

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Based on information presently available, Advanced Coding Technologies LLC (“ACT”) contends that Defendant Google LLC (“Defendant” or “Google”) infringe Claims 1-5 and 7 (the “Asserted Claims”) of U.S. Patent No. 8,230,101 (the “’101 Patent”) through the Accused Products which are manufactured, sold, offered for sale, and/or used by Google.

Representativeness: Each Accused Product, including (i) the Google Home App, (ii) Google products that run the Google Home App, such as Google Pixel phones, Google Pixel Tablet, and Google Pixel Watch, and (iii) Google Products that are designed to be controlled, manipulated, or monitored by the Google Home App, such as Google Nest Cams and Google Nest Doorbells, is representative of other Accused Products for the purposes of infringement of the ’101 Patent. Based on publicly available information, ACT believes each Accused Product shares substantially the same structure and functionality with respect to the components which are relevant to infringement given that, among other things, the listed products all purport to support Google Home app .

Google directly infringes each of the Asserted Claims by using, importing, testing, selling, and/or offering for sale the Accused Products in violation of 35 U.S.C. § 271(a).

Google indirectly infringes the Asserted Claims in violation of 35 U.S.C. § 271(b) by inducing third parties, including its users and/or customers, to directly infringe through their operation and use of the Accused Products. Google has knowingly and intentionally induced this direct infringement by, *inter alia*, (i) selling, importing, or otherwise providing the Accused Products to third parties with the intent that the Accused Products will be operated and used in a manner that practices the Asserted Claim; and (ii) marketing and advertising the Accused Products. Google’s marketing and promotional materials for the Accused Products are found, for example, on Google’s website, and in App stores of operating systems for which the Accused Products are made available. For example, Google’s website offers customers instructions and/or manuals for the Accused Products that instruct customers to, among other things, use the accused functionality in the Accused Products. Google’s website also offers support to customers, including instruction to, among other things, use the Accused Products. On information and belief, Google knows that its actions will result in infringement of the Asserted Claims, or subjectively believes that there is a high probability that its actions will result in infringement of the Asserted Claims but has taken deliberate actions to avoid learning these facts.

Plaintiff contends that the Accused Products perform each step of the claimed methods. Plaintiff contends that use, testing, and qualification of the Accused Products by Google itself, as well as use by customers and end-users of the Accused Products, perform each step of the claimed methods. On information and belief, backend servers, under the direction and control of the Accused Products, may perform certain steps of the claimed methods. Google, its customers, and users of the Accused Products derive benefits from their infringement.

On information and belief, the charted version of Google’s products is representative of all versions of the Accused Products, including all variants of the Accused Products made, sold, offered for sale, or used on any operating system.

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ACT does not concede that any claims of the '101 Patent that are not listed below are not infringed by the identified Accused Products. Moreover, the citations to certain documents and other information below are intended to be exemplary only and in no way foreclose ACT from citing or relying on additional documents, information, source code, and/or testimony at a later time. These contentions are preliminary in nature, and an analysis of Google's products, internal documentation, source code, and/or testimony from relevant witnesses may more fully and accurately describe the infringing features of its Accused Products. Accordingly, ACT reserves the right to supplement, correct, modify, and/or amend these contentions once such additional information is made available to ACT. Furthermore, ACT reserves the right to supplement, correct, modify, and/or amend these contentions as discovery in this case progresses; in view of the Court's claim construction order(s); in view of any positions taken by Google including, but not limited to, positions on claim construction, invalidity, and/or non-infringement; and in connection with the preparation and exchange of expert reports.

The contents of every below claim cell on which another claim cell depends are expressly incorporated by reference in that dependent cell, as if set forth in their entirety therein.

Further, to the extent this element is performed at least in part by software source code, ACT reserves the right to supplement these contentions pursuant to production of such source code and to the extent Defendant requires additional information in accordance with P.R. 3-1 and for any other reasons.

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google's Accused Products
[1P] A server device for media, the server device for media comprising:	The Google Accused Products are each: A server device for media, the server device for media. Google directly infringes by using, importing, testing, selling, and/or offering for sale devices having the Google Accused Products. For example, Google Home provides a smart home experience by integrating Nest Cams with Nest Aware service. Nest Cams (i.e., server device) provide video surveillance to monitor a user's home, while Nest Aware provides intelligent alerts, continuous video recording, and access to video history. The Nest Cam has a local memory (i.e., internal storage device) to store recorded events.

