IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

S.M.R INNOVATIONS LTD and Y.M.R TECH LTD, Plaintiffs, v. APPLE INC., Defendant.	Civil Action No. 6:23-cv-479-ADA JURY TRIAL DEMANDED

PLAINTIFFS' PRELIMINARY DISCLOSURE OF ASSERTED
CLAIMS AND INFRINGEMENT CONTENTIONS

Pursuant to the Court's Standing Order Governing Proceedings (OGP) 4-4—Patent Cases, Plaintiffs S.M.R Innovations LTD and Y.M.R Tech LTD ("Plaintiffs") provide their Preliminary Disclosure of Asserted Claims and Infringement Contentions ("Infringement Contentions") to Defendant.

These Preliminary Infringement Contentions are based upon publicly available information. The references contained in the appended claim charts are intended to be exemplary rather than exhaustive. Furthermore, certain technical information concerning the Accused Instrumentalities is not publicly available. Such technical information may provide additional support for Plaintiffs' Infringement Contentions. Plaintiffs reserve the right to amend their Preliminary Infringement Contentions and asserted claims as discovery progresses based, for example, upon information obtained through discovery or in response to claim-construction rulings in this case or in any related case.

Asserted Claims

Plaintiffs assert that Defendant infringes the following claims: claims 1, 5, 7-9, 10, 13, 14, 15, 16, 18, 19, and 22 of U.S. Patent No. 9,699,223, as shown in the claim chart attached hereto as Exhibit A. Plaintiffs assert that Defendant infringes claims 1, 5-8, 10, 11, 13, 15, 16, 18, and 19 of U.S. Patent No. 10,547,648, as shown in the claim chart attached hereto as Exhibit B. Plaintiffs assert that Defendant infringes claims 22, 23, and 24 of U.S. Patent No. 8,711,866, as shown in the claim chart attached hereto as Exhibit C. Plaintiffs assert that Defendant infringes claims 1-3, 9, and 24 of U.S. Patent No. 7,969,990, as shown in the claim chart attached hereto as Exhibit D.

Identification of Accused Instrumentalities

The Accused Instrumentalities that Plaintiffs allege infringe the ’223 patent include at least Defendant’s iPhone series of smartphones and iPad series of tablets running iOS 4.2 or higher, as well as AppleTV products.

The Accused Instrumentalities that Plaintiffs allege infringe the ’648 patent include at least Defendant’s iPhone series of smartphones and iPad series of tablets running iOS 11 or higher, as well as its Apple Watch series of smartwatches.

The Accused Instrumentalities that Plaintiffs allege infringe the ’866 patent include at least Defendant’s iPhone series of smartphones and iPad series of tablets running iOS 11.4 or higher, as well as its HomePod series of smart speakers.

The Accused Instrumentalities that Plaintiffs allege infringe the ’990 patent include at least Defendant’s iPhone series of smartphones running iOS 11.4 or higher and its HomePod series of smart speakers.

Plaintiffs assert that the Accused Instrumentalities literally infringe each limitation of each asserted claim. Plaintiffs reserve the right to assert infringement under the doctrine of equivalents based on, for example, any claim constructions adopted by the Court or positions subsequently raised by Defendant.

Priority Date

The asserted patents claim priority to U.S. Application No. 10/347,388, filed January 21, 2003, which itself claims priority to U.S. Provisional Application No. 60/398,077, filed on July 25, 2002. Plaintiffs therefore allege that the asserted claims are entitled to, at least, a priority date of July 25, 2002. Moreover, the inventors Oded Shmueli and Benny Yehezkel conceived of the subject matter disclosed in the asserted patents between October 16-18, 2000, during a trip to India. The inventors continued to collaborate on the invention, including working together to prepare a description of the invention in the first months of 2002.

Document Production

Plaintiffs have produced herewith copies of the asserted patents and their file histories. Documents of which Plaintiffs are currently aware that evidence conception and reduction to practice for the claimed inventions were previously produced in connection with venue discovery, including SMR-YMR000001 – 000112, SMR-YMR001561, and SMR-YMR001568-001595.

This 17th day of May, 2024.

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Attorneys for Plaintiffs

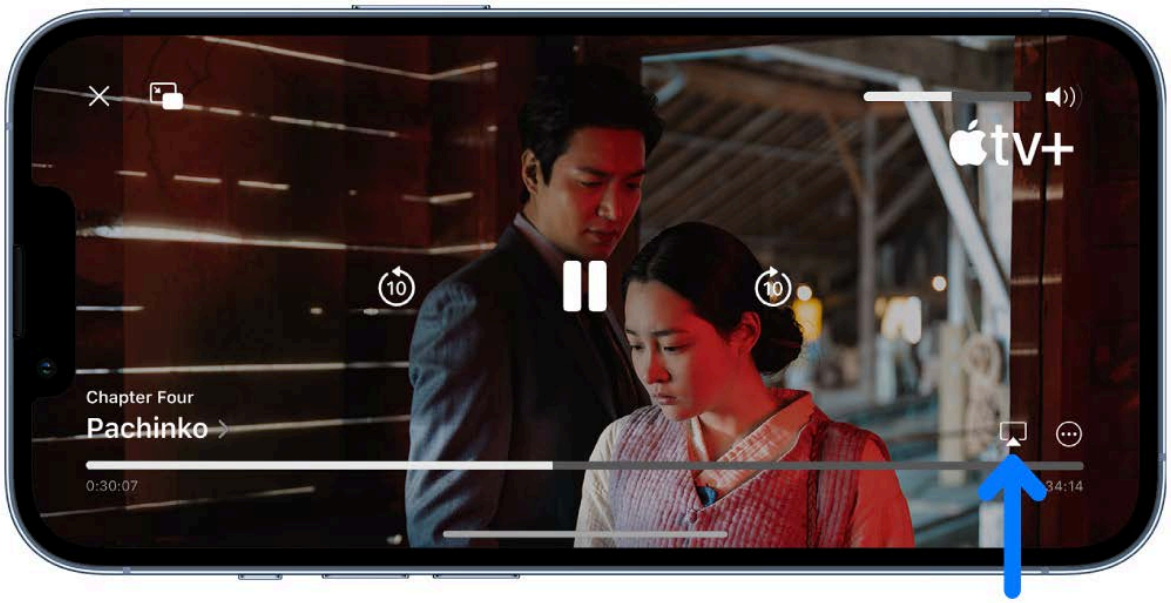
CERTIFICATE OF SERVICE

I hereby certify that on this date, I served a copy of the foregoing document on Defendant's counsel of record via electronic mail.

Dated: May 17, 2024

/s/ *Cortney S. Alexander*
Cortney S. Alexander

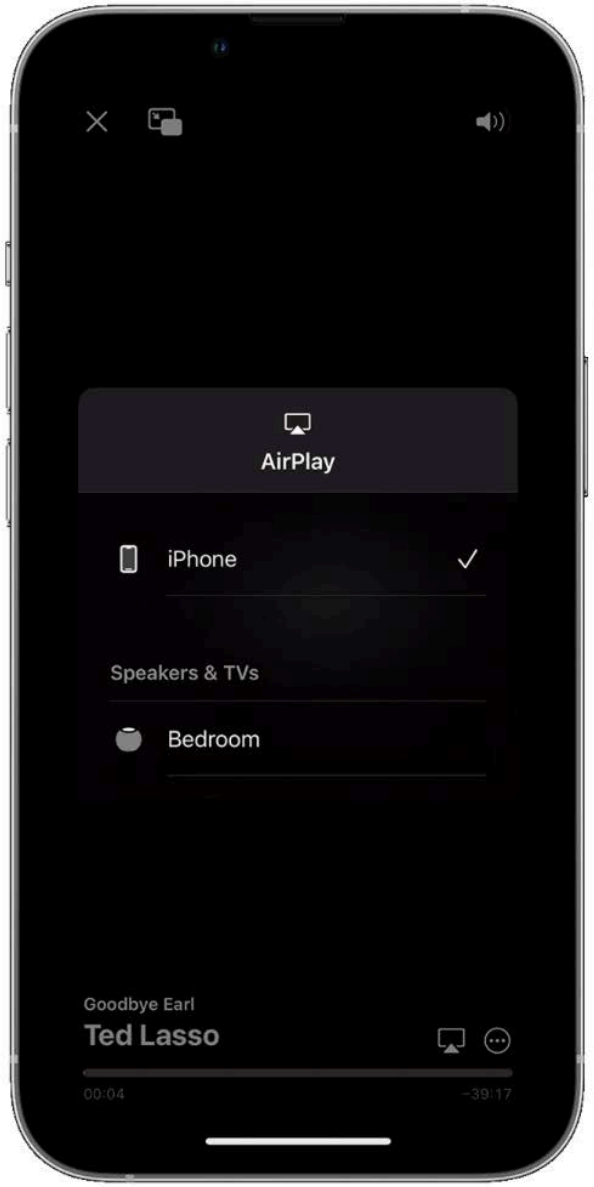
U.S. Patent No. 9,699,223 Claim language	Evidence
1. A method of routing media data stream, comprising:	Apple mobile devices providing streaming (for example an iPhone or iPad) involve a method of routing a media data stream (e.g., Apple TV or Amazon Prime show or movie). On information and belief, various apps that come pre-installed (or can be installed later) on many Apple iPhones and tablets (iPads or iPod Touch) are streaming enabled, such as the Apple TV app ( ), Amazon Prime, Hulu and Roku. "Use AirPlay to stream or share content from your Apple devices to your Apple TV, AirPlay-compatible smart TV, or Mac. Stream a video. Share your photos. Or mirror exactly what's on your device's screen." Ref. 1, https://support.apple.com/en-us/HT204289 Ref. 2, https://support.apple.com/kb/index?page=search&type=organic&src=support_searchbox_psp&locale=en_US&q=airplay "AirPlay lets you share videos, photos, music, and more from Apple devices to your Apple TV, favorite speakers, and popular smart TVs. And what you share always stays personal and private." Ref. 3, https://www.apple.com/airplay/ "Compatible devices include any iPhone, iPod touch, or iPad capable of running iOS 11.4 or later." Ref. 4, https://appleinsider.com/inside/airplay
wirelessly receiving at a mobile device, from an external source via a local wireless communication network, a media data stream transmitted according to a	An iOS mobile device (e.g., an iPhone or iPad) running AirPlay-enabled apps wirelessly receives, from an external source (e.g., Apple TV, Amazon Prime or Hulu) via a local wireless communication network (e.g., a wireless local area network), a media data stream transmitted according to a streaming protocol and comprising audio or video media content.

streaming protocol and comprising media content selected from a group consisting of: audio content and video content;	"While playing video in the Apple TV app ( ) or another supported video app on your iPhone, tap the screen to show the controls." Ref. 5, https://support.apple.com/en-il/guide/iphone/iphd29858fd3/ios 1. While playing video in the Apple TV app or another supported video app on your iPhone, tap the screen to show the controls. 2. Tap , then choose your Apple TV or AirPlay 2-enabled smart TV as the playback destination. 

scanning said local wireless communication network using said mobile device to identify a plurality of devices, identified as compatible to handle said media content, said plurality of devices are wirelessly connected to said local wireless communication network and wirelessly announce an availability for accepting a routed media via said local wireless communication network;	An iOS mobile device (e.g., an iPhone or iPad) running AirPlay-enabled apps scans the local wireless communication network to identify a plurality of devices identified as compatible to handle the media content and which are wirelessly connected to the local wireless communication network and wirelessly announce an availability for accepting a routed media via said local wireless communication network. For example, when a user of an AirPlay-enabled app taps the wireless media streaming button (the AirPlay logo), the enabled app will scan the local wireless network to which the mobile apparatus is connected to identify compatible devices able to handle the media content (i.e., audio content or video content). **Stream video from your iPhone, iPad, or iPod touch to a TV** 1. Connect your device to the same Wi-Fi network as your Apple TV, AirPlay-compatible smart TV, or Mac. 2. Find the video that you want to stream. 3. Tap AirPlay. In some apps, you might need to tap a different button first.[1] For example, in the Photos app, tap Share, then tap AirPlay. 4. Choose your TV or Mac from the list. To stop streaming, tap AirPlay in the app that you're streaming from, then tap your iPhone or iPad from the list. Ref. 6, https://support.apple.com/kb/index?page=search&q=airplay&requestid=&product=&currentPage=1&locale=en_US&includeArchived=false&doctype=&supportAnswerIndex=0

	The compatible devices are wirelessly connected to the local wireless communication network and wirelessly announce an availability for accepting routed media via the wireless communication network. For example, an Apple TV device, an AirPlay 2-enabled smart TV, or MAC supporting AirPlay are connected to the same local wireless communication network as the mobile apparatus running an AirPlay-enabled app and are further set up to announce themselves as available to accept a media stream via the local wireless communication network. AirPlay is the Apple technology for streaming video or audio. A device running AirPlay can discover Apple TV using Bonjour discovery by using multicast traffic to advertise the availability of services. Because multicast traffic is usually not routed across subnets, it requires Apple TV devices to be on the same IP subnet as the iPhone and iPad devices that use them. For small networks, this approach is the norm. Ref. 7, https://support.apple.com/en-il/guide/deployment/dep9151c4ace/web This enables an AirPlay-enabled app to discover compatible devices as shown in the following series of screenshots.

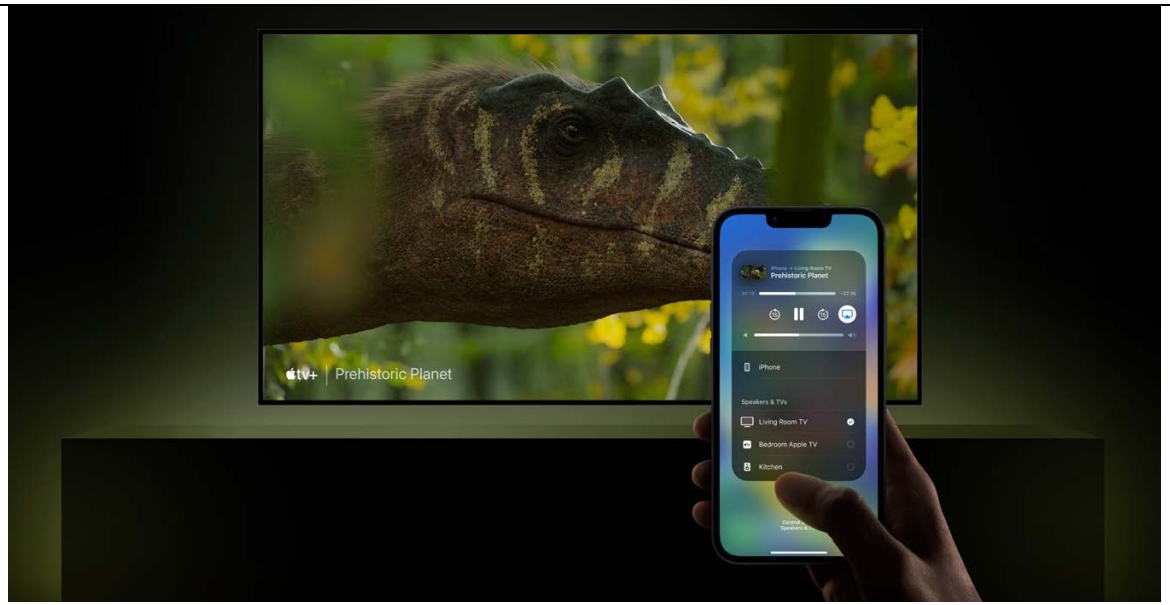
9:41
10
10
Goodbye Earl
Ted Lasso
00:00
-39:21


AirPlay
iPhone
Speakers & TVs
Bedroom
Goodbye Earl
Ted Lasso
00:04
-39:17

AirPlay
iPhone
Speakers & TVs
Living Room
Office
Bedroom
Kitchen
Show more...
Goodbye Earl
Ted Lasso
00:00
-39:21

AirPlay to Living Room
"TV" will play on this TV automatically.
10
10
AirPlay
This video is playing on "Living Room"
Goodbye Earl
Ted Lasso
00:00
-39:21

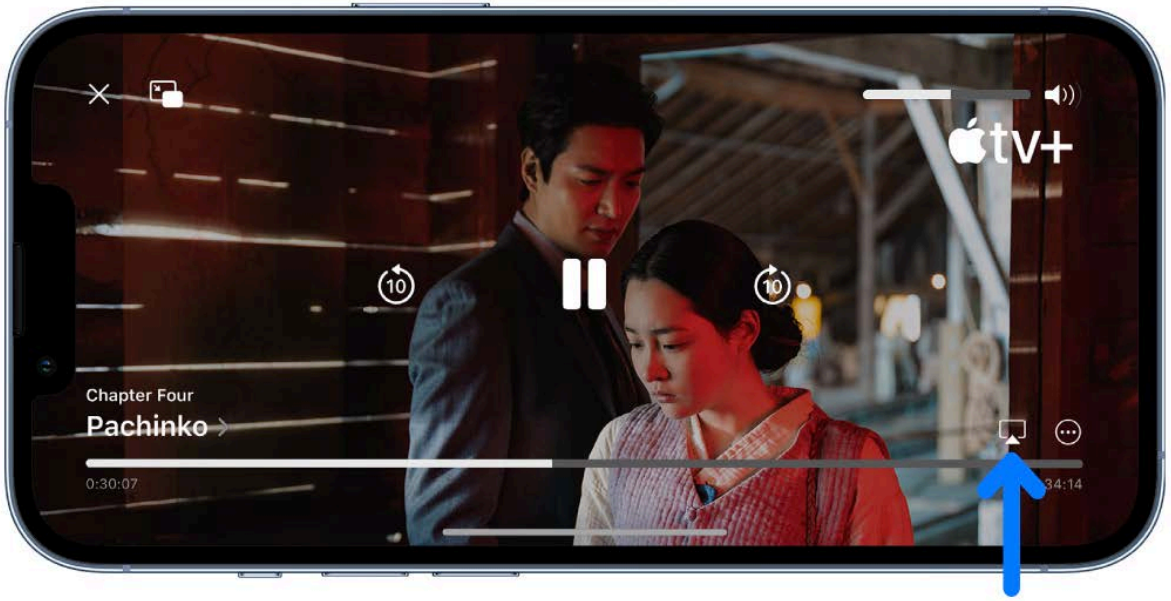
	Ref. 1, https://support.apple.com/en-us/HT204289 "Airplay-enabled apps will automatically scan your WiFi network for compatible devices. When an application detects that AirPlay is possible, the AirPlay icon will appear in the application display. Once you access the AirPlay menu, you can select individual devices you want to receive the streaming audio or video from that application." Ref. 9, https://electronics.howstuffworks.com/airplay.htm
selecting, based on a user interaction made with said mobile device and while said media data stream is streamed to said mobile device from said external source according to said streaming protocol, one of said plurality of devices;	An iOS mobile device (e.g., an iPhone or iPad) running AirPlay-enabled apps selects, based on a user interaction made with the mobile device and while the media data stream is streamed to the mobile device from the external source (e.g., Apple TV, Amazon Prime or Hulu) according to the streaming protocol, one of the plurality of devices. For example, after the user taps the AirPlay button, the user selects one of the plurality of compatible devices by tapping on one of the displayed compatible devices:



Ref. 3, https://www.apple.com/airplay/

The selection of a compatible device can be made while the media content is being streamed to the mobile device.

1. While playing video in the Apple TV app or another supported video app on your iPhone, tap the screen to show the controls.
2. Tap , then choose your Apple TV or AirPlay 2-enabled smart TV as the playback destination.



Ref. 5, https://support.apple.com/en-il/guide/iphone/iphd29858fd3/ios

"Airplay-enabled apps will automatically scan your WiFi network for compatible devices. When an application detects that AirPlay is possible, the AirPlay icon will appear in the application display. Once you access the AirPlay menu, you can select individual devices you want to receive the streaming audio or video from that application."

Ref. 9, https://electronics.howstuffworks.com/airplay.htm

"Control it all with a tap. Convenient built-in controls appear on your iPhone in apps, on the Lock Screen, and in Control Center — so you can easily play, pause, fast-forward, rewind, and adjust the volume on your TV."

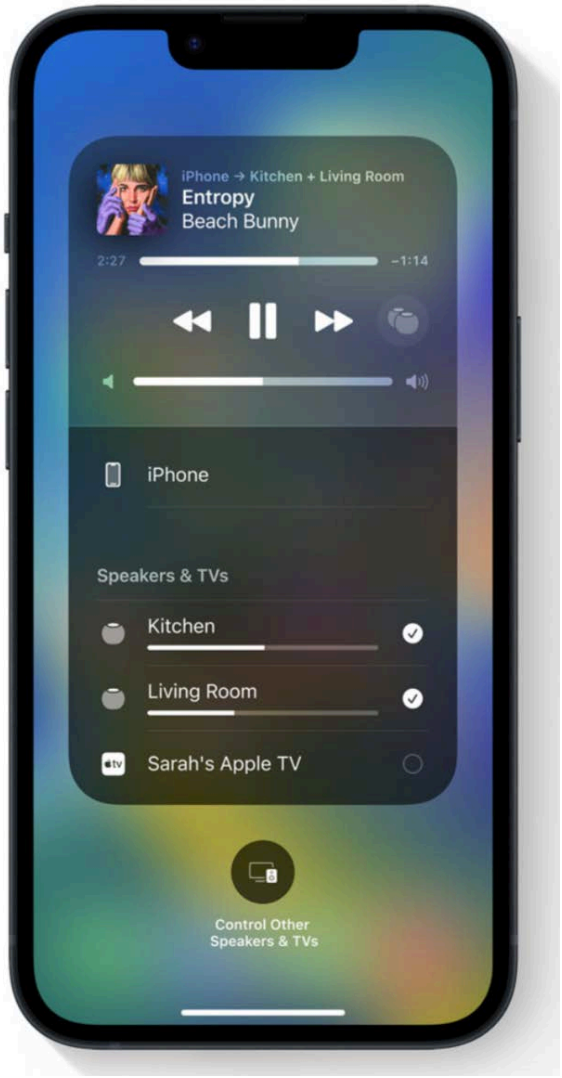
	 Ref. 3, https://www.apple.com/airplay/

setting up a wireless communication link with said selected compatible device via said local wireless communication network;	An iOS mobile device (e.g., an iPhone or iPad) running AirPlay-enabled apps sets up a wireless communication link with the selected device (for example, an Apple TV device) via the local wireless communication network. When the user taps the desired compatible device, the enabled app instructs a wireless communication link to be set up with the selected compatible device via the wireless communication network: "AirPlay and AirPlay 2 will work over any IP network connection, whether wired or wireless (Wi-Fi). The only rule is that all AirPlay devices must be on the same network." Ref. 8, https://www.digitaltrends.com/home-theater/apple-airplay-2-explained/ "Airplay uses an existing WiFi network to stream audio and/or video from a compatible iDevice to a single AirPlay-enabled audio or audio/video receiver, or from iTunes to multiple audio or audio/video receivers, with individual volume control capability on each of the multiple units." Ref. 10, https://support.klipsch.com/hc/en-us/articles/360025599672-What-is-the-difference-between-Airplay-and-Bluetooth- The AirPlay dialog allows users to connect to, control, and disconnect from AirPlay receivers, indicating that a wireless communication link is established between the AirPlay-enabled app on the sender device and the compatible receiving device.
causing a routing of said media data stream of media content to said selected device via said wireless communication link for streaming said media data steam according to said streaming protocol for presentation of said media content by a media player of said selected device.	An iOS mobile device (e.g., an iPhone or iPad) running AirPlay-enabled apps causes a routing of the media data stream of media content to the selected device via the wireless communication network for streaming the media data stream according to the streaming protocol for presentation of the media content by a media player of the selected device. "Tapping the AirPlay icon, which is part of media-playback controls, on the source device pops up a menu that allows you to choose a nearby destination device. After tapping that, the video, audio, or images will begin to play within a few seconds on the playback device." Ref. 11, https://appleinsider.com/inside/airplay

5. The method of claim 1, wherein said selecting comprises displaying a menu at said mobile device to allow a user to perform said user interaction.	An iOS mobile device (e.g., an iPhone or iPad) running AirPlay-enabled apps displays a menu on the mobile device that allows a user to select a compatible device for routing a media data stream. Ref. 1, https://support.apple.com/en-us/HT204289

