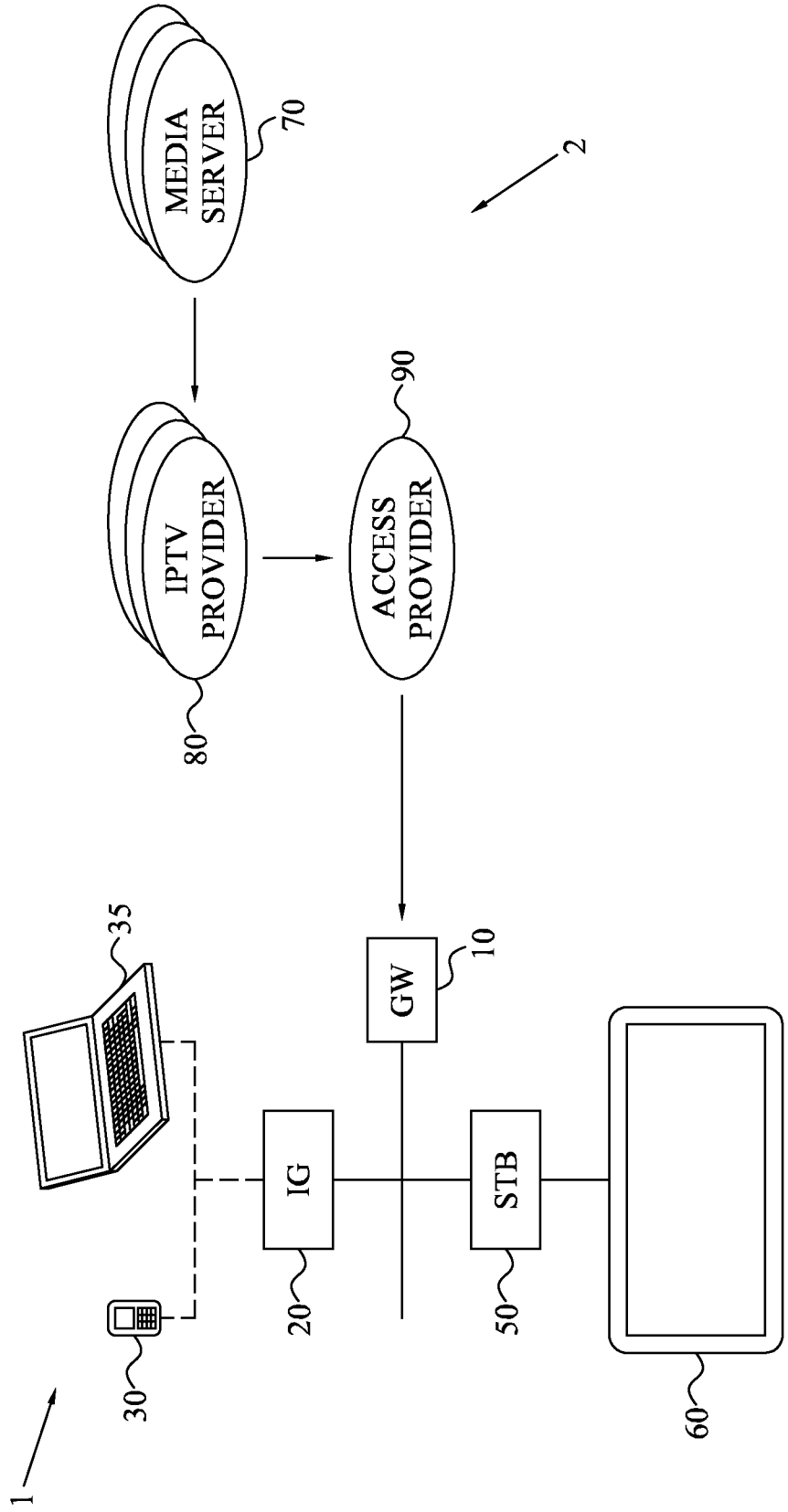

MEDIA SERVER
70
2
IPTV PROVIDER
80
ACCESS PROVIDER
90
GW
10
35
IG
20
STB
50
30
60
1

Fig. 1

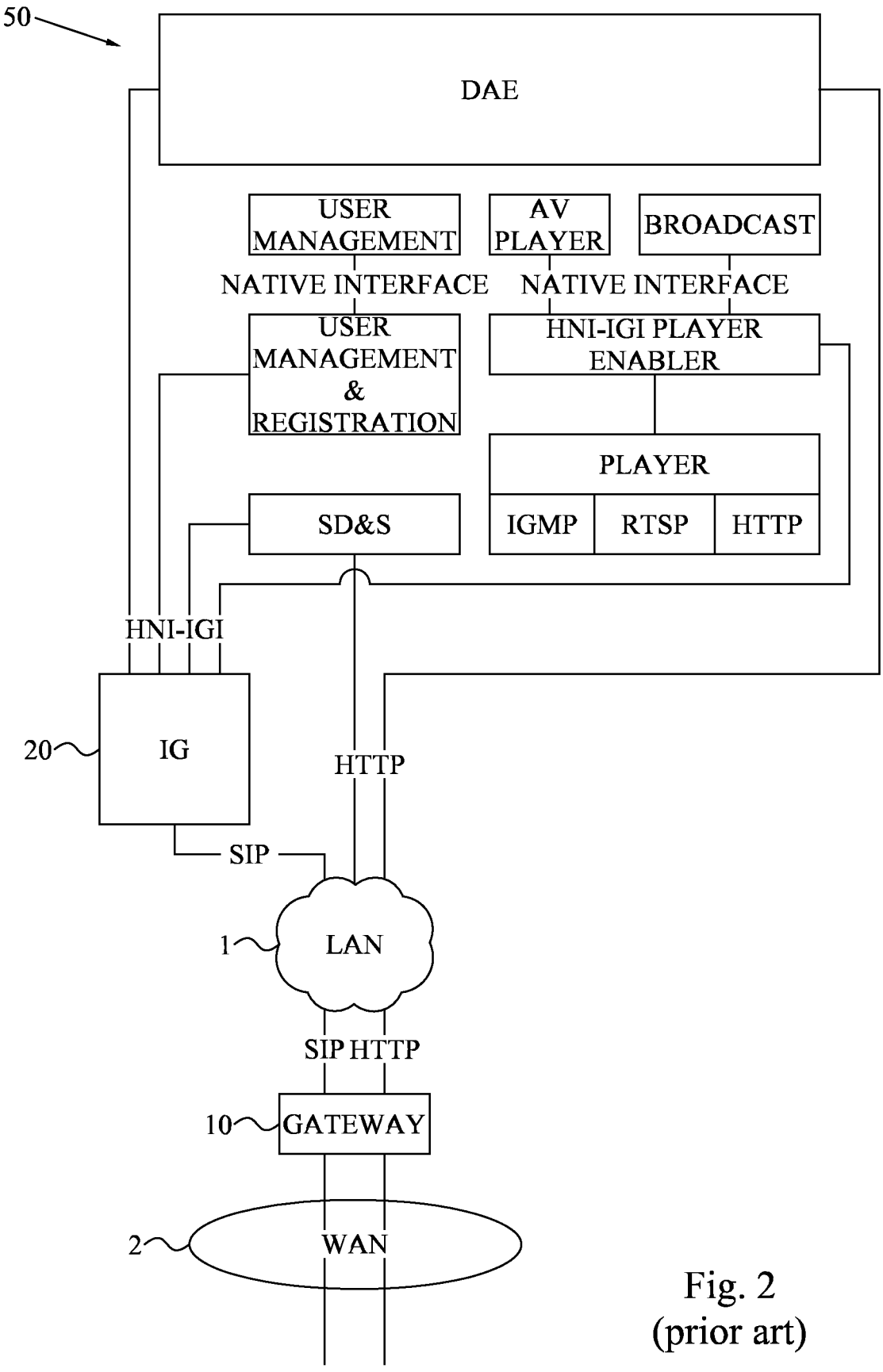


Fig. 2