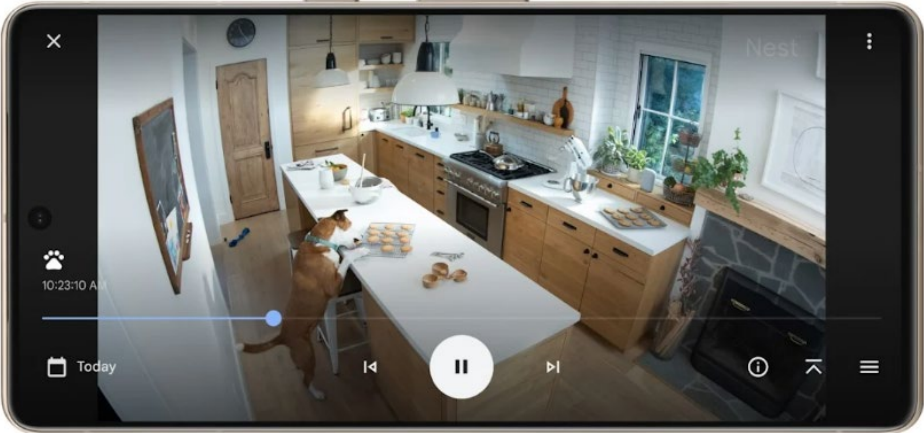
Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
	<p>See what’s going on inside and outside your home. The combination of Nest Cams and a Nest Doorbell can let you know that everything is fine at home. The doorbells have a 16:9 view, letting you see visitors or packages head to toe. Use this doorbell compatibility test to see if the battery or wired doorbell is right for you. Nest Cams have you covered for any other areas of interest inside the home or out. Some popular spots are back and side doors, pathways, and hallways.</p> <p>Consider adding a Nest Aware subscription that will store video picked up by the doorbell and cameras.⁷ And if you’re elsewhere in the house, where it’s hard to hear the doorbell? Nest Mini and other speakers can be paired with the Nest Doorbell to send the sound throughout the house.</p> <p>Source: https://store.google.com/intl/en/ideas/articles/curious-about-smart-home-devices-start-here/</p> <p>Further, to the extent this element is performed at least in part by software source code, ACT reserves the right to supplement these contentions pursuant to production of such source code and to the extent Defendant requires additional information in accordance with P.R. 3-1 and for any other reasons.</p>
<p>[1A] an internal storage device for storing digital contents, wherein the server device for media responds to a data transmission request from a network player by</p>	<p>The Google Accused Products comprise: an internal storage device for storing digital contents, wherein the server device for media responds to a data transmission request from a network player by stream-delivering corresponding data in corresponding digital contents from the internal storage device to the network player during connection to a network.</p> <p>For example, users can access and watch the events recorded by Nest Cam on their Google devices, such as tablets, smartphones, or smartwatches (i.e., network player) over a Wi-Fi network connection. The Nest Cam recording can be viewed on mobile devices via Google Home app or Nest app. When a user clicks on “History”, “Live” or “More” in the Google Home or Nest application on their mobile device, a request for</p>

