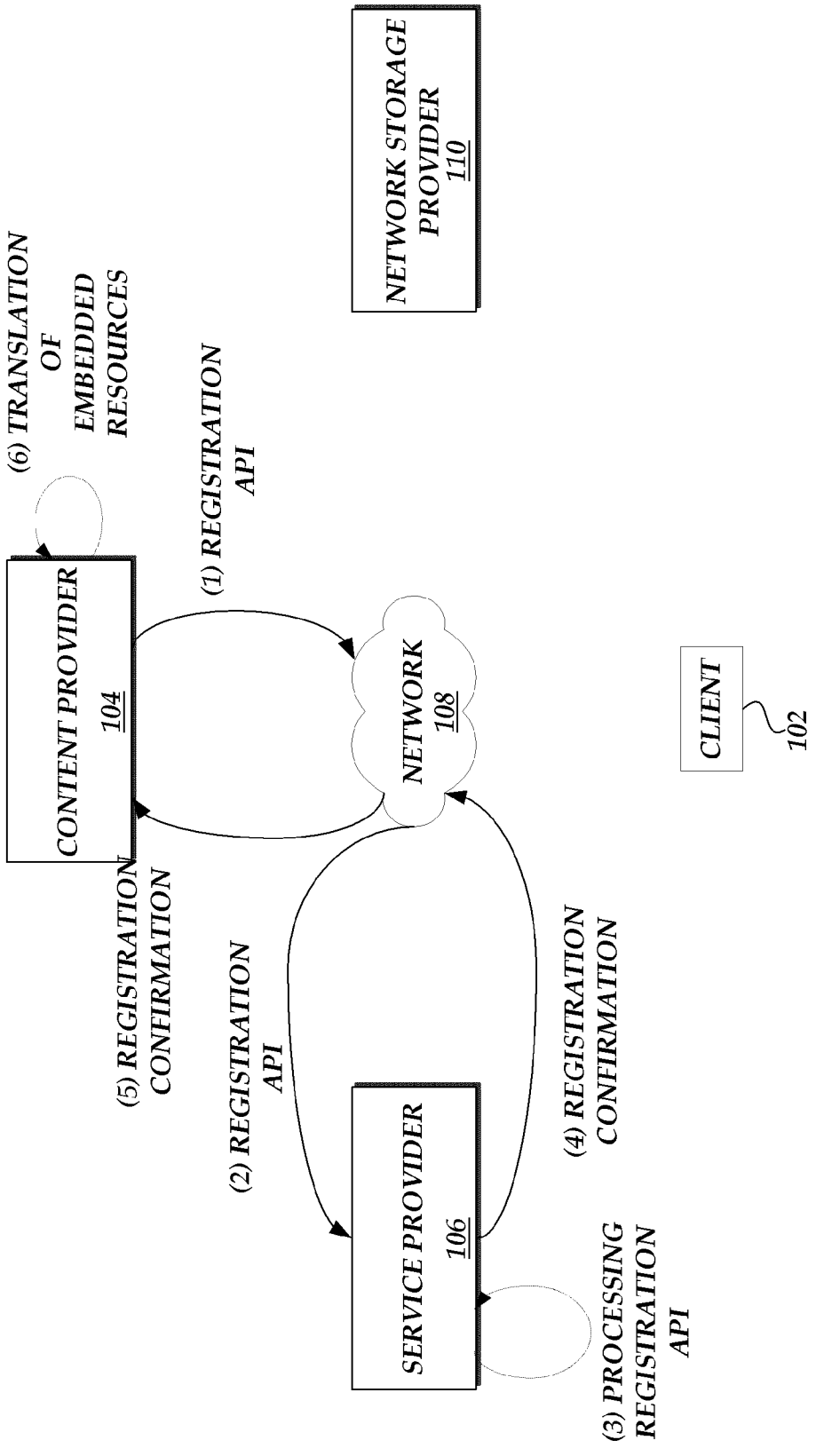
NETWORK STORAGE PROVIDER 110
(6) TRANSLATION OF EMBEDDED RESOURCES
CONTENT PROVIDER 104
(1) REGISTRATION API
NETWORK 108
CLIENT 102
(5) REGISTRATION CONFIRMATION
(2) REGISTRATION API
(4) REGISTRATION CONFIRMATION
SERVICE PROVIDER 106
(3) PROCESSING REGISTRATION API

Fig.3.