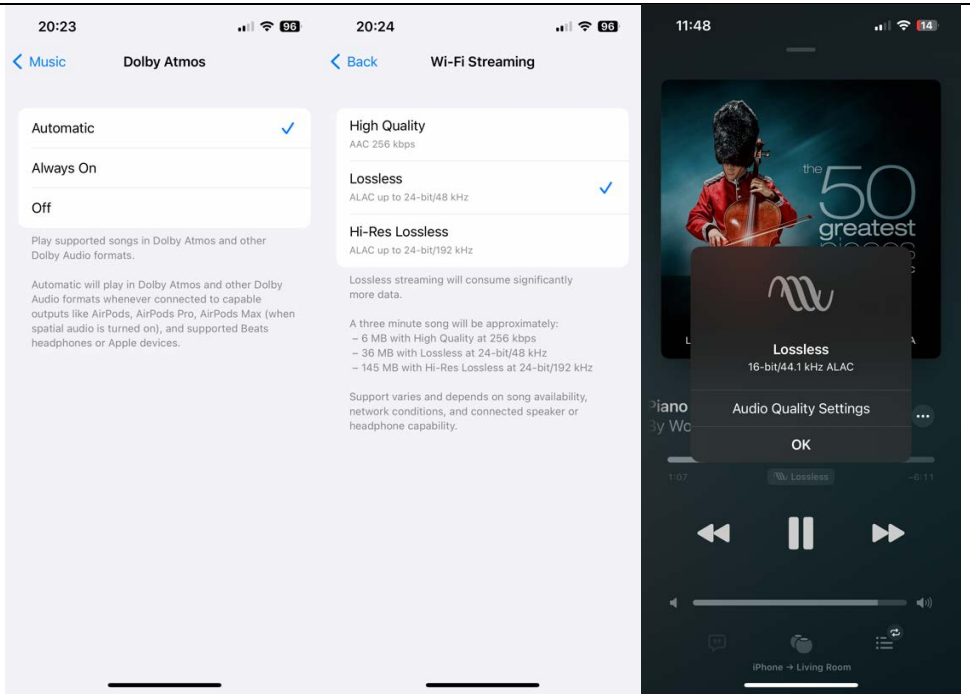
AirPlay
iPhone
Speakers & TVs
Living Room
Office
Bedroom
Kitchen
Show more...
Goodbye Earl
Ted Lasso
00:00
-39:21

7. The method of claim 1, further comprising transmitting said media content to a plurality of copies so as to perform said routing to a number of said plurality of devices.	Apple mobile devices running an AirPlay-enabled app satisfy the additional recitations of claim 7. The iOS devices involve a method of routing an audio stream to a plurality of receiving devices. For example, AirPlay can be used to route audio. AirPlay allows audio to be transmitted to a plurality of devices. “With AirPlay, you’re in control of your audio. And if you have more than one HomePod or AirPlay-enabled speaker, you can enjoy your favorite music or podcasts throughout your house — in perfect sync.” Ref. 3, https://www.apple.com/airplay/


iPhone → Kitchen + Living Room
Entropy
Beach Bunny
2:27
−1:14
iPhone
Speakers & TVs
Kitchen
Living Room
Sarah's Apple TV
Control Other
Speakers & TVs

8. The method of claim 1, wherein said setting up comprising transforming said media content into a form that accords with a media type requirement of said selected device.	Apple mobile devices such as iPhones are able to transform media content into a form that accords with a media type requirement of said selected device. For example, as evidenced below, an audio stream routed to compatible devices (e.g., Apple TV, Apple HomePod smart speaker and other Airplay-compatible speakers) via AirPlay can be transformed to a format compatible with the destination device. "…with regards to using AirPlay 2 to send lossless Apple Music streams. Apple Music's Lossless streams supposedly convert from ALAC (Apple's lossless codec) into AAC (Apple's lossy codec) at a pretty lowly 256kbps when transmitted over AirPlay – and therefore *not* losslessly." https://www.whathifi.com/advice/apple-airplay-2-everything-you-need-to-know When an Apple mobile apparatus (e.g., an iPhone) streams the audio to the compatible devices (e.g. Apple TV, Apple HomePod smart speaker and other Airplay-compatible speakers) via AirPlay it converts the audio format to AAC. As can be seen in the below iPhone screen capture, the iPhone further plays Dolby Atmos format on specific compatible speakers.

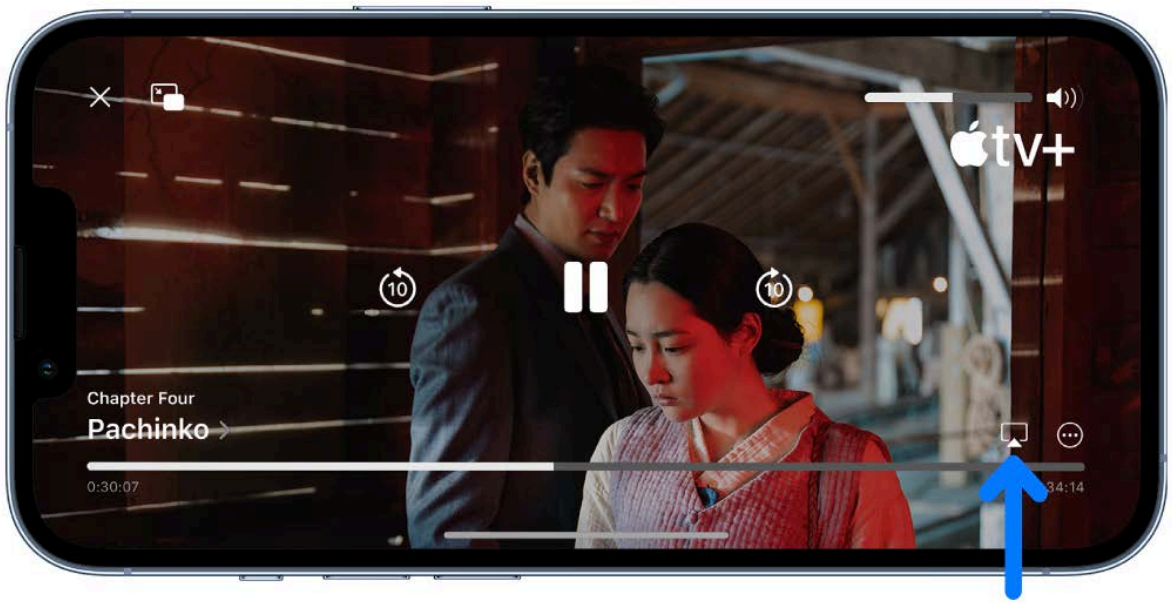
	11:38 support.apple.com **Turn on Dolby Atmos** 1. Go to Settings > Music > Dolby Atmos. 2. Choose Automatic or Always On. • *Automatic:* Plays Dolby Atmos whenever iPhone is connected to compatible headphones such as AirPods (3rd generation), AirPods Pro, or AirPods Max, or to speakers or receivers compatible with Dolby Atmos. • *Always On:* Plays Dolby Atmos on any headphones or speakers. The Music app will attempt to play Dolby Atmos tracks on any headphones or speakers connected to iPhone. Dolby Atmos will play on any headphones, but not all speakers will play Dolby Atmos as intended. **Control Spatial Audio and head tracking on iPhone** The following links provide documentation information on different formats supported by AirPlay: https://developer.apple.com/documentation/avfaudio/avaudioformat; https://developer.apple.com/documentation/avfoundation/streaming_and_airplay/supporting_airplay_in_your_app. The following iPhone screen shots show a user interface allowing a user to select media type for transforming the media data.

	
9. The method of claim 1, wherein said selecting comprises carrying out a selection between devices found to be available, based on a predetermined user profile.	Apple mobile devices running an AirPlay-enabled app satisfy the additional recitations of claim 9.

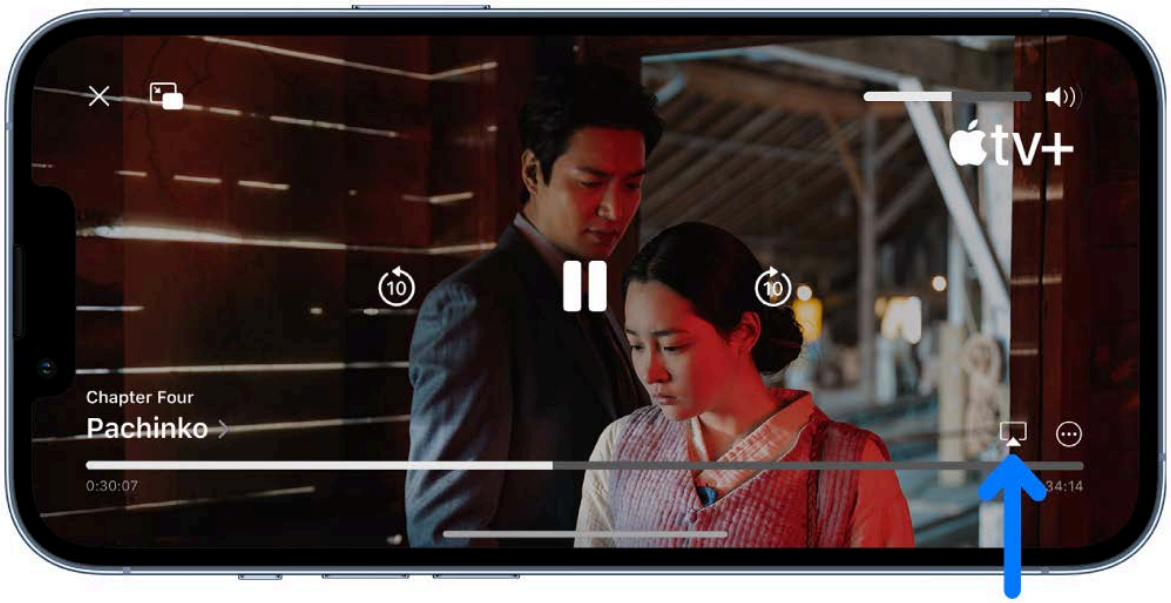
	An iOS mobile device (e.g., an iPhone or iPad) running AirPlay-enabled apps allows a user to name devices according to user preference (e.g., Living Room TV, Bedroom Apple TV in the screenshot below), thereby creating a predetermined user profile, which is then used in carrying out a selection between devices found to be available.

AirPlay
iPhone
Speakers & TVs
Living Room
Office
Bedroom
Kitchen
Show more...
Goodbye Earl
Ted Lasso
00:00
-39:21

	Ref. 1, https://support.apple.com/en-us/HT204289 The device can also stream the media to a device by automatic selection based on the user profile: "You change rooms. Your TV follows. Now AirPlay can automatically play movies and shows in the places you're most likely to watch them. Over time, AirPlay learns where you prefer to watch TV, and can start playing to the TV in that room with just a tap." Ref. 3, https://www.apple.com/airplay/
10. The method of claim 1, further comprising encrypting said media data stream of media content before routing to said selected device.	The use of an iOS mobile device (e.g., an iPhone or iPad) running AirPlay-enabled apps to stream media satisfies the additional recitations of claim 10. "AirPlay uses AES encryption to help ensure that content is protected when mirroring or streaming from an iPhone, iPad, or Mac to an Apple TV." Ref. 7, https://support.apple.com/en-il/guide/deployment/dep9151c4ace/web
13. The method of claim 1, wherein before said causing said media data stream is constantly received and presented by said mobile device while being delivered by said external source before said scanning is performed.	The use of an iOS mobile device (e.g., an iPhone or iPad) running AirPlay-enabled apps satisfies the additional recitations of claim 13. While playing video in the Apple TV app ( ) or another supported video app on your iPhone, the user can open the AirPlay menu to identify compatible devices for wireless media streaming. Thus, prior to the "causing a routing" step recited in claim 1, the media data stream is constantly received and presented by the mobile device while being delivered by the external source before the scanning is performed.

	1. While playing video in the Apple TV app or another supported video app on your iPhone, tap the screen to show the controls. 2. Tap , then choose your Apple TV or AirPlay 2-enabled smart TV as the playback destination.  Ref. 5, https://support.apple.com/en-il/guide/iphone/iphd29858fd3/ios
14. A mobile apparatus of routing media data stream, comprising:	A mobile apparatus (e.g., a smartphone or tablet) running AirPlay can route a media data stream (e.g., an Apple TV or Amazon Prime show or movie). On information and belief, various apps that come pre-installed (or can be installed later) on many Apple iPhones and tablets (iPads or iPod Touch) are streaming enabled, such as the Apple TV app ( ), Amazon Prime, Hulu and Roku.

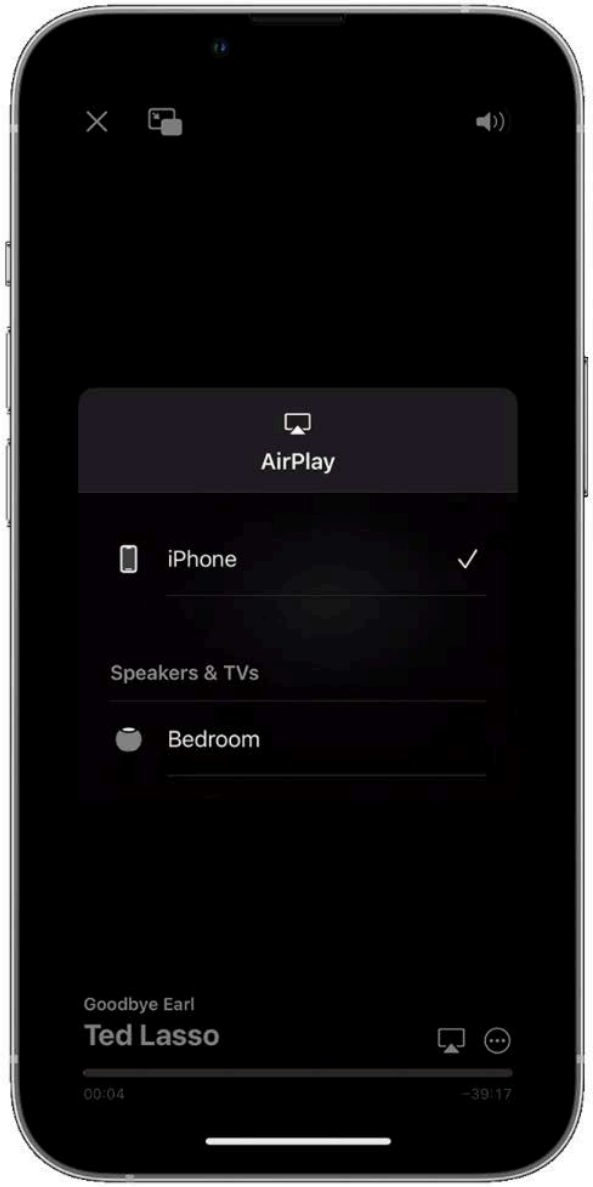
	"Use AirPlay to stream or share content from your Apple devices to your Apple TV, AirPlay-compatible smart TV, or Mac. Stream a video. Share your photos. Or mirror exactly what's on your device's screen" Ref. 1, https://support.apple.com/en-us/HT204289 Ref. 2, https://support.apple.com/kb/index?page=search&type=organic&src=support_searchbox_psp&locale=en_US&q=airplay "AirPlay lets you share videos, photos, music, and more from Apple devices to your Apple TV, favorite speakers, and popular smart TVs. And what you share always stays personal and private." Ref. 3, https://www.apple.com/airplay/ "Compatible devices include any iPhone, iPod touch, or iPad capable of running iOS 11.4 or later." Ref. 4, https://appleinsider.com/inside/airplay
a receiver wirelessly adapted to receive a media data stream transmitted according to a streaming protocol and comprising media content from an external source via a local wireless communication network, said media content is selected from a group consisting of; audio content and video content;	A smartphone or tablet (e.g., an iPhone or iPad) includes a receiver wirelessly adapted to receive a media data stream transmitted according to a streaming protocol and comprising media content (including audio content or video content) from an external source (e.g., Apple TV, Amazon Prime or Hulu) via a local wireless communication network (e.g., a wireless local area network). "While playing video in the Apple TV app ( ) or another supported video app on your iPhone, tap the screen to show the controls." Ref. 5, https://support.apple.com/en-il/guide/iphone/iphd29858fd3/ios

	1. While playing video in the Apple TV app or another supported video app on your iPhone, tap the screen to show the controls. 2. Tap , then choose your Apple TV or AirPlay 2-enabled smart TV as the playback destination. 
a scouting detector adapted to scan said local wireless communication network to identify a plurality of devices, identified as compatible to handle said media content, said plurality of devices are wirelessly connected to said	A mobile apparatus (e.g., a smartphone or tablet) running an AirPlay-enabled app includes a scouting detector that is adapted to scan the local wireless communication network to identify a plurality of devices identified as compatible to handle the media content and which are wirelessly connected to the local wireless communication network and wirelessly announce an availability for accepting a routed media via said local wireless communication network. For example, when a user of an AirPlay-enabled app taps the wireless media streaming button (the AirPlay logo), the mobile apparatus will scan the local wireless network to which the mobile

local wireless communication network and wirelessly announce an availability for accepting a routed media via said local wireless communication network;	apparatus is connected to identify compatible devices able to handle the media content (i.e., audio content or video content). **Stream video from your iPhone, iPad, or iPod touch to a TV** 1. Connect your device to the same Wi-Fi network as your Apple TV, AirPlay-compatible smart TV, or Mac. 2. Find the video that you want to stream. 3. Tap AirPlay. In some apps, you might need to tap a different button first.[1] For example, in the Photos app, tap Share, then tap AirPlay. 4. Choose your TV or Mac from the list. To stop streaming, tap AirPlay in the app that you're streaming from, then tap your iPhone or iPad from the list. Ref. 6, https://support.apple.com/kb/index?page=search&q=airplay&requestid=&product=&currentPage=1&locale=en_US&includeArchived=false&doctype=&supportAnswerIndex=0 The compatible devices are wirelessly connected to the local wireless communication network and wirelessly announce an availability for accepting routed media via the wireless communication network.

	For example, devices such as an Apple TV device, an AirPlay 2-enabled smart TV, or MAC supporting AirPlay are connected to the same local wireless communication network as the mobile apparatus running an AirPlay enabled app and are further set up to announce themselves as available to accept a media stream via the local wireless communication network. AirPlay is the Apple technology for streaming video or audio. A device running AirPlay can discover Apple TV using Bonjour discovery by using multicast traffic to advertise the availability of services. Because multicast traffic is usually not routed across subnets, it requires Apple TV devices to be on the same IP subnet as the iPhone and iPad devices that use them. For small networks, this approach is the norm. Ref. 7, https://support.apple.com/en-il/guide/deployment/dep9151c4ace/web This enables an AirPlay-enabled app to discover compatible devices as shown in the following series of screenshots.

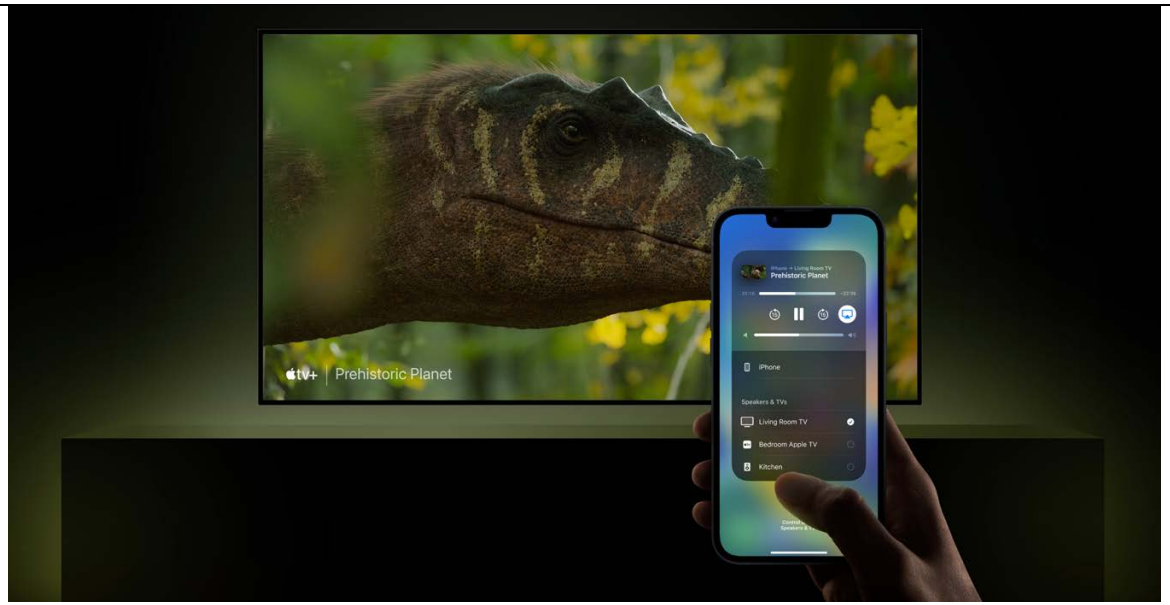
	9:41 10 10 Goodbye Earl Ted Lasso 00:00 -39:21


AirPlay
iPhone
Speakers & TVs
Bedroom
Goodbye Earl
Ted Lasso
00:04
-39:17

AirPlay
iPhone
Speakers & TVs
Living Room
Office
Bedroom
Kitchen
Show more...
Goodbye Earl
Ted Lasso
00:00
-39:21

AirPlay to Living Room
"TV" will play on this TV automatically.
10
10
AirPlay
This video is playing on "Living Room"
Goodbye Earl
Ted Lasso
00:00
-39:21

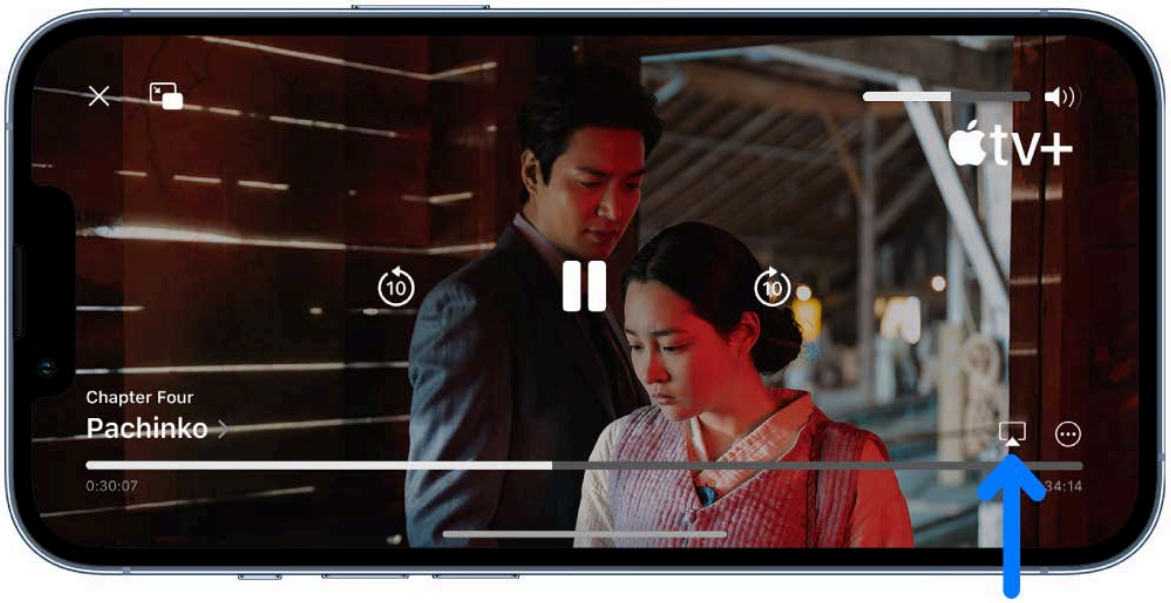
	Ref. 1, https://support.apple.com/en-us/HT204289 "Airplay-enabled apps will automatically scan your WiFi network for compatible devices. When an application detects that AirPlay is possible, the AirPlay icon will appear in the application display. Once you access the AirPlay menu, you can select individual devices you want to receive the streaming audio or video from that application." Ref. 9, https://electronics.howstuffworks.com/airplay.htm
a controller adapted to select, based on a user interaction made with said mobile apparatus, one of said plurality of devices and to instruct a setting up of a wireless communication link with said selected device via said local wireless communication network;	A mobile apparatus running AirPlay-enabled apps includes a controller adapted to select, based on a user interaction made with the mobile apparatus, one of the plurality of devices and to instruct a setting up of a wireless communication link with the selected device via the local wireless communication network. For example, after the user taps the AirPlay button, the user selects one of the plurality of compatible devices by tapping on one of the displayed compatible devices:



Ref. 3, https://www.apple.com/airplay/

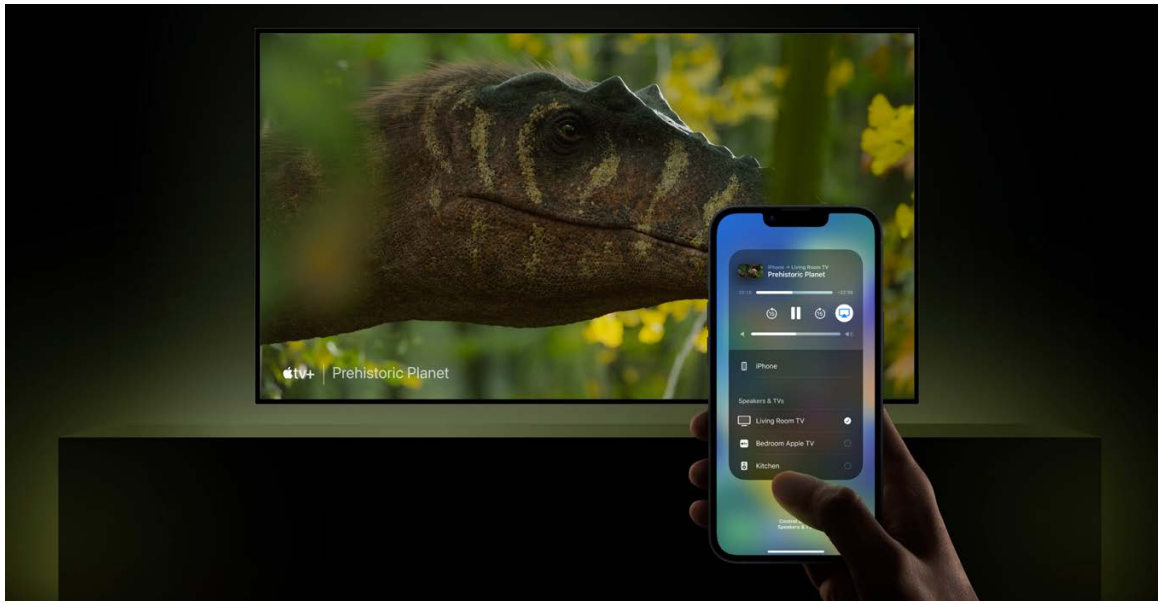
The selection of a compatible device can be made while the media content is being streamed to the mobile device.

