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(54) **METHODS, SYSTEMS, AND PRODUCTS FOR SHARING CONTENT**

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(57) **ABSTRACT**

Methods, systems, and products share content between a device and a media delivery device. The media delivery device includes a content sharing application stored in memory and a processor communicating with the memory. The processor sends a presence update message to indicate the media delivery device is active and available to receive content. The processor receives an invite, and the invite requests a session between the media delivery device and the device. The processor sends an accept message to accept the invitation. The processor receives the content and receives a message that terminates the session.

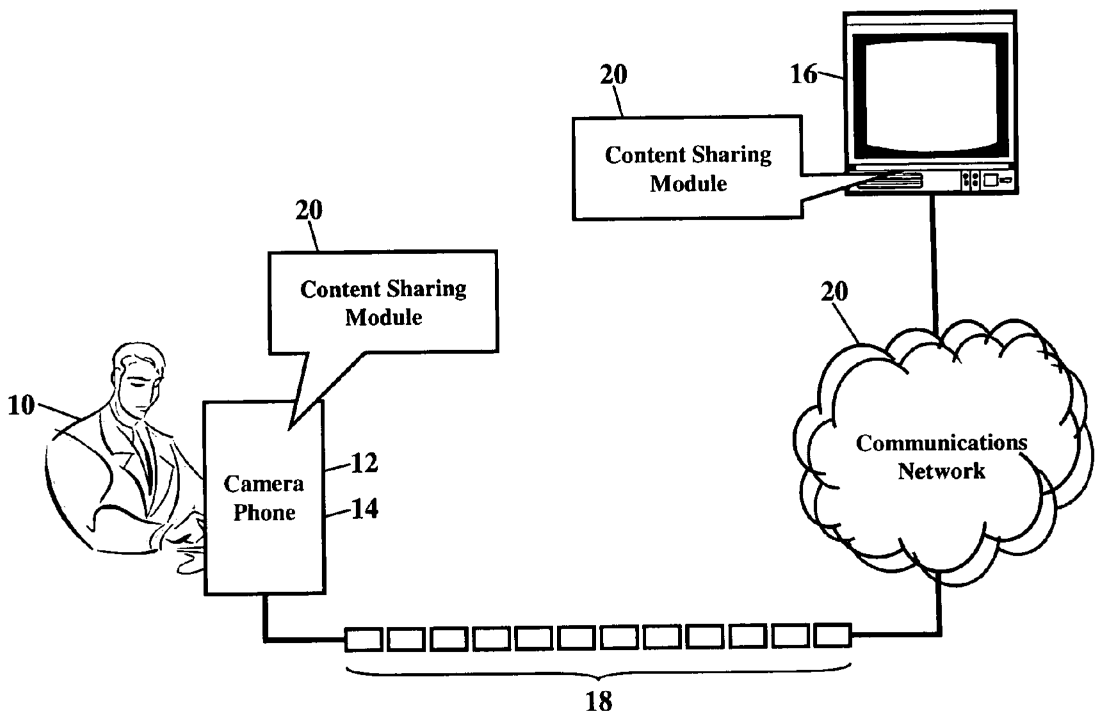
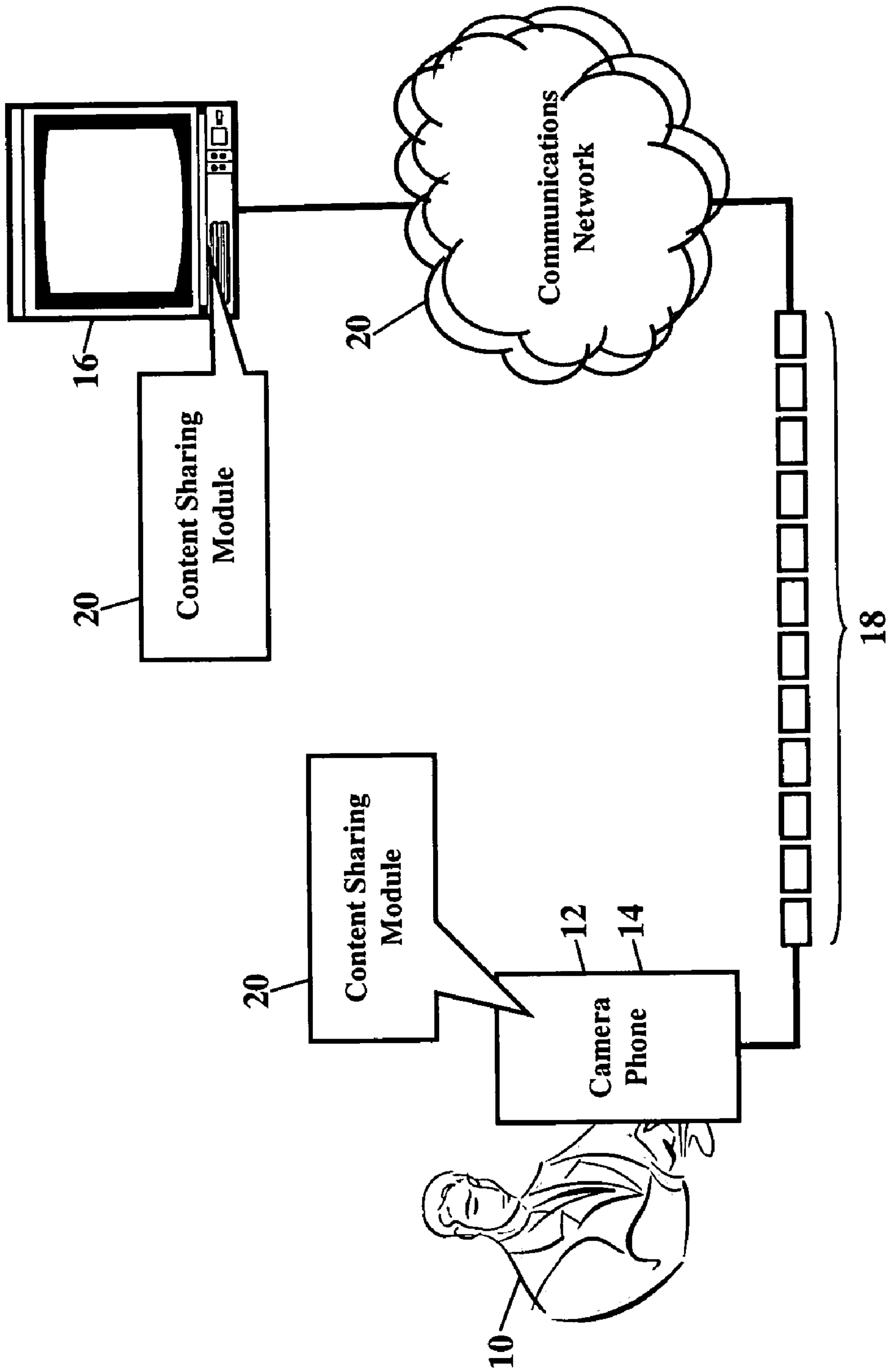


FIG. 1



Content Sharing Module
20
16
Communications Network
20
Content Sharing Module
20
Camera Phone
12
14
18
10

FIG. 2

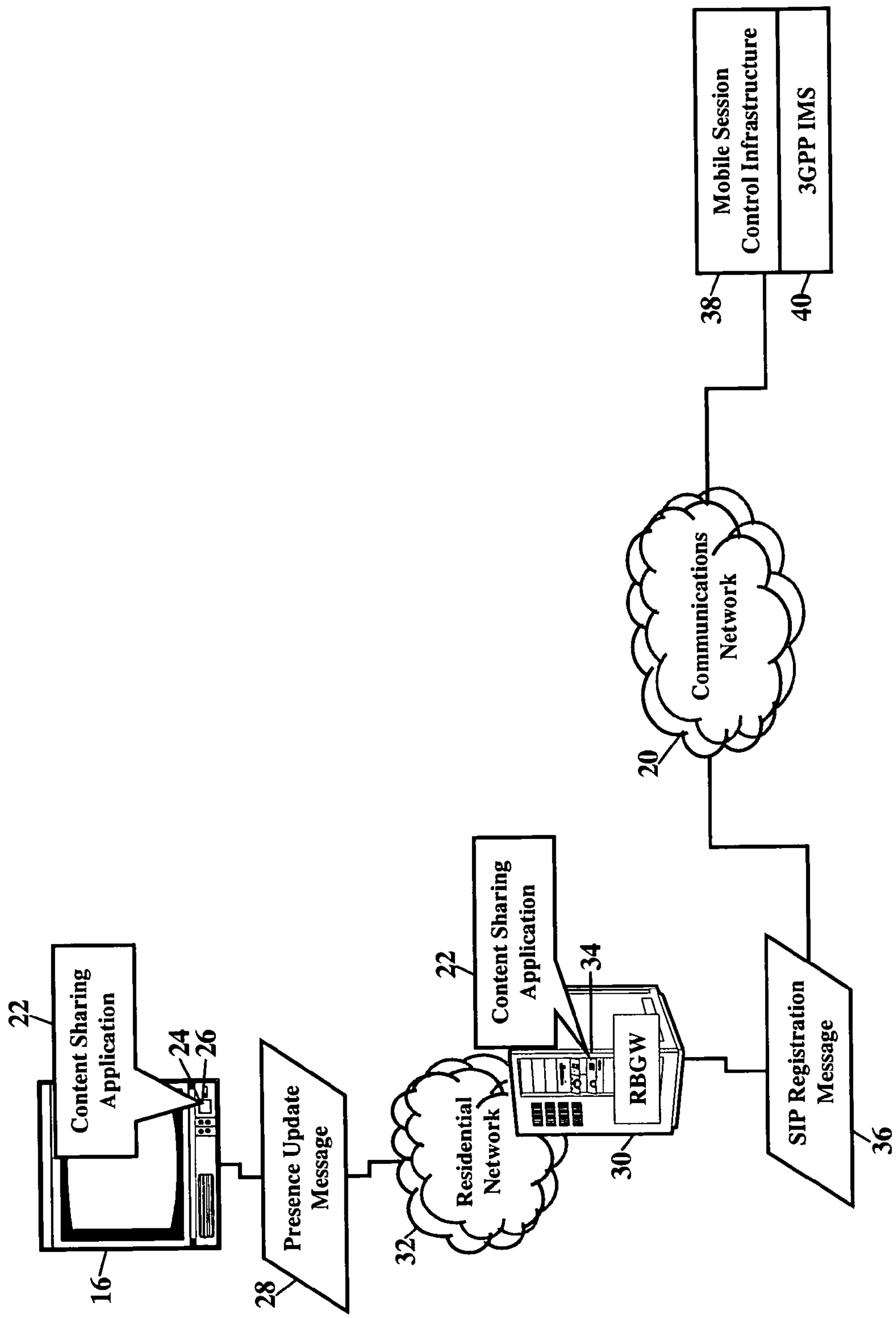

16
22
Content Sharing Application
24
26
28
Presence Update Message
32
Residential Network
30
34
22
Content Sharing Application
RBGW
36
SIP Registration Message
20
Communications Network
38
Mobile Session Control Infrastructure
40
3GPP IMS