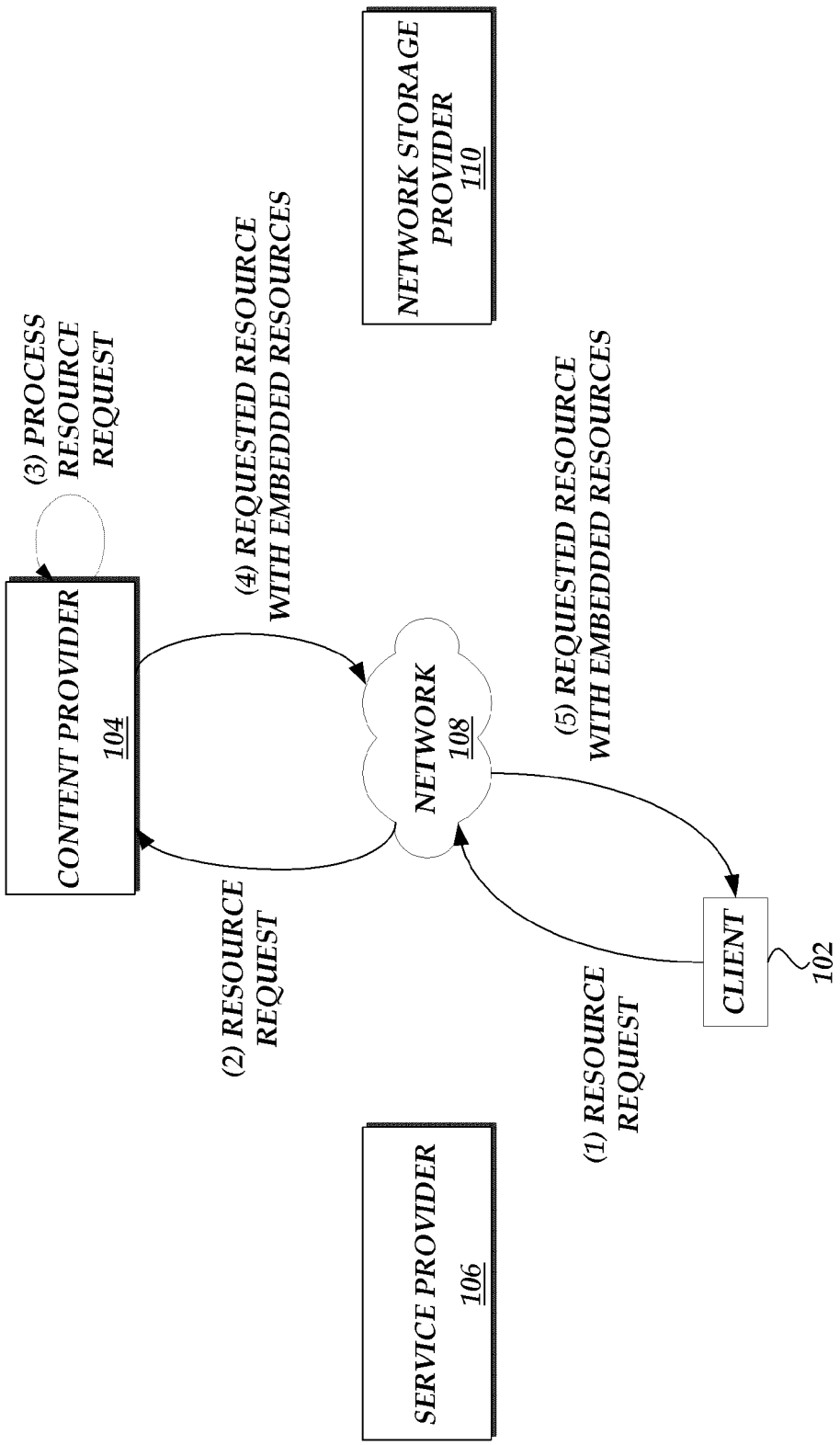
CONTENT PROVIDER
104
NETWORK STORAGE PROVIDER
110
NETWORK
108
SERVICE PROVIDER
106
CLIENT
102
(1) RESOURCE REQUEST
(2) RESOURCE REQUEST
(3) PROCESS RESOURCE REQUEST
(4) REQUESTED RESOURCE WITH EMBEDDED RESOURCES
(5) REQUESTED RESOURCE WITH EMBEDDED RESOURCES

Fig.4A.