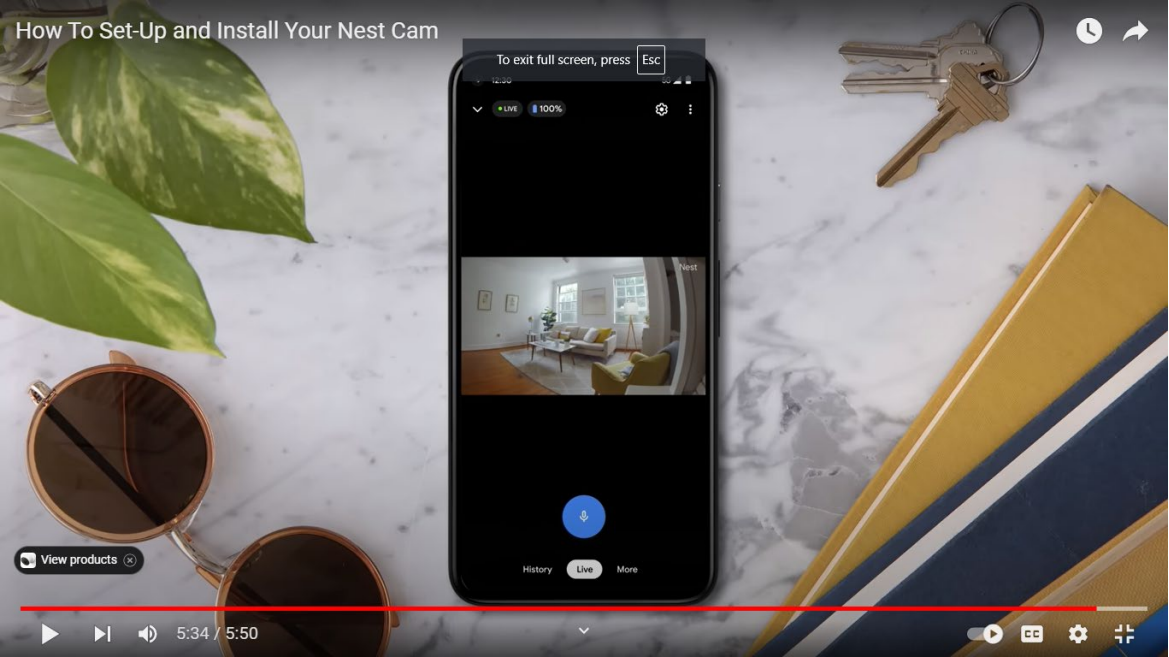
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Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
<p>stream-delivering corresponding data in corresponding digital contents from the internal storage device to the network player during connection to a network;</p>	<p>viewing the recorded contents is generated and sent to the Nest Cam, which then provides the required data, and the recorded event is streamed on user’s display devices.</p> <p>Keep an eye on your home at all times. Through the Google Home app, set Home and Away automations so your Nest Cam can notify you if motion is detected when no one is home. Your Pixel Watch can pick up the camera’s live video stream for easy viewing right from your wrist. And when you return, your indoor cameras can turn off automatically.^{4...8}</p> <p>Source: https://store.google.com/intl/en/ideas/articles/curious-about-smart-home-devices-start-here/</p> <h3>Watch Nest camera video history on a computer</h3> <p>If you're a Nest Aware subscriber, your Nest camera's video history will be stored automatically in the cloud.</p> <p>You can watch your Nest camera's video history on your phone or tablet, or with a computer.</p> <p>To watch the video history on a computer, sign in to your account at home.google.com or home.nest.com and select a camera that has a Nest Aware subscription.</p> <p>Source: Watch live video stream with the Google Home app - Google Nest Help</p>

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Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
	<p>Depending on which camera model you have, use either the Google Home app or Nest app to set it up. Download the one you need from the Apple App Store or the Google Play Store.</p> <p>Use the Google Home app to set up the following Nest cameras:</p> <ul style="list-style-type: none">• Nest Cam (wired)• Nest Cam with Floodlight• Nest Cam (battery) <p>Use the Nest app to set up the following Nest cameras:</p> <ul style="list-style-type: none">• Nest Cam IQ Indoor• Nest Cam IQ Outdoor• Nest Cam Indoor• Nest Cam Outdoor <p>Source: https://support.google.com/googlenest/answer/9293657?hl=en#zippy=</p> 

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	<p data-bbox="747 237 1675 264">Source: https://store.google.com/us/product/nest_cam_battery?hl=en-US</p>  <p data-bbox="835 963 1587 990">Source: https://www.youtube.com/watch?v=x2-RRXMj-cs</p> <p data-bbox="999 1036 1430 1089">Stay connected.</p> <p data-bbox="852 1122 1577 1252">If your Wi-Fi goes down or there’s a power outage, Nest Cam will automatically store up to one hour of recorded events in its local memory.⁵ When things are up and running again, you’ll be able to see exactly what happened.</p> <p data-bbox="747 1308 1675 1336">Source: https://store.google.com/us/product/nest_cam_battery?hl=en-US</p>