FIG. 3

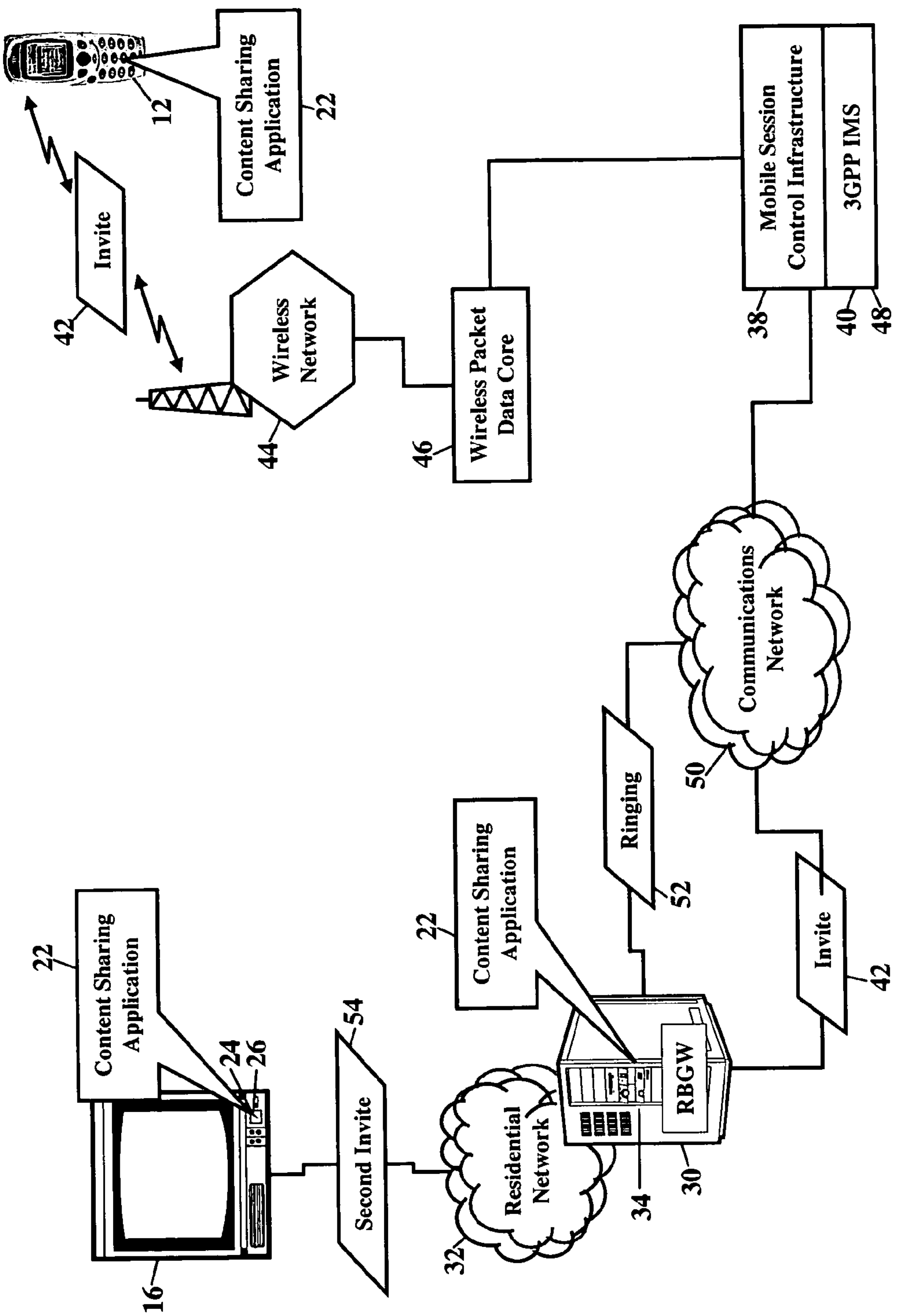
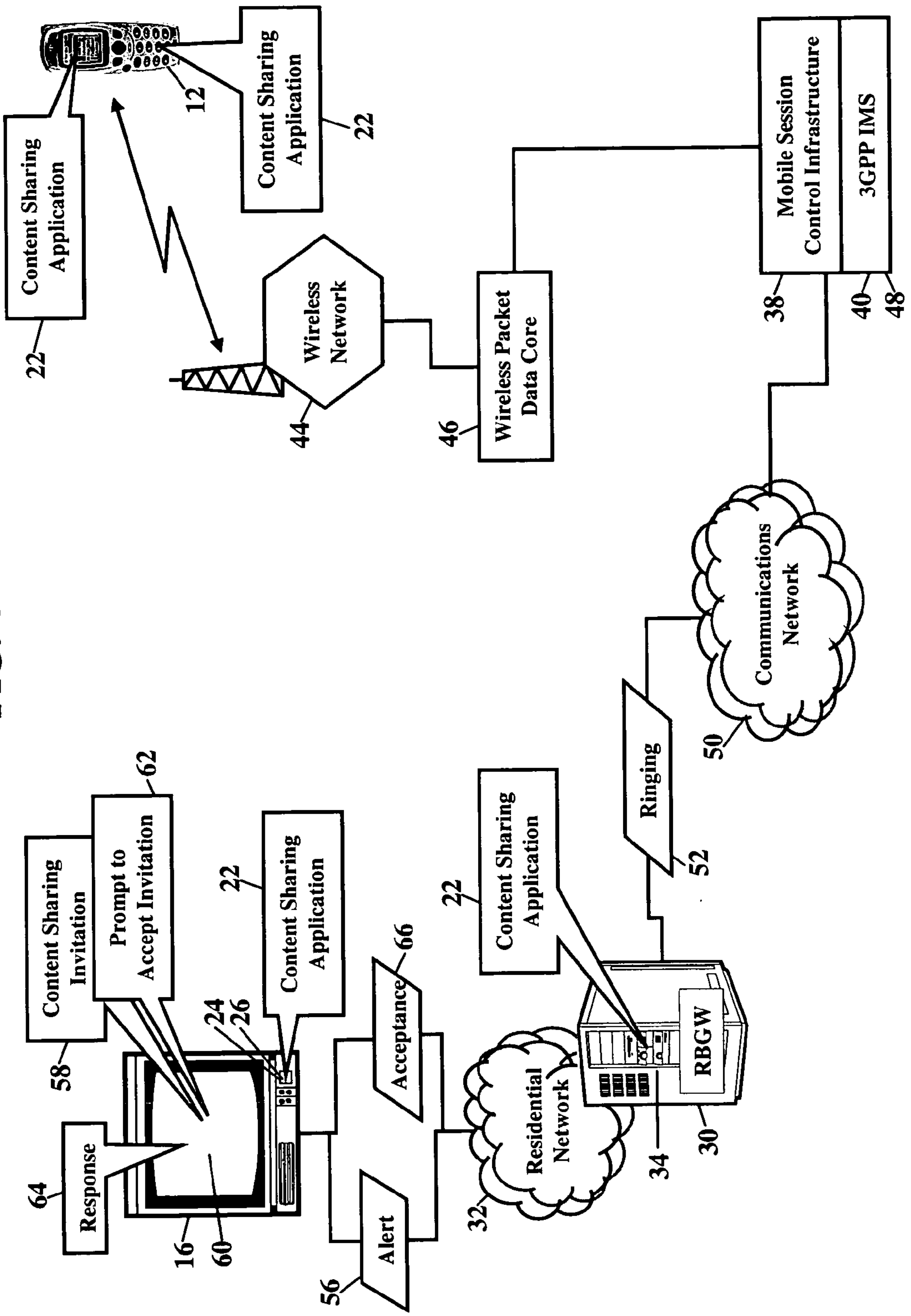
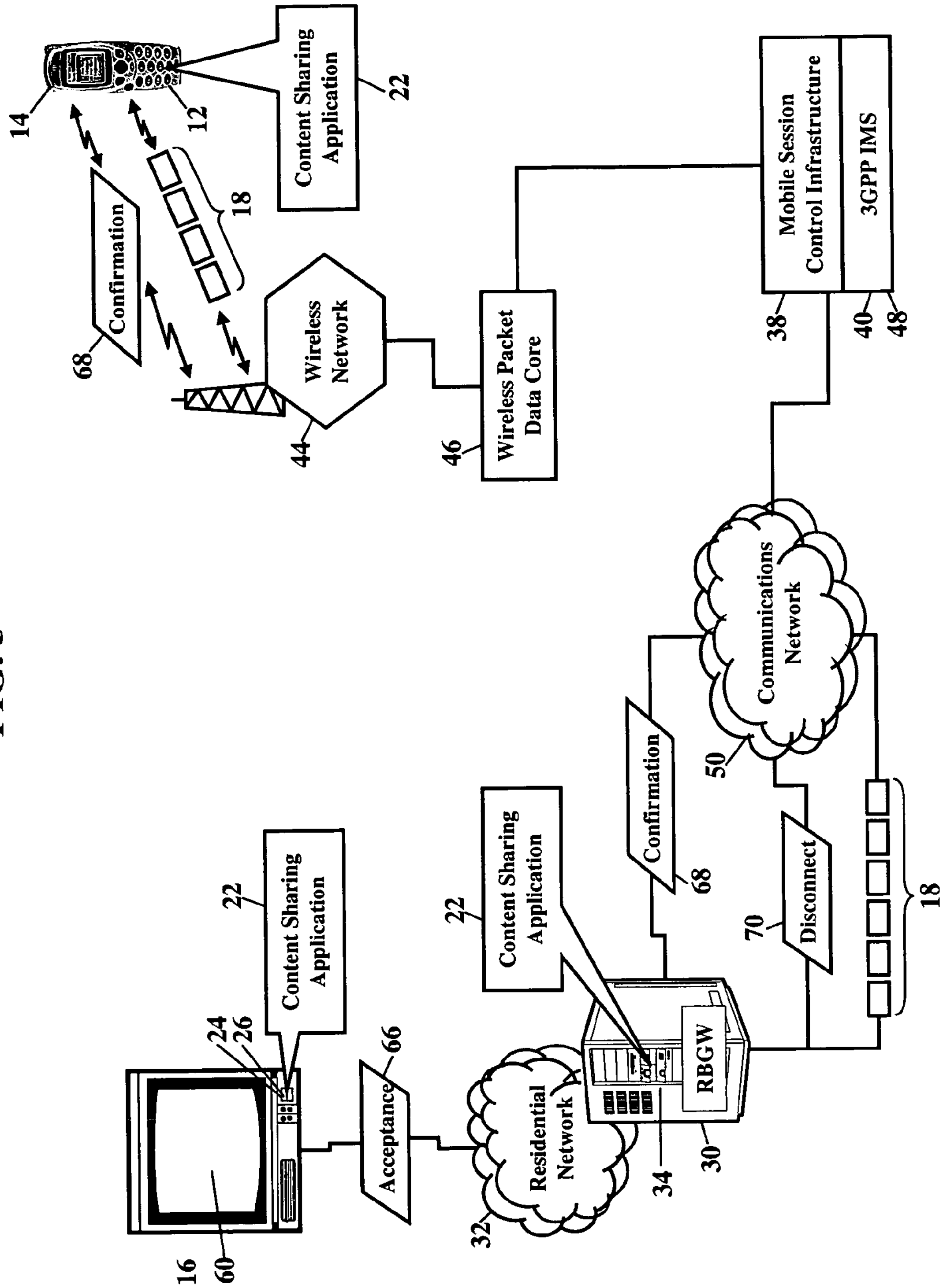

Content Sharing Application
22
12
Invite
42
Wireless Network
44
Wireless Packet Data Core
46
Mobile Session Control Infrastructure
3GPP IMS
38
40
48
Communications Network
50
Ringing
52
Invite
42
Content Sharing Application
22
RBGW
30
34
Residential Network
32
Second Invite
54
Content Sharing Application
22
24
26
16

FIG. 4



Content Sharing Application
22
12
Content Sharing Application
22
Wireless Network
44
Wireless Packet Data Core
46
Mobile Session Control Infrastructure
3GPP IMS
38
40
48
Communications Network
50
Ringing
52
Content Sharing Application
22
RBGW
34
30
Residential Network
32
Alert
56
Acceptance
66
Content Sharing Application
22
24
26
Content Sharing Invitation
58
Prompt to Accept Invitation
62
Response
64
16
60

FIG. 5


14
12
Content Sharing Application
22
Confirmation
68
18
Wireless Network
44
Wireless Packet Data Core
46
Mobile Session Control Infrastructure
3GPP IMS
38
40
48
Communications Network
50
Confirmation
68
Disconnect
70
18
Content Sharing Application
22
RBGW
34
30
Residential Network
32
Acceptance
66
Content Sharing Application
22
24
26
16
60

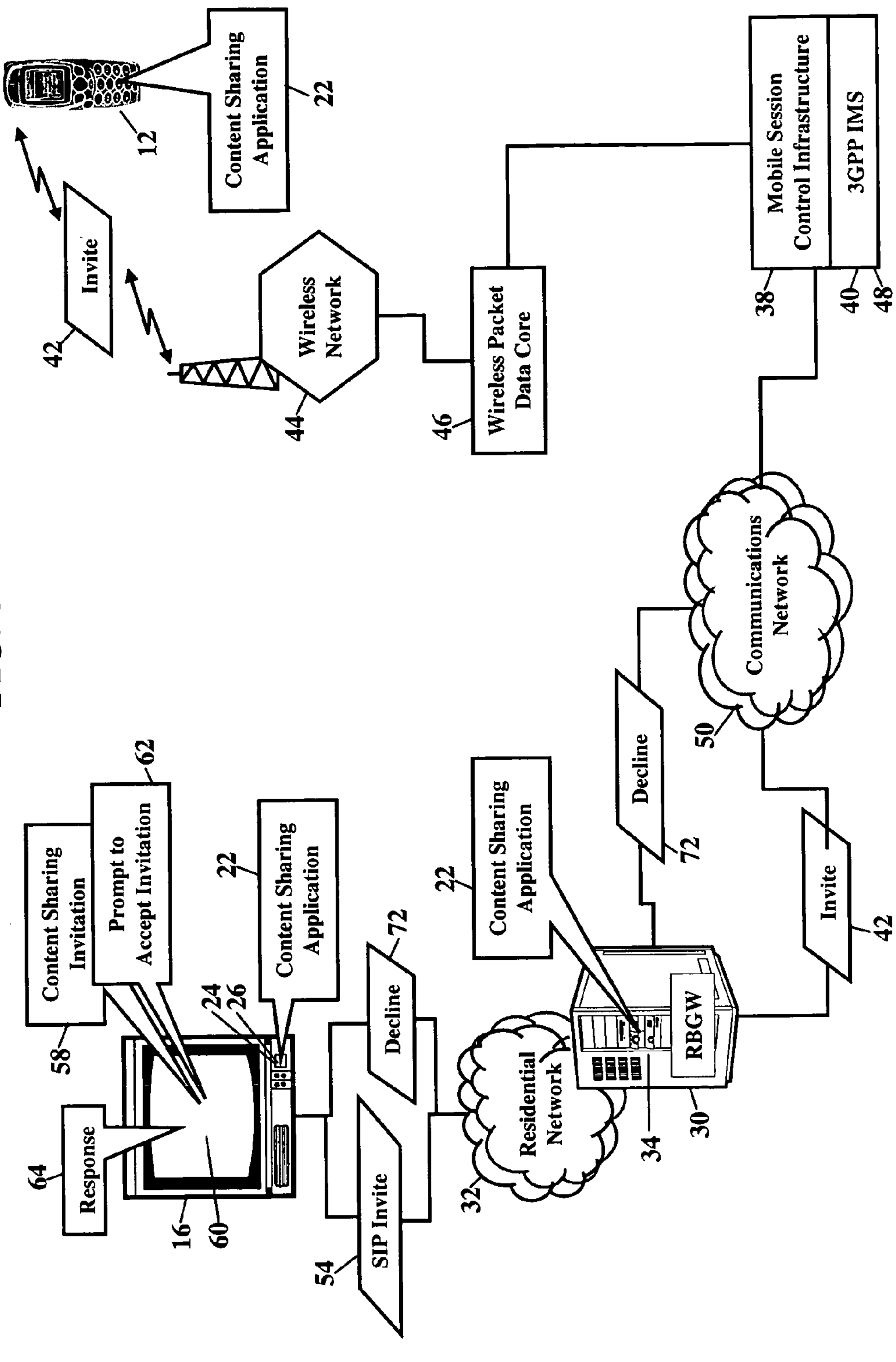

Content Sharing Application
22
12
Invite
42
Wireless Network
44
Wireless Packet Data Core
46
Mobile Session Control Infrastructure
3GPP IMS
38
40
48
Communications Network
50
Decline
72
Invite
42
Content Sharing Application
22
RBGW
34
30
Residential Network
32
Decline
72
SIP Invite
54
Content Sharing Invitation
58
Prompt to Accept Invitation
62
Content Sharing Application
22
24
26
Response
64
16
60

FIG. 6

FIG. 7

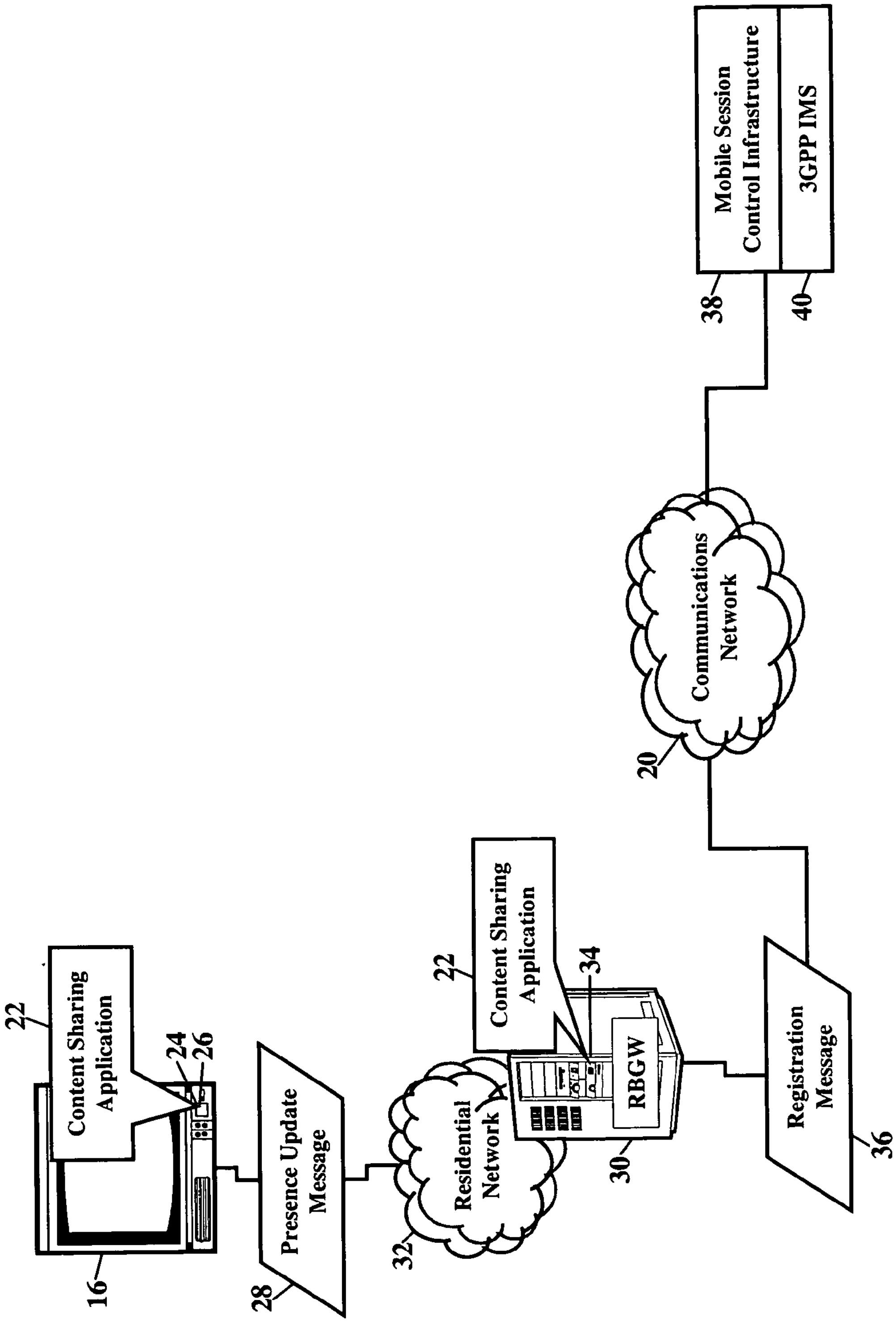

Mobile Session Control Infrastructure
3GPP IMS
38
40
Communications Network
20
Content Sharing Application
22
34
RBGW
30
Residential Network
32
Registration Message
36
Content Sharing Application
22
24
26
16
Presence Update Message
28