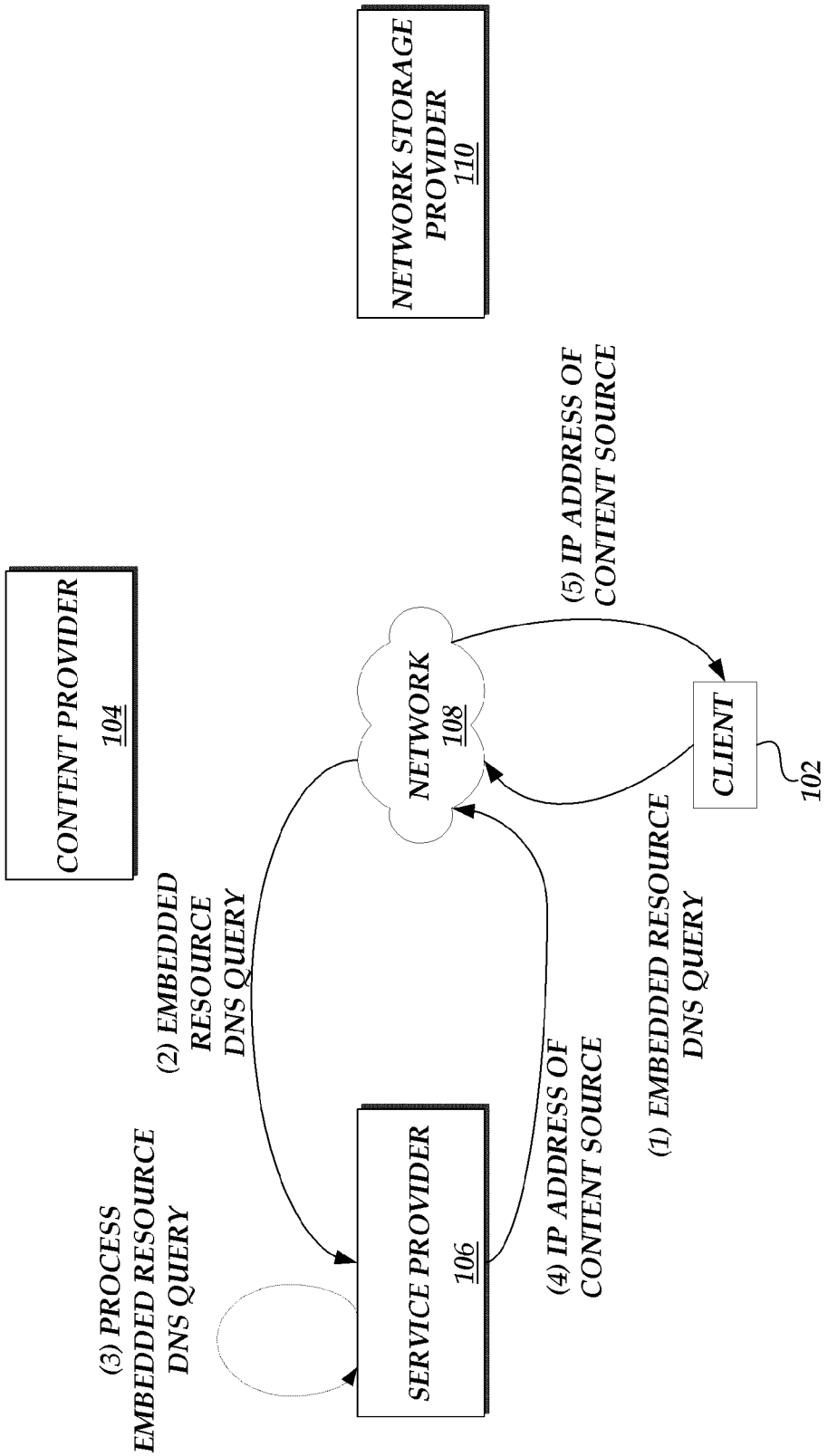
NETWORK STORAGE PROVIDER 110
CONTENT PROVIDER 104
NETWORK 108
CLIENT 102
SERVICE PROVIDER 106
(1) EMBEDDED RESOURCE DNS QUERY
(2) EMBEDDED RESOURCE DNS QUERY
(3) PROCESS EMBEDDED RESOURCE DNS QUERY
(4) IP ADDRESS OF CONTENT SOURCE
(5) IP ADDRESS OF CONTENT SOURCE

Fig.4B.