(prior art)

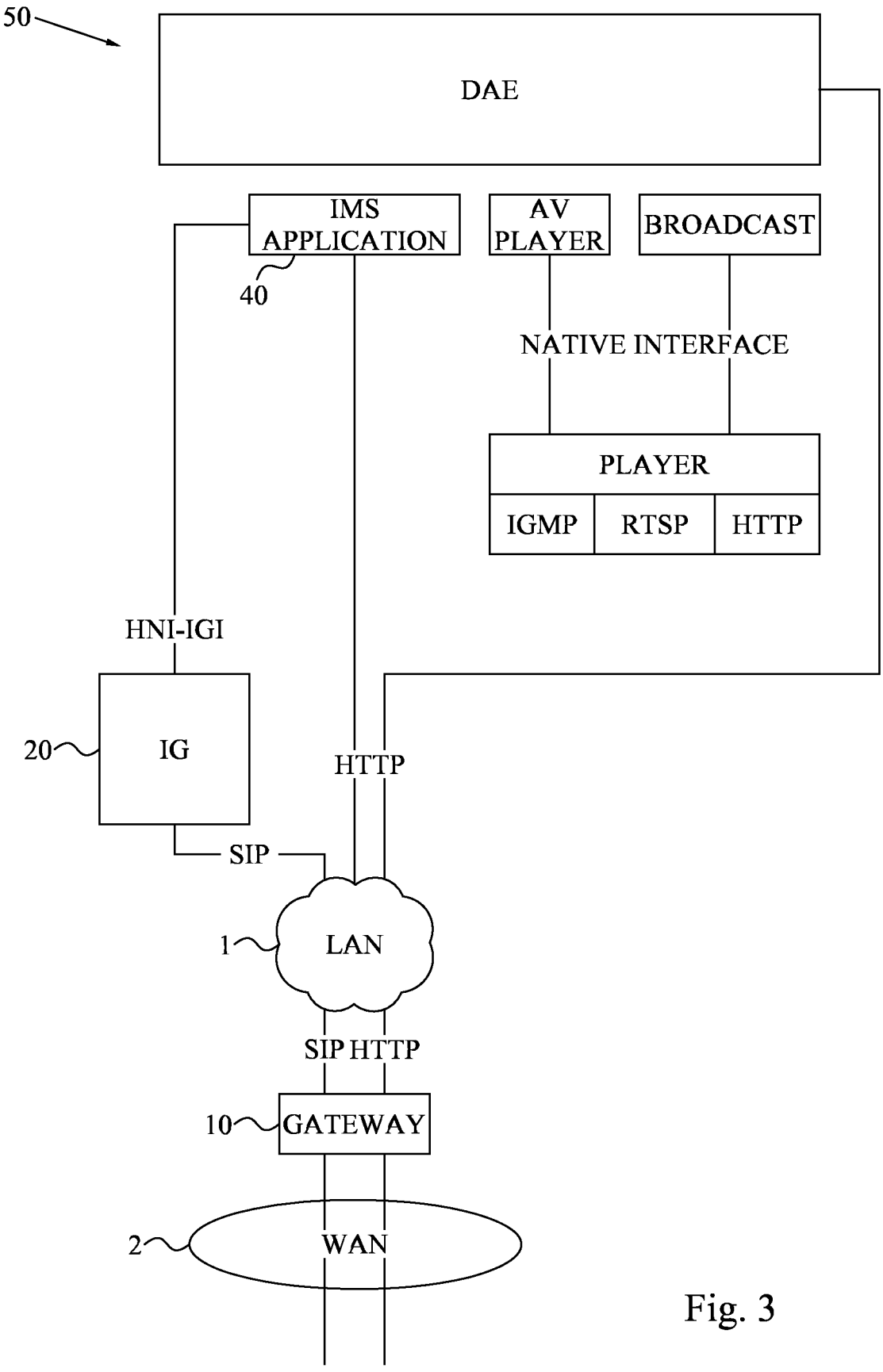

50
DAE
IMS APPLICATION
40
AV PLAYER
BROADCAST
NATIVE INTERFACE
PLAYER
IGMP
RTSP
HTTP
HNI-IGI
20
IG
HTTP
SIP
1
LAN
SIP HTTP
10
GATEWAY
2
WAN