1. While playing video in the Apple TV app or another supported video app on your iPhone, tap the screen to show the controls.
2. Tap , then choose your Apple TV or AirPlay 2-enabled smart TV as the playback destination.

	 Ref. 5, https://support.apple.com/en-il/guide/iphone/iphd29858fd3/ios “Airplay-enabled apps will automatically scan your WiFi network for compatible devices. When an application detects that AirPlay is possible, the AirPlay icon will appear in the application display. Once you access the AirPlay menu, you can select individual devices you want to receive the streaming audio or video from that application.” Ref. 9, https://electronics.howstuffworks.com/airplay.htm “Control it all with a tap. Convenient built-in controls appear on your iPhone in apps, on the Lock Screen, and in Control Center — so you can easily play, pause, fast-forward, rewind, and adjust the volume on your TV.”

	 Ref. 3, https://www.apple.com/airplay/

wherein said controller is adapted to instruct the routing of said media data stream of media content to said selected device via said wireless communication link for streaming said media data stream according to said streaming protocol for presentation of said media content by a media player of said selected device.	A mobile apparatus (such as an iPhone or iPad) running an AirPlay-enabled app is adapted to instruct the routing of the media data stream of media content to the selected device via the wireless communication link for streaming the media data stream according to the streaming protocol for presentation of the media content by a media player of the selected device. "Tapping the AirPlay icon, which is part of media-playback controls, on the source device pops up a menu that allows you to choose a nearby destination device. After tapping that, the video, audio, or images will begin to play within a few seconds on the playback device." Ref. 11, https://appleinsider.com/inside/airplay "AirPlay and AirPlay 2 will work over any IP network connection, whether wired or wireless (Wi-Fi). The only rule is that all AirPlay devices must be on the same network." Ref. 8, https://www.digitaltrends.com/home-theater/apple-airplay-2-explained/ "Airplay uses an existing WiFi network to stream audio and/or video from a compatible iDevice to a single AirPlay-enabled audio or audio/video receiver, or from iTunes to multiple audio or audio/video receivers, with individual volume control capability on each of the multiple units." Ref. 10, https://support.klipsch.com/hc/en-us/articles/360025599672-What-is-the-difference-between-Airplay-and-Bluetooth-
15. The mobile apparatus of claim 14, wherein said mobile apparatus is one of a cell phone, a handheld device, and a personal digital assistant.	Various Apple mobile devices running a streaming enabled app satisfy the additional recitations of claim 15. "Compatible devices include any iPhone, iPod touch, or iPad capable of running iOS 11.4 or later." Ref. 4, https://appleinsider.com/inside/airplay "And just like that, it's on TV. Simply tap the AirPlay icon on your Apple device and share almost anything — the latest movies, home videos, vacation photos, presentations — to your Apple TV or AirPlay-enabled smart TV."

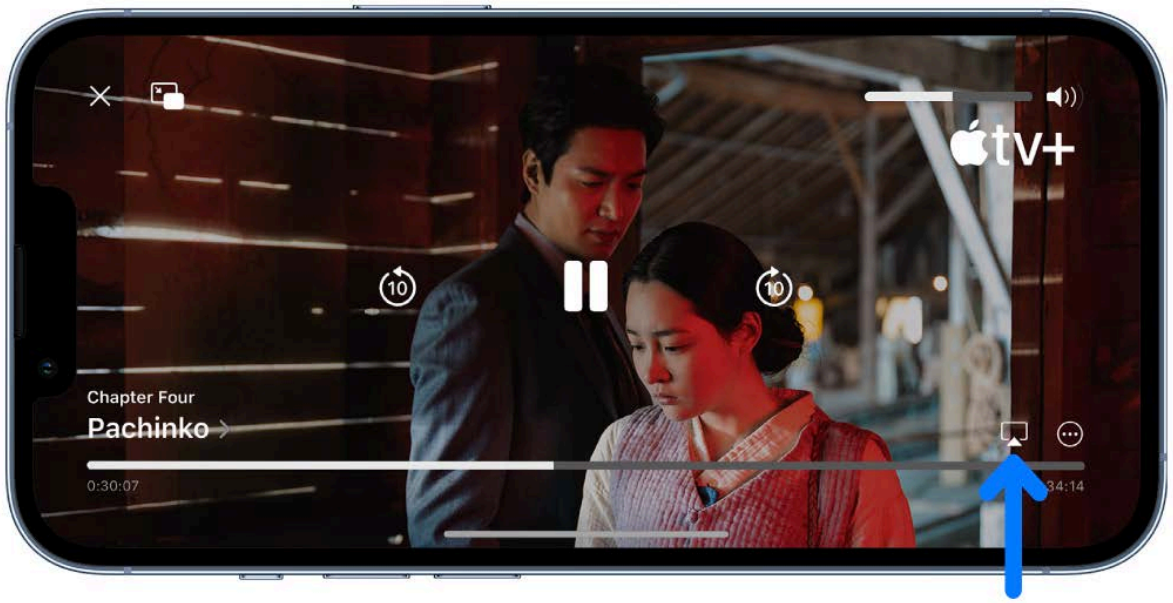
	"Control it all with a tap. Convenient built-in controls appear on your iPhone in apps, on the Lock Screen, and in Control Center — so you can easily play, pause, fast-forward, rewind, and adjust the volume on your TV." Ref. 3, https://www.apple.com/airplay/
16. The mobile apparatus of claim 14, further comprising a user interface associated with said scouting detector for allowing a user to select between available compatible media handling devices to reroute said media data stream thereto.	An Apple mobile device running an AirPlay-enabled app satisfies the additional recitations of claim 16. For example, after the user taps the AirPlay button, the user selects one of the plurality of compatible devices by tapping on one of the displayed compatible devices:  Ref. 3, https://www.apple.com/airplay/ "Airplay-enabled apps will automatically scan your WiFi network for compatible devices. When an application detects that AirPlay is possible, the AirPlay icon will appear in the application display.

	Once you access the AirPlay menu, you can select individual devices you want to receive the streaming audio or video from that application." Ref. 9, https://electronics.howstuffworks.com/airplay.htm "Control it all with a tap. Convenient built-in controls appear on your iPhone in apps, on the Lock Screen, and in Control Center — so you can easily play, pause, fast-forward, rewind, and adjust the volume on your TV."

	 Ref. 3, https://www.apple.com/airplay/

18. The mobile apparatus of claim 14, wherein said controller further comprising control functionality operable to carry out said rerouting through locally available infrastructure.	An Apple mobile apparatus includes a controller comprising control functionality operable to carry out said rerouting through locally available infrastructure. When the user taps the desired compatible device, the enabled app instructs a wireless communication link to be set up with the selected compatible device via the wireless communication network: "AirPlay and AirPlay 2 will work over any IP network connection, whether wired or wireless (Wi-Fi). The only rule is that all AirPlay devices must be on the same network." Ref. 8, https://www.digitaltrends.com/home-theater/apple-airplay-2-explained/
19. The mobile apparatus of claim 14, wherein said media content is one of voice data, bidirectional voice data, bidirectional audio data, bidirectional video data, a game session, an interactive game session, a television broadcast, and a radio broadcast.	An Apple mobile apparatus (e.g., a smartphone or tablet) running an AirPlay-enabled app can be used to route, for example, a radio broadcast. "You can use AirPlay to: Play music, podcasts, and radio stations on multiple AirPlay 2–enabled devices (such as HomePod or other speakers) in rooms throughout your house." Ref. 12, https://support.apple.com/guide/tv/stream-audio-and-video-with-airplay-atvbf2be9ef7/tvos
22. A computer program product for routing media data stream, said computer program product comprising: a non-transitory computer readable storage medium having stored thereon:	A mobile apparatus (e.g., an iPhone or iPad) running an AirPlay-enabled app includes a computer program product for routing a media data stream and includes a non-transitory computer readable storage medium. On information and belief, various AirPlay-enabled apps come pre-installed on many Apple devices, such as the Apple TV app ( ), Amazon Prime, Hulu and Roku. "Use AirPlay to stream or share content from your Apple devices to your Apple TV, AirPlay-compatible smart TV, or Mac." Ref. 1, https://support.apple.com/en-us/HT204289

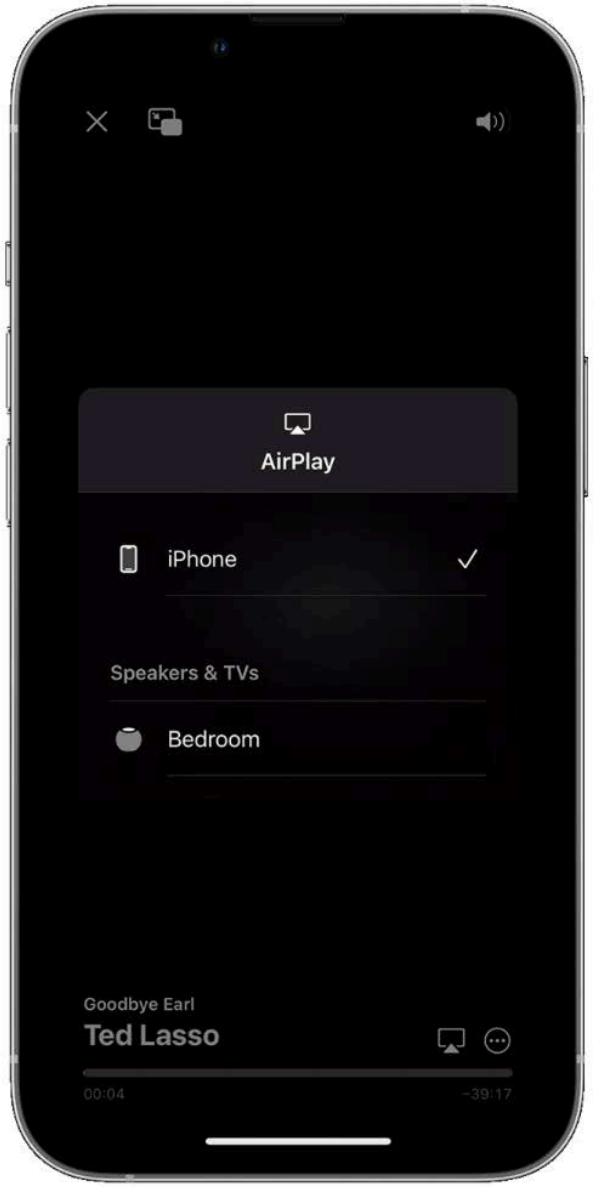
	Ref. 2, https://support.apple.com/kb/index?page=search&type=organic&src=support_searchbox_psp&locale=en_US&q=airplay "AirPlay lets you share videos, photos, music, and more from Apple devices to your Apple TV, favorite speakers, and popular smart TVs. And what you share always stays personal and private." Ref. 3, https://www.apple.com/airplay/ "Compatible devices include any iPhone, iPod touch, or iPad capable of running iOS 11.4 or later." Ref. 4, https://appleinsider.com/inside/airplay
first program instructions executable by a processor to wirelessly receive at a mobile device, from an external source via a local wireless communication network, a media data stream transmitted according to a streaming protocol and comprising media content selected from a group consisted of: audio content and video content;	A smartphone or tablet includes first program instructions executable by a processor to wirelessly receive at a mobile device, from an external source (e.g., Apple TV, Amazon Prime or Hulu) via a local wireless communication network (e.g., a wireless local area network), a media data stream transmitted according to a streaming protocol and comprising media content selected from a group consisted of: audio content and video content. AirPlay-enabled apps running on smartphones or tablets allow users to receive streaming audio or video: "While playing video in the Apple TV app ( ) or another supported video app on your iPhone, tap the screen to show the controls." Ref. 5, https://support.apple.com/en-il/guide/iphone/iphd29858fd3/ios

	
second program instructions executable by the processor to scan said local wireless communication network using said mobile device to identify a plurality of devices, identified as compatible to handle said media content, said plurality of devices are wirelessly connected to said local wireless communication network and wirelessly announce an availability for accepting a routed media via	An Apple mobile apparatus running an AirPlay-enabled app includes second program instructions executable by the processor to scan said local wireless communication network to identify a plurality of devices, identified as compatible to handle said media content, said plurality of devices are wirelessly connected to said local wireless communication network and wirelessly announce an availability for accepting a routed media via said local wireless communication network. For example, when a user of an AirPlay-enabled app taps the wireless media streaming button (the AirPlay logo), the Apple mobile apparatus will scan the local wireless network to which the mobile apparatus is connected to identify compatible devices able to handle the media content (i.e., audio content or video content).

said local wireless communication network;	**Stream video from your iPhone, iPad, or iPod touch to a TV** 1. Connect your device to the same Wi-Fi network as your Apple TV, AirPlay-compatible smart TV, or Mac. 2. Find the video that you want to stream. 3. Tap AirPlay. In some apps, you might need to tap a different button first.[1] For example, in the Photos app, tap Share, then tap AirPlay. 4. Choose your TV or Mac from the list. To stop streaming, tap AirPlay in the app that you're streaming from, then tap your iPhone or iPad from the list. Ref. 6, https://support.apple.com/kb/index?page=search&q=airplay&requestid=&product=&currentPage=1&locale=en_US&includeArchived=false&doctype=&supportAnswerIndex=0 The compatible devices are wirelessly connected to the local wireless communication network and wirelessly announce an availability for accepting routed media via the wireless communication network. For example, devices such as an Apple TV device, an AirPlay 2-enabled smart TV, or MAC supporting AirPlay are connected to the same local wireless communication network as the mobile apparatus running an AirPlay-enabled app and are further set up to announce themselves as available to accept a media stream via the local wireless communication network.

	AirPlay is the Apple technology for streaming video or audio. A device running AirPlay can discover Apple TV using Bonjour discovery by using multicast traffic to advertise the availability of services. Because multicast traffic is usually not routed across subnets, it requires Apple TV devices to be on the same IP subnet as the iPhone and iPad devices that use them. For small networks, this approach is the norm. Ref. 7, https://support.apple.com/en-il/guide/deployment/dep9151c4ace/web This enables an AirPlay-enabled app to discover compatible devices as shown in the following series of screenshots.

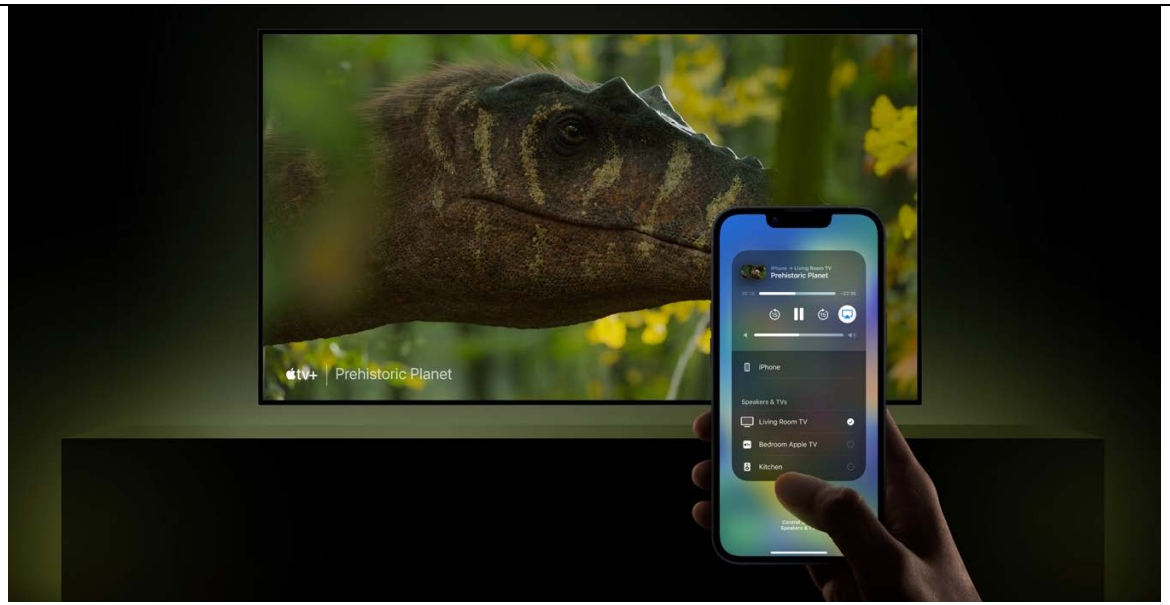
9:41
10
10
Goodbye Earl
Ted Lasso
00:00
-39:21


AirPlay
iPhone
Speakers & TVs
Bedroom
Goodbye Earl
Ted Lasso
00:04
-39:17

AirPlay
iPhone
Speakers & TVs
Living Room
Office
Bedroom
Kitchen
Show more...
Goodbye Earl
Ted Lasso
00:00
-39:21

AirPlay to Living Room
"TV" will play on this TV automatically.
10
10
AirPlay
This video is playing on "Living Room"
Goodbye Earl
Ted Lasso
00:00
-39:21

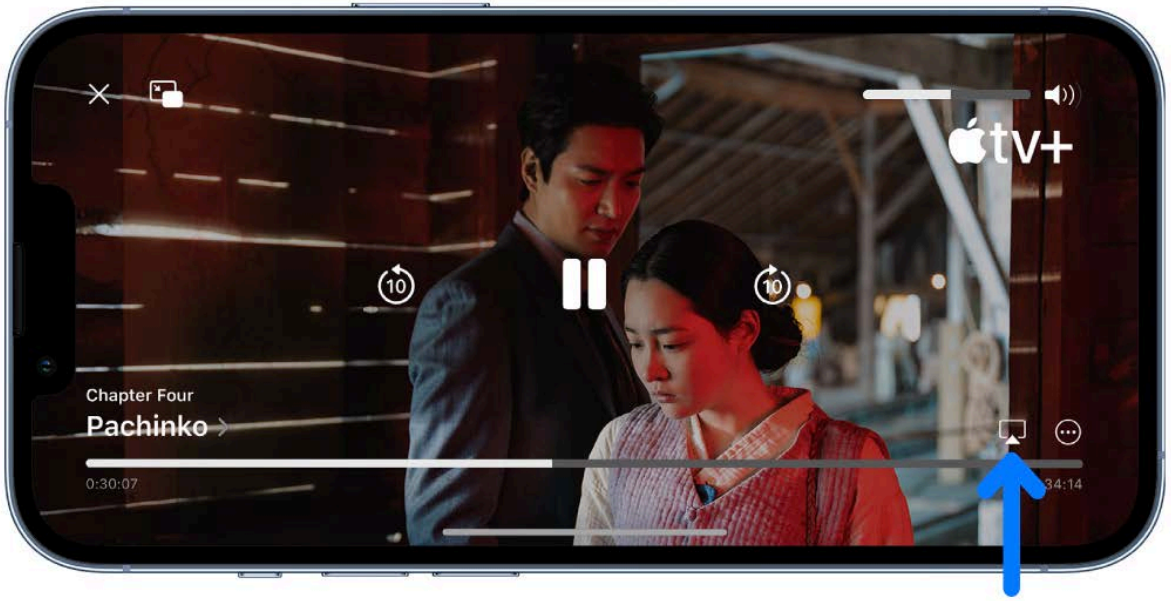
	Ref. 1, https://support.apple.com/en-us/HT204289 "Airplay-enabled apps will automatically scan your WiFi network for compatible devices. When an application detects that AirPlay is possible, the AirPlay icon will appear in the application display. Once you access the AirPlay menu, you can select individual devices you want to receive the streaming audio or video from that application." Ref. 9, https://electronics.howstuffworks.com/airplay.htm
third program instructions executable by the processor to select, based on a user interaction made with said mobile device and while said media data stream is streamed to said mobile device from said external source according to said streaming protocol, one of said plurality of devices;	An Apple mobile apparatus running an AirPlay-enabled app includes third program instructions executable by the processor to select, based on a user interaction made with said mobile device and while said media data stream is streamed to said mobile device from said external source (e.g., Apple TV, Amazon Prime or Hulu) according to said streaming protocol, one of said plurality of devices. For example, after the user taps the AirPlay button, the user selects one of the plurality of compatible devices by tapping on one of the displayed compatible devices:



Ref. 3, https://www.apple.com/airplay/

The selection of a compatible device can be made while the media content is being streamed to the mobile device.

1. While playing video in the Apple TV app or another supported video app on your iPhone, tap the screen to show the controls.
2. Tap , then choose your Apple TV or AirPlay 2-enabled smart TV as the playback destination.



Ref. 5, https://support.apple.com/en-il/guide/iphone/iphd29858fd3/ios

"Airplay-enabled apps will automatically scan your WiFi network for compatible devices. When an application detects that AirPlay is possible, the AirPlay icon will appear in the application display. Once you access the AirPlay menu, you can select individual devices you want to receive the streaming audio or video from that application."

Ref. 9, https://electronics.howstuffworks.com/airplay.htm

"Control it all with a tap. Convenient built-in controls appear on your iPhone in apps, on the Lock Screen, and in Control Center — so you can easily play, pause, fast-forward, rewind, and adjust the volume on your TV."