FIG. 8

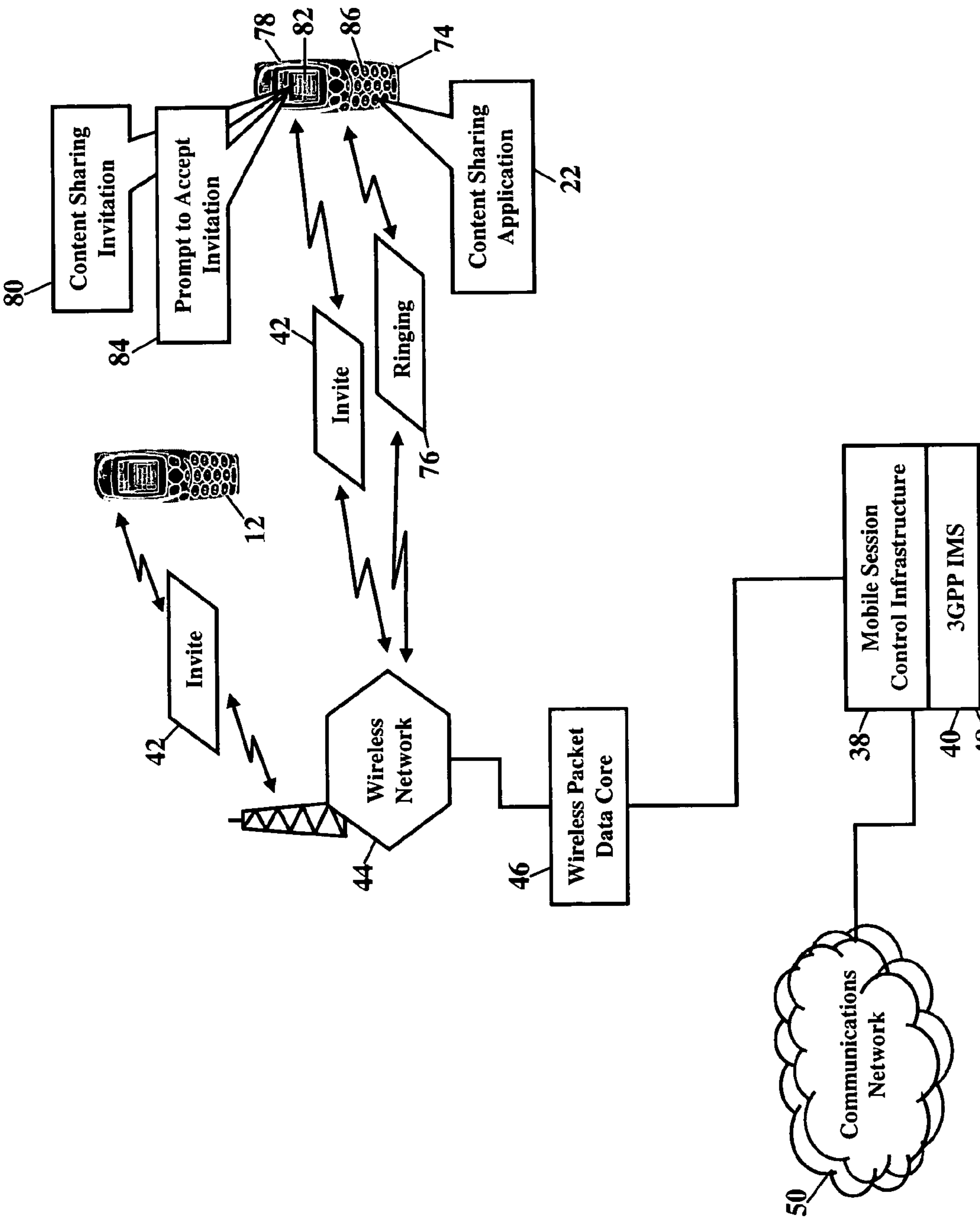

Content Sharing Invitation
80
Prompt to Accept Invitation
84
78
82
86
74
Content Sharing Application
22
Invite
42
Ringing
76
12
Invite
42
Wireless Network
44
Wireless Packet Data Core
46
Mobile Session Control Infrastructure
38
3GPP IMS
40
48
Communications Network
50

FIG. 9

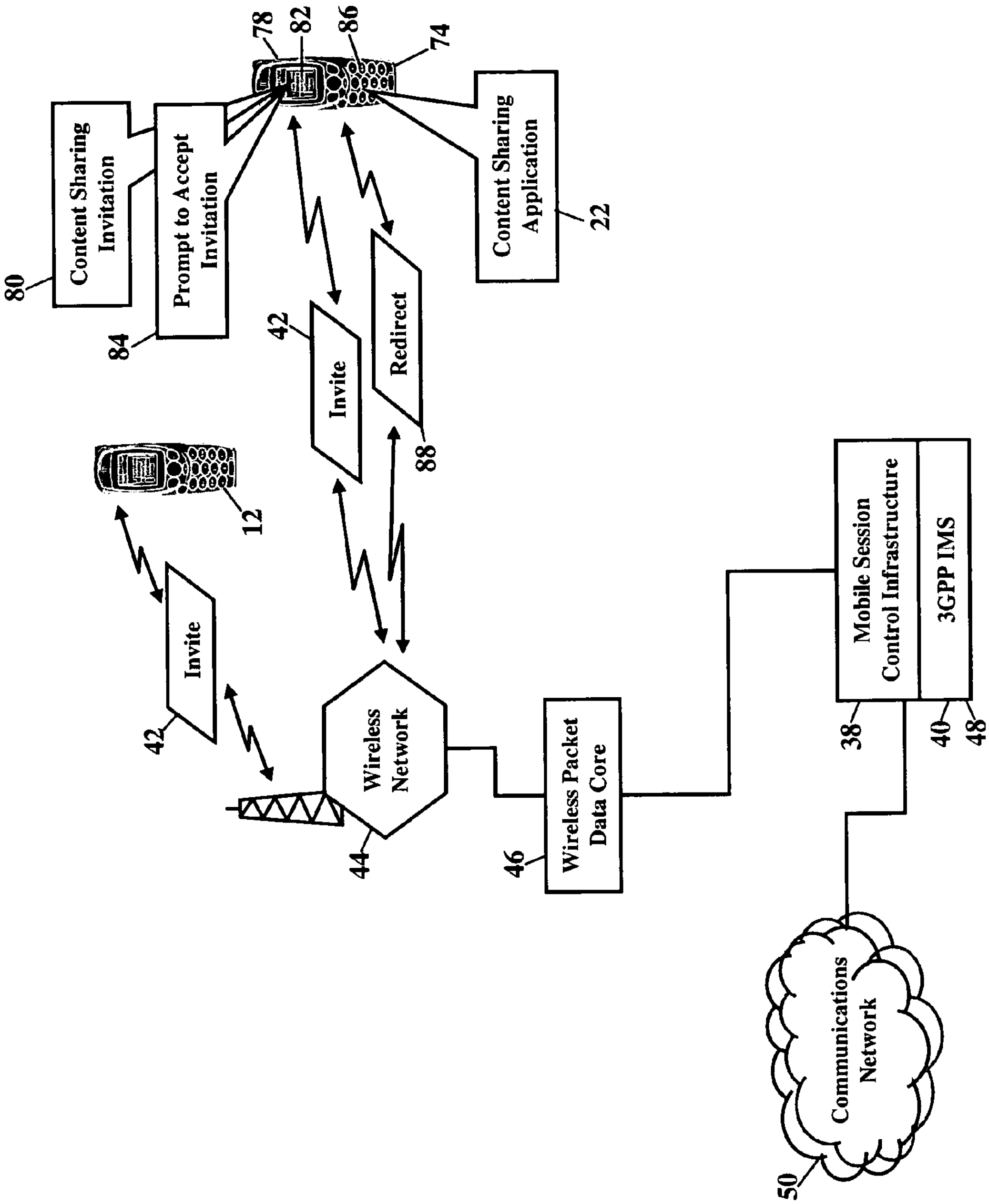
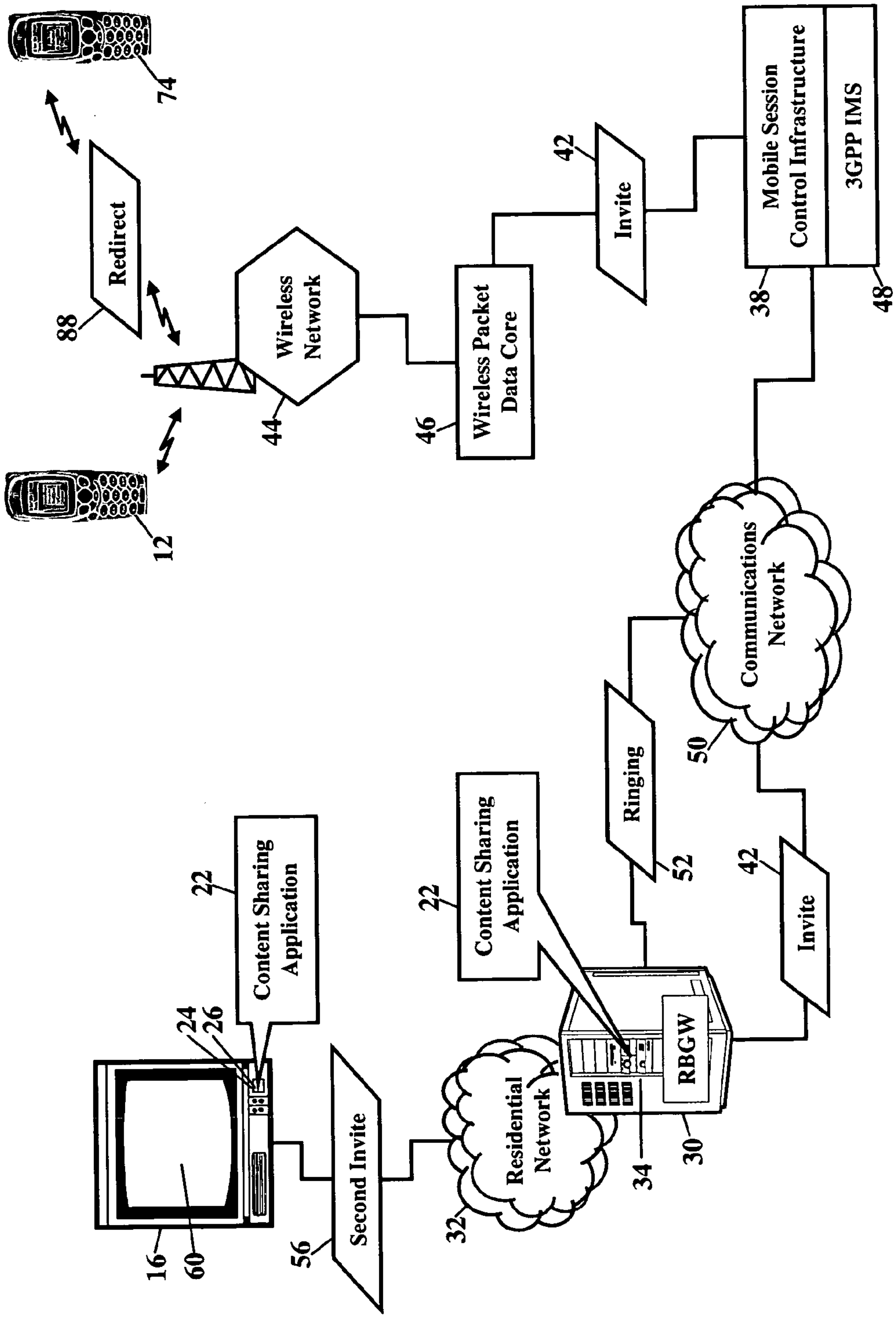
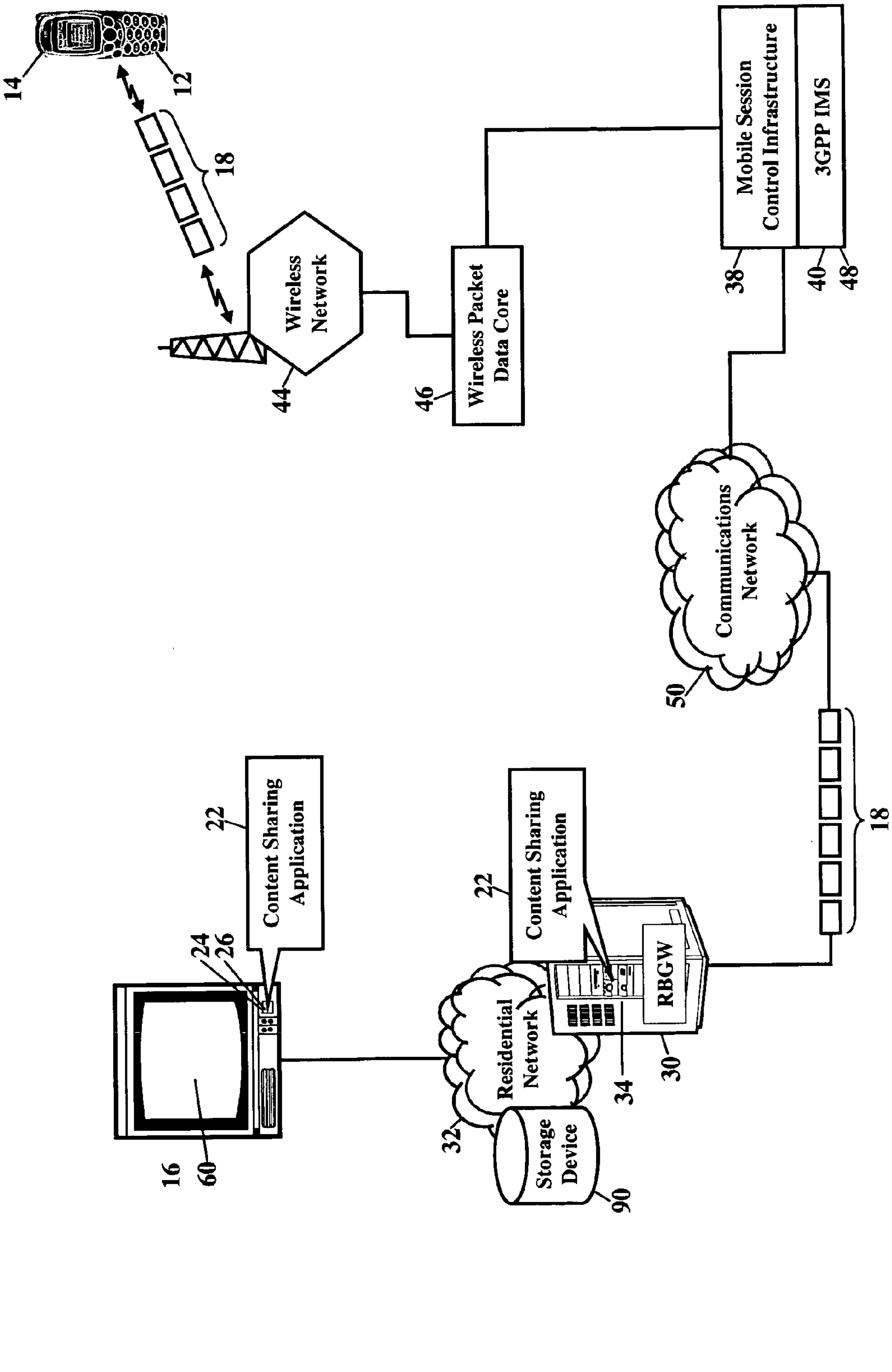