Fig. 3

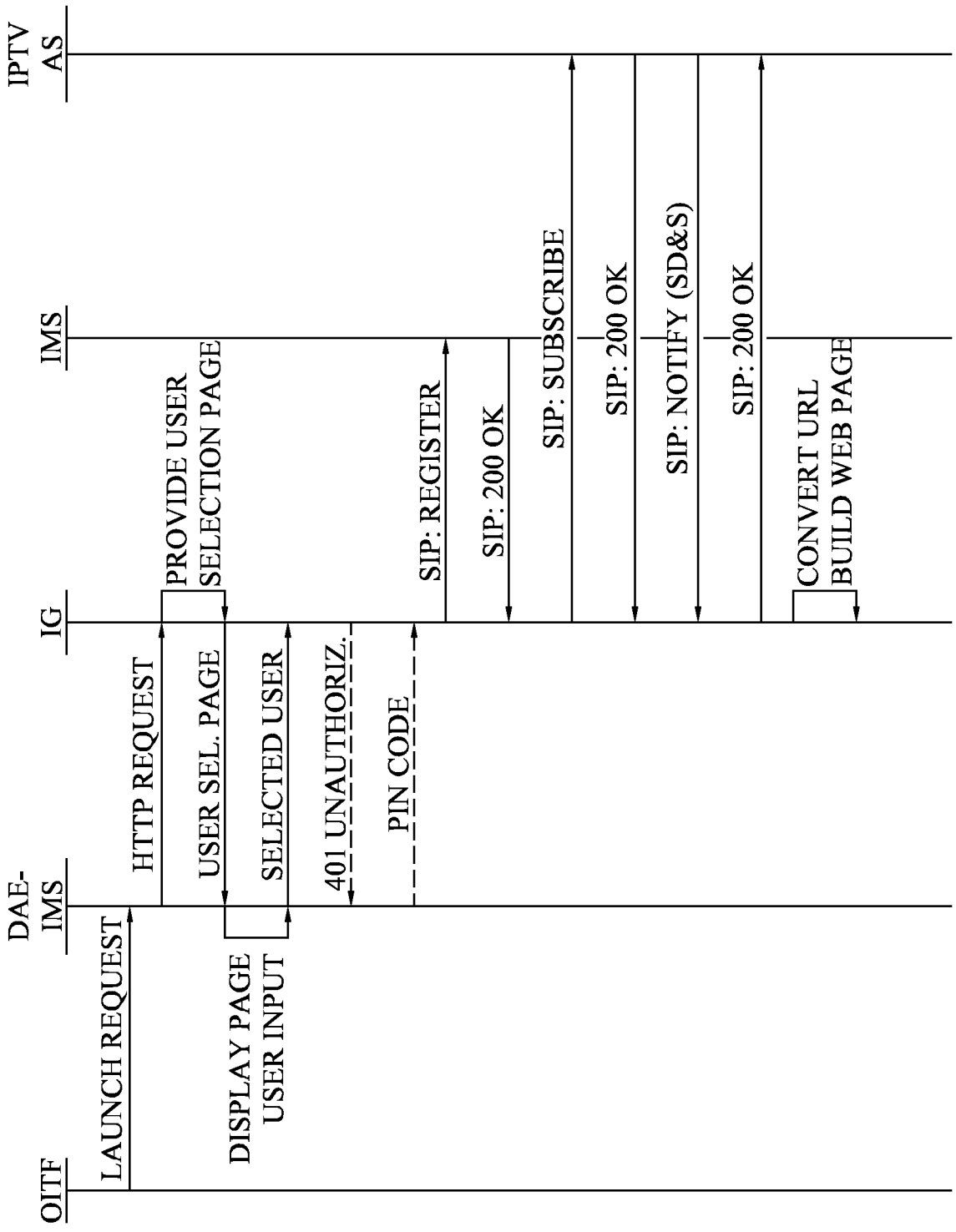

OITF
DAE-IMS
IG
IMS
IPTV AS
LAUNCH REQUEST
HTTP REQUEST
PROVIDE USER SELECTION PAGE
USER SEL. PAGE
DISPLAY PAGE USER INPUT
SELECTED USER
401 UNAUTHORIZ.
PIN CODE
SIP: REGISTER
SIP: 200 OK
SIP: SUBSCRIBE
SIP: 200 OK
SIP: NOTIFY (SD&S)
SIP: 200 OK
CONVERT URL BUILD WEB PAGE