	 Ref. 3, https://www.apple.com/airplay/

fourth program instructions executable by the processor to set up a wireless communication link with said selected device via said local wireless communication network; and	An Apple mobile apparatus running an AirPlay-enabled app includes fourth program instructions executable by the processor to set up a wireless communication link with said selected device via said local wireless communication network. For example, when the user taps the desired compatible device, the enabled app instructs a wireless communication link to be set up with the selected compatible device via the wireless communication network: "AirPlay and AirPlay 2 will work over any IP network connection, whether wired or wireless (Wi-Fi). The only rule is that all AirPlay devices must be on the same network." Ref. 8, https://www.digitaltrends.com/home-theater/apple-airplay-2-explained/ "Airplay uses an existing WiFi network to stream audio and/or video from a compatible iDevice to a single AirPlay-enabled audio or audio/video receiver, or from iTunes to multiple audio or audio/video receivers, with individual volume control capability on each of the multiple units." Ref. 10, https://support.klipsch.com/hc/en-us/articles/360025599672-What-is-the-difference-between-Airplay-and-Bluetooth- The AirPlay dialog allows users to connect to, control, and disconnect from AirPlay receivers, indicating that a wireless communication link is established between the AirPlay-enabled app on the sender device and the compatible receiving device.
fifth program instructions executable by the processor to cause a routing of said media data stream of media content to said selected device via said wireless communication link streaming said data stream of media content according to said streaming protocol for presentation of said media content by a media player of said selected device.	An Apple mobile apparatus running an AirPlay-enabled app includes fifth program instructions executable by the processor to cause a routing of said media data stream of media content to said selected device via said wireless communication link streaming said data stream of media content according to said streaming protocol for presentation of said media content by a media player of said selected device. "Tapping the AirPlay icon, which is part of media-playback controls, on the source device pops up a menu that allows you to choose a nearby destination device. After tapping that, the video, audio, or images will begin to play within a few seconds on the playback device." Ref. 11, https://appleinsider.com/inside/airplay

EXHIBIT A

U.S. Patent No. 10,547,648 Claim language	Evidence
1. A method of informing a device about an availability of media content at a mobile device connected to a local area network (LAN), comprising: using the mobile device for:	Various Apple smartphones (e.g., iPhones) utilize a method of informing a device about an availability of media content at a mobile device connected to a local area network (LAN). For example, an iPhone running iOS (as of September 2022, new Apple Watches come with WatchOS 9 preinstalled and require an iPhone running iOS 16, which is available for the iPhone 8 and later, while the Apple Watch 3 released in Sep 2017 required iPhone 6 and iOS 11 or newer) is adapted to inform an Apple Watch about an availability of media content. Ref. 1, https://support.apple.com/en-au/HT204505 Ref. 2, https://en.wikipedia.org/wiki/Apple_Watch Such smartphones are referred to herein as "Smartwatch-Compatible Apple smartphones." • If Bluetooth isn't available, your Apple Watch will try to use Wi-Fi. For example, if compatible Wi-Fi is available and your iPhone isn't in Bluetooth range, your Apple Watch uses Wi-Fi. **Connect to a compatible Wi-Fi network** Your Apple Watch can connect to a Wi-Fi network: • If your iPhone, while connected to your watch with Bluetooth, has connected to the network before. • If the Wi-Fi network is 802.11b/g/n 2.4GHz (or 5 GHz if you have Apple Watch Series 6). When your Apple Watch connects to a compatible Wi-Fi network instead of your iPhone connection, the Wi-Fi icon appears in Control Center.

	Ref. 3, https://support.apple.com/en-us/HT204562 The screenshots below show a device, an Apple Watch, connected to the LAN, being informed about an availability of media content, voice messages and a WhatsApp audio message at a Smartwatch-Compatible Apple smartphone.

	 The screenshot below shows a device, an Apple Watch, connected to the LAN, being informed about an availability of media content, a video message, at a Smartwatch-Compatible Apple smartphone.

	The Apple Watch vibration notification was mentioned by PC Magazine as the main reason to buy it (Ref. 4, https://www.pcmag.com/article2/0,2817,2468276,00.asp).
identifying one or more available devices compatible to handle the media content and connected to the LAN;	Smartwatch-Compatible Apple smartphones are adapted to identify one or more available devices compatible to handle the media content and connected to the LAN. As can be seen on page 90 of "Apple Watch User Guide WatchOS 9.4," (https://help.apple.com/pdf/watch/9/en_US/apple-watch-user-guide-watchos9.pdf), once the watch is connected to the WiFi, it can receive media content: "By connecting your Apple Watch to a Wi-Fi network, you can continue to use many of its features, even when you don't have your iPhone with you." "Your iPhone detects the paired Apple Watch you're wearing and automatically connects to it." Ref. 5, https://support.apple.com/en-eg/guide/watch/apdde4d6f98e/watchos **Connect to a compatible Wi-Fi network** Your Apple Watch can connect to a Wi-Fi network: • If your iPhone, while connected to your watch with Bluetooth, has connected to the network before. • If the Wi-Fi network is 802.11b/g/n 2.4GHz (or 5 GHz if you have Apple Watch Series 6). When your Apple Watch connects to a compatible Wi-Fi network instead of your iPhone connection, the Wi-Fi icon appears in Control Center. Ref. 3, https://support.apple.com/en-us/HT204562 And, for example, you can remotely connect the Apple Watch to your Mobile Device via the Wi-Fi network: "When your iPhone is off or out of range, your Apple Watch can use a Wi-Fi network to send and receive data" Ref. 6, https://support.apple.com/en-il/HT205547

	• If Bluetooth isn't available, your Apple Watch will try to use Wi-Fi. For example, if compatible Wi-Fi is available and your iPhone isn't in Bluetooth range, your Apple Watch uses Wi-Fi. See Ref. 3, https://support.apple.com/en-us/HT204562 Your watch will automatically connect to Wi-Fi networks that your phone has used before. **Connect to a compatible Wi-Fi network** Your Apple Watch can connect to a Wi-Fi network: • If your iPhone, while connected to your watch with Bluetooth, has connected to the network before. • If the Wi-Fi network is 802.11b/g/n 2.4GHz (or 5 GHz if you have Apple Watch Series 6). When your Apple Watch connects to a compatible Wi-Fi network instead of your iPhone connection, the Wi-Fi icon appears in Control Center. Ref. 3, https://support.apple.com/en-us/HT204562 Testing has demonstrated that once an Apple Watch has been paired with a Smartwatch-Compatible Apple smartphone, the Watch and smartphone will thereafter continue to pair via Wi-Fi when Bluetooth is disabled and, as discussed below, receive notifications regarding available media content, as can be seen in the screenshot below. "If your Apple Watch is connected to Wi-Fi or cellular" "With a Wi-Fi or cellular connection, your Apple Watch can do the following things, even if your iPhone isn't with you." Ref. 6, https://support.apple.com/en-il/HT205547

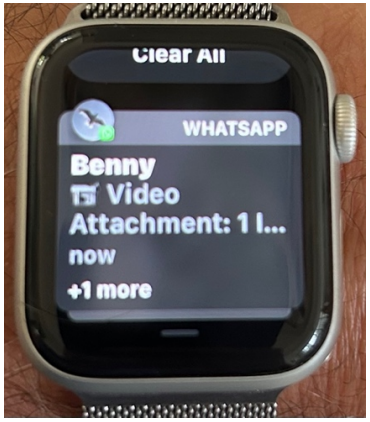
	  "Quickly switch to a different Apple Watch" "Your iPhone detects the paired Apple Watch you're wearing and automatically connects to it. Just put on a different Apple Watch and raise your wrist." Ref. 5, https://support.apple.com/en-eg/guide/watch/apdde4d6f98e/watchos This demonstrates that Smartwatch-Compatible Apple smartphones include a controller adapted to identify an Apple Watch compatible to handle the media content when connected to a local area network.
wirelessly communicating information to an intermediate routing device connected to the LAN for indirectly routing messages or media content to at least one of the one or more available devices via said intermediate routing device; and	Smartwatch-Compatible Apple smartphones wirelessly communicate information to an intermediate routing device connected to the LAN for indirectly routing messages or media content to at least one of the one or more available devices via said intermediate routing device: "Your Apple Watch uses Wi-Fi and Bluetooth to communicate with your paired iPhone." "If Bluetooth isn't available, your Apple Watch will try to use Wi-Fi. For example, if compatible Wi-Fi is available and your iPhone isn't in Bluetooth range, your Apple Watch uses Wi-Fi."

	Ref. 3, https://support.apple.com/en-us/HT204562 Testing has demonstrated that while both the iPhone and the Apple Watch were connected to the LAN (via Wi-Fi), messages and media content including incoming phone calls were indirectly routed to the watch by the intermediate routing device (see following screenshots).

wirelessly signaling the one or more available devices indicating an availability of a media content at the mobile device;	Smartwatch-Compatible Apple smartphones are adapted to wirelessly signal the one or more available devices indicating an availability of the media content at the mobile device. "See and respond to notifications on Apple Watch: Apps can send notifications to keep you informed—meeting invitations, messages, noise alerts, and Activity reminders are just a few examples. Your Apple Watch can display notifications as they arrive, but if you don't read one right away, it's saved so you can check it later." Ref. 5, https://support.apple.com/en-eg/guide/watch/apdde4d6f98e/watchos,page 81. "If your Apple Watch is connected to Wi-Fi or cellular" "With a Wi-Fi or cellular connection, your Apple Watch can do the following things, even if your iPhone isn't with you: make and answer phone calls, send and receive messages…" etc. Ref. 6, https://support.apple.com/en-il/HT205547 For example, as shown in the screenshot below, an Apple smartphone has wirelessly signaled to an Apple Watch to indicate the availability of a voice message at the smartphone.

	In the following screenshot, an Apple smartphone has wirelessly signaled to an Apple Watch to indicate the availability of an incoming call at the smartphone.
wherein the media content is originated from an external source disconnected from the LAN;	The media content available at the Smartwatch-Compatible Apple smartphone includes media content originated from an external source disconnected from the LAN. For example, as shown in the screenshots below, the media content can include a voice message originating from a source that is not connected to the LAN.

wherein the media content selected from a group consisting of: audio content and video content.	Smartwatch-Compatible Apple smartphones inform a device about an availability of media content selected from a group consisting of: audio and video content. The following screenshots show audio media content:

	The following screenshot shows video media content:  The many types of media content that Smartwatch-Compatible Apple smartphones are adapted to wirelessly receive include phone call data. Dependent claim 18 identifies phone call data as an example of media content. The following screenshot shows phone call media content:

5. The method of claim 1, wherein the media content is a phone call; further comprising routing the phone call to the one or more available devices in response to a receipt of a response to the signaling received from the one or more device.	Smartwatch-Compatible Apple smartphones satisfy the additional recitations of claim 5. The media content that Smartwatch-Compatible Apple smartphones can route to an Apple Watch via a LAN include phone calls. "Answer a call[:] When you hear or feel the call notification, raise your wrist to see who's calling. • *Send a call to voicemail:* Tap the red Decline button in the incoming call notification. • *Answer on your Apple Watch:* Tap the Answer button to talk using the built-in microphone and speaker or a Bluetooth device paired with your Apple Watch. Ref. 5, https://support.apple.com/en-il/guide/watch/apd32b6c5658/watchos "On Apple Watch, calls are routed through the iPhone…" Ref. 9, https://www.macrumors.com/how-to/apple-watch-phone-calls/ The following screenshot shows an incoming phone call being signaled on an Apple Watch.

	The following screenshot shows that the call was taken on the device (Apple Watch) after the Watch responded to the signal (based on the green button being pressed). "On Apple Watch, calls are routed through the iPhone…" Ref. 9, https://www.macrumors.com/how-to/apple-watch-phone-calls/
6. The method of claim 1, wherein the media content is a phone call; further comprising routing the phone call to the one or more available devices while the phone call is ongoing using the mobile device.	Smartwatch-Compatible Apple smartphones satisfy the additional recitations of claim 6. The following screenshot shows a call that was answered on the mobile device (iPhone) and that the call can be routed to the one or more devices (Apple Watch) while the call is ongoing.

	 "you can also switch an in-progress call from your iPhone to your Apple Watch and from your Apple Watch back to your iPhone." Ref. 10, https://www.idownloadblog.com/2018/01/12/how-to-switch-phone-facetime-calls-iphone-apple-watch/
7. The method of claim 1, wherein the one or more available devices is triggered by the signaling to perform one or more of the following: flash light, ring, and play a loudspeaker sound.	The use of Smartwatch-Compatible Apple smartphones with an Apple Watch satisfies the additional recitations of claim 7. A Smartwatch-Compatible Apple phone can trigger a smartwatch to ring, make a light, play a sound (haptic), etc. "The Apple Watch informs users of incoming calls or messages via sounds, as well as vibrations or Haptic Alerts" Ref. 12, https://screenrant.com/haptic-alerts-apple-watch-should-you-use/

	"Answer a call: When you hear or feel the call notification, raise your wrist to see who's calling." Ref. 5, https://support.apple.com/en-il/guide/watch/apd32b6c5658/watchos "If your Apple Watch is dim and not active, full-screen notifications appear." Ref. 13, https://support.apple.com/en-il/HT204791
8. The method of claim 1, further comprising setting up a wireless communication link between the at least one of the one or more available devices based on a user interaction made with the mobile device or the one or more available devices and causing a routing of the media content to the at least one device via the wireless communication link.	Smartwatch-Compatible Apple smartphones satisfy the additional recitations of claim 8. "Your Apple Watch uses Wi-Fi and Bluetooth to communicate with your paired iPhone. If compatible Wi-Fi is available and your iPhone isn't in Bluetooth range, your Apple Watch uses Wi-Fi." Ref. 3, https://support.apple.com/en-us/HT204562 By syncing Wi-Fi profiles from your phone, your watch will automatically connect to Wi-Fi networks that your phone has used before. **Connect to a compatible Wi-Fi network** Your Apple Watch can connect to a Wi-Fi network: • If your iPhone, while connected to your watch with Bluetooth, has connected to the network before. • If the Wi-Fi network is 802.11b/g/n 2.4GHz (or 5 GHz if you have Apple Watch Series 6). When your Apple Watch connects to a compatible Wi-Fi network instead of your iPhone connection, the Wi-Fi icon appears in Control Center. Ref. 3, https://support.apple.com/en-us/HT204562

	As the watch can now receive notifications and more from the mobile device (even when it is not connected via Bluetooth), it shows that a wireless communication link was established. Now, the user can cause audio media content to be routed to the one or more devices (for example the Apple Watch) via the wireless communication link. "On Apple Watch, calls are routed through the iPhone…" Ref. 9, https://www.macrumors.com/how-to/apple-watch-phone-calls/
10. The method of claim 1, wherein the identifying comprises triggering a display of a menu by the one or more available devices or the mobile device to allow a user to perform a user interaction.	Smartwatch-Compatible Apple smartphones satisfy the additional recitations of claim 10. "Quickly switch to a different Apple Watch You can also choose an Apple Watch manually: 1. Open the Apple Watch app on your iPhone. 2. Tap My Watch, then tap All Watches at the top of the screen. 3. Turn off Auto Switch."

	Ref. 14, https://support.apple.com/en-eg/guide/watch/apdde4d6f98e/watchos
11. The method of claim 1, wherein the one or more available devices are triggered by the signaling to inform a user about an availability of media content at the mobile device.	A Smartwatch-Compatible Apple phone can trigger a smartwatch to inform a user about an availability of media content at the mobile device by ringing, making sounds, vibrations or Haptic alerts. "The Apple Watch informs users of incoming calls or messages via sounds, as well as vibrations or Haptic Alerts" Ref. 12, https://screenrant.com/haptic-alerts-apple-watch-should-you-use/ "Answer a call: When you hear or feel the call notification, raise your wrist to see who's calling." Ref. 5, https://support.apple.com/en-il/guide/watch/apd32b6c5658/watchos "If your Apple Watch is dim and not active, full-screen notifications appear" Ref. 13, https://support.apple.com/en-il/HT204791
13. The method of claim 1, further comprising encrypting and routing the media content to the one or more available devices.	Smartwatch-Compatible Apple smartphones satisfy the additional recitations of claim 13. "Apple Watch uses many of the same hardware-based platform security capabilities that iOS and iPadOS use. For example, Apple Watch: Helps protect data—both on the device and when communicating with a paired iPhone… Supported technologies include those listed in System Security (for example, KIP, SKP, and SCIP) as well as Data Protection, keychain, and network technologies. Ref. 11, https://support.apple.com/guide/security/system-security-for-watchos-secc7d85209d/web

15. A mobile apparatus for informing a device about an availability of media content, comprising:	Various Apple smartphones (e.g. iPhones) inform a device about an availability of media content at a mobile device connected to a local area network (LAN). For example, an iPhone running iOS (as of September 2022, new Apple Watches come with WatchOS 9 preinstalled and require an iPhone running iOS 16, which is available for the iPhone 8 and later, while Apple Watch 3 released in Sep 2017 required iPhone 6 and iOS 11 or newer) are adapted to inform Apple Watch (current and previous models) about an availability of media content. Ref. 1, https://support.apple.com/en-au/HT204505 Ref. 2, https://en.wikipedia.org/wiki/Apple_Watch Such smartphones are referred to herein as "Smartwatch-Compatible Apple smartphones." The screenshots below show a device, an Apple Watch, being informed about an availability of media content, voice messages and a WhatsApp audio message at a Smartwatch-Compatible Apple smartphone.

	 The screenshot below shows a device, an Apple Watch, connected to the LAN, being informed about an availability of media content, a video message, at a Smartwatch-Compatible Apple smartphone.

	The Apple Watch vibration notifications was mentioned by PC Magazine as the main reason to buy it (Ref. 4, https://www.pcmag.com/article2/0,2817,2468276,00.asp).
a receiver adapted to receive wirelessly, from an external source, media content selected from a group consisting of: audio content and video content; and	Smartwatch-Compatible Apple smartphones include a receiver adapted to receive wirelessly, from an external source, media content selected from a group consisting of: audio and video content. As discussed below, the many types of media content Smartwatch-Compatible Apple smartphones are adapted to wirelessly receive include phone call data. Dependent claim 18 identifies phone call data as an example of media content.
a controller adapted to identify one or more available devices connected to a local area network (LAN) and compatible to handle the media content;	Smartwatch-Compatible Apple smartphones include a controller adapted to identify one or more available devices connected to a local area network and compatible to handle the media content. As can be seen on page 90 of "Apple Watch User Guide WatchOS 9.4," (https://help.apple.com/pdf/watch/9/en_US/apple-watch-user-guide-watchos9.pdf), once the watch is connected to the WiFi, it can receive media content: "By connecting your Apple Watch to a Wi-Fi network, you can continue to use many of its features, even when you don't have your iPhone with you." "Your iPhone detects the paired Apple Watch you're wearing and automatically connects to it." Ref. 5, https://support.apple.com/en-eg/guide/watch/apdde4d6f98e/watchos **Connect to a compatible Wi-Fi network** Your Apple Watch can connect to a Wi-Fi network: • If your iPhone, while connected to your watch with Bluetooth, has connected to the network before. • If the Wi-Fi network is 802.11b/g/n 2.4GHz (or 5 GHz if you have Apple Watch Series 6). When your Apple Watch connects to a compatible Wi-Fi network instead of your iPhone connection, the Wi-Fi icon appears in Control Center.

	Ref. 3, https://support.apple.com/en-us/HT204562 And, for example, you can remotely connect the Apple Watch to your Mobile Device via the Wi-Fi network: "When your iPhone is off or out of range, your Apple Watch can use a Wi-Fi network to send and receive data." Ref. 6, https://support.apple.com/en-il/HT205547 • If Bluetooth isn't available, your Apple Watch will try to use Wi-Fi. For example, if compatible Wi-Fi is available and your iPhone isn't in Bluetooth range, your Apple Watch uses Wi-Fi. See Ref. 3, https://support.apple.com/en-us/HT204562 Your watch will automatically connect to Wi-Fi networks that your phone has used before. **Connect to a compatible Wi-Fi network** Your Apple Watch can connect to a Wi-Fi network: • If your iPhone, while connected to your watch with Bluetooth, has connected to the network before. • If the Wi-Fi network is 802.11b/g/n 2.4GHz (or 5 GHz if you have Apple Watch Series 6). When your Apple Watch connects to a compatible Wi-Fi network instead of your iPhone connection, the Wi-Fi icon appears in Control Center. Ref. 3, https://support.apple.com/en-us/HT204562 Testing has demonstrated that once an Apple Watch has been paired with a Smartwatch-Compatible Apple smartphone, the Watch and smartphone will thereafter continue to pair via Wi-Fi

	when Bluetooth is disabled and, as discussed below, receive notifications regarding available media content, as can be seen in the screenshot below. "If your Apple Watch is connected to Wi-Fi or cellular" "With a Wi-Fi or cellular connection, your Apple Watch can do the following things, even if your iPhone isn't with you." Ref. 6, https://support.apple.com/en-il/HT205547 "Quickly switch to a different Apple Watch" "Your iPhone detects the paired Apple Watch you're wearing and automatically connects to it. Just put on a different Apple Watch and raise your wrist." Ref. 5, https://support.apple.com/en-eg/guide/watch/apdde4d6f98e/watchos This demonstrates that Smartwatch-Compatible Apple smartphones include a controller adapted to identify an Apple Watch compatible to handle the media content when connected to a local area network.

wherein the controller is adapted to instruct communicating wirelessly information to an intermediate routing device connected to the LAN for indirectly routing messages or media content to at least one of the one or more available devices via said intermediate routing device;	The controller of Smartwatch-Compatible Apple smartphones is adapted to instruct communicating wirelessly information to an intermediate routing device connected to the LAN for indirectly routing messages or media content to at least one of the one or more available devices via said intermediate routing device. “Your Apple Watch uses Wi-Fi and Bluetooth to communicate with your paired iPhone.” “If Bluetooth isn’t available, your Apple Watch will try to use Wi-Fi. For example, if compatible Wi-Fi is available and your iPhone isn't in Bluetooth range, your Apple Watch uses Wi-Fi.” Ref. 3, https://support.apple.com/en-us/HT204562 Testing has demonstrated that while both the iPhone and the Apple Watch were connected to the LAN (via Wi-Fi), messages and media content including incoming phone calls were indirectly routed to the watch by the intermediate routing device (see following screenshots).

wherein the controller is adapted to wirelessly signaling the one or more available devices indicating an availability of the media content at the mobile device;	The controller of a Smartwatch-Compatible Apple device is adapted to wirelessly signal the one or more available devices indicating an availability of the media content at the mobile device. "See and respond to notifications on Apple Watch: Apps can send notifications to keep you informed—meeting invitations, messages, noise alerts, and Activity reminders are just a few examples. Your Apple Watch can display notifications as they arrive, but if you don't read one right away, it's saved so you can check it later." Ref. 5, https://support.apple.com/en-eg/guide/watch/apdde4d6f98e/watchos,page 81. "If your Apple Watch is connected to Wi-Fi or cellular" "With a Wi-Fi or cellular connection, your Apple Watch can do the following things, even if your iPhone isn't with you: make and answer phone calls, send and receive messages…" etc. Ref. 6, https://support.apple.com/en-il/HT205547 For example, as shown in the screenshot below, an Apple smartphone has wirelessly signaled to an Apple Watch to indicate the availability of a voice message at the smartphone.

	 In the following screenshot, an Apple smartphone has wirelessly signaled to an Apple Watch to indicate the availability of an incoming call at the smartphone.
wherein the media content is originated from an external source disconnected from the LAN.	The media content available at the Smartwatch-Compatible Apple smartphones includes media content originated from an external source disconnected from the LAN. For example, as shown in

	the screenshots below, the media content can include a voice message originating from a source that is not connected to the LAN.
16. The mobile apparatus of claim 15, wherein the one or more available devices is triggered by the mobile device to perform one or more of the following: flash light, ring, and play a loudspeaker sound.	The use of a Smartwatch-Compatible Apple smartphone with an Apple Watch satisfies the additional recitations of claim 16. A Smartwatch-Compatible Apple phone can trigger a smartwatch to ring, flash a light, play a sound (haptic), etc. "The Apple Watch informs users of incoming calls or messages via sounds, as well as vibrations or Haptic Alerts" Ref. 12, https://screenrant.com/haptic-alerts-apple-watch-should-you-use/ "Answer a call: When you hear or feel the call notification, raise your wrist to see who's calling." Ref. 5, https://support.apple.com/en-il/guide/watch/apd32b6c5658/watchos "If your Apple Watch is dim and not active, full-screen notifications appear."

	Ref. 13, https://support.apple.com/en-il/HT204791
18. The mobile apparatus of claim 15, wherein the media content is audio content selected from a group consisting of: a phone call data, bidirectional voice data, bidirectional audio data and a radio broadcast.	Smartwatch-Compatible Apple smartphones satisfy the additional recitations of claim 18. The media content that Smartwatch-Compatible Apple smartphones can route to an Apple Watch via a LAN include phone calls. "Answer a call: When you hear or feel the call notification, raise your wrist to see who's calling. • *Send a call to voicemail:* Tap the red Decline button in the incoming call notification. • *Answer on your Apple Watch:* Tap the Answer button to talk using the built-in microphone and speaker or a Bluetooth device paired with your Apple Watch." Ref. 5, https://support.apple.com/en-il/guide/watch/apd32b6c5658/watchos "On Apple Watch, calls are routed through the iPhone…" Ref. 9, https://www.macrumors.com/how-to/apple-watch-phone-calls/ The following screenshot shows an incoming phone call being signaled on an Apple Watch.