Content Sharing Invitation
Prompt to Accept Invitation
Content Sharing Application
Invite
Redirect
Invite
Wireless Network
Wireless Packet Data Core
Mobile Session Control Infrastructure
3GPP IMS
Communications Network
80
84
78
82
86
74
22
42
88
12
42
44
46
38
40
48
50

FIG. 10



16
60
24
26
22
Content Sharing Application
56
Second Invite
32
Residential Network
34
30
RBGW
22
Content Sharing Application
Ringing
52
42
Invite
50
Communications Network
12
44
Wireless Network
88
Redirect
74
46
Wireless Packet Data Core
42
Invite
38
Mobile Session Control Infrastructure
48
3GPP IMS

FIG. 11



14
12
18
Wireless Network
44
Wireless Packet Data Core
46
Mobile Session Control Infrastructure
3GPP IMS
38
40
48
Communications Network
50
18
16
60
24
26
22
Content Sharing Application
22
Content Sharing Application
Residential Network
RBGW
34
30
32
Storage Device
90

FIG. 12

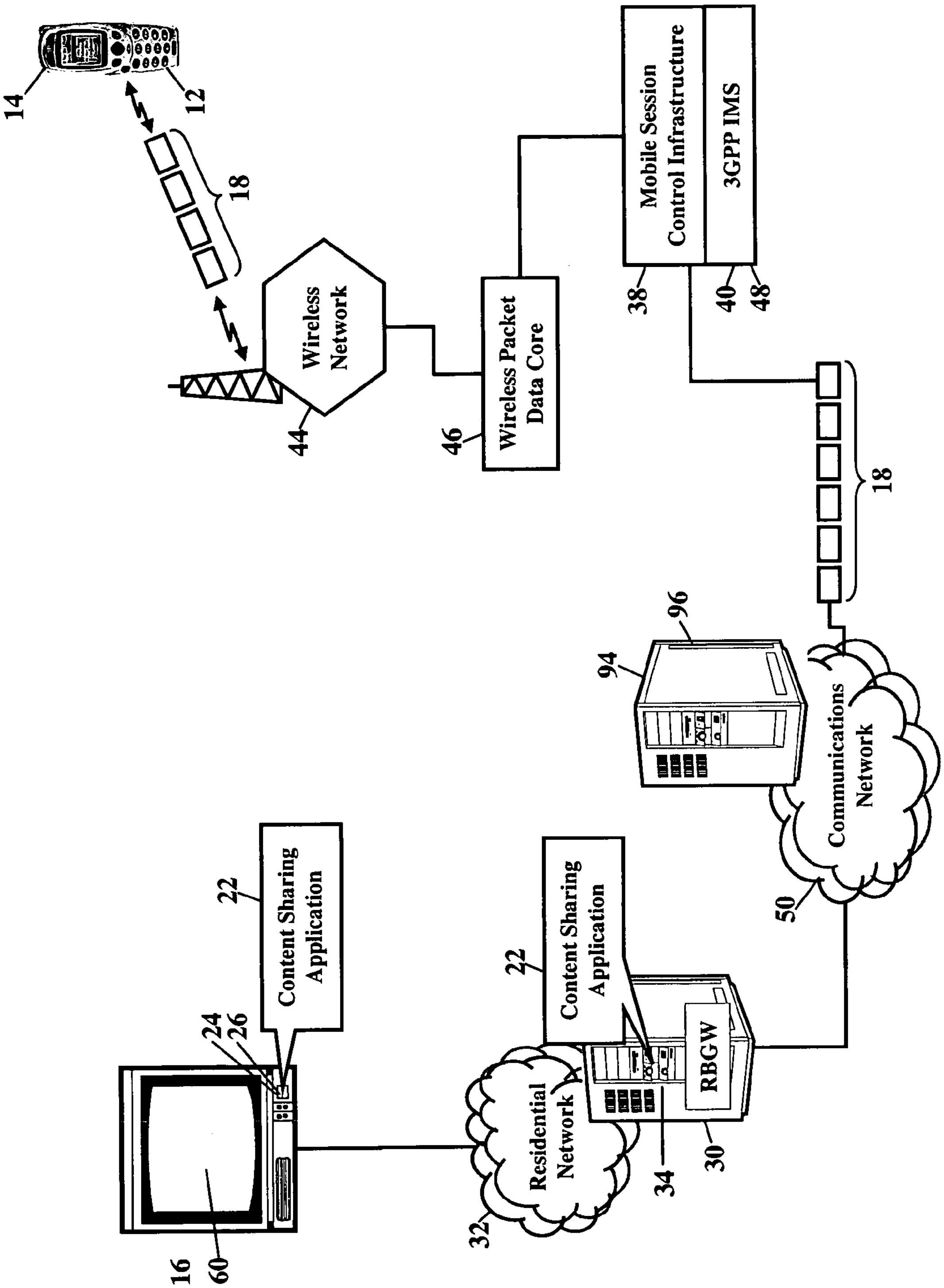

14
12
18
Wireless Network
44
Wireless Packet Data Core
46
Mobile Session Control Infrastructure
3GPP IMS
38
40
48
18
96
94
Communications Network
50
Content Sharing Application
22
24
26
16
60
Residential Network
32
Content Sharing Application
22
RBGW
34
30

FIG. 13

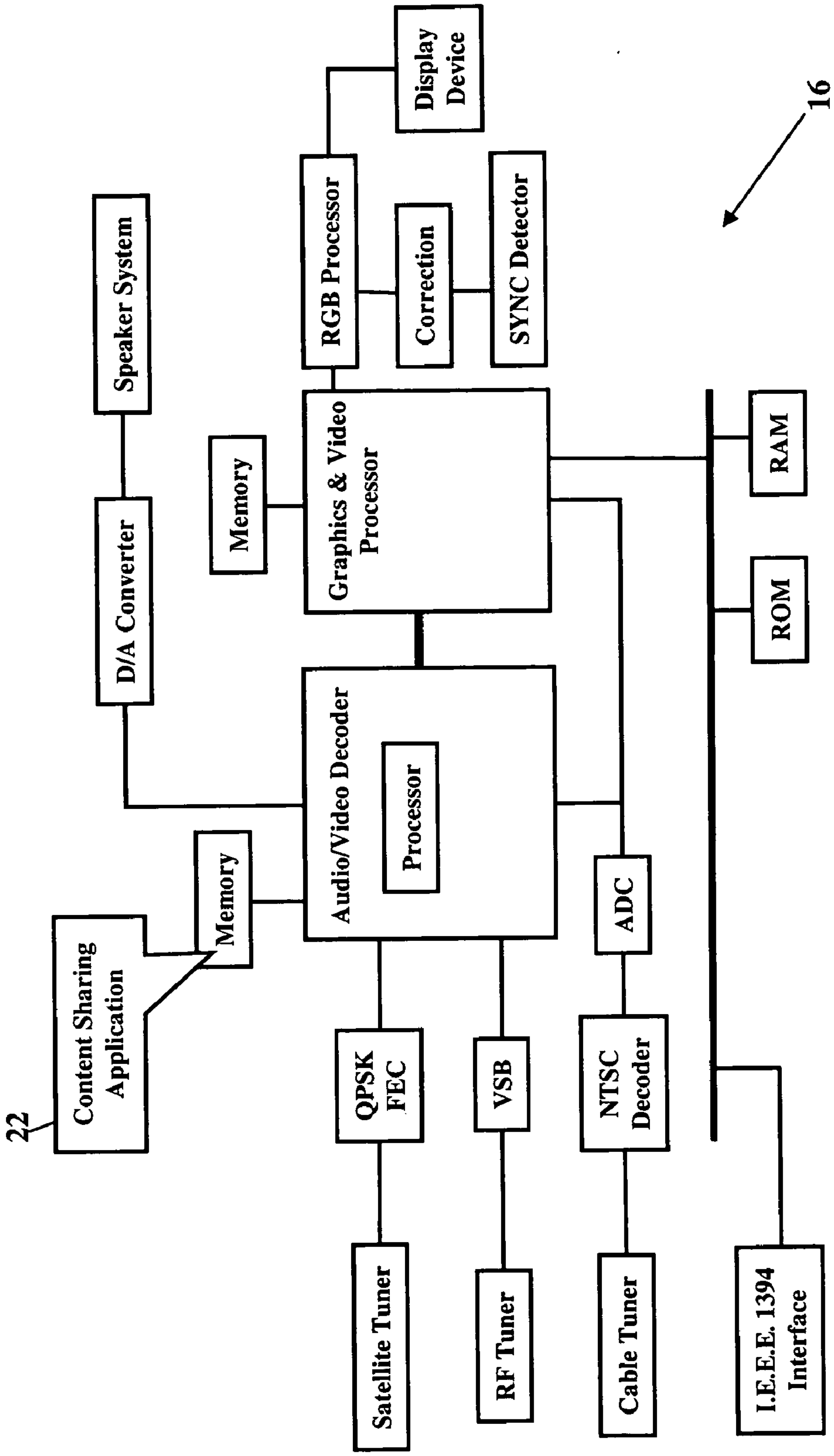
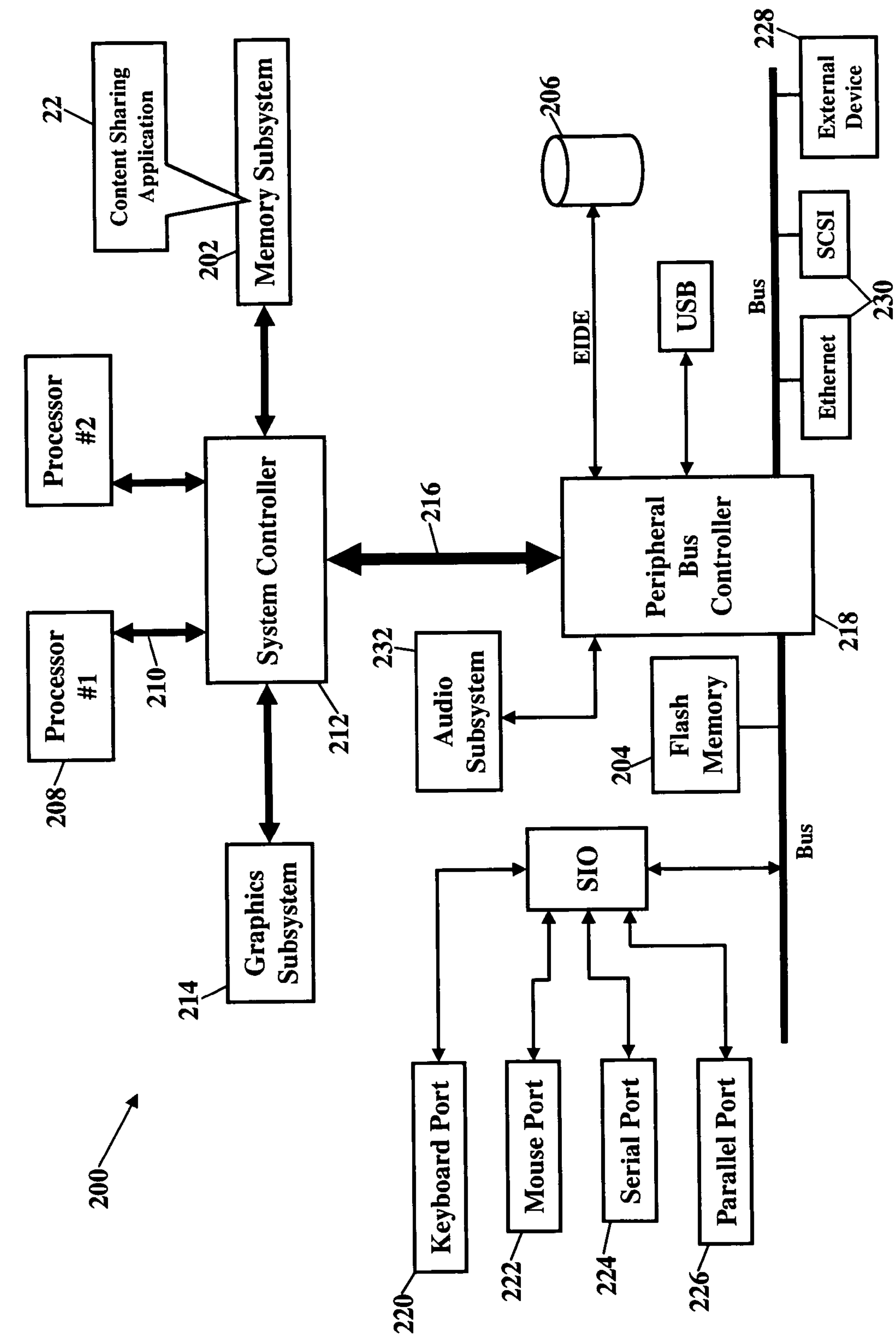

Display Device
RGB Processor
Correction
SYNC Detector
16
Speaker System
D/A Converter
Memory
Graphics & Video Processor
RAM
ROM
Audio/Video Decoder
Processor
Memory
Content Sharing Application
22
ADC
QPSK FEC
VSB
NTSC Decoder
Satellite Tuner
RF Tuner
Cable Tuner
I.E.E.E. 1394 Interface

FIG. 14



200
22
Content Sharing Application
202
Memory Subsystem
Processor #2
Processor #1
208
210
System Controller
212
Graphics Subsystem
214
216
Peripheral Bus Controller
218
206
EIDE
USB
Bus
228
External Device
SCSI
Ethernet
230
232
Audio Subsystem
204
Flash Memory
SIO
Bus
Keyboard Port
220
Mouse Port
222
Serial Port
224
Parallel Port
226