Fig. 4A

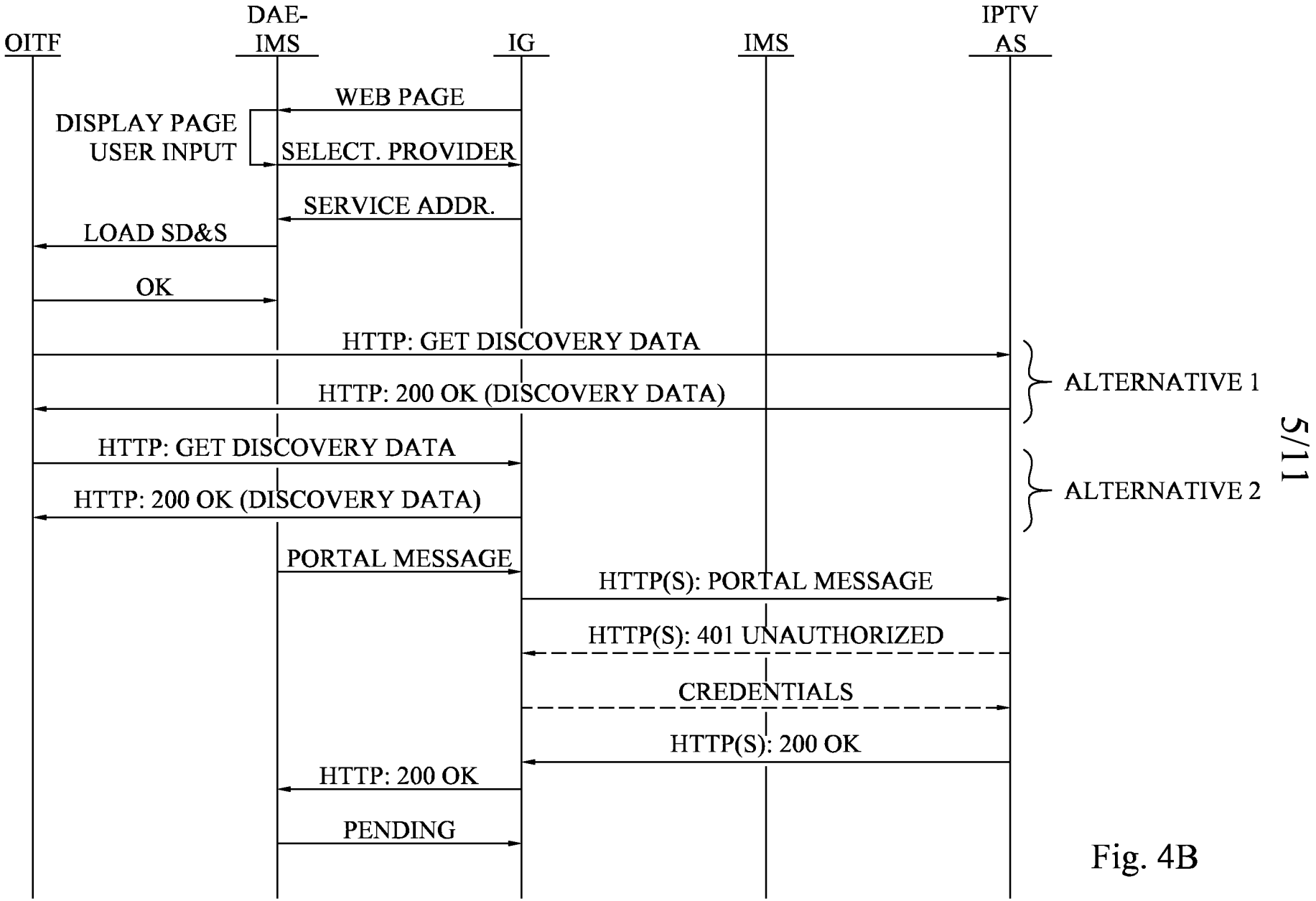

OITF
DAE-IMS
IG
IMS
IPTV AS
WEB PAGE
DISPLAY PAGE
USER INPUT
SELECT. PROVIDER
SERVICE ADDR.
LOAD SD&S
OK
HTTP: GET DISCOVERY DATA
HTTP: 200 OK (DISCOVERY DATA)
ALTERNATIVE 1
HTTP: GET DISCOVERY DATA
HTTP: 200 OK (DISCOVERY DATA)
ALTERNATIVE 2
PORTAL MESSAGE
HTTP(S): PORTAL MESSAGE
HTTP(S): 401 UNAUTHORIZED
CREDENTIALS
HTTP(S): 200 OK
HTTP: 200 OK
PENDING