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	<p>See what’s going on inside and outside your home. The combination of Nest Cams and a Nest Doorbell can let you know that everything is fine at home. The doorbells have a 16:9 view, letting you see visitors or packages head to toe. Use this doorbell compatibility test to see if the battery or wired doorbell is right for you. Nest Cams have you covered for any other areas of interest inside the home or out. Some popular spots are back and side doors, pathways, and hallways.</p> <p>Consider adding a Nest Aware subscription that will store video picked up by the doorbell and cameras.⁷ And if you’re elsewhere in the house, where it’s hard to hear the doorbell? Nest Mini and other speakers can be paired with the Nest Doorbell to send the sound throughout the house.</p> <p>Source: https://store.google.com/intl/en/ideas/articles/curious-about-smart-home-devices-start-here/</p> <p>Keep an eye on your home at all times. Through the Google Home app, set Home and Away automations so your Nest Cam can notify you if motion is detected when no one is home. Your Pixel Watch can pick up the camera’s live video stream for easy viewing right from your wrist. And when you return, your indoor cameras can turn off automatically.^{4...8}</p> <p>Source: https://store.google.com/intl/en/ideas/articles/curious-about-smart-home-devices-start-here/</p>
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Check that your devices are on the same Wi-Fi network

To confirm if your phone or tablet and your Google devices are on the same Wi-Fi network, follow the steps below.

Step 1. Check the Wi-Fi network of your phone or tablet

1. Open your device's Settings app.
2. Tap **Network & internet** > **Internet**.
3. The Wi-Fi network labeled "Connected" is the network your phone or tablet is connected to.
4. If your Wi-Fi network doesn't match, or if you need to change the network:
 - Tap a new network > enter password > **Connect**.
 - If you've entered the password for that network before, you just need to tap the network and your device should connect automatically.

Step 2. Check the Wi-Fi network of your Google device

1. Open the Google Home app .
2. Tap **Favorites**  or **Devices** .
3. Tap and hold your device's tile.
4. Tap Settings  > **Device information**.
5. Check what Wi-Fi network your device is connected to.

Source: <https://support.google.com/googlenest/answer/7360025?hl=en&co=GENIE.Platform%3DAndroid>,

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	<p>Further, to the extent this element is performed at least in part by software source code, ACT reserves the right to supplement these contentions pursuant to production of such source code and to the extent Defendant requires additional information in accordance with P.R. 3-1 and for any other reasons.</p>
<p>[1B] a transfer control unit adapted to transfer and store part of held digital contents in the internal storage device to a network storage device, wherein the network storage device is connected to the network and is capable of storing data, and wherein said transfer control unit does not transfer, from the internal storage device to the network storage device, the digital contents that cannot be recovered if a network failure occurs during the transferring of the digital contents from the internal storage</p>	<p>The Google Accused Products comprise: a transfer control unit adapted to transfer and store part of held digital contents in the internal storage device to a network storage device, wherein the network storage device is connected to the network and is capable of storing data, and wherein said transfer control unit does not transfer, from the internal storage device to the network storage device, the digital contents that cannot be recovered if a network failure occurs during the transferring of the digital contents from the internal storage device to the network storage device.</p> <p>For example, Nest Cam has a local memory that can store recorded events, which are transferred and stored in the cloud (i.e., network storage device). Nest Aware allows Nest Cam’s video history to be stored in the cloud automatically. Users can then access and watch the events recorded by Nest Cam on their Google devices, such as tablets, smartphones, or smartwatches. The recorded events are not transferred when there’s a power cut or when the Wi-Fi connectivity goes down.</p> <div style="text-align: center;"> <h2 style="margin: 0;">Stay connected.</h2> <p style="margin: 0;">If your Wi-Fi goes down or there’s a power outage, Nest Cam will automatically store up to one hour of recorded events in its local memory.⁵ When things are up and running again, you’ll be able to see exactly what happened.</p> </div> <p style="text-align: center;">Source: https://store.google.com/us/product/nest_cam_battery?hl=en-US</p>