FIG. 15

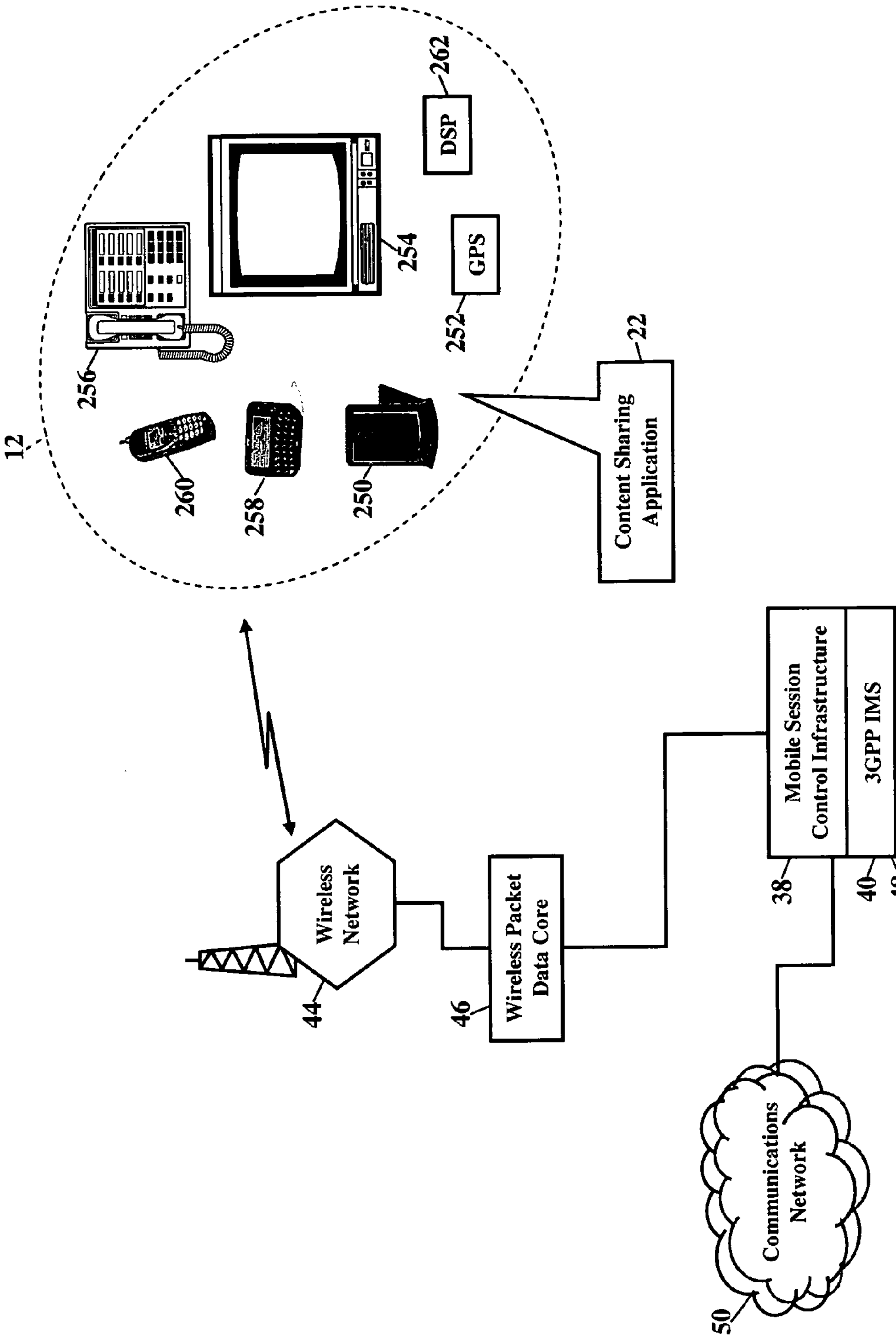

12
256
254
262
DSP
GPS
252
260
258
250
22
Content Sharing Application
Wireless Network
44
Wireless Packet Data Core
46
Mobile Session Control Infrastructure
3GPP IMS
38
40
48
Communications Network
50

FIG. 16

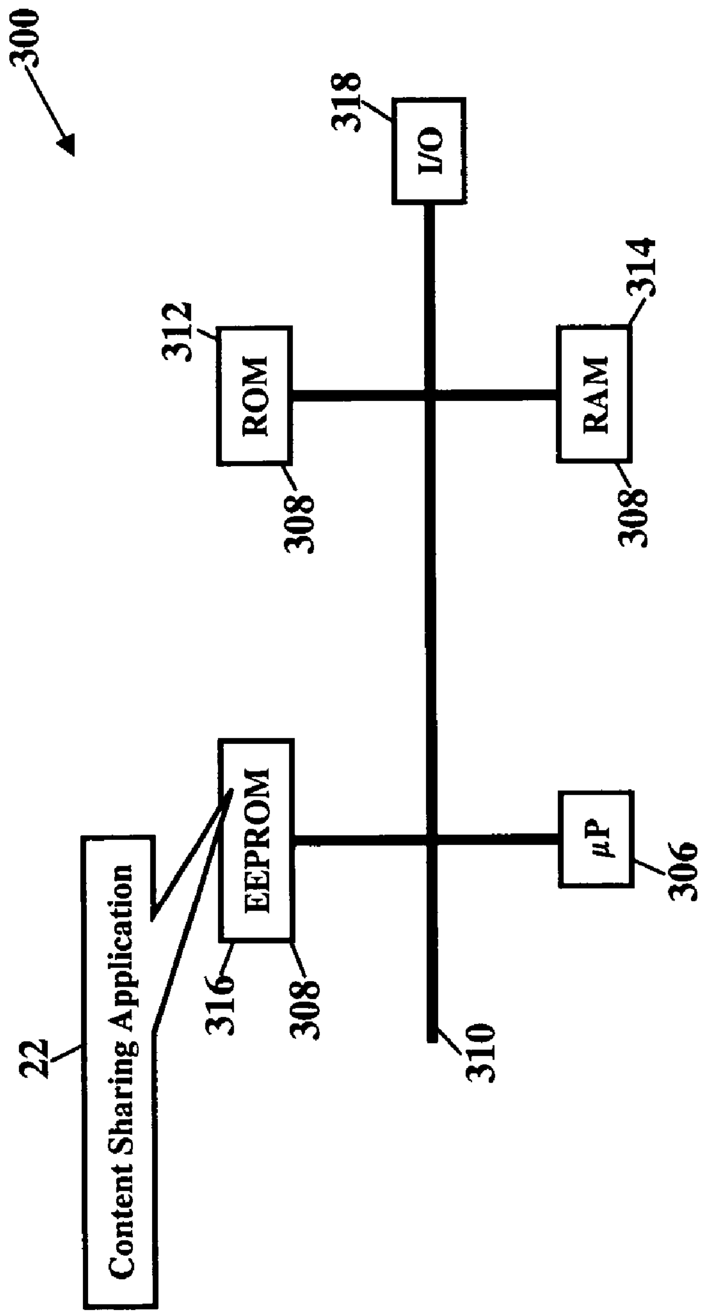

300
318
I/O
312
ROM
314
RAM
308
308
22
Content Sharing Application
EEPROM
316
308
310
µP
306

FIG. 17

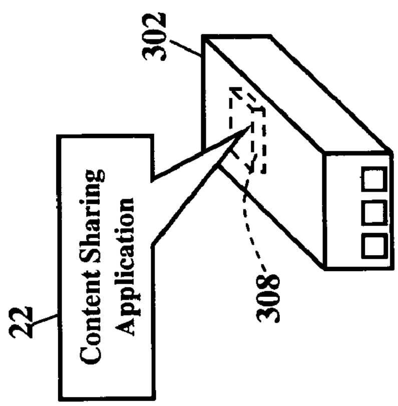

302
Content Sharing Application
22
308

FIG. 18

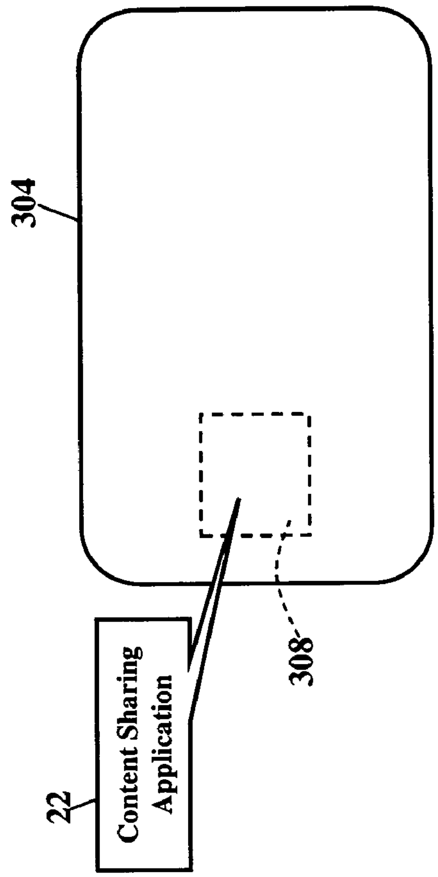

304
Content Sharing Application
22
308

FIG. 19

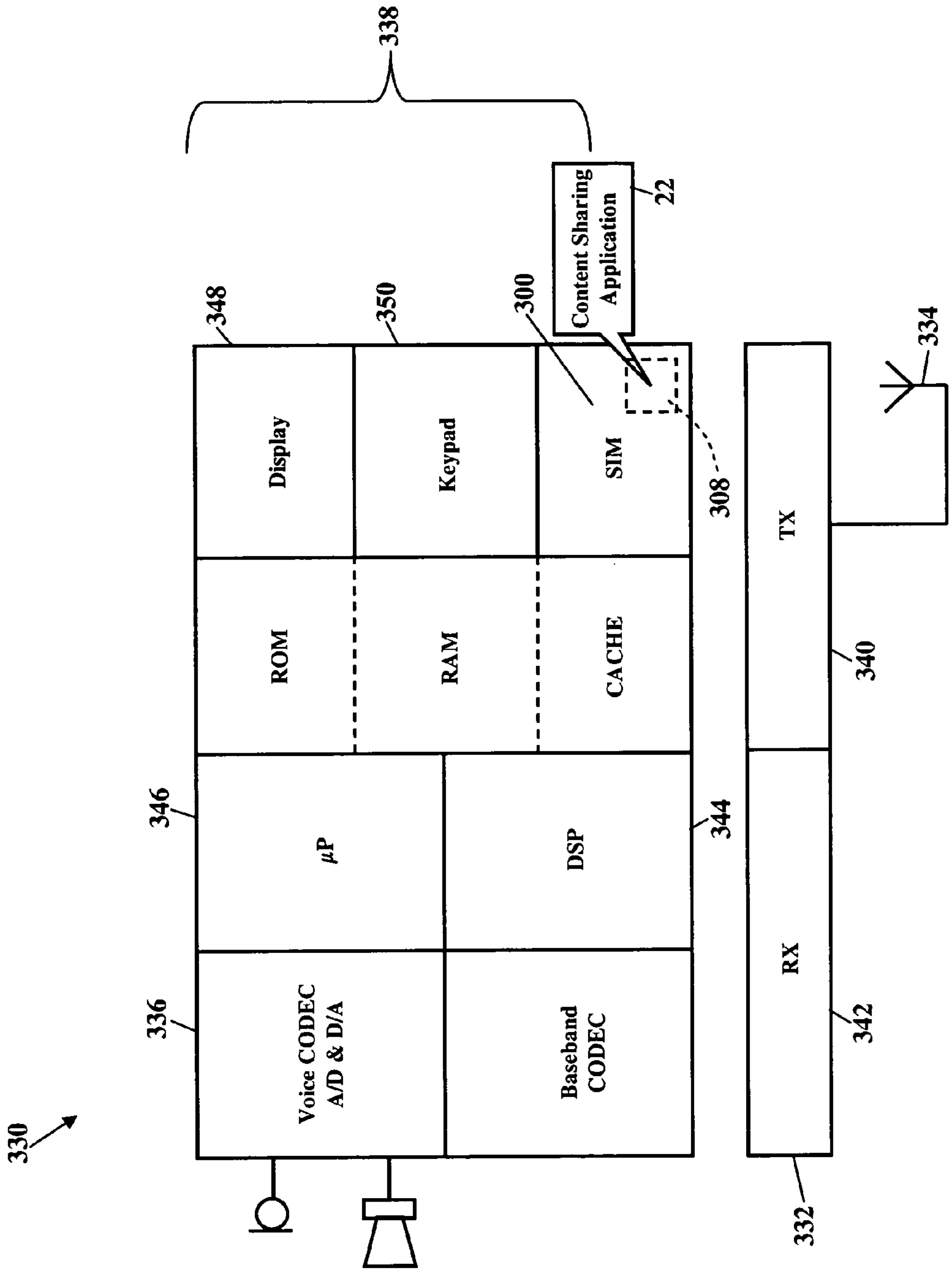
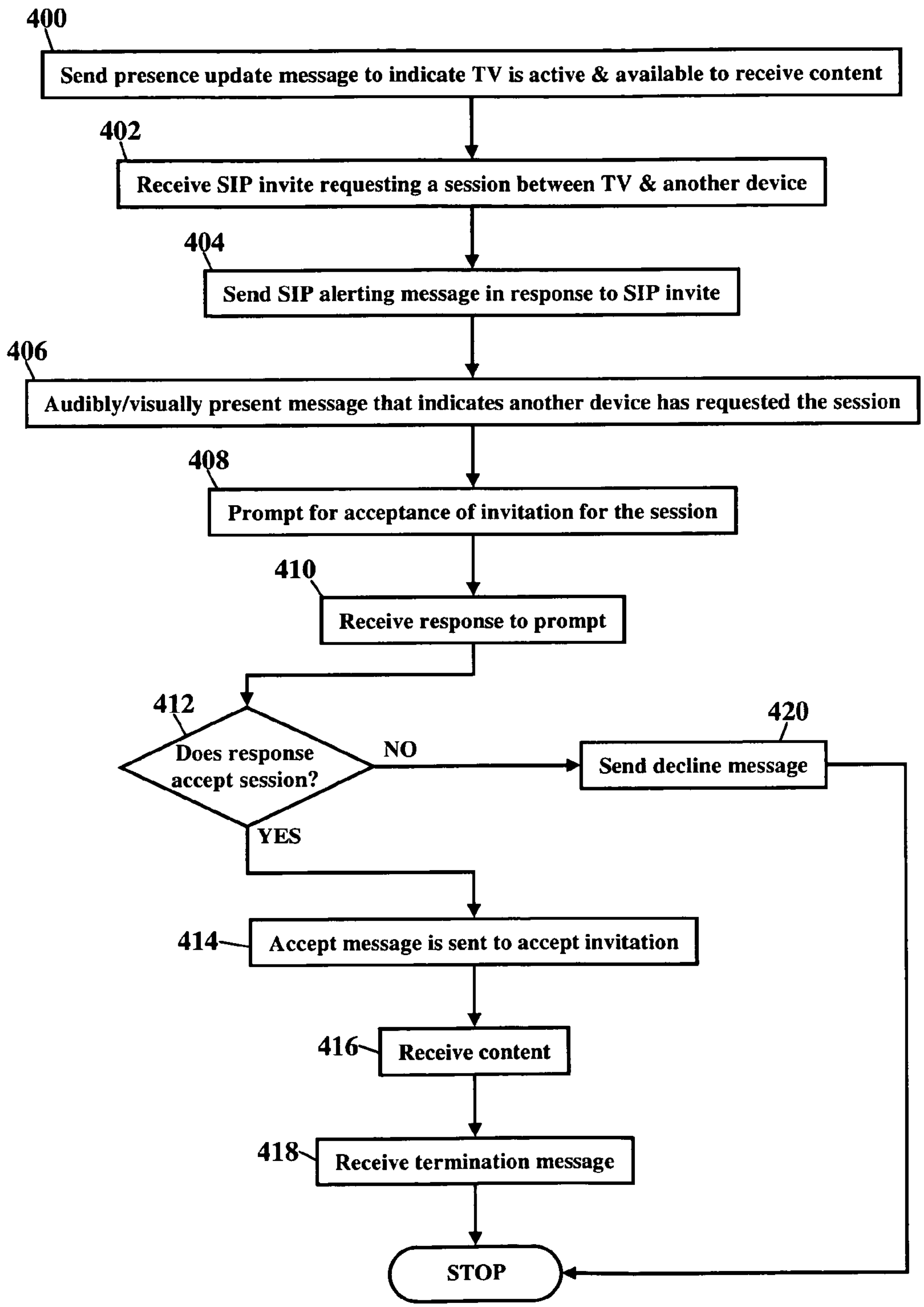