Fig. 4B

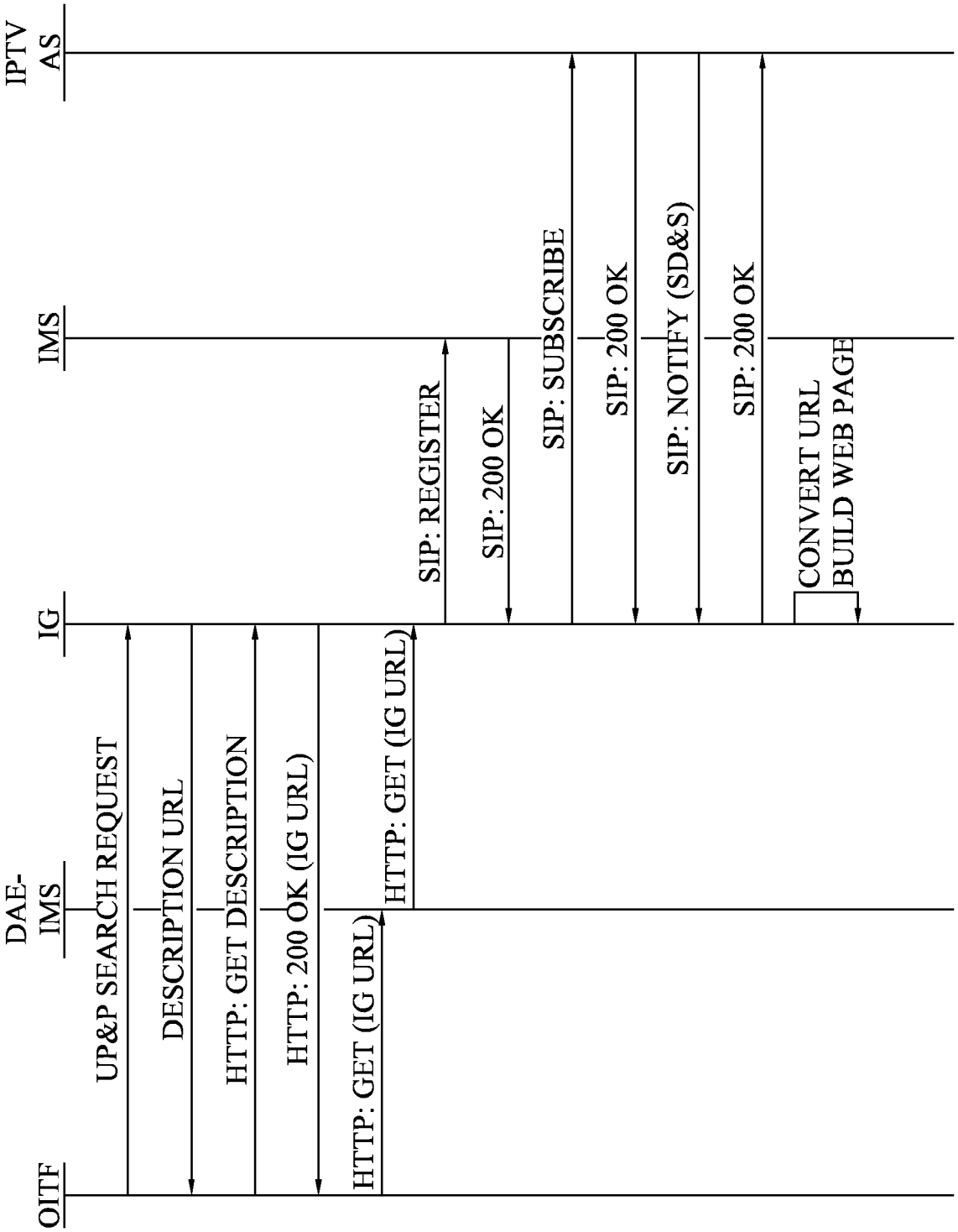

OITF
DAE-IMS
IG
IMS
IPTV AS
UP&P SEARCH REQUEST
DESCRIPTION URL
HTTP: GET DESCRIPTION
HTTP: 200 OK (IG URL)
HTTP: GET (IG URL)
HTTP: GET (IG URL)
SIP: REGISTER
SIP: 200 OK
SIP: SUBSCRIBE
SIP: 200 OK
SIP: NOTIFY (SD&S)
SIP: 200 OK
CONVERT URL
BUILD WEB PAGE

Fig. 5A

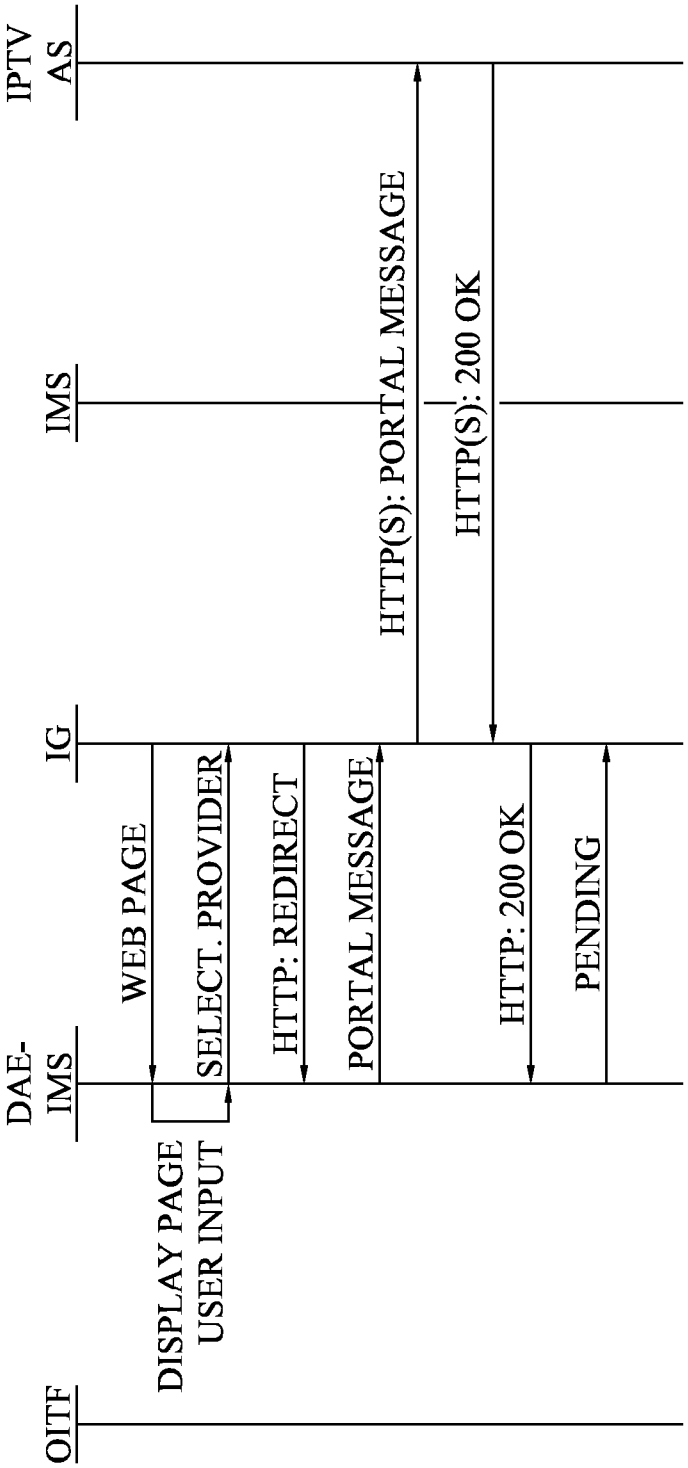

OITF
DAE-IMS
IG
IMS
IPTV AS
DISPLAY PAGE
USER INPUT
WEB PAGE
SELECT. PROVIDER
HTTP: REDIRECT
PORTAL MESSAGE
HTTP(S): PORTAL MESSAGE
HTTP(S): 200 OK
HTTP: 200 OK
PENDING