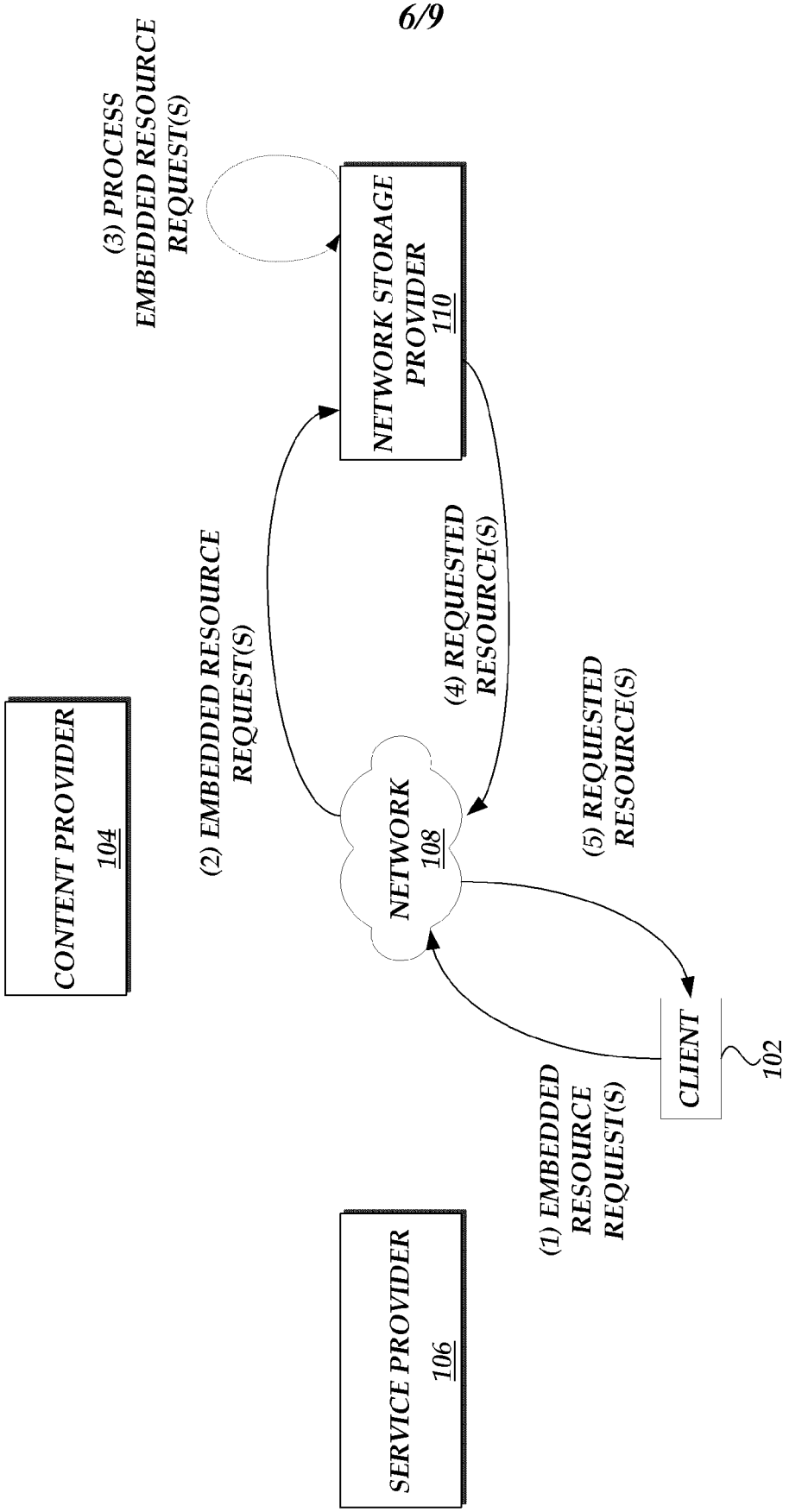
(3) PROCESS EMBEDDED RESOURCE REQUEST(S)
NETWORK STORAGE PROVIDER 110
CONTENT PROVIDER 104
(2) EMBEDDED RESOURCE REQUEST(S)
(4) REQUESTED RESOURCE(S)
NETWORK 108
(5) REQUESTED RESOURCE(S)
SERVICE PROVIDER 106
(1) EMBEDDED RESOURCE REQUEST(S)
CLIENT
102

Fig.4C.