	The following screenshot shows that the call was taken on the device (Apple Watch) after responding to the signaling (by pressing the green button). “On Apple Watch, calls are routed through the iPhone…” Ref. 9, https://www.macrumors.com/how-to/apple-watch-phone-calls/ In addition to phone call media content, the Smartwatch-Compatible Apple smartphones can also route radio or radio broadcasts to an Apple Watch via a LAN. “To listen to Apple Music radio, make sure your Apple Watch is near your iPhone or connected to a Wi-Fi network… Open the Music app on your Apple Watch and tap Radio…” “Listen to broadcast radio: You can listen to thousands of broadcast radio stations on your Apple Watch” Ref. 15, https://support.apple.com/en-il/guide/watch/apdb8051ca2c/watchos

19. A computer program product for a device for informing a user about an availability of media content at a mobile device, the computer program product comprising:	Apple Watches of current and previous models include a computer program product and comprise a device for informing a user about an availability of media content on a compatible iPhone. For example, an iPhone running iOS (as of September 2022, new Apple Watches come with WatchOS 9 preinstalled and require an iPhone running iOS 16, which is available for the iPhone 8 and later while Apple watch 3 released in Sep 2017 required iPhone 6 and iOS 11 or newer) is adapted to inform an Apple Watch about an availability of media content. Ref. 1, https://support.apple.com/en-au/HT204505 Ref. 2, https://en.wikipedia.org/wiki/Apple_Watch Such smartphones are referred to herein as "Smartwatch-Compatible Apple smartphones." The screenshots below shows a device, an Apple Watch, connected to the LAN, being informed about an availability of media content, voice messages and a WhatsApp audio message at a Smartwatch-Compatible Apple smartphone.

a non-transitory computer readable storage medium having stored thereon:	An Apple Watch includes a non-transitory computer readable storage medium. MEMORY Card slot: No Internal: 32GB 1GB RAM eMMC 5.1 Ref. 16, https://www.gsmarena.com/apple_watch_series_8-11866.php
first program instructions executable by a processor to wirelessly communicating information to an intermediate routing device connected to a local area network (LAN) for indirectly receive messages or media content routed from one or more available devices connected to the LAN via the intermediate routing device; and	Apple Watches include first program instructions executable by a processor to wirelessly communicate information to an intermediate routing device connected to a local area network (LAN) for indirectly receiving messages or media content routed from one or more available devices connected to the LAN via the intermediate routing device. "Your Apple Watch uses Wi-Fi and Bluetooth to communicate with your paired iPhone." "If Bluetooth isn't available, your Apple Watch will try to use Wi-Fi. For example, if compatible Wi-Fi is available and your iPhone isn't in Bluetooth range, your Apple Watch uses Wi-Fi." Ref. 3, https://support.apple.com/en-us/HT204562 Testing has demonstrated that while both the iPhone and the Apple Watch were connected to the LAN (via Wi-Fi), messages and media content including incoming phone calls were indirectly routed to the watch by the intermediate routing device (see following screenshots).

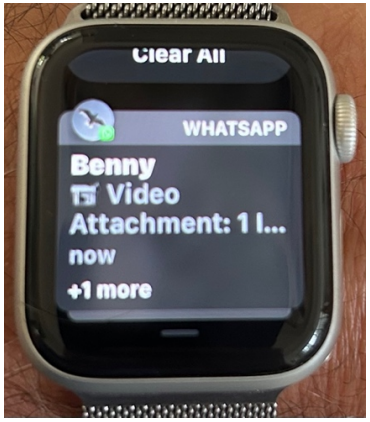
PLATFORM	OS	watchOS 9.0, upgradable to 9.4
	Chipset	Apple S8
	CPU	Dual-core
	GPU	PowerVR

Ref. 16, https://www.gsmarena.com/apple_watch_series_8-11866.php

second program instructions executable by the processor to wirelessly receive signal from the mobile device indicating an availability of a media content at the mobile device;	Apple Watch includes second program instructions executable by the processor to wirelessly receive a signal from the mobile device indicating an availability of a media content at the mobile device. "See and respond to notifications on Apple Watch: Apps can send notifications to keep you informed—meeting invitations, messages, noise alerts, and Activity reminders are just a few examples. Your Apple Watch can display notifications as they arrive, but if you don't read one right away, it's saved so you can check it later." Ref. 5, https://support.apple.com/en-eg/guide/watch/apdde4d6f98e/watchos,page 81. "If your Apple Watch is connected to Wi-Fi or cellular" "With a Wi-Fi or cellular connection, your Apple Watch can do the following things, even if your iPhone isn't with you: make and answer phone calls, send and receive messages…" etc. Ref. 6, https://support.apple.com/en-il/HT205547 For example, as shown in the screenshot below, an Apple smartphone has wirelessly signaled to an Apple Watch to indicate the availability of a voice message at the smartphone.

	In the following screenshot, an Apple smartphone has wirelessly signaled to an Apple Watch to indicate the availability of an incoming call at the smartphone.
third program instructions executable by the processor to inform the user of said device about an availability of a media content at the mobile device with one or more of the following: flash light, ring, and play a loudspeaker sound;	Apple Watch includes third program instructions executable by the processor to inform the user of said device about an availability of a media content at the mobile device with one or more of the following: flash a light, ring, play a sound (haptic), etc. “The Apple Watch informs users of incoming calls or messages via sounds, as well as vibrations or Haptic Alerts” Ref. 12, https://screenrant.com/haptic-alerts-apple-watch-should-you-use/ “Answer a call: When you hear or feel the call notification, raise your wrist to see who’s calling.” Ref. 5, https://support.apple.com/en-il/guide/watch/apd32b6c5658/watchos “If your Apple Watch is dim and not active, full-screen notifications appear” Ref. 13, https://support.apple.com/en-il/HT204791

wherein the media content is originated from an external source disconnected from the LAN;	The media content available at the Smartwatch-Compatible Apple smartphones includes media content originated from an external source disconnected from the LAN. For example, as shown in the screenshots below, the media content can include a voice message originating from a source that is not connected to the LAN.
wherein the media content selected from a group consisting of: audio content, text content and video content.	Apple Watches are adapted to receive audio content, text content and video content. Dependent claim 18 further identifies phone call data as an example of media content and includes audio content. Furthermore, as shown in the screenshot below, the media content can include text content. The following screenshots show audio media content:

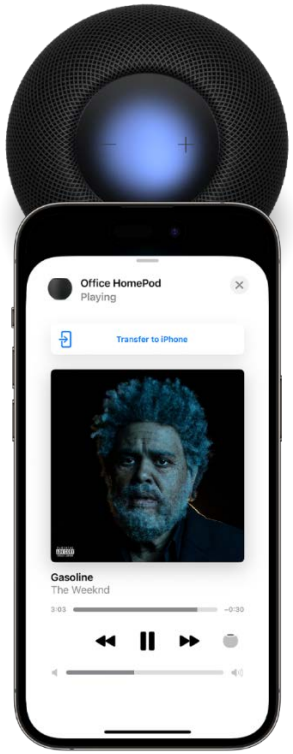
	 The following screenshot shows video media content:  The following screenshot shows phone call media content:

	15:40 Benny INCOMING CALL

U.S. Patent No. 8,711,866 Claim language	Evidence
22. Apparatus for routing and rerouting streaming data, the apparatus being mobile and comprising: a streaming device comprising:	An Apple mobile apparatus (e.g., an iPhone) can route and reroute streaming data. On information and belief, various apps that come pre-installed (or can be installed later) on many Apple iPhones are streaming enabled, such as Apple Music, Apple Podcasts, Amazon Music and Spotify. "AirPlay lets you share videos, photos, music, and more from Apple devices to your Apple TV, favorite speakers, and popular smart TVs. And what you share always stays personal and private. So sit back and enjoy everything you love — in more places than ever." Ref. 1, https://www.apple.com/airplay/ "Stream music, podcasts, and other audio to Apple TV, HomePod, or AirPlay 2-compatible speakers or smart TVs. Play audio across multiple speakers throughout your home in perfect sync. Or play something different in every room — all with AirPlay." "Play audio on your iPhone or iPad with iOS 11.4 or later, Apple TV, or a Mac with macOS Catalina or later. Then use AirPlay to stream that audio to your AirPlay-compatible speakers or smart TVs." Ref. 2, https://support.apple.com/en-il/HT202809 Handoff works with these devices and operating systems: **iOS 8 or later**: iPhone 5 or later; iPad Pro (all models) **OS X Yosemite or later**: MacBook introduced in 2015 or later **watchOS 1.0 or later**: Apple Watch (all models)

	• iPad (4th generation) or later • iPad Air or later • iPad mini or later • iPod touch (5th generation) or later • MacBook Pro introduced in 2012 or later • MacBook Air introduced in 2012 later • Mac mini introduced in 2012 or later • iMac introduced in 2012 or later • iMac Pro • Mac Pro introduced in 2013 or later • Mac Studio introduced in 2022 or later https://support.apple.com/en-us/108046 iPhone Cellular Calls iPhone Cellular Calls requires any iPhone using iOS 8.1 or later and an activated carrier plan. You can then relay calls to and from that iPhone from these devices: • Any Mac using OS X Yosemite or later. Mac mini and Mac Pro require an external microphone or headset. • Any iPhone, iPad, or iPod touch using iOS 8 or later.

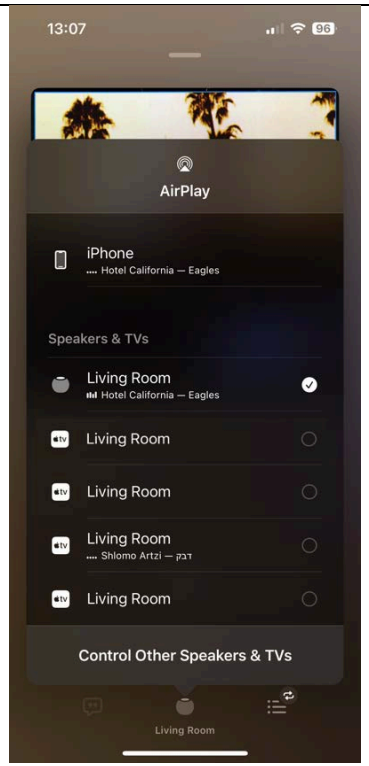
	https://support.apple.com/en-us/108046 Make and receive phone calls on Mac or iPad With the iPhone Cellular Calls feature, you can make and receive phone calls from your Mac or iPad when those devices are on the same network as your iPhone. Set up iPhone Cellular Calls Make sure that your Mac, iPhone, and iPad meet the Continuity system requirements. Your devices must also be near each other and set up as follows: • Each device is signed in with the same Apple ID. • Each device is signed in to FaceTime with the same Apple ID. • Each device has Wi-Fi turned on. • Each device is connected to the same network using Wi-Fi or Ethernet. • On your iPhone, go to Settings > Phone > Calls on Other Devices, then turn on Allow Calls on Other Devices. • On your iPad, go to Settings > FaceTime > Calls from iPhone, then turn on Calls from iPhone. • On your Mac, open the FaceTime app, choose FaceTime > Settings (or Preferences), then select Calls From iPhone. If your carrier supports Wi-Fi calling on other devices, you can set up those devices to make and receive calls even when your iPhone isn't turned on or nearby. Learn about Wi-Fi calling. https://support.apple.com/en-us/102405 **Route the audio of an existing call through HomePod** Do either of the following:

	• On your iOS or iPadOS device, tap Audio in the Phone or FaceTime app, then choose your HomePod. • Hold your iPhone near the top of HomePod. To hand off audio, your device must have Bluetooth turned on and be on the same Wi-Fi network as HomePod. You must also turn on Transfer to HomePod in Settings > General > AirPlay & Handoff.  To change who can hand off phone calls to HomePod, see Allow others to control audio on HomePod. https://support.apple.com/guide/homepod/use-for-phone-calls-apdeaa15a6c3/homepod

an announcer device configured to indicate to surrounding media handling devices that said streaming device is available to receive streaming data, thereby to enable receipt of rerouted data from said surrounding media handling devices, and	An Apple mobile apparatus (e.g., an iPhone) comprises an announcer device configured to indicate to surrounding media handling devices that said streaming device is available to receive streaming data, thereby to enable receipt of rerouted data from said surrounding media handling devices. For example, an Apple mobile apparatus (e.g., an iPhone) announces its availability to receive streaming data from surrounding equipment. "…AirPlay and AirPlay 2 will work over any IP network connection, whether wired or wireless (Wi-Fi). The only rule is that all AirPlay devices must be on the same network." Ref. 3, https://www.digitaltrends.com/home-theater/apple-airplay-2-explained/ Connecting to the Wi-Fi network, the Apple mobile apparatus (e.g. the wi-fi client) announces itself by sending probe request frames in accordance with the wi-fi protocol. "The client sends probe request frames which contain supported data rates and 802.11 capabilities." Ref. 4, https://netbeez.net/blog/how-wifi-connection-works/ "Internet connectivity occurs through a wireless router. When you access Wi-Fi, you are connecting to a wireless router that allows your Wi-Fi-compatible devices to interface with the Internet." Ref. 5, https://www.cisco.com/c/en/us/products/wireless/what-is-wifi.html
a scout device configured to scan surroundings of said streaming device to identify surrounding media handling devices as being compatible to handle given media, and determine availability of said identified compatible media handling devices, thereby to reroute streaming data between	An Apple mobile apparatus (e.g., an iPhone) comprises a scout device configured to scan surroundings of said streaming device to identify surrounding media handling devices as being compatible to handle given media, and determine availability of said identified compatible media handling devices, thereby to reroute streaming data between said streaming device and a selected one of said surrounding media handling devices, said scout device further being configured to determine media type requirements of said compatible media handling devices.

said streaming device and a selected one of said surrounding media handling devices, said scout device further being configured to determine media type requirements of said compatible media handling devices,	For example, an Apple mobile apparatus (e.g., an iPhone) scans the surroundings to identify compatible Wi-Fi clients (e.g. Apple TV or an Apple HomePod smart speaker) connected to the same network and available to receive data, including for example, music, video, or phone calls. Once connected to the Wi-Fi network, tapping the AirPlay icon on your device will list all compatible equipment, connected to the same network, available to receive the routed data (e.g. streamed music). Ref. 2, https://support.apple.com/en-us/HT202809

	The following links provide documentation information on different AirPlay objects providing a user interface for the user to select from available devices: "AVRouteDetector: An object that detects available media playback routes." Ref. 11, https://developer.apple.com/documentation/avfoundation/streaming_and_airplay/supporting_airplay_in_your_app The Apple mobile apparatus scout device determines AirPlay-compatible media handling devices, allowing streaming media data only to these devices as can be seen in the below iPhone screen capture.

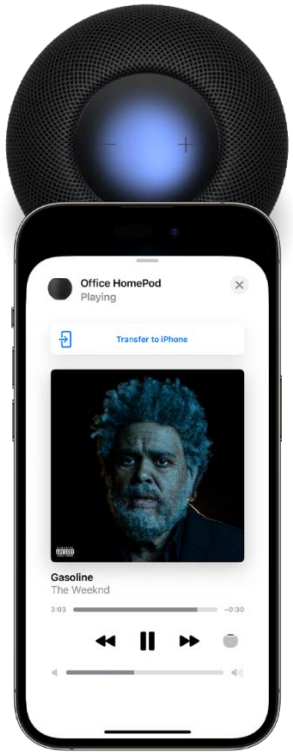


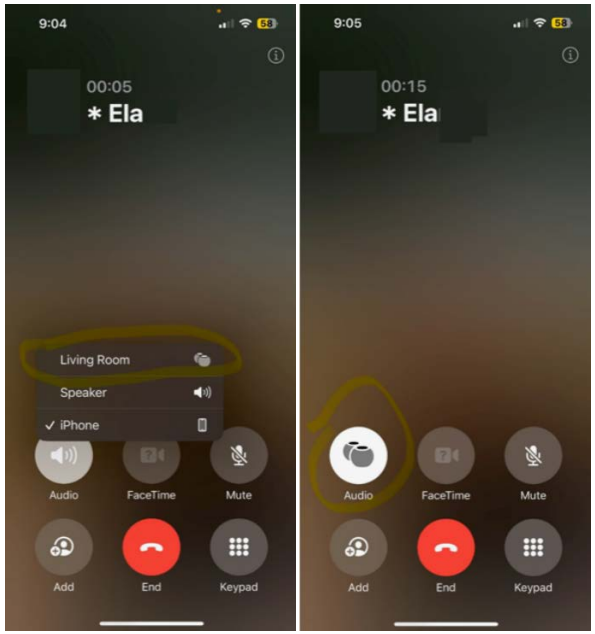
Handoff works with these devices and operating systems:

iOS 8 or later	OS X Yosemite or later	watchOS 1.0 or later
• iPhone 5 or later • iPad Pro (all models) • iPad (4th generation) or later	• MacBook introduced in 2015 or later	• Apple Watch (all models)

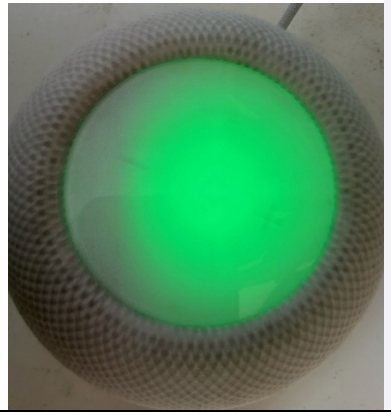
	• iPad Air or later • iPad mini or later • iPod touch (5th generation) or later • MacBook Pro introduced in 2012 or later • MacBook Air introduced in 2012 later • Mac mini introduced in 2012 or later • iMac introduced in 2012 or later • iMac Pro • Mac Pro introduced in 2013 or later • Mac Studio introduced in 2022 or later https://support.apple.com/en-us/108046 iPhone Cellular Calls iPhone Cellular Calls requires any iPhone using iOS 8.1 or later and an activated carrier plan. You can then relay calls to and from that iPhone from these devices: • Any Mac using OS X Yosemite or later. Mac mini and Mac Pro require an external microphone or headset. • Any iPhone, iPad, or iPod touch using iOS 8 or later.

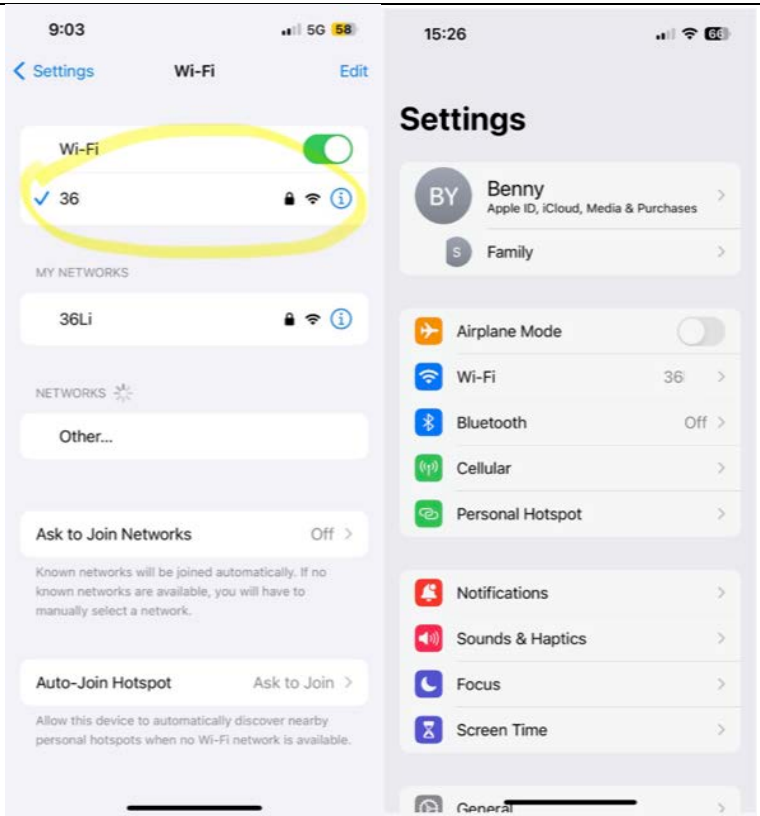
	https://support.apple.com/en-us/108046 Make and receive phone calls on Mac or iPad With the iPhone Cellular Calls feature, you can make and receive phone calls from your Mac or iPad when those devices are on the same network as your iPhone. Set up iPhone Cellular Calls Make sure that your Mac, iPhone, and iPad meet the Continuity system requirements. Your devices must also be near each other and set up as follows: • Each device is signed in with the same Apple ID. • Each device is signed in to FaceTime with the same Apple ID. • Each device has Wi-Fi turned on. • Each device is connected to the same network using Wi-Fi or Ethernet. • On your iPhone, go to Settings > Phone > Calls on Other Devices, then turn on Allow Calls on Other Devices. • On your iPad, go to Settings > FaceTime > Calls from iPhone, then turn on Calls from iPhone. • On your Mac, open the FaceTime app, choose FaceTime > Settings (or Preferences), then select Calls From iPhone. If your carrier supports Wi-Fi calling on other devices, you can set up those devices to make and receive calls even when your iPhone isn't turned on or nearby. Learn about Wi-Fi calling. https://support.apple.com/en-us/102405 **Route the audio of an existing call through HomePod** Do either of the following:

	• On your iOS or iPadOS device, tap Audio in the Phone or FaceTime app, then choose your HomePod. • Hold your iPhone near the top of HomePod. To hand off audio, your device must have Bluetooth turned on and be on the same Wi-Fi network as HomePod. You must also turn on Transfer to HomePod in Settings > General > AirPlay & Handoff.  To change who can hand off phone calls to HomePod, see Allow others to control audio on HomePod. https://support.apple.com/guide/homepod/use-for-phone-calls-apdeaa15a6c3/homepod

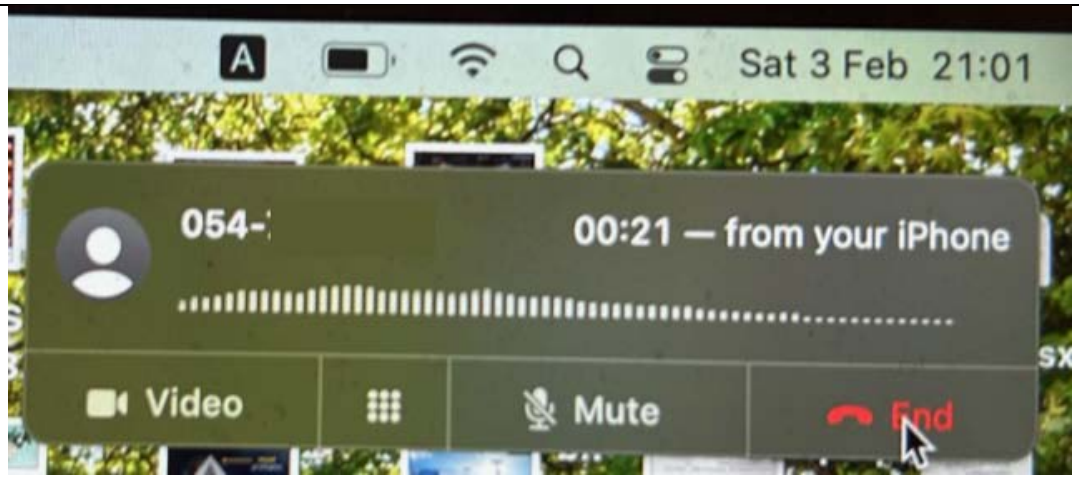
said apparatus configured to set up a bidirectional wireless communication link between said streaming device and a respective one of said media handling devices, said bidirectional link carrying streaming data over either direction as required of said bidirectional link;	An Apple mobile apparatus (e.g., an iPhone) is configured to set up a bidirectional wireless communication link between said streaming device and a respective one of said media handling devices, said bidirectional link carrying streaming data over either direction as required of said bidirectional link. The following screenshots depict the use of an iPhone to route a phone call to an Apple HomePod, which on information and belief utilizes a bidirectional link carrying streaming data over either direction of said bidirectional link.[1] 

[1] The screenshots included herein have been edited to remove certain identifying information, such as full names and phone numbers, Wi-Fi network names, and user photographs.