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Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
<p>device to the network storage device;</p>	<p>See what’s going on inside and outside your home. The combination of Nest Cams and a Nest Doorbell can let you know that everything is fine at home. The doorbells have a 16:9 view, letting you see visitors or packages head to toe. Use this doorbell compatibility test to see if the battery or wired doorbell is right for you. Nest Cams have you covered for any other areas of interest inside the home or out. Some popular spots are back and side doors, pathways, and hallways.</p> <p>Consider adding a Nest Aware subscription that will store video picked up by the doorbell and cameras.⁷ And if you’re elsewhere in the house, where it’s hard to hear the doorbell? Nest Mini and other speakers can be paired with the Nest Doorbell to send the sound throughout the house.</p> <p>Source: https://store.google.com/intl/en/ideas/articles/curious-about-smart-home-devices-start-here/</p> <h3>Watch Nest camera video history on a computer</h3> <p>If you're a Nest Aware subscriber, your Nest camera's video history will be stored automatically in the cloud.</p> <p>You can watch your Nest camera's video history on your phone or tablet, or with a computer.</p> <p>To watch the video history on a computer, sign in to your account at home.google.com or home.nest.com and select a camera that has a Nest Aware subscription.</p>

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	<p>Source: https://support.google.com/googlenest/answer/9225631?hl=en&ref_topic=9305896</p> <p>Further, to the extent this element is performed at least in part by software source code, ACT reserves the right to supplement these contentions pursuant to production of such source code and to the extent Defendant requires additional information in accordance with P.R. 3-1 and for any other reasons.</p>
<p>[1C] a list information transmission unit adapted to respond to a list presentation request for the held digital contents of the server device for media from the network player by transmitting list information to the network player, wherein the list information lists the digital contents left in the internal storage device and the digital contents transferred from the internal storage device to the network storage device and stored in the network storage device, and wherein the list information maintains a tree structure of the digital contents in the internal storage device before transferring the digital contents to the network storage device.</p>	<p>The Google Accused Products comprise: a list information transmission unit adapted to respond to a list presentation request for the held digital contents of the server device for media from the network player by transmitting list information to the network player, wherein the list information lists the digital contents left in the internal storage device and the digital contents transferred from the internal storage device to the network storage device and stored in the network storage device, and wherein the list information maintains a tree structure of the digital contents in the internal storage device before transferring the digital contents to the network storage device.</p> <p>For example, a user can request the list of content captured by Nest Cam (i.e., server device) via Google Home App or Google Home app on Google devices such as tablets, smartphones, or smartwatches. In response to that request (i.e., responding to a list presentation request for the held digital contents of the server device for media from the network player) the user is presented with a structured list (i.e., transmitting list information to the network player) showing the recorded events according to cameras and dates (i.e., and wherein the list information maintains a tree structure of the digital contents).</p>

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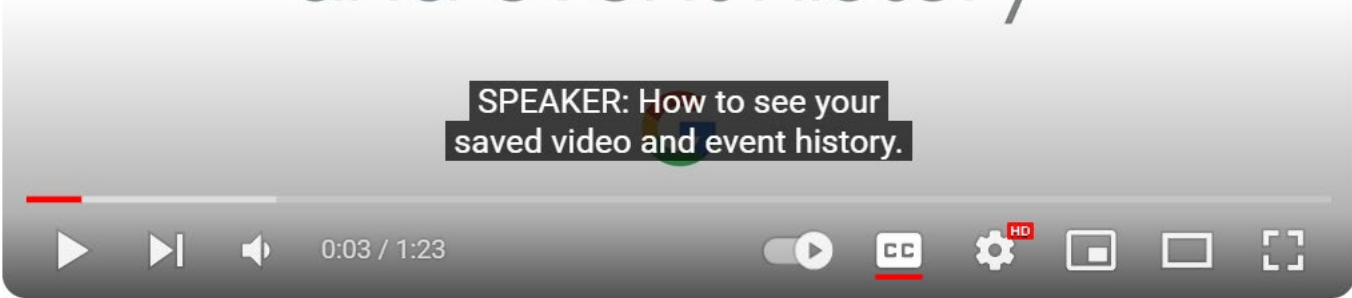
Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
<p>maintains a tree structure of the digital contents in the internal storage device before transferring the digital contents to the network storage device;</p>	<p>Find your camera’s video history</p> <p>Here’s how to access your camera’s video history:</p> <ol style="list-style-type: none">1. Open the Nest app.2. On the home screen, select your camera.3. Your camera’s video history will appear below the live video stream. <p>Switch between different views in video history</p> <p>The video history timeline and event history are two different views of your Google Nest camera’s video history in the Nest app.</p> <ul style="list-style-type: none">• In the timeline, you’ll get an activity track that’s marked with activity your camera has picked up.• In the event history, you’ll get a list of events your camera has picked up. <p>To switch between these views, tap the timeline  or event history  icon in your camera’s video history.</p> <p>Source: https://support.google.com/googlenest/answer/9225631?hl=en&ref_topic=9305896</p>