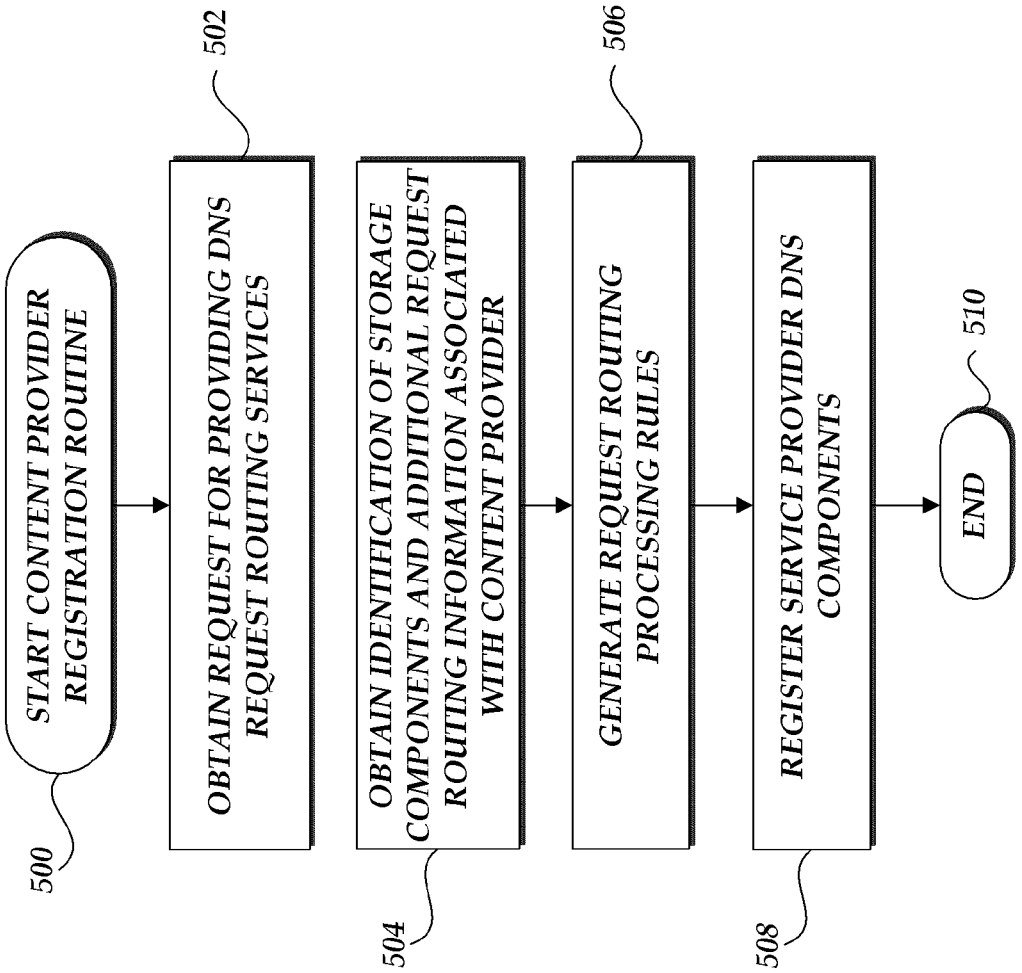
START CONTENT PROVIDER REGISTRATION ROUTINE
500
OBTAIN REQUEST FOR PROVIDING DNS REQUEST ROUTING SERVICES
502
OBTAIN IDENTIFICATION OF STORAGE COMPONENTS AND ADDITIONAL REQUEST ROUTING INFORMATION ASSOCIATED WITH CONTENT PROVIDER
504
GENERATE REQUEST ROUTING PROCESSING RULES
506
REGISTER SERVICE PROVIDER DNS COMPONENTS
508
END
510

Fig.5.