	 9:03 5G 58 Settings Phone Share Name and Photo Off To personalize your messages, choose your name and photo, and who can see what you share. CALLS Wi-Fi Calling Off Calls on Other Devices Off Respond with Text Call Forwarding Call Waiting Show My Caller ID Silence Unknown Callers Off Blocked Contacts SMS/Call Reporting Dial Assist Dial assist automatically determines the correct



The following screenshots depict the use of an iPhone to route a phone call to a Mac, which on information and belief utilizes a bidirectional link carrying streaming data over either direction of said bidirectional link.

	 Sat 3 Feb 21:01 054- 00:21 — from your iPhone Video Mute End 21:01 00:02 * Ela Benny's Mac Living Room Benny's Speaker ✓ iPhone Audio FaceTime Mute Add End Keypad 21:01 00:12 * Ela Audio FaceTime Mute Add End Keypad

iPhone Cellular Calls

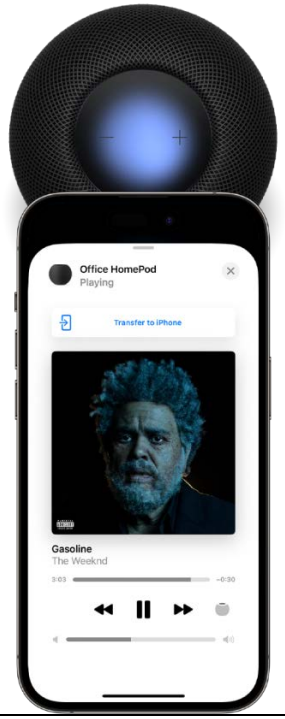
iPhone Cellular Calls requires any iPhone using iOS 8.1 or later and an activated carrier plan. You can then relay calls to and from that iPhone from these devices:

- Any Mac using OS X Yosemite or later. Mac mini and Mac Pro require an external microphone or headset.
- Any iPhone, iPad, or iPod touch using iOS 8 or later.

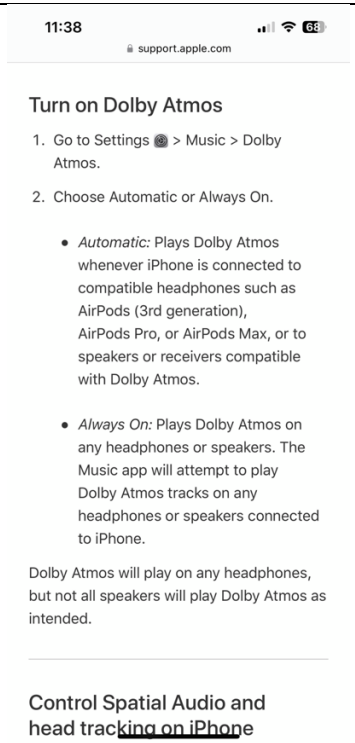
https://support.apple.com/en-us/108046

Make and receive phone calls on Mac or iPad

With the iPhone Cellular Calls feature, you can make and receive phone calls from your Mac or iPad when those devices are on the same network as your iPhone.

	https://support.apple.com/en-us/102405 **Route the audio of an existing call through HomePod** Do either of the following: • On your iOS or iPadOS device, tap Audio in the Phone or FaceTime app, then choose your HomePod. • Hold your iPhone near the top of HomePod. To hand off audio, your device must have Bluetooth turned on and be on the same Wi-Fi network as HomePod. You must also turn on Transfer to HomePod in Settings > General > AirPlay & Handoff. 

	To change who can hand off phone calls to HomePod, see Allow others to control audio on HomePod. https://support.apple.com/guide/homepod/use-for-phone-calls-apdeaa15a6c3/homepod
a media transformer, configured to transform media into forms that accord with respective determined media type requirements, wherein there are a plurality of said types; a user interface for allowing a user to select one of said media type requirements for transforming at said media transformer, and	As described above, the scout device of Apple iPhones identifies and determines availability of compatible equipment in the vicinity. An Apple mobile apparatus (e.g., an iPhone) comprises a media transformer, configured to transform media into forms that accord with respective determined media type requirements, wherein there are a plurality of said types, as well as a user interface for allowing a user to select one of said media type requirements for transforming at said media transformer. For example, as evidenced below, an audio stream routed to compatible devices (e.g., Apple TV, Apple HomePod smart speaker and other Airplay-compatible speakers) via AirPlay can be transformed to a format compatible with the destination device. "…with regards to using AirPlay 2 to send lossless Apple Music streams. Apple Music's Lossless streams supposedly convert from ALAC (Apple's lossless codec) into AAC (Apple's lossy codec) at a pretty lowly 256kbps when transmitted over AirPlay – and therefore *not* losslessly." Ref. 9, https://www.whathifi.com/advice/apple-airplay-2-everything-you-need-to-know When an Apple mobile apparatus (e.g., an iPhone) streams the audio to the compatible devices (e.g. Apple TV, Apple HomePod smart speaker and other Airplay-compatible speakers) via AirPlay it converts the audio format to AAC. As can be seen in the below iPhone screen capture, the iPhone further plays Dolby Atmos format on specific compatible speakers.



11:38

support.apple.com

Turn on Dolby Atmos

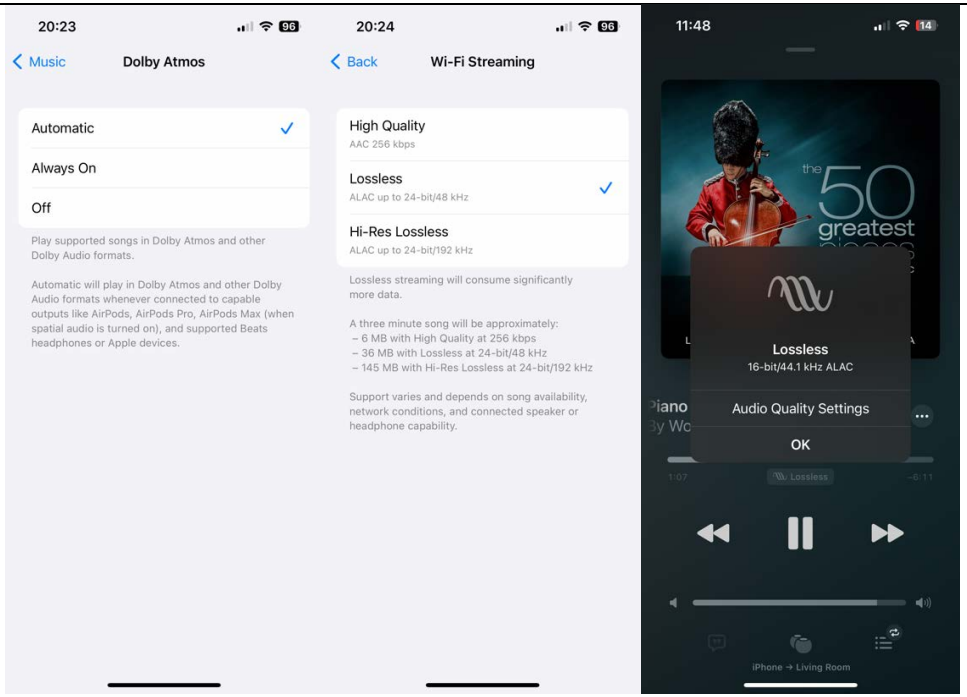
1. Go to Settings > Music > Dolby Atmos.
2. Choose Automatic or Always On.
   - *Automatic:* Plays Dolby Atmos whenever iPhone is connected to compatible headphones such as AirPods (3rd generation), AirPods Pro, or AirPods Max, or to speakers or receivers compatible with Dolby Atmos.
   - *Always On:* Plays Dolby Atmos on any headphones or speakers. The Music app will attempt to play Dolby Atmos tracks on any headphones or speakers connected to iPhone.

Dolby Atmos will play on any headphones, but not all speakers will play Dolby Atmos as intended.

Control Spatial Audio and head tracking on iPhone

The following links provide documentation information on different formats supported by AirPlay: https://developer.apple.com/documentation/avfaudio/avaudioformat; https://developer.apple.com/documentation/avfoundation/streaming_and_airplay/supporting_airplay_in_your_app.

The following iPhone screen shots show a user interface allowing a user to select media type for transforming the media data.

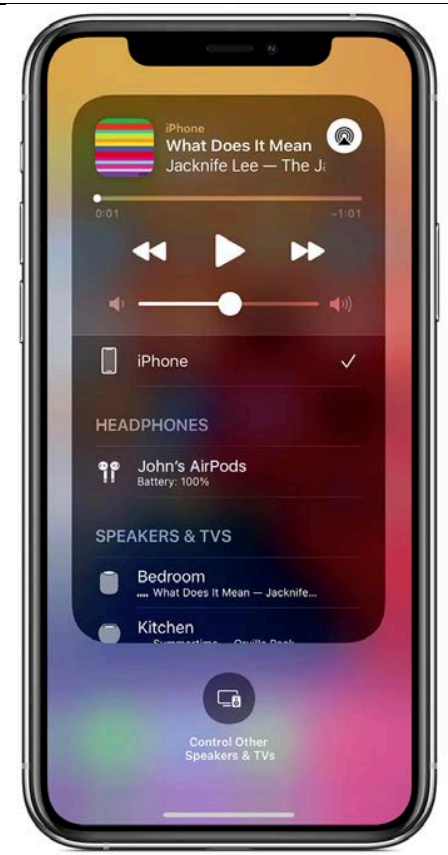
	
a media cloner, associated with said media transformer, for making multiple copies of a single incoming data stream, thereby to enable said apparatus to redirect said single incoming data stream to a plurality of locations, at least some of said multiple copies being transformed via said media transformer.	An Apple mobile apparatus (e.g., an iPhone) comprises a media cloner, associated with said media transformer, for making multiple copies of a single incoming data stream, thereby to enable said apparatus to redirect said single incoming data stream to a plurality of locations, at least some of said multiple copies being transformed via said media transformer. For example, an Apple mobile apparatus (e.g., an iPhone) is capable of streaming a single data stream (i.e., an audio stream) via AirPlay to one or more compatible devices (e.g. Apple TV, Apple HomePod smart speaker and other Airplay-compatible speakers) connected to the same network. “Play audio on multiple AirPlay 2-enabled devices: With AirPlay 2 and iPhone, you can play audio on multiple AirPlay 2-enabled devices connected to the same Wi-Fi network. For example, you can play a party playlist on HomePod speakers in the

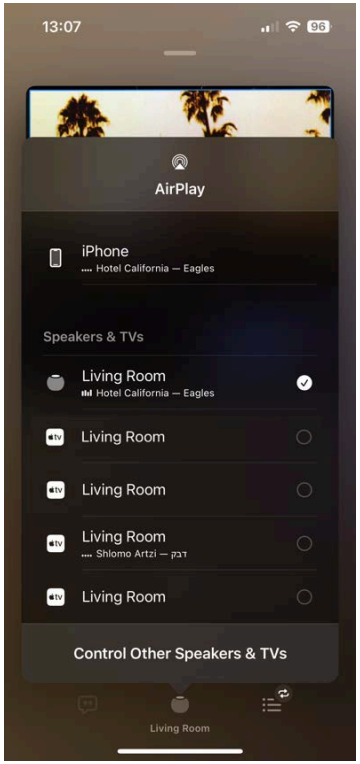
	living room and kitchen, on an Apple TV in the bedroom, and on an AirPlay 2-enabled smart TV in the den." Ref. 10, https://support.apple.com/en-il/guide/iphone/iph315e0d58d/ios "As long as all the devices are on the same wi-fi network (remember, AirPlay requires a wi-fi connection to work), you simply have to access the music controls on, say, your iPhone, iPad or Apple TV, and select a connected speaker (or more than one) to send the music to." Ref. 9, https://www.whathifi.com/advice/apple-airplay-2-everything-you-need-to-know
23. Apparatus for routing'and rerouting media data, the	An Apple mobile apparatus (e.g., a smartphone or tablet – iPhone or iPad) running AirPlay comprises a media data transfer device that can route and reroute media data. On information and

apparatus being mobile and comprising: a media data transfer device comprising:	belief, various apps that come pre-installed (or can be installed later) on many Apple iPhones and tablets (iPads or iPod Touch) are media data streaming enabled, such as the Apple Music, Apple Podcasts, Amazon Music and Spotify. "AirPlay lets you share videos, photos, music, and more from Apple devices to your Apple TV, favorite speakers, and popular smart TVs. And what you share always stays personal and private. So sit back and enjoy everything you love — in more places than ever." Ref. 1, https://www.apple.com/airplay/ "Stream music, podcasts, and other audio to Apple TV, HomePod, or AirPlay 2-compatible speakers or smart TVs. Play audio across multiple speakers throughout your home in perfect sync. Or play something different in every room — all with AirPlay." "Play audio on your iPhone or iPad with iOS 11.4 or later, Apple TV, or a Mac with macOS Catalina or later. Then use AirPlay to stream that audio to your AirPlay-compatible speakers or smart TVs." Ref. 2, https://support.apple.com/en-il/HT202809
an announcer device configured for indicating to surrounding media handling devices that said media data transfer device is available to receive media data, thereby to enable receipt of rerouted data from said surrounding media handling devices, and	An Apple mobile apparatus (e.g., a smartphone or tablet – iPhone or iPad) running AirPlay comprises an announcer device configured for indicating to surrounding media handling devices that said media data transfer device is available to receive media data, thereby to enable receipt of rerouted data from said surrounding media handling devices. An Apple mobile apparatus (e.g., a smartphone or tablet) running AirPlay announces its availability to receive media data to surrounding equipment (e.g. APs, routers and other wi-fi clients like Apple TV, Apple HomePod smart speaker and other Airplay-compatible speakers) as well as its availability to receive rerouted data from said surrounding equipment. "…AirPlay and AirPlay 2 will work over any IP network connection, whether wired or wireless (Wi-Fi). The only rule is that all AirPlay devices must be on the same network."

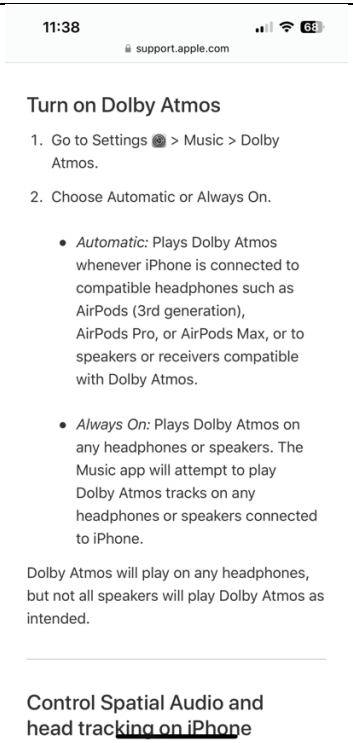
	Ref. 3, https://www.digitaltrends.com/home-theater/apple-airplay-2-explained/ Connecting to the Wi-Fi network, the Apple mobile apparatus (e.g. the wi-fi client) announces itself by sending probe request frames in accordance with the wi-fi protocol. "The client sends probe request frames which contain supported data rates and 802.11 capabilities." Ref. 4, https://netbeez.net/blog/how-wifi-connection-works/ The Apple mobile apparatus can further receive acknowledgments (ACK) data from the surrounding media handling device rerouted via the router or AP devices. "In WiFi networks when a device sends a data packet, the receiving device sends an acknowledgement (ACK) back to the transmitter." Ref. x, https://blog.apnic.net/2021/01/18/is-wifi-too-polite/#:~:text=In%20WiFi%20networks%20when%20a,ACK)%20back%20to%20the%20transmitter. "Internet connectivity occurs through a wireless router. When you access Wi-Fi, you are connecting to a wireless router that allows your Wi-Fi-compatible devices to interface with the Internet." Ref. 5, https://www.cisco.com/c/en/us/products/wireless/what-is-wifi.html
a scout device configured for scanning surroundings to identify surrounding media handling devices as being compatible with given media and determine availability of said identified compatible media handling devices,	An Apple mobile apparatus (e.g., a smartphone or tablet – iPhone or iPad) running AirPlay comprises a scout device configured for scanning surroundings to identify surrounding media handling devices as being compatible with given media and determine availability of said identified compatible media handling devices, thereby to reroute media data from said media data transfer device to a selected one of said surrounding media handling devices, said scout device further being configured to determine media type requirements of said media handling devices.

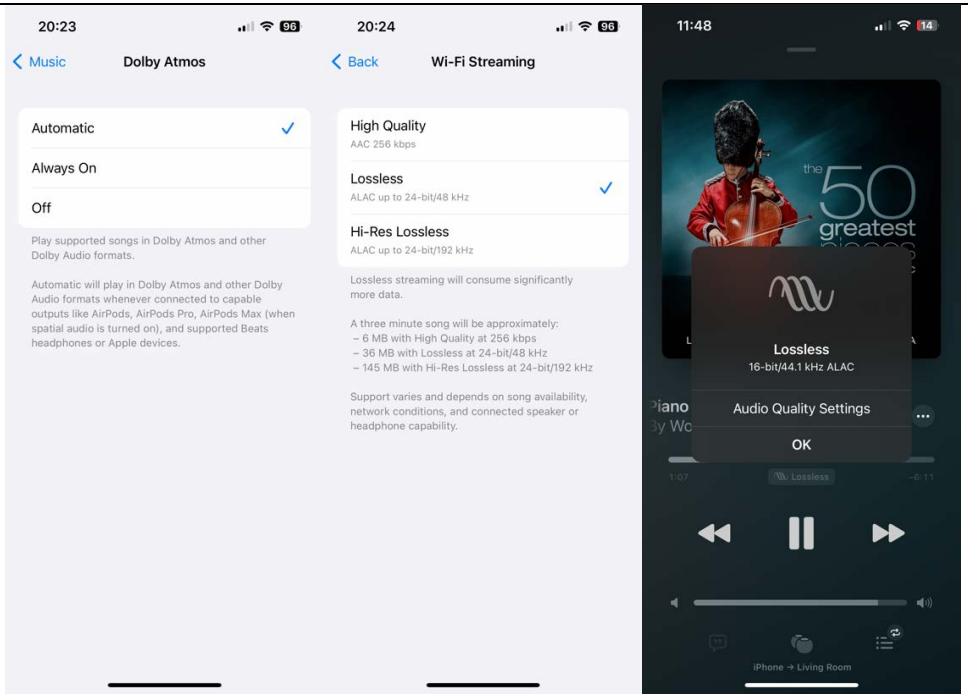
thereby to reroute media data from said media data transfer device to a selected one of said surrounding media handling devices, said scout device further being configured to determine media type requirements of said media handling devices;	For example, an Apple mobile apparatus (e.g., a smartphone or tablet – iPhone or iPad) running AirPlay scans the surroundings, while connected to a Wi-Fi network, to identify compatible media handling Wi-Fi client devices (e.g. Apple TV, Apple HomePod smart speaker and other Airplay-compatible speakers) connected to the same network and available to receive media data. Once connected to the Wi-Fi network, tapping the AirPlay icon on your device will list all compatible media handling devices, connected to the same network, available to receive the rerouted media data (e.g. streamed music).

	 Ref. 2, https://support.apple.com/en-us/HT202809 The following links provide documentation information on different AirPlay objects providing user interface for the user to select from available devices:

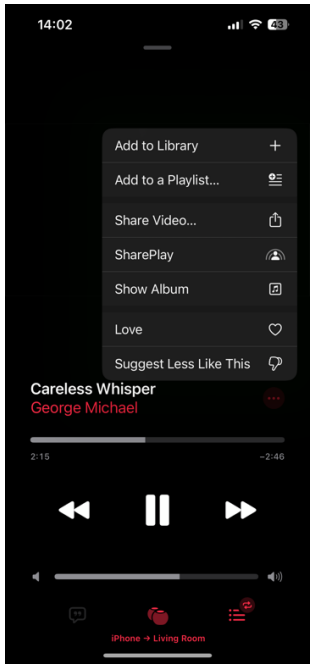
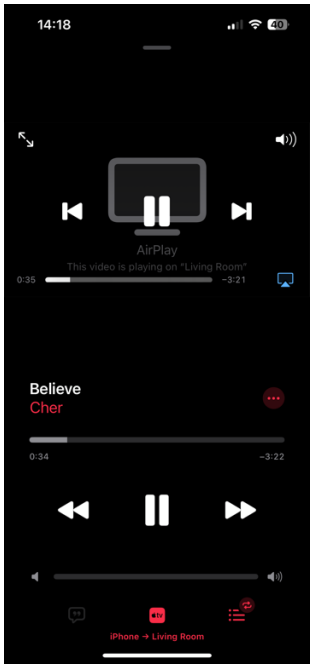
	"AVRouteDetector: An object that detects available media playback routes." Ref. 11, https://developer.apple.com/documentation/avfoundation/streaming_and_airplay/supporting_airplay_in_your_app The Apple mobile apparatus scout device determine AirPlay compatible media handling devices allowing streaming media data to these devices only as can be seen in the below iPhone screen capture. 

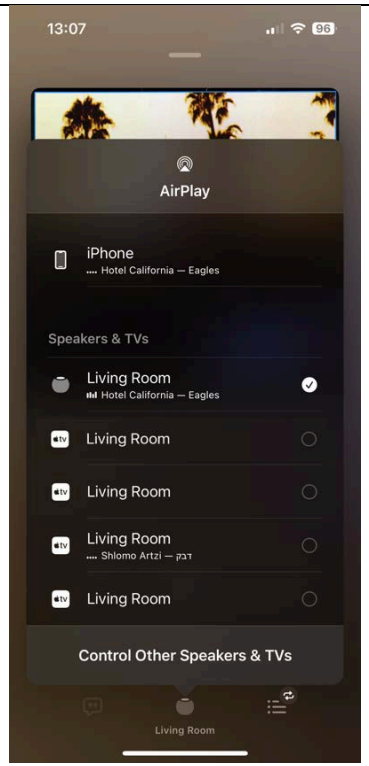
a media transformer, configured to transform media into a form that accords with respective determined media type requirements, there being a plurality of said media type requirements; a user interface for allowing a user to select one of said plurality of media type requirements for transforming at said media transformer, and	An Apple mobile apparatus (e.g., a smartphone or tablet – iPhone or iPad) running AirPlay comprises a media transformer, configured to transform media into a form that accords with respective determined media type requirements, there being a plurality of said media type requirements; a user interface for allowing a user to select one of said plurality of media type requirements for transforming at said media transformer. For example, an Apple mobile apparatus (e.g., a smartphone or tablet – iPhone or iPad) running AirPlay includes a media transformer. The audio stream routed to the compatible devices (e.g. Apple TV, Apple HomePod smart speaker and other Airplay-compatible speakers) is being transformed to a format compatible with the destination device. "…with regards to using AirPlay 2 to send lossless Apple Music streams. Apple Music's Lossless streams supposedly convert from ALAC (Apple's lossless codec) into AAC (Apple's lossy codec) at a pretty lowly 256kbps when transmitted over AirPlay – and therefore *not* losslessly." Ref. 9, https://www.whathifi.com/advice/apple-airplay-2-everything-you-need-to-know When an Apple mobile apparatus (iPhone or iPad) running AirPlay streams the audio to the compatible devices (e.g. Apple TV, Apple HomePod smart speaker and other Airplay-compatible speakers) it is converting the audio format to AAC. As can be seen in the below iPhone screen capture, the iPhone further plays Dolby Atmos format on specific compatible speakers.

	 11:38 support.apple.com **Turn on Dolby Atmos** 1. Go to Settings > Music > Dolby Atmos. 2. Choose Automatic or Always On. • *Automatic:* Plays Dolby Atmos whenever iPhone is connected to compatible headphones such as AirPods (3rd generation), AirPods Pro, or AirPods Max, or to speakers or receivers compatible with Dolby Atmos. • *Always On:* Plays Dolby Atmos on any headphones or speakers. The Music app will attempt to play Dolby Atmos tracks on any headphones or speakers connected to iPhone. Dolby Atmos will play on any headphones, but not all speakers will play Dolby Atmos as intended. **Control Spatial Audio and head tracking on iPhone** The following links provide documentation information on different formats supported by AirPlay: https://developer.apple.com/documentation/avfaudio/avaudioformat; https://developer.apple.com/documentation/avfoundation/streaming_and_airplay/supporting_airplay_in_your_app. The following iPhone screen shots show a user interface allowing a user to select media type for transforming the media data.

	
a media cloner, associated with said media transformer, for making multiple copies of said media data, thereby to enable said apparatus to redirect said media data to a plurality of locations, at least some of said multiple copies being transformed at said media transformer.	An Apple mobile apparatus (e.g., a smartphone or tablet – iPhone or iPad) running AirPlay comprises a media cloner, associated with said media transformer, for making multiple copies of said media data, thereby to enable said apparatus to redirect said media data to a plurality of locations, at least some of said multiple copies being transformed at said media transformer. For example, an Apple mobile apparatus (e.g., a smartphone or tablet – iPhone or iPad) running AirPlay is capable of streaming a data stream (i.e. audio stream) to one or more compatible devices (e.g. Apple TV, Apple HomePod smart speaker and other Airplay-compatible speakers) connected to the same network.