338
Content Sharing Application
22
348
350
300
334
Display
Keypad
SIM
308
TX
ROM
RAM
CACHE
340
346
μP
DSP
344
336
Voice CODEC A/D & D/A
Baseband CODEC
RX
342
330
332

FIG. 20


400
Send presence update message to indicate TV is active & available to receive content
402
Receive SIP invite requesting a session between TV & another device
404
Send SIP alerting message in response to SIP invite
406
Audibly/visually present message that indicates another device has requested the session
408
Prompt for acceptance of invitation for the session
410
Receive response to prompt
412
Does response accept session?
NO
YES
420
Send decline message
414
Accept message is sent to accept invitation
416
Receive content
418
Receive termination message
STOP

# METHODS, SYSTEMS, AND PRODUCTS FOR SHARING CONTENT

## NOTICE OF COPYRIGHT PROTECTION



## BACKGROUND

[0002] This application generally relates to communications and, more particularly, to sharing content in communications.

[0003] Shared video streaming is popular among wireless users. Third generation networks allow two mobile devices (such as camera phones) to stream live video between each one another. The service is sometimes called "see what I see" and establishes a streaming session between the two phones. One person with a mobile phone makes a call, establishes a session, and then takes the camera on that phone and points it. The other person's phone receives the session transmission and displays the received images. Some 3G phones also have the capability to support voice transmission between the users.

[0004] One significant problem, however, is screen size. Today's mobile phones have small screens, and these small screens limit the appeal of "see what I see" services. If pictures, movies, and other content could be shared with larger display devices, one service provider believes that more people would utilize "see what I see" services. What is needed, then, is a "see what I see" service that is not limited to the small screen sizes of conventional mobile devices.

## SUMMARY

[0005] The aforementioned problems, and other problems, are reduced, according to the exemplary embodiments, using methods, systems, and products that share pictures, movies, and other content with a media delivery device. These exemplary embodiments describe how mobile user, using any device, may share content with a media delivery device. The exemplary embodiments, for example, allow a camera phone to share video content with a computer, a television, or other media delivery device. The camera phone uses a messaging protocol to establish a session with the media delivery device. The media delivery device may then audibly and/or visually present the content originating from the camera phone. The camera phone, however, is only one example of a mobile device. As the following paragraphs will explain, the exemplary embodiments are applicable to any communications device, such as a computer, a personal digital assistant, a pager, or any other device. The exemplary embodiments are also applicable to any media delivery device, whether analog or digital. Because the content is shared with a media delivery device, having a larger screen than a conventional phone, more people will be willing to utilize "see what I see services."

[0006] The exemplary embodiments share content with a media delivery device. The media delivery device includes a content sharing application stored in memory and a processor communicating with the memory. The processor sends a presence update message to indicate the media delivery device is active and available to receive a stream of data. The processor receives an invite, and the invite requests a session between the media delivery device and another device. The processor sends an accept message to accept the invitation, and the processor receives the stream of data. The processor then receives a message that terminates the session.

[0007] In another of the embodiments, a method is disclosed for sharing a stream of data. A presence update message is sent to indicate a media delivery device is active and available to receive a stream of data. An invite is received, and the invite requests a session between the media delivery device and another device. The media delivery device sends an accept message to accept the invitation and begins receiving the stream of data. A message is then sent, or received, that terminates the session.

[0008] In yet another embodiment, a computer program product shares a stream of data between a media delivery device and another device. The computer program product comprises a computer-readable medium and a content sharing application stored on the computer-readable medium. The content sharing application comprises computer code for sending a presence update message to indicate the media delivery device is active and available to receive a stream of data. An invite is received, and the invite requests a session between the media delivery device and another device. The media delivery device sends an accept message to accept the invitation and begins receiving the stream of data. A message is then sent, or received, that terminates the session.

[0009] Other systems, methods, and/or computer program products according to the exemplary embodiments will be or become apparent to one with ordinary skill in the art upon review of the following drawings and detailed description. It is intended that all such additional systems, methods, and/or computer program products be included within this description, be within the scope of the claims, and be protected by the accompanying claims.

## BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0010] These and other features, aspects, and advantages of the exemplary embodiments are better understood when the following Detailed Description is read with reference to the accompanying drawings, wherein:

[0011] **FIG. 1** is a simplified schematic illustrating the exemplary embodiments;

[0012] **FIGS. 2-6** are detailed schematics illustrating the exemplary embodiments;

[0013] **FIGS. 7-10** are detailed schematics illustrating a common home network, according to the exemplary embodiments;

[0014] **FIG. 11** is a schematic illustrating storage of shared content, according to more of the exemplary embodiments;

[0015] **FIG. 12** is a schematic illustrating network storage of shared content, according to even more of the exemplary embodiments;

[0016] **FIG. 13** is a block diagram of a television, according to still more of the exemplary embodiments;

[0017] **FIG. 14** depicts a content sharing application residing in a computer system, according to yet more exemplary embodiments;

[0018] **FIG. 15** is a schematic illustrating the content sharing application alternatively or additionally operating within various other mobile devices;

[0019] **FIGS. 16-19** are schematics further illustrating the mobile device, according to the exemplary embodiments; and

[0020] **FIG. 20** is a flowchart illustrating a method of sharing content, according to an exemplary embodiment.

## DETAILED DESCRIPTION

[0021] The exemplary embodiments will now be described more fully hereinafter with reference to the accompanying drawings. The exemplary embodiments may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein. These embodiments are provided so that this disclosure will be thorough and complete and will fully convey the scope of the invention to those of ordinary skill in the art. Moreover, all statements herein reciting embodiments, as well as specific examples thereof, are intended to encompass both structural and functional equivalents thereof. Additionally, it is intended that such equivalents include both currently known equivalents as well as equivalents developed in the future (i.e., any elements developed that perform the same function, regardless of structure).

[0022] Thus, for example, it will be appreciated by those of ordinary skill in the art that the diagrams, schematics, illustrations, and the like represent conceptual views or processes illustrating the exemplary embodiments. The functions of the various elements shown in the figures may be provided through the use of dedicated hardware as well as hardware capable of executing associated software. Similarly, any switches shown in the figures are conceptual only. Their function may be carried out through the operation of program logic, through dedicated logic, through the interaction of program control and dedicated logic, or even manually, the particular technique being selectable by the entity implementing this invention. Those of ordinary skill in the art further understand that the exemplary hardware, software, processes, methods, and/or operating systems described herein are for illustrative purposes and, thus, are not intended to be limited to any particular named manufacturer.

[0023] According to exemplary embodiments, methods, systems, and products share pictures, movies, and other content with a media delivery device. These exemplary embodiments describe how mobile user, using any mobile device, may share content with a media delivery device. The exemplary embodiments, for example, allow a camera phone to share video content with a television. The camera phone uses a messaging protocol to establish a session with the television. The television may then audibly and/or visually present the content originating from the camera phone. The camera phone, however, is only one example of a mobile device, and the television is only one example of the media delivery device. As the following paragraphs will explain, the exemplary embodiments are applicable to any communications device, such as a computer, a personal digital assistant, a pager, or any other device. Because the content is shared with a media delivery device, having a larger screen than a conventional phone, more people will be willing to utilize "see what I see services."

[0024] **FIG. 1** is a simplified schematic illustrating the exemplary embodiments. These exemplary embodiments describe how one person may share content with a subscriber's media delivery device. As this patent will explain, the concepts described herein are applicable to any computer and/or mobile device. The concepts, in fact, are applicable to any media delivery device, such as a television, monitor, communications device, or processor-controlled device. The media delivery device may utilize analog circuitry or digital circuitry. The television may receive analog signals or digital signals (e.g., HDTV). The media delivery device, for example, may be a television including an encoder/decoder, such as an embedded set-top box. The term "media delivery device," however, may encompass a stand-alone set-top box that is a separate component from a conventional television. The media delivery device may also utilize any display device technology, such as a cathode-ray, a liquid crystal, a diode, micromirrors, or plasma.

[0025] As **FIG. 1** illustrates, a mobile user **10** operates a mobile device **12**. **FIG. 1** illustrates the mobile device **12** as a camera phone **14**, but the mobile device could alternatively be any communications device, such as a computer, a personal digital assistant, a pager, or any other device. The mobile user **10** desires to communicate, or share, content with the subscriber's media delivery device **16**. The content may have any format or standard. The mobile user **10**, for example, may wish to communicate a stream of video images, captured by the camera phone **14**, with the subscriber's media delivery device **16**. The mobile device **12** uses any messaging protocol to establish a session. The mobile device **12** communicates a stream **18** of data via a communications network **20**. The stream **18** of data may contain any packetized data, such as "live" or real time video images, a video clip, or an image. The stream **18** of data may additionally or alternatively contain Voice-Over Internet Protocol data. The stream **18** of data may or may not include audio data. As the following paragraphs and schematics will explain, various devices (not shown for simplicity) allow the stream **18** of data to communicate to the media delivery device **16**. The media delivery device **16** may then audibly and/or visually present the stream **18** of data originating from the mobile device **12**.

[0026] **FIGS. 2-6** are detailed schematics illustrating the exemplary embodiments. The mobile user **10** desires to communicate content to the subscriber's media delivery device **16**. The media delivery device **16** includes a content sharing application **22** stored in memory **24**. The media delivery device **16** also includes a processor **26** communicating with the memory **24**. When the subscriber's media delivery device **16** is powered "on," the processor **26** sends a presence update message **28**. The presence update message **28** indicates the media delivery device **16** is active and available to receive communications. The presence update message **28** may utilize any format or protocol, such as the SIMPLE industry standard protocol. The presence update message **28** communicates to a residential broadband gateway (RBGW) **30** via a residential network **32**. The residential broadband gateway **30** is a computer device that also stores some or all portions of the content sharing application **22** in memory **34**. The residential broadband gateway **30** terminates broadband facilities coming into the subscriber's premises. The residential broadband gateway **30** also provides wired and wireless interfaces for a variety of subscribed services, such as voice service, broadband Internet access service, and Internet Protocol television service. The residential network **32** is commonly called a "home network." The residential network **32**, as will be later explained, is a wired and/or wireless communications network installed within the subscriber's premises. The content sharing application **22** operating in the residential broadband gateway **30** functions as a B2BUA (Back-to-Back User Agent) supporting this video sharing service. The residential broadband gateway **30** may or may not support Quality of Service (QoS) mechanisms.

[**0027**] The residential broadband gateway **30** updates its internal presence records. When the presence update message **28** is received, the content sharing application **22** (operating in the residential broadband gateway **30**) updates its internal presence records. The residential broadband gateway **30** sends a registration message **36** to the subscriber's Mobile Session Control Infrastructure **38**. The registration message **36** indicates that the media delivery device **16** is active and ready to receive video session invites.

[**0028**] The exemplary embodiments may utilize any messaging protocol. The registration message **36**, for example, may use the Session Initiation Protocol (SIP) or the H.323 protocol. As those of ordinary skill in the art understand, Session Initiation Protocol (SIP) is the Internet Engineering Task Force's standard for multimedia conferencing over IP. The H.323 protocol originated as an International Telecommunications Union (ITU) multimedia standard and incorporates multiple protocols, including Q.931 for signaling, H.245 for negotiation, and Registration Admission and Status (RAS) for session control. Because SIP has gained greater industry acceptance, SIP will be shown and discussed, although those of ordinary skill in the art understand any messaging protocol may be used.

[**0029**] The Mobile Session Control Infrastructure **38** is known in the art. The Mobile Session Control Infrastructure **38** is an all-IP subsystem designed to facilitate delivery of IP multimedia services using the SIP signaling protocols for session initiation, modification, and termination. The Mobile Session Control Infrastructure **38** may or may not support QoS mechanisms. **FIG. 2** illustrates the 3GPP (Third Generation Partnership Projects) IMS (EP Multimedia Subsystem) network **40**. As those of ordinary skill in the art understand, the 3GPP has standardized the Universal Mobile Telecommunication System (UMTS) to offer the next generation of wireless services. The IMS network **40** supports traditional telephony services as well as multimedia services. Because the IMS network **40** is known to those of ordinary skill, this patent will not further describe the IMS network **40**.

[**0030**] **FIG. 3** is a schematic further illustrating the exemplary embodiments. The mobile user, using the mobile device **12**, desires to share content with the subscriber's media delivery device **16**. The mobile device **12** sends an invite message **42** to the subscriber. The invite message **42** is addressed to the subscriber, such as to the subscriber's home telephone number, home email address, or any other communications address associated with the subscriber. The invite **42**, as earlier explained, may use any messaging protocol. Because SIP has gained greater industry acceptance, the invite message **42** will be shown as discussed as SIP invite message **42**. The SIP invite message **42** first routes to the mobile user's home IMS network **40** via a wireless network **44** and via a wireless packet data core **46**. As those of ordinary skill in the art understand, the wireless network **44** is a wireless access network of a communications service provider. The wireless network **44** includes all the network elements and equipment for the delivery of wireless services (e.g. receivers, base stations, base station controllers, transmission facilities, MSCs, HLRs, VLRs, etc.) (not shown for simplicity). The wireless network **44** may utilize any portion of the electromagnetic spectrum and any signaling standard (such as the I.E.E.E. 802 family of standards, GSM/CDMA/TDMA/WCDMA or any other cellular standard, and/or the ISM band). As those of ordinary skill in the art understand, the wireless packet data core **46** includes elements required to support wireless packet data services (such as 2.5G and/or 3G services, BLUETOOTH services, and/or the family of I.E.E.E. 802 services). These elements provide the interface between the wireless network and internal or external IP networks. The packet core may or may not support QoS mechanisms. Because both the wireless network **44** and the wireless packet data core **46** are known to those of ordinary skill, this patent will not provide a further explanation of either.