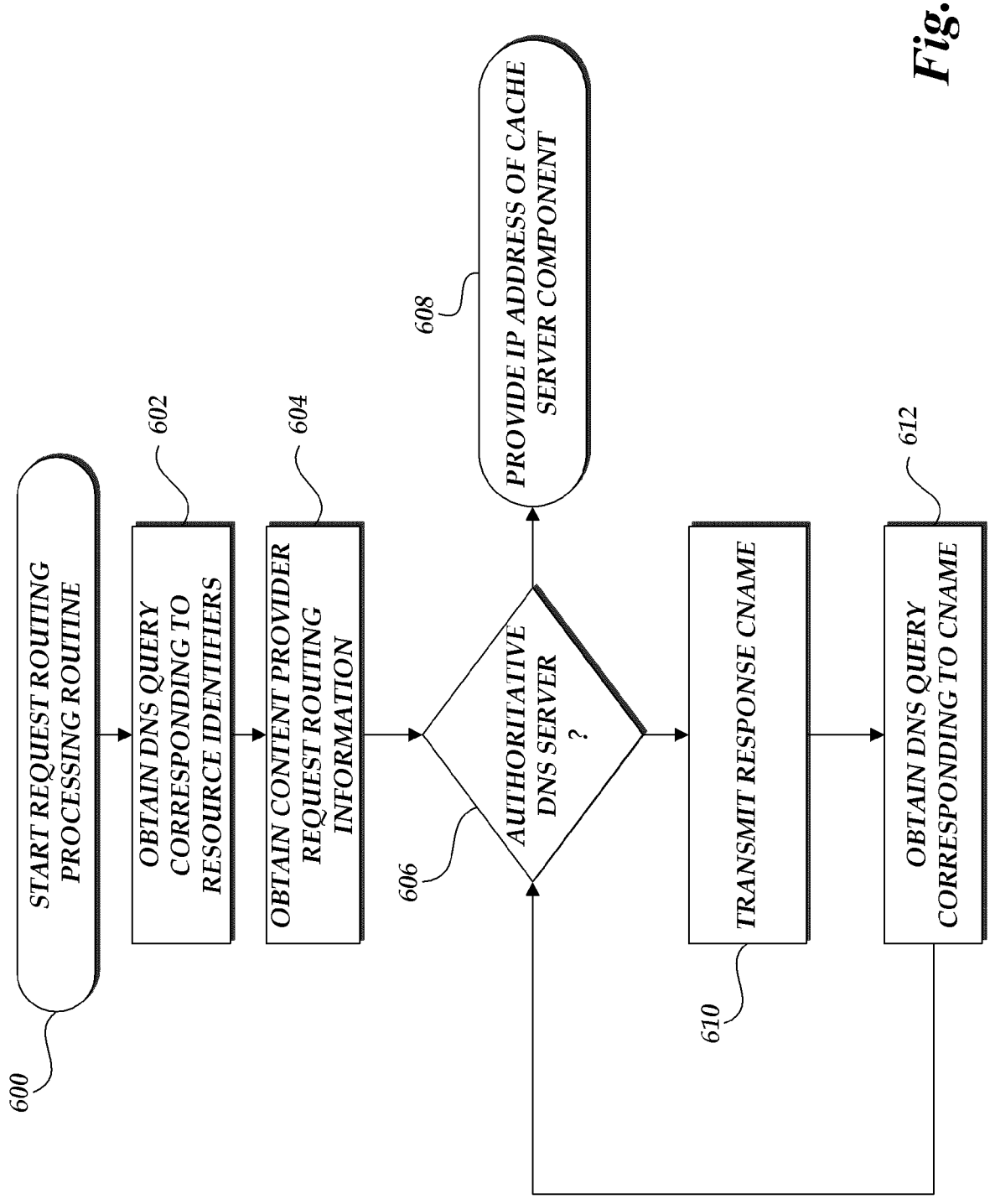
START REQUEST ROUTING PROCESSING ROUTINE
600
OBTAIN DNS QUERY CORRESPONDING TO RESOURCE IDENTIFIERS
602
OBTAIN CONTENT PROVIDER REQUEST ROUTING INFORMATION
604
AUTHORITATIVE DNS SERVER ?
606
PROVIDE IP ADDRESS OF CACHE SERVER COMPONENT
608
TRANSMIT RESPONSE CNAME
610
OBTAIN DNS QUERY CORRESPONDING TO CNAME
612

Fig. 6.