	"Play audio on multiple AirPlay 2-enabled devices: With AirPlay 2 and iPhone, you can play audio on multiple AirPlay 2-enabled devices connected to the same Wi-Fi network. For example, you can play a party playlist on HomePod speakers in the living room and kitchen, on an Apple TV in the bedroom, and on an AirPlay 2-enabled smart TV in the den." Ref. 10, https://support.apple.com/en-il/guide/iphone/iph315e0d58d/ios "As long as all the devices are on the same wi-fi network (remember, AirPlay requires a wi-fi connection to work), you simply have to access the music controls on, say, your iPhone, iPad or Apple TV, and select a connected speaker (or more than one) to send the music to." Ref. 9, https://www.whathifi.com/advice/apple-airplay-2-everything-you-need-to-know

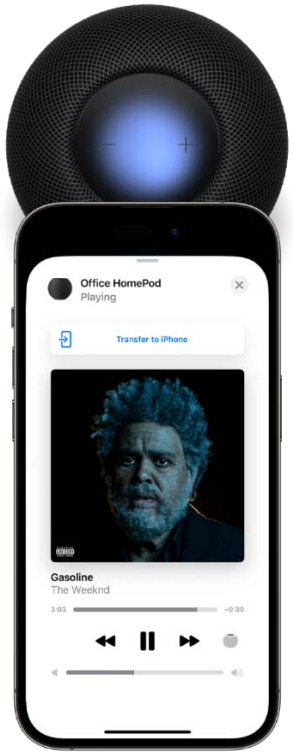
24. The apparatus of claim 23, wherein said media type requirements comprise a screen capability.	The below iPhone screen shots ("Apple Music stream Screens") demonstrate the actual streaming of an Apple Music audio-video media data to a selected compatible media handling device identified by the Apple mobile apparatus – an Apple TV device and HomePod smart speaker.   The Apple mobile apparatus determines AirPlay-compatible equipment, allowing streaming media data to these devices only as can be seen in the below iPhone screen capture.

	 In the above “Apple Music stream Screens”, compatible equipment is identified by its screen capabilities.

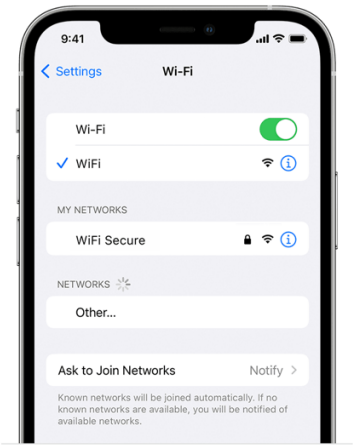
U.S. Patent No. 7,969,990 Claim language	Evidence
1. Apparatus for rerouting communication data, comprising: a mobile communication device comprising:	Apple mobile devices such as iPhones comprise an apparatus for rerouting communication data comprising a mobile communication device. For example, an Apple mobile apparatus (e.g., an iPhone) can reroute a media data stream (e.g., music, podcasts or other audio, including phone calls). On information and belief, various apps that come pre-installed (or can be installed later) on many Apple are streaming-enabled, such as Apple Music, Apple Podcasts, Amazon Music and Spotify. "AirPlay lets you share videos, photos, music, and more from Apple devices to your Apple TV, favorite speakers, and popular smart TVs. And what you share always stays personal and private. So sit back and enjoy everything you love — in more places than ever." Ref. 1, https://www.apple.com/airplay/ "Stream music, podcasts, and other audio to Apple TV, HomePod, or AirPlay 2-compatible speakers or smart TVs. Play audio across multiple speakers throughout your home in perfect sync. Or play something different in every room — all with AirPlay." "Play audio on your iPhone or iPad with iOS 11.4 or later, Apple TV, or a Mac with macOS Catalina or later. Then use AirPlay to stream that audio to your AirPlay-compatible speakers or smart TVs." Ref. 2, https://support.apple.com/en-il/HT202809 Handoff works with these devices and operating systems: **iOS 8 or later** **OS X Yosemite or later** **watchOS 1.0 or later**

	• iPhone 5 or later • iPad Pro (all models) • iPad (4th generation) or later • iPad Air or later • iPad mini or later • iPod touch (5th generation) or later • MacBook introduced in 2015 or later • MacBook Pro introduced in 2012 or later • MacBook Air introduced in 2012 later • Mac mini introduced in 2012 or later • iMac introduced in 2012 or later • iMac Pro • Mac Pro introduced in 2013 or later • Mac Studio introduced in 2022 or later • Apple Watch (all models) https://support.apple.com/en-us/108046 iPhone Cellular Calls iPhone Cellular Calls requires any iPhone using iOS 8.1 or later and an activated carrier plan. You can then relay calls to and from that iPhone from these devices: • Any Mac using OS X Yosemite or later. Mac mini and Mac Pro require an external microphone or headset. • Any iPhone, iPad, or iPod touch using iOS 8 or later.

	https://support.apple.com/en-us/108046 Make and receive phone calls on Mac or iPad With the iPhone Cellular Calls feature, you can make and receive phone calls from your Mac or iPad when those devices are on the same network as your iPhone. Set up iPhone Cellular Calls Make sure that your Mac, iPhone, and iPad meet the Continuity system requirements. Your devices must also be near each other and set up as follows: • Each device is signed in with the same Apple ID. • Each device is signed in to FaceTime with the same Apple ID. • Each device has Wi-Fi turned on. • Each device is connected to the same network using Wi-Fi or Ethernet. • On your iPhone, go to Settings > Phone > Calls on Other Devices, then turn on Allow Calls on Other Devices. • On your iPad, go to Settings > FaceTime > Calls from iPhone, then turn on Calls from iPhone. • On your Mac, open the FaceTime app, choose FaceTime > Settings (or Preferences), then select Calls From iPhone. If your carrier supports Wi-Fi calling on other devices, you can set up those devices to make and receive calls even when your iPhone isn't turned on or nearby. Learn about Wi-Fi calling. https://support.apple.com/en-us/102405 **Route the audio of an existing call through HomePod** Do either of the following:

	• On your iOS or iPadOS device, tap Audio in the Phone or FaceTime app, then choose your HomePod. • Hold your iPhone near the top of HomePod. To hand off audio, your device must have Bluetooth turned on and be on the same Wi-Fi network as HomePod. You must also turn on Transfer to HomePod in Settings > General > AirPlay & Handoff.  To change who can hand off phone calls to HomePod, see Allow others to control audio on HomePod. https://support.apple.com/guide/homepod/use-for-phone-calls-apdeaa15a6c3/homepod

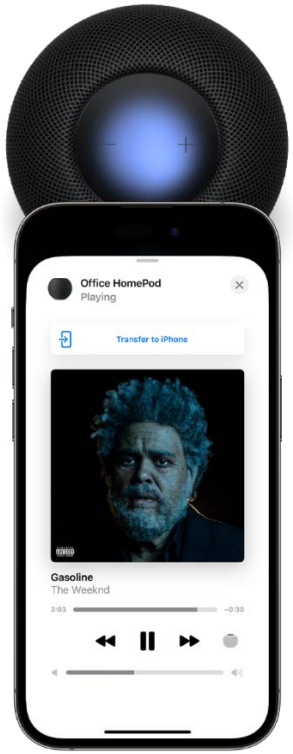
an announcer device associated with said mobile communication device, and configured for indicating to surrounding equipment that said mobile communication device is available to receive rerouting, thereby to enable receipt of rerouted data from said surrounding equipment, and	Apple mobile devices such as iPhones comprise an announcer device associated with said mobile communication device, and configured for indicating to surrounding equipment that said mobile communication device is available to receive rerouting, thereby to enable receipt of rerouted data from said surrounding equipment via the Wi-Fi connection. For example, an Apple mobile apparatus (e.g., a smartphone or tablet) announces its availability to receive data from surrounding equipment. "…AirPlay and AirPlay 2 will work over any IP network connection, whether wired or wireless (Wi-Fi). The only rule is that all AirPlay devices must be on the same network." Ref. 3, https://www.digitaltrends.com/home-theater/apple-airplay-2-explained/ Connecting to the Wi-Fi network, the Apple mobile apparatus (e.g. the wi-fi client) announces itself by sending probe request frames in accordance with the wi-fi protocol. "The client sends probe request frames which contain supported data rates and 802.11 capabilities." Ref. 4, https://netbeez.net/blog/how-wifi-connection-works/ Once connected to the Wi-Fi network, an Apple mobile apparatus (e.g., an iPhone) can receive streaming data to then be rerouted to compatible equipment in the vicinity, connected to the same network in accordance with Wi-Fi network capabilities. "Internet connectivity occurs through a wireless router. When you access Wi-Fi, you are connecting to a wireless router that allows your Wi-Fi-compatible devices to interface with the Internet." Ref. 5, https://www.cisco.com/c/en/us/products/wireless/what-is-wifi.html
a scout device associated with said mobile communication device, configured for	Apple mobile devices such as iPhones comprise a scout device associated with said mobile communication device, configured for scanning surroundings of said associated mobile

scanning surroundings of said associated mobile communication device to identify and determine availability of compatible equipment in the vicinity,	communication device to identify and determine availability of compatible equipment in the vicinity. For example, an Apple mobile apparatus (e.g., an iPhone) scans the surroundings to identify and determine availability of compatible equipment such as, for example a Mac, iPad, or Apple HomePod smart speaker) connected to the same network and available to receive data, including, for example, music, video, or phone calls. **Connect to Wi-Fi on your iPhone, iPad, or iPod touch** Learn how to connect your device to a Wi-Fi network, including open, secure, public networks, and networks that you've connected with in the past. **Connect to a Wi-Fi network** 1. From your Home screen, go to Settings > Wi-Fi. 2. Turn on Wi-Fi. Your device will automatically search for available Wi-Fi networks. 3. Tap the name of the Wi-Fi network that you want to join. Before you can join the network, you might be asked to enter the network's password or agree to terms and conditions. After you join the network, you'll see a blue checkmark ✓ next to the network and the connected Wi-Fi icon in the upper corner of your display. If you don't know the password to the Wi-Fi network, contact your network administrator.  Ref. 6, https://support.apple.com/en-il/HT202639

	Once connected to the Wi-Fi network, tapping the AirPlay icon on your device will list all compatible equipment, connected to the same network, available to receive the routed data (e.g., streamed music). Ref. 2, https://support.apple.com/en-us/HT202809 Handoff works with these devices and operating systems: **iOS 8 or later** **OS X Yosemite or later** **watchOS 1.0 or later**

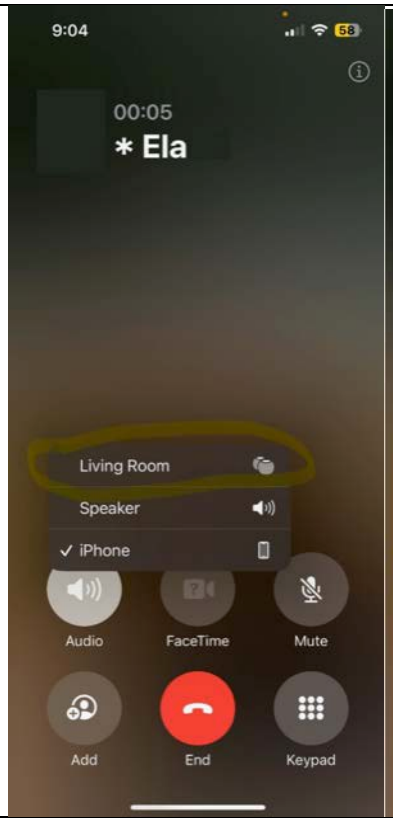
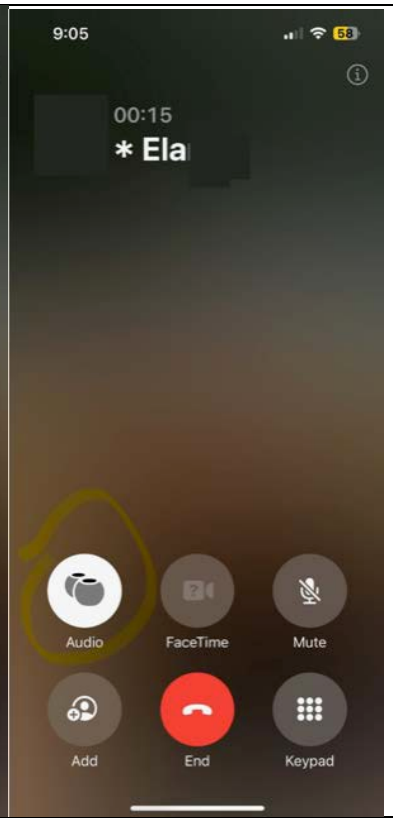
	• iPhone 5 or later • iPad Pro (all models) • iPad (4th generation) or later • iPad Air or later • iPad mini or later • iPod touch (5th generation) or later • MacBook introduced in 2015 or later • MacBook Pro introduced in 2012 or later • MacBook Air introduced in 2012 later • Mac mini introduced in 2012 or later • iMac introduced in 2012 or later • iMac Pro • Mac Pro introduced in 2013 or later • Mac Studio introduced in 2022 or later • Apple Watch (all models) https://support.apple.com/en-us/108046 iPhone Cellular Calls iPhone Cellular Calls requires any iPhone using iOS 8.1 or later and an activated carrier plan. You can then relay calls to and from that iPhone from these devices: • Any Mac using OS X Yosemite or later. Mac mini and Mac Pro require an external microphone or headset. • Any iPhone, iPad, or iPod touch using iOS 8 or later.

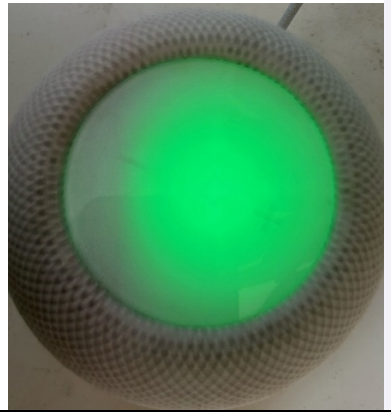
	https://support.apple.com/en-us/108046 Make and receive phone calls on Mac or iPad With the iPhone Cellular Calls feature, you can make and receive phone calls from your Mac or iPad when those devices are on the same network as your iPhone. Set up iPhone Cellular Calls Make sure that your Mac, iPhone, and iPad meet the Continuity system requirements. Your devices must also be near each other and set up as follows: • Each device is signed in with the same Apple ID. • Each device is signed in to FaceTime with the same Apple ID. • Each device has Wi-Fi turned on. • Each device is connected to the same network using Wi-Fi or Ethernet. • On your iPhone, go to Settings > Phone > Calls on Other Devices, then turn on Allow Calls on Other Devices. • On your iPad, go to Settings > FaceTime > Calls from iPhone, then turn on Calls from iPhone. • On your Mac, open the FaceTime app, choose FaceTime > Settings (or Preferences), then select Calls From iPhone. If your carrier supports Wi-Fi calling on other devices, you can set up those devices to make and receive calls even when your iPhone isn't turned on or nearby. Learn about Wi-Fi calling. https://support.apple.com/en-us/102405 **Route the audio of an existing call through HomePod** Do either of the following:

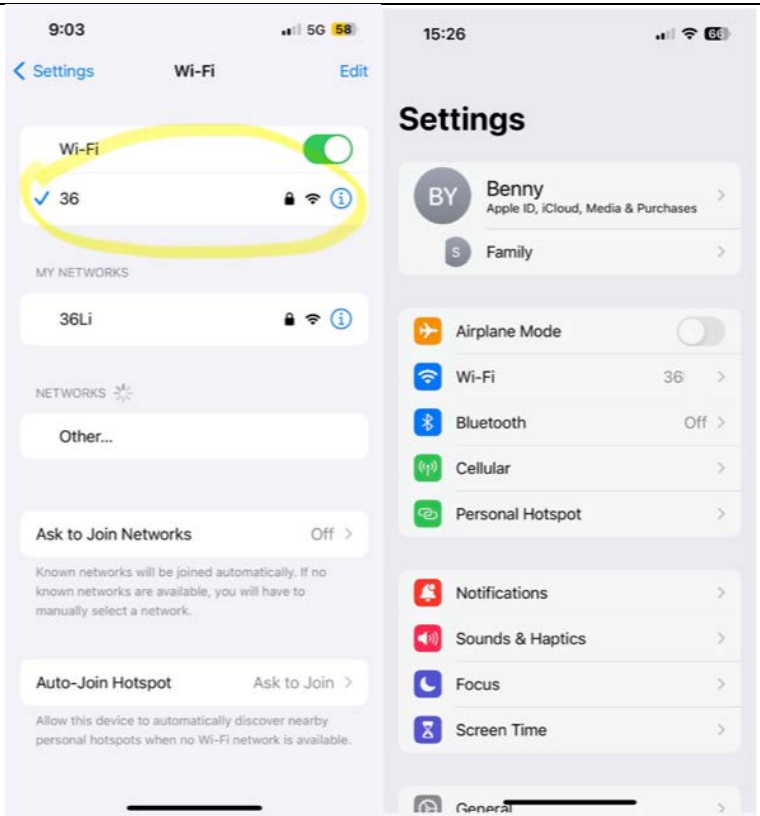
	• On your iOS or iPadOS device, tap Audio in the Phone or FaceTime app, then choose your HomePod. • Hold your iPhone near the top of HomePod. To hand off audio, your device must have Bluetooth turned on and be on the same Wi-Fi network as HomePod. You must also turn on Transfer to HomePod in Settings > General > AirPlay & Handoff.  To change who can hand off phone calls to HomePod, see Allow others to control audio on HomePod. https://support.apple.com/guide/homepod/use-for-phone-calls-apdeaa15a6c3/homepod

thereby to reroute data from said mobile communication device to a selected one of said surrounding equipment, wherein said rerouting comprises setting up a bidirectional communication link between said mobile communication device and said selected surrounding equipment, said bidirectional link having a first link direction from said mobile communication device to said selected surrounding equipment and a second link direction from said selected surrounding equipment to said mobile communication device, said bidirectional link carrying streaming data over both directions of said first link direction and said second link direction,	Apple mobile devices such as iPhones are equipped to reroute data from said mobile communication device to a selected one of said surrounding equipment, wherein said rerouting comprises setting up a bidirectional communication link between said mobile communication device and said selected surrounding equipment, said bidirectional link having a first link direction from said mobile communication device to said selected surrounding equipment and a second link direction from said selected surrounding equipment to said mobile communication device, said bidirectional link carrying streaming data over both directions of said first link direction and said second link direction, and wherein said scout device is operable to determine media type requirements of said compatible equipment. For example, an Apple mobile apparatus (e.g., an iPhone) sets up a bidirectional communication link with selected surrounding equipment (e.g., Mac, iPad, or HomePod). The following screenshots depict the use of an iPhone to route a phone call to an Apple HomePod, which on information and belief utilizes a bidirectional link carrying streaming data over both directions of said first link direction and said second link direction.[1]

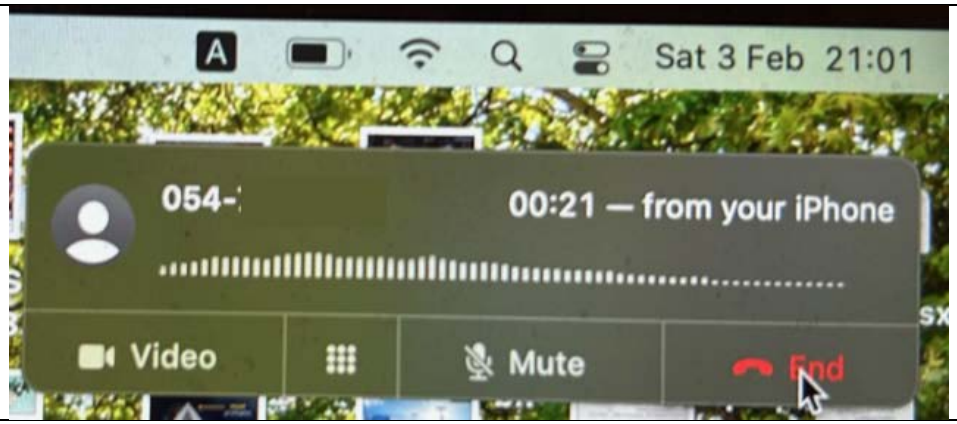
[1] The screenshots included herein have been edited to remove certain identifying information, such as full names and phone numbers, Wi-Fi network names, and user photographs.

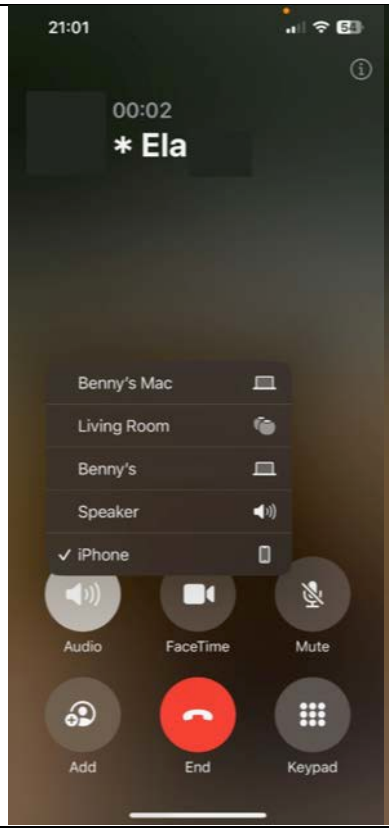
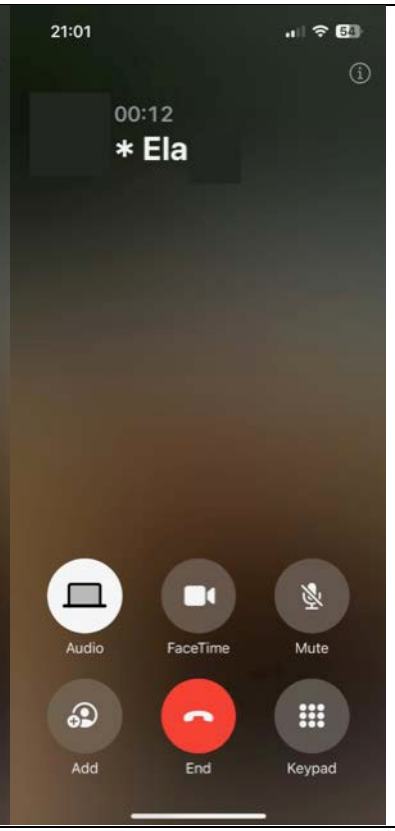
		 9:04 00:05 * Ela Living Room Speaker ✓ iPhone Audio FaceTime Mute Add End Keypad  9:05 00:15 * Ela Audio FaceTime Mute Add End Keypad	

	 9:03 5G 58 Settings Phone Share Name and Photo Off To personalize your messages, choose your name and photo, and who can see what you share. CALLS Wi-Fi Calling Off Calls on Other Devices Off Respond with Text Call Forwarding Call Waiting Show My Caller ID Silence Unknown Callers Off Blocked Contacts SMS/Call Reporting Dial Assist Dial assist automatically determines the correct



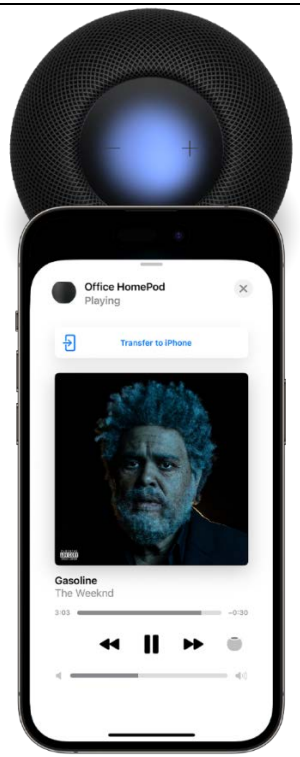
The following screenshots depict the use of an iPhone to route a phone call to a Mac, which on information and belief utilizes a bidirectional link carrying streaming data over both directions of said first link direction and said second link direction.