[**0031**] The SIP invite message **42** routes to the mobile user's home IMS network **40**. The mobile user's home IMS network **40** performs an ENUM address translation and/or a DNS lookup to determine a network address of the subscriber. The mobile user's home IMS network **40** then forwards the SIP invite message **42** to that network address.

[**0032**] The SIP invite message **42** forwards to the subscriber. The SIP invite message **42** routes to the subscriber's home IMS network **48**. The subscriber's home IMS network **48** determines the location and status of the subscriber's media delivery device **16**. The subscriber's home IMS network **48** then forwards the SIP invite message **42** to the residential broadband gateway (RBGW) **30** via a communications network **50**. The content sharing application **22**, operating in the residential broadband gateway **30**, functions as a B2BUA (Back-to-Back User Agent) supporting this content sharing service. When the content sharing application **22** receives the SIP invite message **42**, the content sharing application **22** first returns a ringing message **52** to the mobile device **12**. The content sharing application **22** also sends a second invite message **54** to the media delivery device **16** to initiate a session between the residential broadband gateway **30** and the media delivery device **16**. The ringing message **52** and the second invite message **54** may use any messaging protocol. Because SIP has gained greater industry acceptance, the ringing message **52** and the second invite message **54** are shown utilizing SIP.

[**0033**] **FIG. 4** is a schematic further illustrating the exemplary embodiments. The media delivery device **16** responds to the second invite message (shown as reference numeral **54** in **FIG. 3**). The media delivery device **16** sends an alerting message **56** in response to the second invite message. The alerting message **56** may use any messaging protocol, but SIP is shown. The processor **26** in the media delivery device may visually present a message **58** on a display device **60**. The message **58** indicates the mobile user, at the mobile device **12**, has requested a content sharing session with the media delivery device **16**. The processor **26** may additionally or alternatively prompt **62** the subscriber to accept the invitation for the session. The subscriber responds using a button on a control panel of the media delivery device or using a button on a remote control. The subscriber may also utter a verbal response that is interpreted by the processor **26**. However the subscriber responds, the processor **26** receives the subscriber's response **64** to the prompt **62**. If the response **64** accepts the session invitation, then the processor **26** sends an acceptance message **66** to the residential broadband gateway **30**.

[0034] **FIG. 5** is a schematic illustrating a confirmation message **68**, according to the exemplary embodiments. When the residential broadband gateway **30** receives the acceptance message **66**, the residential broadband gateway **30** sends the confirmation message **68**. The confirmation message **68** may be any message or information that acknowledges acceptance of the session invitation. The confirmation message **68**, for example, may be a SIP OK message. The confirmation message **68** routes to the mobile device **12** and indicates that the subscriber has accepted the session invitation. The mobile device **12** (such as the camera phone **14**) then communicates the stream **18** of data containing any packetized data, such as "live" or real time video images, video clip(s), or image(s), and/or VoIP data. The mobile device **12**, for example, may initiate an RTP/RTCP transmission between the mobile device **12** and the media delivery device **16**. The media delivery device **16** then visually and/or audibly presents the shared content. When the mobile device **12** and/or the media delivery device **16** decides to end the session, either device provides a disconnect message **70** to terminate the session per standard SIP protocols.

[0035] **FIG. 6** illustrates a decline message **72**. Should the subscriber decline to accept the session invitation, **FIG. 6** illustrates how the mobile device **12** is informed of the declined session. The mobile device **12**, as earlier described, sends the SIP invite message **42** to the subscriber. The SIP invite message **42** routes to the subscriber's residential broadband gateway (RBGW) **30** via the communications network **50**. The content sharing application **22**, operating in the residential broadband gateway **30**, sends the second SIP invite message **54** to the media delivery device **16** to initiate the session between the residential broadband gateway **30** and the media delivery device **16**. The processor **26** in the media delivery device **16** prompts the subscriber to accept the invitation for the session. The subscriber responds and the processor **26** receives the subscriber's response **64** to the prompt **62**. Here the subscriber has declined the session invitation, so the processor **26** sends the decline message **72**. The decline message **72** routes to the residential broadband gateway **30** via the residential network **32**. The decline message **72** continues routing to the mobile device **12** via the communications network **50** and via the wireless network **44**. The decline message **72** indicates that the subscriber has declined the session invitation.

[0036] The communications networks described herein may utilize any wired and/or wireline technology. The communications network **20**, the residential network **32**, and the communications network **50** may be a cable network operating in the radio-frequency domain and/or the Internet Protocol (IP) domain. Either communications network, however, may also include a distributed computing network, such as the Internet (sometimes alternatively known as the "World Wide Web"), an intranet, a local-area network (LAN), and/or a wide-area network (WAN). The communications networks may include coaxial cables, copper wires, fiber optic lines, and/or hybrid-coaxial lines. The communications networks may even include wireless portions utilizing any portion of the electromagnetic spectrum and any signaling standard (such as the I.E.E.E. 802 family of standards, GSM/CDMA/TDMA/WCDMA or any cellular standard, and/or the ISM band). Either communications network may be a broadband data transport network that supports IP protocols. Either communications network may be a broadband access network (BBAN) that connects to the subscriber's premises. Either communications network may support broadband access (such as ADSL technology, cable technology, and/or fiber technology). Either communications network, in fact, may support any broadband access technology that supports and/or delivers broadband services to the subscriber's premises. Either communications network may or may not support QoS.

[0037] **FIGS. 7-10** are detailed schematics illustrating more exemplary embodiments. These exemplary embodiments illustrate a scenario in which both the mobile user and the subscriber are recognized by the same home network. This scenario has some similarities, and some differences, to that discussed with reference to **FIGS. 2-6**. The similar portions will be quickly reviewed. When the subscriber's media delivery device **16** is powered "on," as earlier explained, the processor **26** sends the presence update message **28**. The presence update message **28** indicates the media delivery device **16** is active and available to receive the stream **18** of data. The presence update message **28** communicates to the residential broadband gateway (RBGW) **30** via the residential network **32**. When the presence update message **28** is received, the content sharing application **22** (operating in the residential broadband gateway **30**) updates its internal presence records. The residential broadband gateway **30** sends the SIP registration message **36** to the subscriber's Mobile Session Control Infrastructure **38**. The SIP registration message **36** indicates that the media delivery device **16** is active and ready to receive video session invites.

[0038] **FIG. 8** is a schematic illustrating the SIP invite message **42**, according to the exemplary embodiments. The mobile user desires to share content between the mobile device **12** and the subscriber's media delivery device **16**. The mobile device **12** sends the SIP invite message **42** to the subscriber. The SIP invite message **42** is addressed to the subscriber, such as to the subscriber's mobile telephone number, home telephone number, home email address, or any other communications address associated with the subscriber. The SIP invite message **42** routes to the mobile user's home IMS network **40**. Here the SIP invite message **42** is addressed to the subscriber's mobile telephone number, so the home IMS network **40** recognizes the subscriber's communications address as one of its own mobile subscribers. The home IMS network **40** determines the location and status of the subscriber's mobile terminal **74** and forwards the SIP invite message **42** to the subscriber's mobile terminal **74**.

[0039] The SIP invite message **42** forwards to the subscriber's mobile terminal **74**. When the subscriber's mobile terminal **74** receives the SIP invite message **42**, the subscriber's mobile terminal **74** provides an expected response per the SIP protocol, such as a SIP ringing message **76**. The subscriber's mobile terminal **74** also provides an audible and/or visual indication or alert of the mobile user's invitation to share video. A processor **78** operating in the mobile terminal **74** audibly/visually presents a message **80** on a display device **82**. The message **80** indicates the mobile user, at the mobile device **12**, has requested a content sharing session with the subscriber's mobile terminal **74**. The processor **78** may additionally or alternatively prompt **84** the subscriber to accept the invitation for the session. The subscriber responds using a button or command on a keypad **86**. The subscriber may also utter a verbal response that is interpreted by the processor **78**.

[0040] Here, however, the subscriber prefers to view the shared content on the subscriber's media delivery device **16**. The SIP invite message **42** forwarded to the subscriber's mobile terminal **74**, but the subscriber does not wish to view the shared content on the mobile terminal **74**. Perhaps the mobile terminal's video capabilities and/or audio capabilities are not desirable for video. Perhaps the environment is not conducive to use of the mobile terminal **74**. Whatever the reasons, the subscriber prefers instead to view the shared content on the subscriber's alternate media delivery device.

[0041] **FIG. 9** is a schematic illustrating a redirect message **88**, according to the exemplary embodiments. The processor **78** prompted the subscriber to accept the invitation, but the subscriber prefers instead to view the shared content on the subscriber's media delivery device **16**. The subscriber, then, responds to the prompt **84** by redirecting the session invitation to an alternate communications address. The alternate communications address may be any address of any other network location. The alternate communications address, for example, may be a network address of the residential broadband gateway (shown as reference numeral **30** in **FIGS. 2-7**), a network address of a television or other media delivery device (shown as reference numeral **16** in **FIGS. 1-7**), a network address of a remote storage device, or any other destination. Here the alternate communications address is described as a home email address for the subscriber. The processor **78** sends the redirect message **88** to the mobile user's home IMS network **40**.

[0042] The mobile user's home IMS network **40** receives the redirect message **88**. The redirect message **88** instructs the mobile user's home IMS network **40** to redirect the session invitation to the subscriber's home email address. The mobile user's IMS network **40** performs a Domain Name Server (DNS) lookup to determine the network address associated with the subscriber's home IMS network. The mobile user's home IMS network **40** then forwards the SIP invite message **42** to the network address associated with the subscriber's home IMS network.

[0043] **FIG. 10** is a schematic illustrating the subscriber's home IMS network **48**, according to the exemplary embodiments. The SIP invite message **42** routes to the subscriber's home IMS network **48**. The subscriber's home IMS network **48** determines the location and status of the subscriber's media delivery device **16**. The subscriber's home IMS network **48** then forwards the SIP invite message **42** to the residential broadband gateway (RBGW) **30** via the communications network **50**. The content sharing application **22**, operating in the residential broadband gateway **30**, receives the SIP invite message **42**. The content sharing application **22** first returns the SIP ringing message **52** to the mobile device **12**. The content sharing application **22** also sends the second SIP invite message **54** to the media delivery device **16** to initiate the session between the residential broadband gateway **30** and the media delivery device **16**.

[0044] The content sharing session then continues as previously explained. The media delivery device **16** sends the SIP alerting message (shown as reference numeral **56** in **FIG. 4**) in response to the second SIP invite message **54**. The processor **26**, as earlier described, may present the message (shown as reference numeral **58** in **FIG. 4**) that indicates the mobile user, at the mobile device **12**, has requested a video sharing session with the media delivery device **16**. The processor **26** may additionally or alternatively prompt (shown as reference numeral **62** in **FIG. 4**) to accept the invitation for the session. The processor **26** sends the acceptance message (shown as reference numeral **66** in **FIG. 4**) to the residential broadband gateway **30**, and the acceptance message accepts the session invitation. When the residential broadband gateway **30** receives the acceptance message, the residential broadband gateway **30** sends the confirmation message (shown as reference numeral **68** in **FIG. 5**). The confirmation message routes to the mobile device **12** and indicates that the media delivery device **16** has accepted the session invitation. The mobile device **12** then communicates the stream of data (shown as reference numeral **18** in **FIG. 5**) to the residential broadband gateway **30**. The residential broadband gateway **30** then forwards the stream of data during a session with the media delivery device **16**.

[0045] **FIG. 11** is a schematic illustrating storage of shared content, according to more of the exemplary embodiments. Here the residential broadband gateway (RBGW) **30** communicates the shared content to a storage device or memory location. When the mobile user desires to share content with the subscriber, a session is established between the mobile device **12** and the residential broadband gateway **30**. Ordinarily the residential broadband gateway **30** then forwards the stream **18** of data during a session with the media delivery device **16**. Here, however, the residential broadband gateway (RBGW) **30** communicates the stream **18** of data to a storage device **90** communicating with the residential network **32**. The residential broadband gateway **30** may additionally or alternatively store the stream **18** of data in the memory **34**.

[0046] Suppose the media delivery device **16** is not available. Perhaps the media delivery device **16** is not powered "on." Perhaps the media delivery device **16** is already engaged in a session. Perhaps the media delivery device **16** is malfunctioning. Whatever the reason, the media delivery device **16** may not be available for a session with the mobile device **12**. If the residential broadband gateway (RBGW) **30** is available, however, the mobile device **12** could still establish a session. When the residential broadband gateway **30** receives the stream **18** of data, the residential broadband gateway **30** may then locally store the stream **18** in the local memory location **34**. The residential broadband gateway **30** may additionally or alternatively remotely store the stream **18** at the storage device **90**. So, even if the media delivery device **16** is not available for a session, the residential broadband gateway **30** may itself establish a session and receive the stream **18** of data. Because the residential broadband gateway **30** locally and/or remotely stores the stream **18**, the shared content can be retrieved at a later time.

[**0047**] **FIG. 12** is a schematic illustrating network storage of shared content, according to even more of the exemplary embodiments. Here the shared content from the mobile device **12** is stored at a network memory location **94**. If the subscriber's residential broadband gateway (RBGW) **30** is unavailable, no session may be established with the subscriber's media delivery device **16**. Even if the subscriber's residential broadband gateway (RBGW) **30** is unavailable, a session may still be established with the network memory location **94**, such as a server **96**. A session is established between the mobile device **12** and the server **96**, and the server **96** receives and stores the stream **18** of data. The subscriber may then later retrieve the shared content by establishing a session or other communication with the server **96**.

[**0048**] **FIG. 13** is a block diagram of the media delivery device **16**, according to yet more of the exemplary embodiments. Here the media delivery device **16** is shown as a digital high definition television (HDTV) system, yet the concepts described herein are applicable to any television design. The concepts, for example, are applicable to analog circuitry, digital circuitry, analog signals, and/or or digital signals. The television may include an encoder/decoder, such as an embedded set-top box. The term "television," however, may encompass a stand-alone set-top box that is a separate component from the television. The television may also utilize any display device technology, such as a cathode-ray, a liquid crystal, a diode, digital micromirror, light processor, or plasma. The content sharing application **22** may be stored in any memory location or device in the television **16**. **FIG. 15**, though, is only a simplified block diagram. The operating and engineering principles are already known in the art and will not be repeated here. If, however, the reader desires more information on the television, the reader is directed to the following sources: MICHEAL ROBIN & MICHEL POULIN, DIGITAL TELEVISION FUNDAMENTALS (2000); JERRY WHITAKER AND BLAIR BENSON, VIDEO AND TELEVISION ENGINEERING (2003); JERRY WHITAKER, DTV HANDBOOK (2001); JERRY WHITAKER, DTV: THE REVOLUTION IN ELECTRONIC IMAGING (1998); and EDWARD M. SCHWALB, ITV HANDBOOK: TECHNOLOGIES AND STANDARDS (2004), with each incorporated herein by reference.