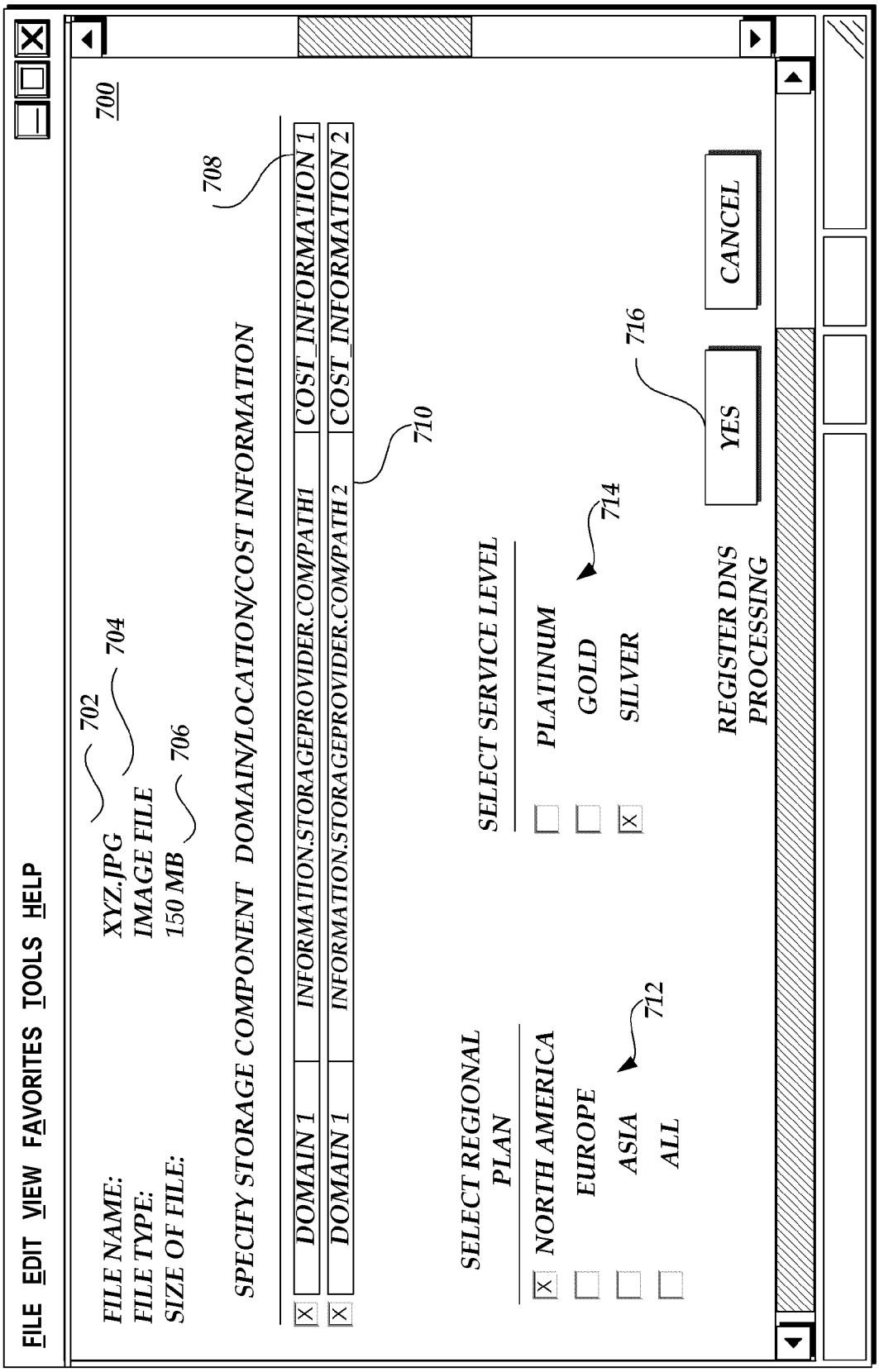
FILE EDIT VIEW FAVORITES TOOLS HELP
700
FILE NAME:
FILE TYPE:
SIZE OF FILE:
XYZ.JPG
IMAGE FILE
150 MB
702
704
706
708
SPECIFY STORAGE COMPONENT DOMAIN/LOCATION/COST INFORMATION
DOMAIN 1
INFORMATION.STORAGEPROVIDER.COM/PATH1
COST_INFORMATION 1
DOMAIN 1
INFORMATION.STORAGEPROVIDER.COM/PATH 2
COST_INFORMATION 2
710
SELECT REGIONAL PLAN
NORTH AMERICA
EUROPE
ASIA
ALL
712
SELECT SERVICE LEVEL
PLATINUM
GOLD
SILVER
714
716
REGISTER DNS PROCESSING
YES
CANCEL

Fig. 7.