Fig. 5B

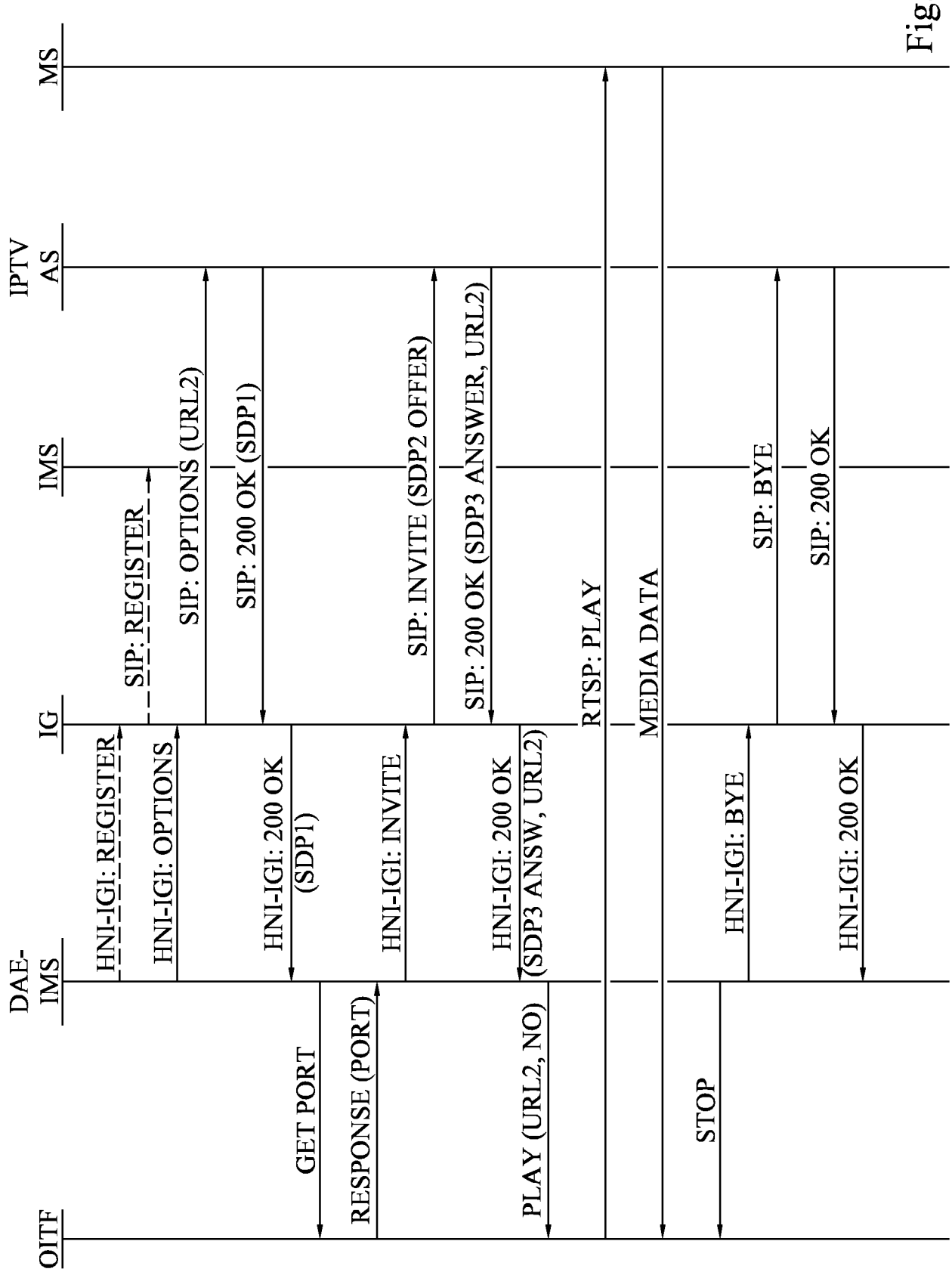

OITF
DAE-IMS
IG
IMS
IPTV AS
MS
HNI-IGI: REGISTER
SIP: REGISTER
HNI-IGI: OPTIONS
SIP: OPTIONS (URL2)
HNI-IGI: 200 OK (SDP1)
SIP: 200 OK (SDP1)
GET PORT
RESPONSE (PORT)
HNI-IGI: INVITE
SIP: INVITE (SDP2 OFFER)
HNI-IGI: 200 OK (SDP3 ANSW, URL2)
SIP: 200 OK (SDP3 ANSWER, URL2)
PLAY (URL2, NO)
RTSP: PLAY
MEDIA DATA
STOP
HNI-IGI: BYE
SIP: BYE
HNI-IGI: 200 OK
SIP: 200 OK