[**0049**] **FIG. 14** depicts another possible operating environment for the exemplary embodiments. **FIG. 14** is a block diagram showing the content sharing application **22** residing in a computer system **200** (such as the residential broadband gateway **30**, the storage device **90**, the network memory location **94**, or the server **96**). **FIG. 14**, however, may also represent a block diagram of the mobile device **12** or of the media delivery device **16**. **FIG. 14**, in fact, is a block diagram of any computer, communications device, or processor-controlled device. The content sharing application **22** operates within a system memory device. The content sharing application **22**, for example, is shown residing in a memory subsystem **202**. The content sharing application **22**, however, could also reside in flash memory **204** or peripheral storage device **206**. The computer system **200** also has one or more central processors **208** executing an operating system. The operating system, as is well known, has a set of instructions that control the internal functions of the computer system **200**. A system bus **210** communicates signals, such as data signals, control signals, and address signals, between the central processor **208** and a system controller **212**. The system controller **212** provides a bridging function between the one or more central processors **208**, a graphics subsystem **214**, the memory subsystem **202**, and a PCI (Peripheral Controller Interface) bus **216**. The PCI bus **216** is controlled by a Peripheral Bus Controller **218**. The Peripheral Bus Controller **218** is an integrated circuit that serves as an input/output hub for various peripheral ports. These peripheral ports could include, for example, a keyboard port **220**, a mouse port **222**, a serial port **224**, and/or a parallel port **226** for a video display unit, one or more external device ports **228**, and networking ports **230** (such as USB, SCSI, or Ethernet). The Peripheral Bus Controller **218** could also include an audio subsystem **232**. Those of ordinary skill in the art understand that the program, processes, methods, and systems described herein \are not limited to any particular computer system or computer hardware.

[**0050**] One example of the central processor **208** is a microprocessor. Advanced Micro Devices, Inc., for example, manufactures a full line of ATHLON™ microprocessors (ATHLON™ is a trademark of Advanced Micro Devices, Inc., One AMD Place, P.O. Box 3453, Sunnyvale, Calif. 94088-3453, 408.732.2400, 800.538.8450, www.amd.com). The Intel Corporation also manufactures a family of X86 and P86 microprocessors (Intel Corporation, 2200 Mission College Blvd., Santa Clara, Calif. 95052-8119, 408.765.8080, www.intel.com). Other manufacturers also offer microprocessors. Such other manufacturers include Motorola, Inc. (1303 East Algonquin Road, P.O. Box A3309 Schaumburg, Ill. 60196, www.Motorola.com), International Business Machines Corp. (New Orchard Road, Armonk, N.Y. 10504, (914) 499-1900, www.ibm.com), and Transmeta Corp. (3940 Freedom Circle, Santa Clara, Calif. 95054, www.transmeta.com). The central processor **208** may also represent a digital signal processor. Those skilled in the art further understand that the program, processes, methods, and systems described herein are not limited to any particular manufacturer's central processor.

[**0051**] According to an exemplary embodiment, the WINDOWS® operating system may be used (WINDOWS® is a registered trademark of Microsoft Corporation, One Microsoft Way, Redmond Wash. 98052-6399, 425.882.8080, www.Microsoft.com). Other operating systems, however, are also suitable. Such other operating systems would include the UNIX® operating system (UNIX® is a registered trademark of the Open Source Group, www.opensource.org), the UNIX-based Linux operating system, WINDOWS NT®, and Mac® OS (Mac® is a registered trademark of Apple Computer, Inc., 1 Infinite Loop, Cupertino, Calif. 95014, 408.996.1010, www.apple.com). Those of ordinary skill in the art again understand that the program, processes, methods, and systems described herein are not limited to any particular operating system.

[**0052**] The system memory device (shown as memory subsystem **202**, flash memory **204**, or peripheral storage device **206**) may also contain an application program. The application program cooperates with the operating system and with a video display unit (via the serial port **224** and/or the parallel port 226) to provide a Graphical User Interface (GUI). The Graphical User Interface typically includes a combination of signals communicated along the keyboard port 220 and the mouse port 222. The Graphical User Interface provides a convenient visual and/or audible interface with a user of the computer system 200.

[0053] FIG. 15 is a schematic illustrating still more exemplary embodiments. FIG. 15 illustrates that the content sharing application 22 may alternatively or additionally operate within various other mobile devices 12. FIG. 15, for example, illustrates that the content sharing application 22 may entirely or partially operate within a personal digital assistant (PDA) 250, a Global Positioning System (GPS) device 252, an interactive television 254, an Internet Protocol (IP) phone 256, a pager 258, a cellular/satellite phone 260, or any computer system and/or communications device utilizing a digital signal processor (DSP) 262. The mobile device 12 may also include watches, radios, vehicle electronics, clocks, printers, gateways, and other apparatuses and systems.

[0054] FIGS. 16-19 are schematics further illustrating the mobile device, according to the exemplary embodiments. FIG. 16 is a block diagram of a Subscriber Identity Module 300, while FIGS. 17 and 18 illustrate, respectively, the Subscriber Identity Module 300 embodied in a plug 302 and the Subscriber Identity Module 300 embodied in a card 304. As those of ordinary skill in the art recognize, the Subscriber Identity Module 300 may be used in conjunction with many mobile devices (such as the mobile communications devices 12 shown in FIG. 15). The Subscriber Identity Module 300 stores user information (such as the user's International Mobile Subscriber Identity, the user's $K_i$ number, and other user information), and any portion of the content sharing application 22. As those of ordinary skill in the art also recognize, the plug 302 and the card 304 each interface with the communications device according to GSM Standards 2.17 and 11.11 and ISO Standard 7816, with each incorporated herein by reference. The GSM Standard 2.17 is formally known as "European digital cellular telecommunications system (Phase 1); *Subscriber Identity Modules, Functional Characteristics* (GSM 02.17 V3.2.0 (1995-01))." The GSM Standard 11.11 is formally known as "Digital cellular telecommunications system (Phase 2+) (GSM); *Specification of the Subscriber Identity Module—Mobile Equipment* (*Subscriber Identity Module—ME*) interface (GSM 11.11 V5.3.0 (1996-07))." Both GSM standards are available from the European Telecommunication Standards Institute (650 route des Lucioles, 06921 Sophia-Antipolis Cedex, FRANCE, Tel.: +33 (0)4 92 94 42 00, Fax: +33 (0)4 93 65 47 16, www.etsi.org). The ISO Standard 7816 is formally known as "*Information technology—Identification cards—Integrated circuit(s) cards with contacts*," and the standard is available from the International Organization for Standardization (ISO) (1, rue de Varembe, Case, postale 56CH-1211 Geneva 20, Switzerland, Telephone +41 22 749 01 11, Telefax +41 22 733 34 30, www.iso.org).

[0055] FIG. 16 is a block diagram of the Subscriber Identity Module 300, whether embodied as the plug 302 of FIG. 17 or as the card 304 of FIG. 18. Here the Subscriber Identity Module 300 comprises a microprocessor 306 (μP) communicating with memory modules 308 via a data bus 310. The memory modules may include Read Only Memory (ROM) 312, Random Access Memory (RAM) and or flash memory 314, and Electrically Erasable-Programmable Read Only Memory (EEPROM) 316. The Subscriber Identity Module 300 stores some or all of the content sharing application 22 in one or more of the memory modules 308. FIG. 18 shows the content sharing application 22 residing in the Erasable-Programmable Read Only Memory 316, yet the content sharing application 22 could alternatively or additionally reside in the Read Only Memory 312 and/or the Random Access/Flash Memory 314. An Input/Output module 318 handles communication between the Subscriber Identity Module 300 and the mobile device. As those skilled in the art will appreciate, there are many suitable ways for implementing the operation and physical/memory structure of the Subscriber Identity Module. If, however, the reader desires more information on the Subscriber Identity Module, the reader is directed to the following sources: LAWRENCE HARTE et al., GSM SUPERPHONES 99-100, 113-14 (1999); SIEGMUND REDL et al., GSM AND PERSONAL COMMUNCATIONS HANDBOOK 303-69 (1998); and JOACHIM TISAL, GSM CELLULAR RADIO TELEPHONY 99-130 (1997), with each incorporated herein by reference.

[0056] FIG. 19 is a schematic further illustrating other media delivery devices and mobile devices for sharing content, according to the exemplary embodiments. FIG. 19 is a block diagram of another mobile device 330 utilizing any portion of the content sharing application 22. Here the mobile device 330 comprises a radio transceiver unit 332, an antenna 334, a digital baseband chipset 336, and a man/machine interface (MMI) 338. The transceiver unit 332 includes transmitter circuitry 340 and receiver circuitry 342 for receiving and transmitting radio-frequency (RF) signals. The transceiver unit 342 couples to the antenna 334 for converting electrical current to and from electromagnetic waves. The digital baseband chipset 336 contains a digital signal processor (DSP) 344 and performs signal processing functions for audio (voice) signals and RF signals. As FIG. 19 shows, the digital baseband chipset 336 may also include an on-board microprocessor 346 that interacts with the man/machine interface (MMI) 338. The man/machine interface (MMI) 338 may comprise a display device 348, a keypad 350, and the Subscriber Identity Module 300. The on-board microprocessor 346 performs GSM protocol functions and control functions for the radio circuitry 340 and 342, for the display device 348, and for the keypad 350. The on-board microprocessor 346 may also interface with the Subscriber Identity Module 300 and with the content sharing application 22 residing in the memory module 308 of the Subscriber Identity Module 300. Those skilled in the art will appreciate that there may be many suitable architectural configurations for the elements of the mobile device 330. If the reader desires a more detailed explanation, the reader is invited to consult the following sources: LAWRENCE HARTE et al., GSM SUPERPHONES 105-120 (1999); SIEGMUND REDL et al., GSM AND PERSONAL COMMUNCATIONS HANDBOOK 389-474 (1998); and JOACHIM TsAL, GSM CELLULAR RADIO TELEPHONY 99-130 (1997), with each incorporated herein by reference.

[0057] The content sharing application 22 may be utilized regardless of signaling standard. As those of ordinary skill in the art recognize, FIGS. 16-19 illustrate a Global System for Mobile (GSM) communications device. That is, the communications device utilizes the Global System for Mobile

(GSM) communications signaling standard. Those of ordinary skill in the art, however, also recognize the content sharing application **22** is equally applicable to any mobile communications device utilizing the Time Division Multiple Access signaling standard, the Code Division Multiple Access signaling standard, the "dual-mode" GSM-ANSI Interoperability Team (GAIT) signaling standard, or any variant of the GSM/CDMA/TDMA/WCDMA signaling standard.

[**0058**] **FIG. 20** is a flowchart illustrating a method for sharing content. A presence update message is sent to indicate a television is active and available to receive content (Block **400**). A SIP invite is received (Block **402**), and the SIP invite requesting a session between the media delivery device and another device. A SIP alerting message is sent in response to the SIP invite (Block **404**). A message is audibly/visually presented that indicates the another device has requested the session (Block **406**). A prompt is presented requesting acceptance of the invitation for the session (Block **408**). A response to the prompt is received (Block **410**). If the response accepts the invitation (Block **412**), an accept message is sent to accept the invitation (Block **414**). The content is received (Block **416**). A message is received that terminates the session (Block **418**). If, however, the response declines the invitation (Block **412**), then a decline message is sent that declines the session invitation (Block **420**).

[**0059**] The content sharing application (shown as reference numeral **22** in **FIGS. 1-19**) may be physically embodied on or in a computer-readable medium. This computer-readable medium may include CD-ROM, DVD, tape, cassette, floppy disk, memory card, and large-capacity disk (such as IOMEGA®D, ZIP®, JAZZ®, and other large-capacity memory products (IOMEGA®, ZIP®, and JAZZ® are registered trademarks of Iomega Corporation, 1821 W. Iomega Way, Roy, Utah 84067, 801.332.1000, www.iomega.com). This computer-readable medium, or media, could be distributed to end-users, licensees, and assignees. These types of computer-readable media, and other types not mention here but considered within the scope of the exemplary embodiments, allow the calendaring application to be easily disseminated. A computer program product comprises the content sharing application stored on the computer-readable medium. The content sharing application comprises computer-readable instructions/code for sharing content with a media delivery device. A presence update message is sent to indicate the media delivery device is active and available to receive content. A SIP invite is received, the SIP invite requesting a session between the media delivery device and another device. An accept message is sent to accept the invitation. The content is received until a message terminates the session.

[**0060**] The content sharing application may be physically embodied on or in any addressable (e.g., HTTP, I.E.E.E. 802.11, Wireless Application Protocol (WAP)) wireless device capable of presenting an IP address. Examples could include a computer, a wireless personal digital assistant (PDA), an Internet Protocol mobile phone, or a wireless pager.

[**0061**] While the exemplary embodiments have been described with respect to various features, aspects, and embodiments, those skilled and unskilled in the art will recognize the exemplary embodiments are not so limited. Other variations, modifications, and alternative embodiments may be made without departing from the spirit and scope of the exemplary embodiments.

What is claimed is:

**1**. A media delivery device, comprising:

a content sharing application stored in memory and a processor communicating with the memory,

the processor sending a presence update message to indicate the media delivery device is active and available to receive content;

the processor receiving an invite, the invite requesting a session between the media delivery device and another device;

the processor sending an accept message to accept the invitation;

the processor receiving the content; and

the processor receiving a message that terminates the session.

**2**. A media delivery device according to claim 1, wherein the processor receives the invite from a residential gateway.

**3**. A media delivery device according to claim 1, wherein the processor presents a message indicating the another device has requested the session.

**4**. A media delivery device according to claim 1, wherein the processor sends an alerting message in response to the invite.

**5**. A media delivery device according to claim 1, wherein the processor presents a prompt to a user requesting acceptance of the invitation for the session.

**6**. A media delivery device according to claim 5, wherein the processor receives a response to the prompt.

**7**. A media delivery device according to claim 6, wherein if the response declines the invitation, then the processor sends a redirect message that redirects the session invitation to an alternate communications address.

**8**. A method of sharing content, comprising:

sending a presence update message to indicate a media delivery device is active and available to receive content;

receiving an invite, the invite requesting a session between the media delivery device and another device;

sending an accept message to accept the invitation;

receiving the content; and

receiving a message that terminates the session.

**9**. A method according to claim 8, further comprising presenting a message indicating the another device has requested the session.

**10**. A method according to claim 8, further comprising sends an alerting message in response to the invite.

**11**. A method according to claim 8, further comprising presenting a prompt to a user requesting acceptance of the invitation for the session.

**12**. A method according to claim 11, further comprising receiving a response to the prompt.

**13**. A method according to claim 12, wherein if the response declines the invitation, then sending a redirect message that redirects the session invitation to an alternate communications address.

**14**. A computer program product, comprising:

a computer-readable medium; and

a content sharing application stored on the computer-readable medium, the content sharing application comprising computer code for sending a presence update message to indicate a television is active and available to receive content;

receiving an invite, the invite requesting a session between the television and another device;

sending an accept message to accept the invitation;

receiving the content; and

receiving a message that terminates the session.

**15**. A computer program product according to claim 14, further comprising computer code for presenting a message indicating the another device has requested the session.

**16**. A computer program product according to claim 14, further comprising computer code for sending an alerting message in response to the invite.

**17**. A computer program product according to claim 14, further comprising computer code for presenting a prompt to a user that requests acceptance of the invitation for the session.

**18**. A computer program product according to claim 17, further comprising computer code for receiving a response to the prompt.

**19**. A computer program product according to claim 18, further comprising computer code for when the response declines the invitation, then sending a redirect message that redirects the session invitation to an alternate communications address.

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