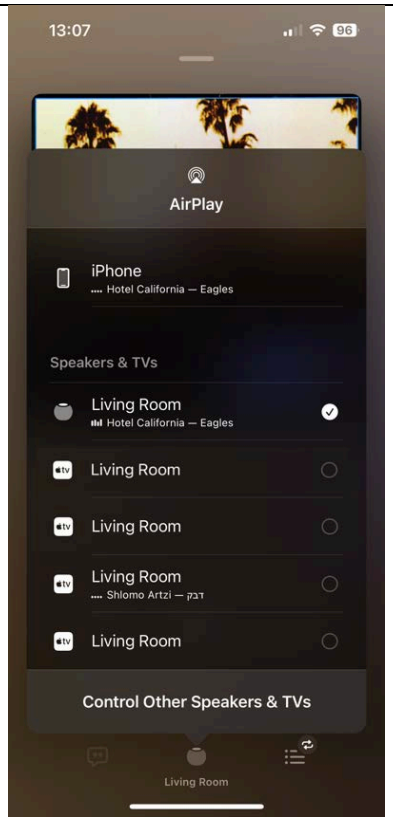
		 Sat 3 Feb 21:01 054- 00:21 — from your iPhone Video Mute End	

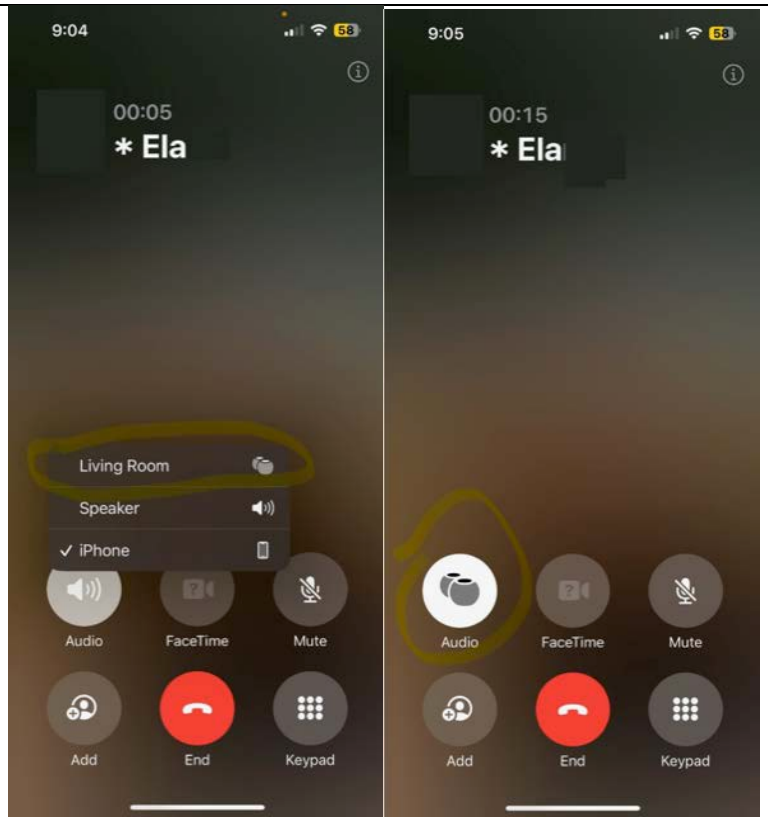
		 21:01 00:02 * Ela Benny's Mac Living Room Benny's Speaker ✓ iPhone Audio FaceTime Mute Add End Keypad  21:01 00:12 * Ela Audio FaceTime Mute Add End Keypad	

	  iPhone Cellular Calls iPhone Cellular Calls requires any iPhone using iOS 8.1 or later and an activated carrier plan. You can then relay calls to and from that iPhone from these devices: • Any Mac using OS X Yosemite or later. Mac mini and Mac Pro require an external microphone or headset. • Any iPhone, iPad, or iPod touch using iOS 8 or later. https://support.apple.com/en-us/108046 Make and receive phone calls on Mac or iPad With the iPhone Cellular Calls feature, you can make and receive phone calls from your Mac or iPad when those devices are on the same network as your iPhone.

	https://support.apple.com/en-us/102405 **Route the audio of an existing call through HomePod** Do either of the following: • On your iOS or iPadOS device, tap Audio in the Phone or FaceTime app, then choose your HomePod. • Hold your iPhone near the top of HomePod. To hand off audio, your device must have Bluetooth turned on and be on the same Wi-Fi network as HomePod. You must also turn on Transfer to HomePod in Settings > General > AirPlay & Handoff.

	 To change who can hand off phone calls to HomePod, see Allow others to control audio on HomePod. https://support.apple.com/guide/homepod/use-for-phone-calls-apdeaa15a6c3/homepod
and wherein said scout device is operable to determine media type requirements of said compatible equipment;	The scout device of an Apple apparatus (e.g., iPhone) is operable to determine media type requirements of compatible equipment. As illustrated in the screenshots below, an iPhone allows streaming media data to compatible devices (e.g., streaming music to AirPlay-compatible devices or routing phone calls to capable devices). This includes, for example, displaying equipment compatible to receive music via AirPlay, including identifying compatible equipment by its screen capability where applicable.

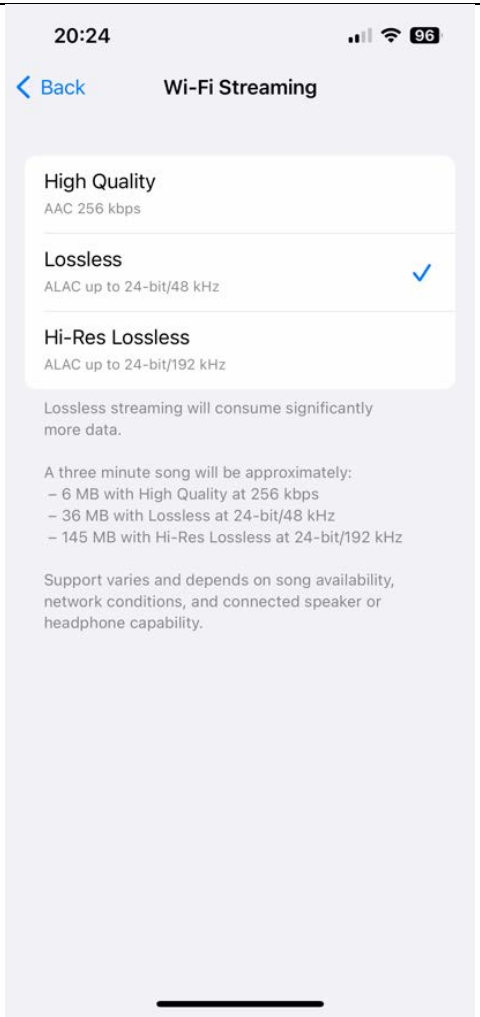
	 Moreover, the following screenshots show an iPhone displaying equipment compatible to receive a routed phone call:



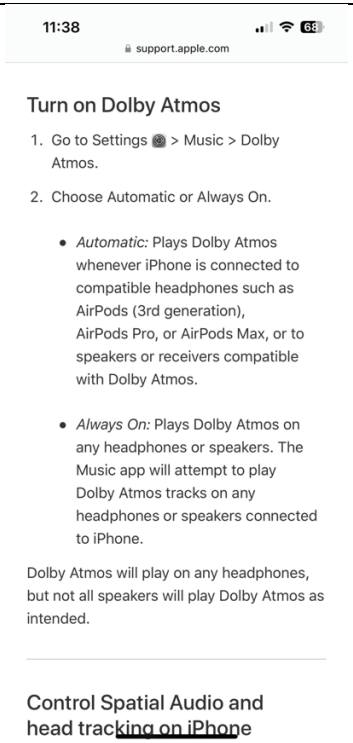
The scout device can further determine data rate requirements of compatible equipment.

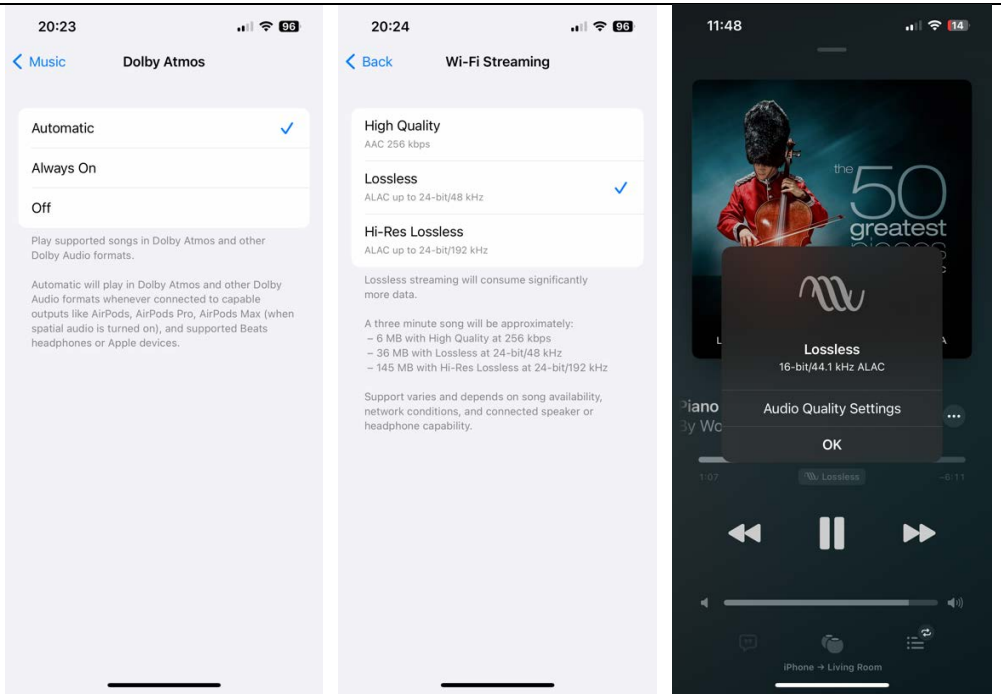
"…with regards to using AirPlay 2 to send lossless Apple Music streams. Apple Music's Lossless streams supposedly convert from ALAC (Apple's lossless codec) into AAC (Apple's lossy codec) at a pretty lowly 256kbps when transmitted over AirPlay – and therefore *not* losslessly."

Ref. 9, https://www.whathifi.com/advice/apple-airplay-2-everything-you-need-to-know

	
a media transformer, associated with said scout device, for transforming media	As described above, the scout device of an Apple iPhone identifies and determines availability of compatible equipment in the vicinity.

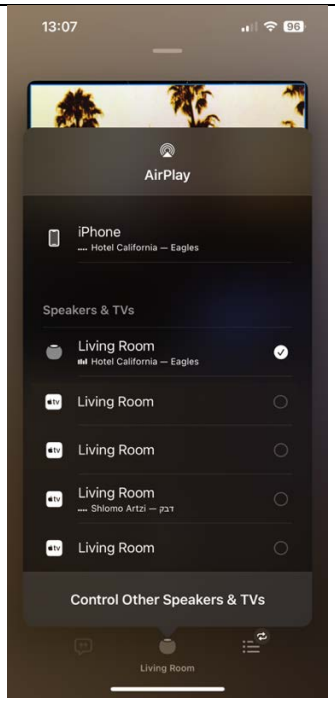
into a form that accords with said determined media type requirements, wherein a plurality of types correspond to said media type requirements, and further comprising a user interface for allowing a user to select one of said media type requirements for transforming at said media transformer and	Apple mobile devices such as iPhones comprise a media transformer, associated with said scout device, for transforming media into a form that accords with said determined media type requirements, wherein a plurality of types correspond to said media type requirements, and further comprising a user interface for allowing a user to select one of said media type requirements for transforming at said media transformer. For example, as evidenced below, an audio stream routed to compatible devices (e.g., Apple TV, Apple HomePod smart speaker and other Airplay-compatible speakers) via AirPlay can be transformed to a format compatible with the destination device. "…with regards to using AirPlay 2 to send lossless Apple Music streams. Apple Music's Lossless streams supposedly convert from ALAC (Apple's lossless codec) into AAC (Apple's lossy codec) at a pretty lowly 256kbps when transmitted over AirPlay – and therefore *not* losslessly." Ref. 9, https://www.whathifi.com/advice/apple-airplay-2-everything-you-need-to-know When an Apple mobile apparatus (e.g., iPhone) streams the audio to the compatible devices (e.g., Apple TV, Apple HomePod smart speaker and other Airplay-compatible speakers) via AirPlay, it converts the audio format to AAC. As can be seen in the below iPhone screen capture, the iPhone further plays Dolby Atmos format on specific compatible speakers. The Apple device provides a user interface allowing a user to select Dolby Atmos.

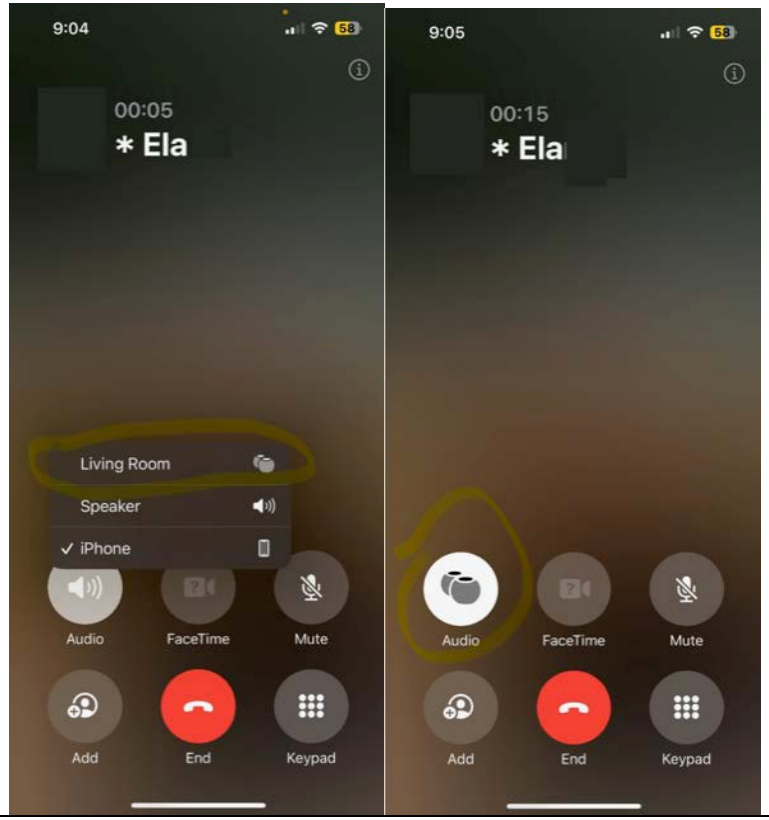
	 11:38 support.apple.com **Turn on Dolby Atmos** 1. Go to Settings > Music > Dolby Atmos. 2. Choose Automatic or Always On. • *Automatic:* Plays Dolby Atmos whenever iPhone is connected to compatible headphones such as AirPods (3rd generation), AirPods Pro, or AirPods Max, or to speakers or receivers compatible with Dolby Atmos. • *Always On:* Plays Dolby Atmos on any headphones or speakers. The Music app will attempt to play Dolby Atmos tracks on any headphones or speakers connected to iPhone. Dolby Atmos will play on any headphones, but not all speakers will play Dolby Atmos as intended. **Control Spatial Audio and head tracking on iPhone** The following links provide documentation information on different formats supported by AirPlay: https://developer.apple.com/documentation/avfaudio/avaudioformat; https://developer.apple.com/documentation/avfoundation/streaming_and_airplay/supporting_airplay_in_your_app. The following iPhone screenshots show a user interface allowing a user to select media type for transforming the media data.

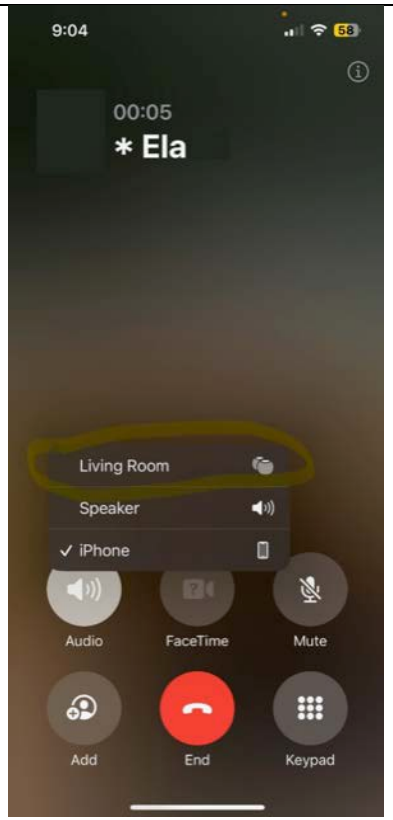
	
a media cloner, associated with said media transformer, for making multiple copies of a single incoming data stream, thereby to enable said apparatus to redirect said single incoming data stream to a plurality of locations, at least some of said multiple copies being redirected via said media transformer.	Apple mobile devices such as iPhones comprise a media cloner, associated with said media transformer, for making multiple copies of a single incoming data stream, thereby to enable said apparatus to redirect said single incoming data stream to a plurality of locations, at least some of said multiple copies being redirected via said media transformer. For example, an Apple mobile apparatus (e.g., an iPhone) is capable of streaming a single audio stream to one or more compatible devices (e.g., Apple TV, Apple HomePod smart speaker and other Airplay-compatible speakers) connected to the same network via AirPlay.

	"Play audio on multiple AirPlay 2-enabled devices: With AirPlay 2 and iPhone, you can play audio on multiple AirPlay 2-enabled devices connected to the same Wi-Fi network. For example, you can play a party playlist on HomePod speakers in the living room and kitchen, on an Apple TV in the bedroom, and on an AirPlay 2-enabled smart TV in the den." Ref. 10, https://support.apple.com/en-il/guide/iphone/iph315e0d58d/ios "As long as all the devices are on the same wi-fi network (remember, AirPlay requires a wi-fi connection to work), you simply have to access the music controls on, say, your iPhone, iPad or Apple TV, and select a connected speaker (or more than one) to send the music to." Ref. 9, https://www.whathifi.com/advice/apple-airplay-2-everything-you-need-to-know

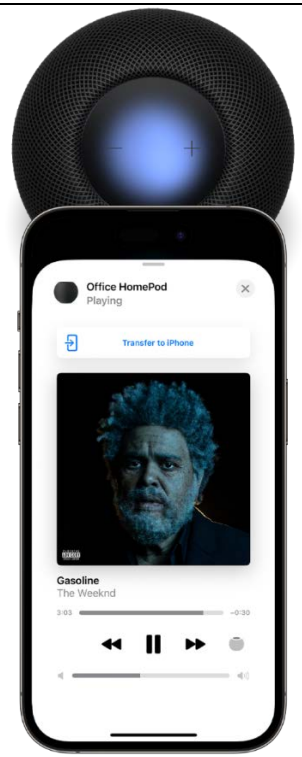
2. Apparatus according to claim 1, further comprising a user interface associated with said scout device for allowing a user to select between available compatible equipment to reroute data thereto.	Apple mobile devices such as iPhones comprise a user interface associated with said scout device for allowing a user to select between available compatible equipment to reroute data thereto. For example, an Apple mobile apparatus (e.g., an iPhone) allows the user to detect and select between one or more available compatible devices. "…you simply have to access the music controls on, say, your iPhone, iPad or Apple TV, and select a connected speaker (or more than one) to send the music to." Ref. 9, https://www.whathifi.com/advice/apple-airplay-2-everything-you-need-to-know The following iPhone screen capture shows the user interface allowing a user to select available compatible equipment to stream the audio to.

	 The following links provide documentation information on different AirPlay objects providing a user interface for the user to select from available devices: "AVRouteDetector: An object that detects available media playback routes." "…the object reports whether it detects multiple playback routes. If it does, use AVRoutePickerView to present the UI for the user to select an appropriate route." Ref. 11, https://developer.apple.com/documentation/avfoundation/streaming_and_airplay/supporting_airplay_in_your_app

	The following screenshot shows a user interface for routing a phone call to another device. In this particular case, the phone call was routed to a HomePod. 
3. Apparatus according to claim 1, wherein said announcer is an active device, operable to transmit at least status information to respective surroundings.	On information and belief, Apple mobile devices such as iPhones comprise an announcer that is an active device operable to transmit at least status information to respective surroundings, as evidenced by the screenshot below showing an iPhone that, on information and belief, transmitted its status information to respective surroundings, causing it to appear as an available device in the screenshot below.

	 Connecting to the Wi-Fi network, the Apple mobile apparatus (e.g. the wi-fi client) announces itself by sending probe request frames in accordance with the wi-fi protocol. “The client sends probe request frames which contain supported data rates and 802.11 capabilities.” https://netbeez.net/blog/how-wifi-connection-works/

9. Apparatus according to claim 1, further comprising control functionality operable to carry out said rerouting through locally available network infrastructure.	Apple mobile devices such as iPhones comprise control functionality operable to carry out said rerouting through locally available network infrastructure. iPhone Cellular Calls iPhone Cellular Calls requires any iPhone using iOS 8.1 or later and an activated carrier plan. You can then relay calls to and from that iPhone from these devices: • Any Mac using OS X Yosemite or later. Mac mini and Mac Pro require an external microphone or headset. • Any iPhone, iPad, or iPod touch using iOS 8 or later. https://support.apple.com/en-us/108046 Make and receive phone calls on Mac or iPad With the iPhone Cellular Calls feature, you can make and receive phone calls from your Mac or iPad when those devices are on the same network as your iPhone. https://support.apple.com/en-us/102405 **Route the audio of an existing call through HomePod** Do either of the following: • On your iOS or iPadOS device, tap Audio in the Phone or FaceTime app, then choose your HomePod. • Hold your iPhone near the top of HomePod. To hand off audio, your device must have Bluetooth turned on and be on the same Wi-Fi network as HomePod. You must also turn on Transfer to HomePod in Settings > General > AirPlay & Handoff.

	 To change who can hand off phone calls to HomePod, see Allow others to control audio on HomePod. https://support.apple.com/guide/homepod/use-for-phone-calls-apdeaa15a6c3/homepod
24. A cellular telephone comprising the apparatus of claim 1.	The apparatus of claim 1 can comprise a cellular telephone (e.g., an iPhone). "Play audio on your iPhone or iPad with iOS 11.4 or later, Apple TV, or a Mac with macOS Catalina or later. Then use AirPlay to stream that audio to your AirPlay-compatible speakers or smart TVs." Ref. 2, https://support.apple.com/en-il/HT202809 Handoff works with these devices and operating systems:

	iOS 8 or later	**OS X Yosemite or later**	**watchOS 1.0 or later**
	• iPhone 5 or later • iPad Pro (all models) • iPad (4th generation) or later • iPad Air or later • iPad mini or later • iPod touch (5th generation) or later	• MacBook introduced in 2015 or later • MacBook Pro introduced in 2012 or later • MacBook Air introduced in 2012 later • Mac mini introduced in 2012 or later • iMac introduced in 2012 or later • iMac Pro • Mac Pro introduced in 2013 or later • Mac Studio introduced in 2022 or later	• Apple Watch (all models)
	https://support.apple.com/en-us/108046 iPhone Cellular Calls iPhone Cellular Calls requires any iPhone using iOS 8.1 or later and an activated carrier plan. You can then relay calls to and from that iPhone from these devices: • Any Mac using OS X Yosemite or later. Mac mini and Mac Pro require an external microphone or headset. • Any iPhone, iPad, or iPod touch using iOS 8 or later.		

	https://support.apple.com/en-us/108046 **Route the audio of an existing call through HomePod** Do either of the following: • On your iOS or iPadOS device, tap Audio in the Phone or FaceTime app, then choose your HomePod. • Hold your iPhone near the top of HomePod. To hand off audio, your device must have Bluetooth turned on and be on the same Wi-Fi network as HomePod. You must also turn on Transfer to HomePod in Settings > General > AirPlay & Handoff.

	 To change who can hand off phone calls to HomePod, see Allow others to control audio on HomePod. https://support.apple.com/guide/homepod/use-for-phone-calls-apdeaa15a6c3/homepod