Fig. 6

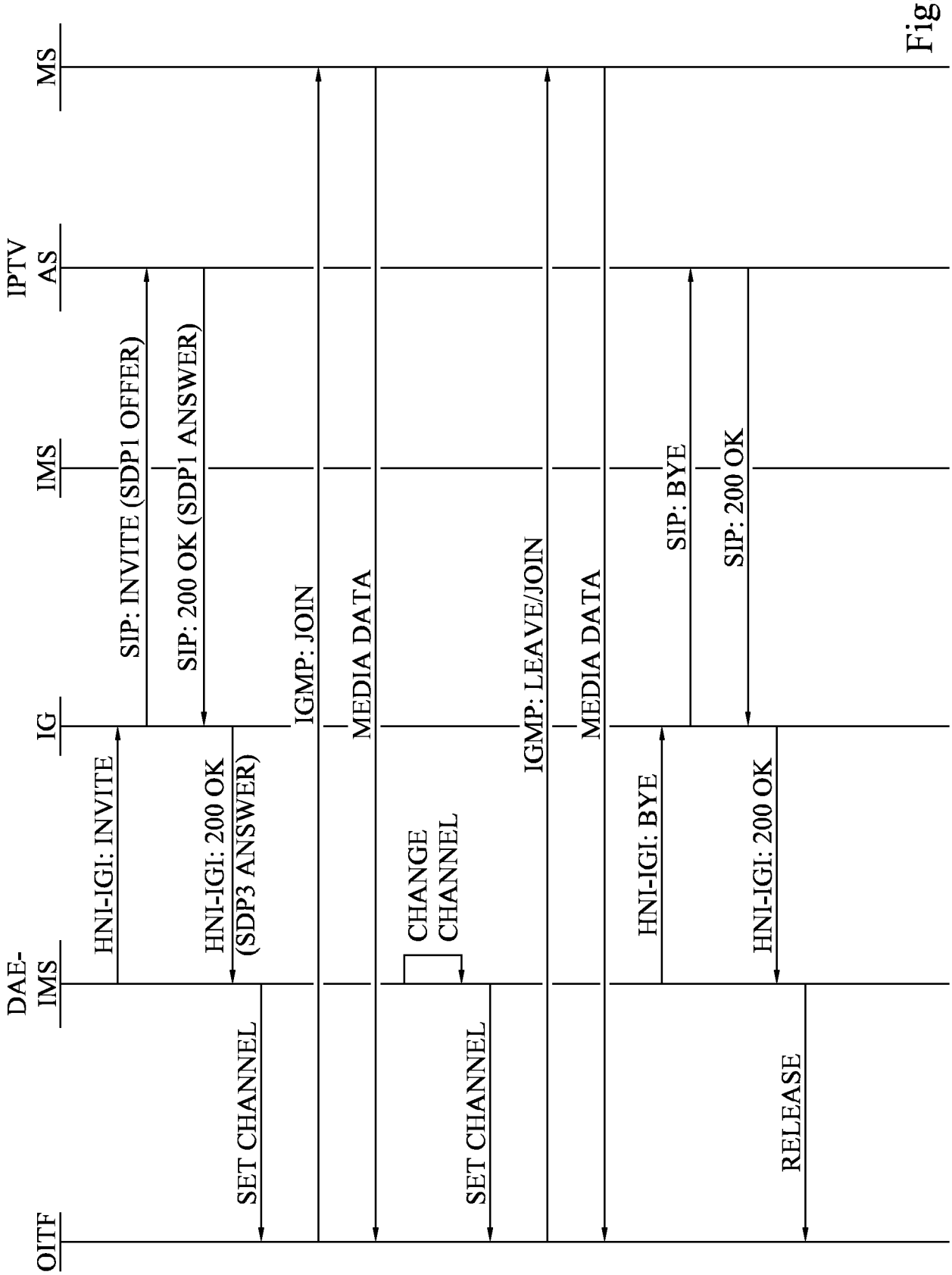

OITF
DAE-IMS
IG
IMS
IPTV AS
MS
HNI-IGI: INVITE
SIP: INVITE (SDP1 OFFER)
SIP: 200 OK (SDP1 ANSWER)
HNI-IGI: 200 OK (SDP3 ANSWER)
IGMP: JOIN
SET CHANNEL
MEDIA DATA
CHANGE CHANNEL
SET CHANNEL
IGMP: LEAVE/JOIN
MEDIA DATA
HNI-IGI: BYE
SIP: BYE
SIP: 200 OK
HNI-IGI: 200 OK
RELEASE

Fig. 7

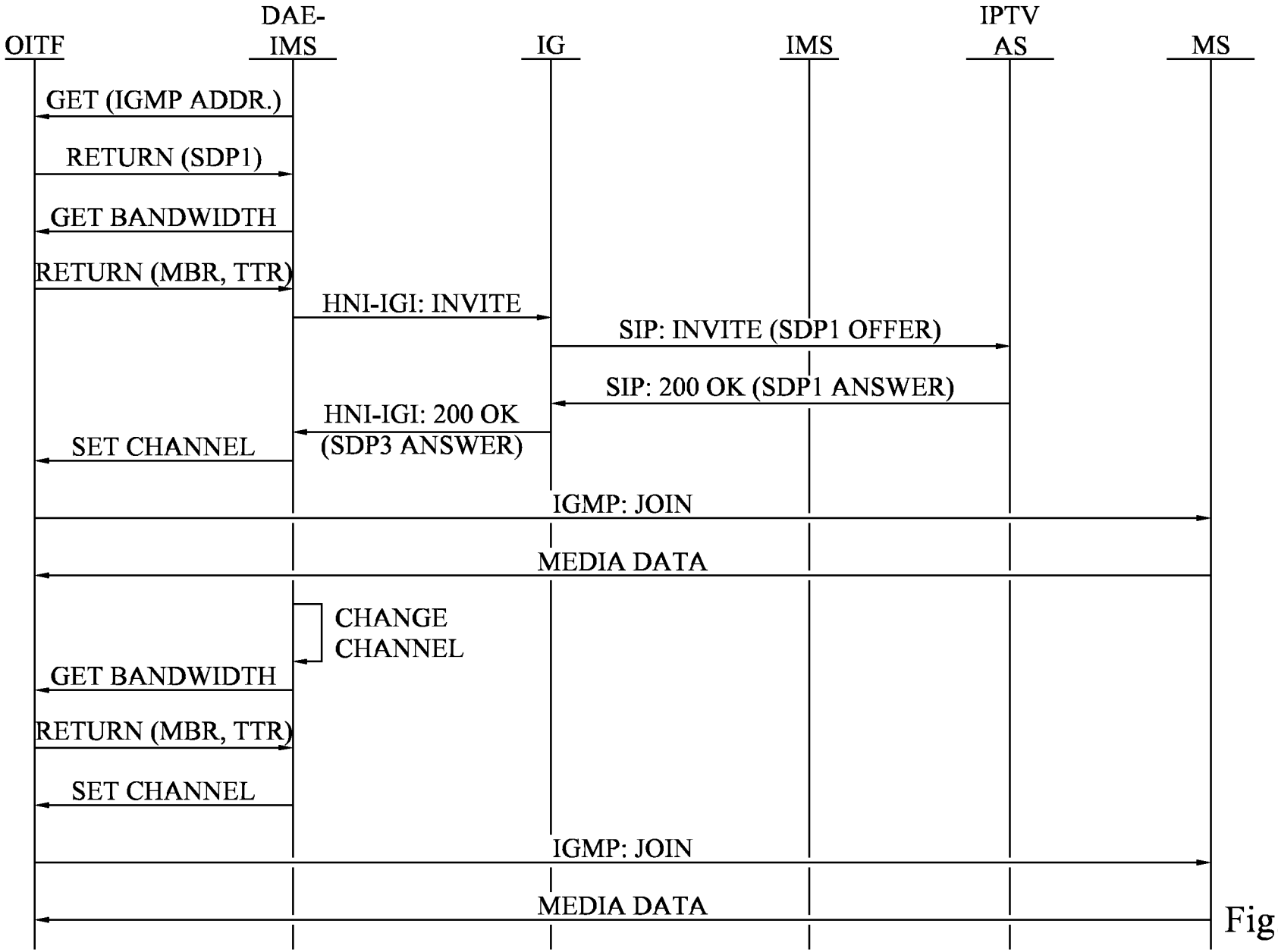

OITF
DAE-IMS
IG
IMS
IPTV AS
MS
GET (IGMP ADDR.)
RETURN (SDP1)
GET BANDWIDTH
RETURN (MBR, TTR)
HNI-IGI: INVITE
SIP: INVITE (SDP1 OFFER)
SIP: 200 OK (SDP1 ANSWER)
HNI-IGI: 200 OK (SDP3 ANSWER)
SET CHANNEL
IGMP: JOIN
MEDIA DATA
CHANGE CHANNEL
GET BANDWIDTH
RETURN (MBR, TTR)
SET CHANNEL
IGMP: JOIN
MEDIA DATA

Fig. 8

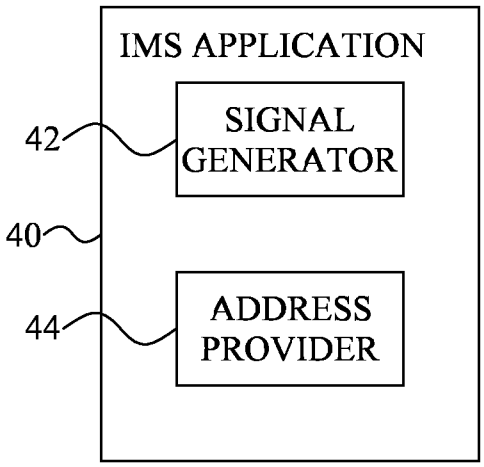


Fig. 9

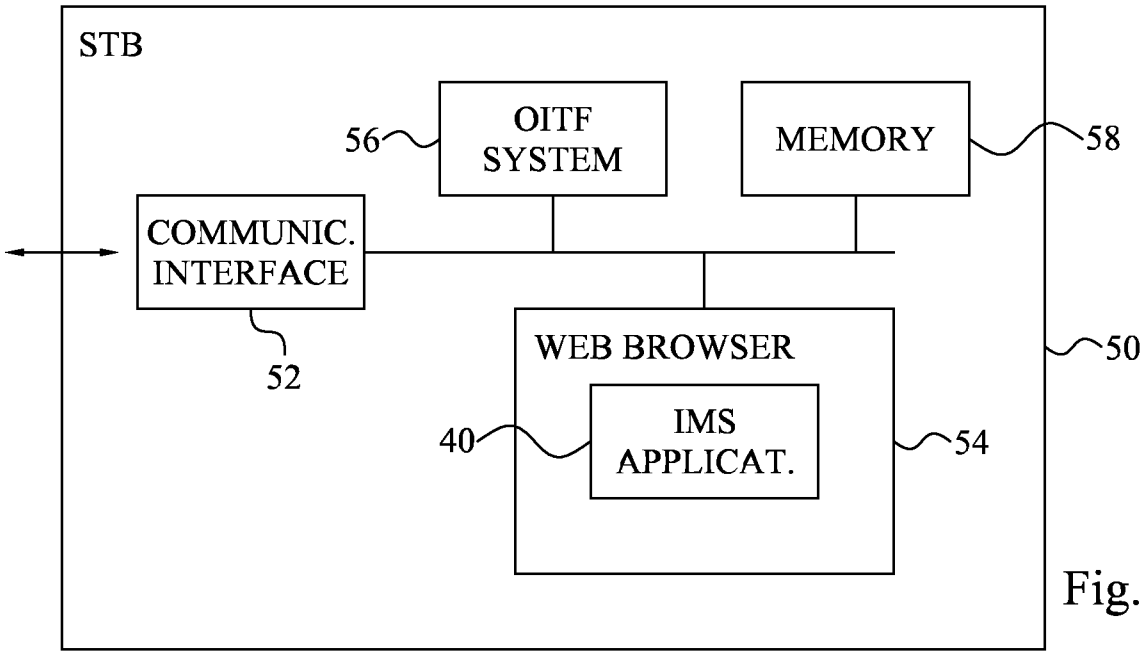


Fig. 10

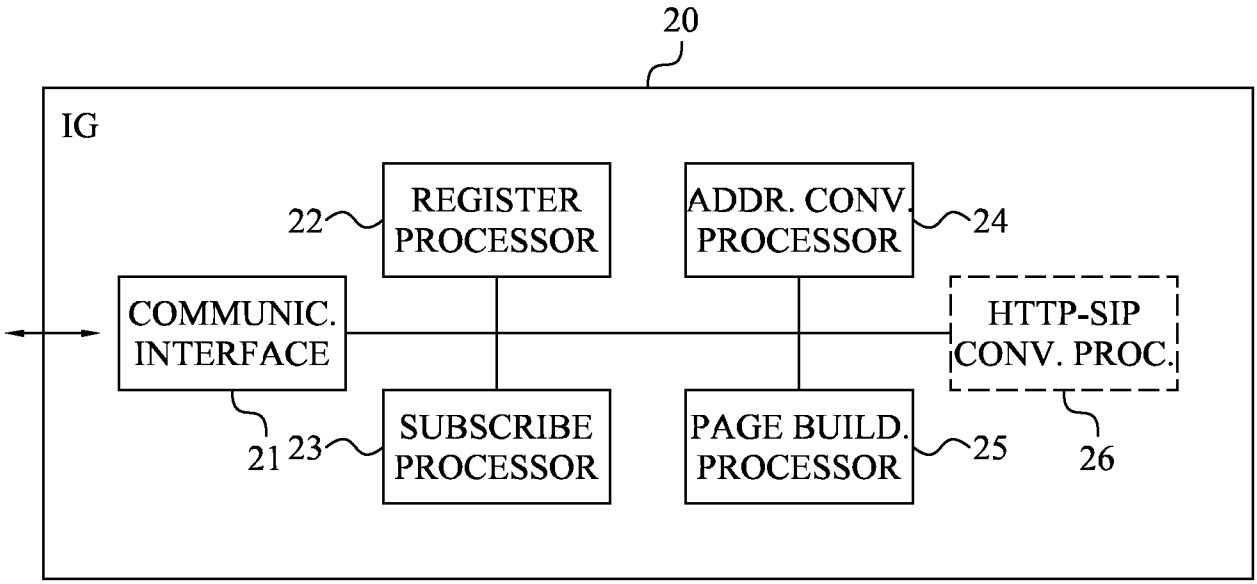


Fig. 11