More about local video storage

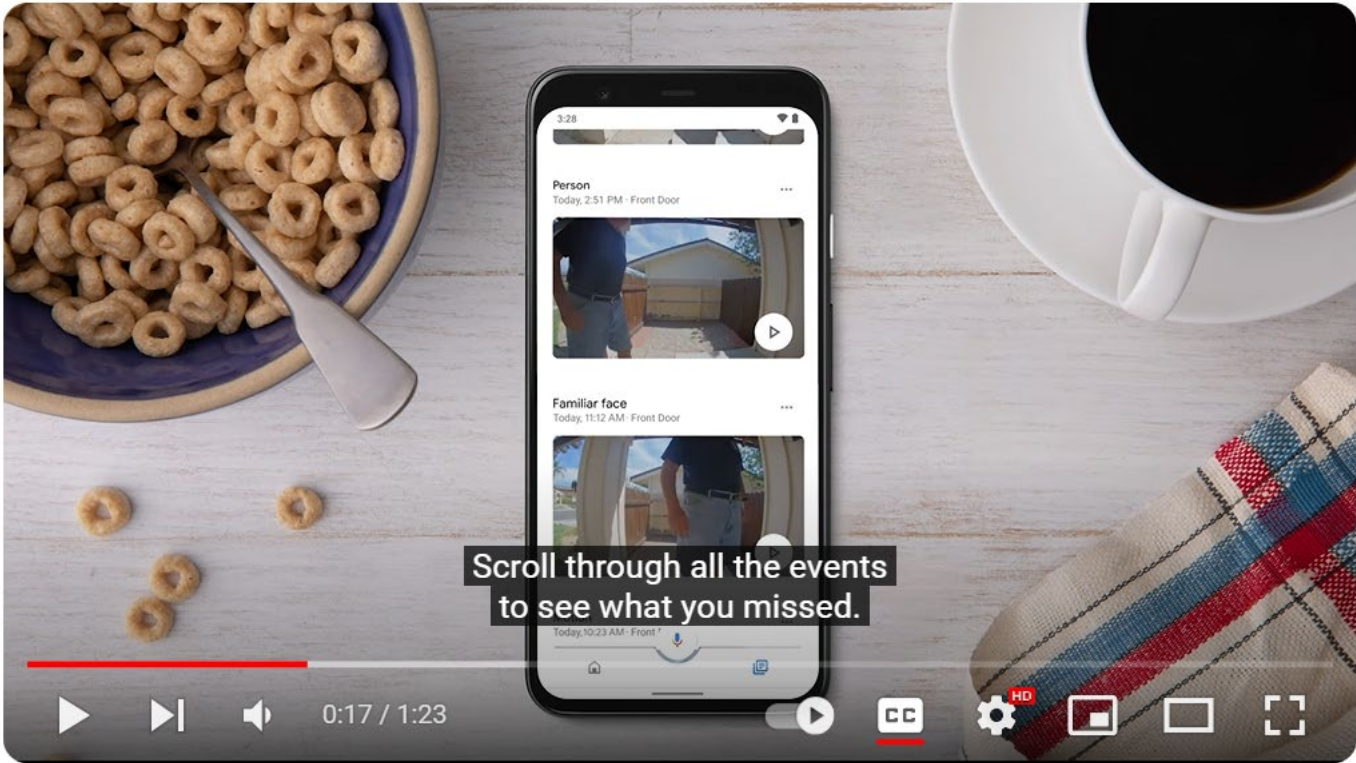
Here are some more details about how local video storage works when your battery-powered camera or doorbell is offline:

- The Nest Cam (wired), Nest Cam (battery), Nest Doorbell (wired, 2nd gen), and Nest Doorbell (battery) have enough internal memory to store up to one hour of recorded events when they're offline.
- Higher video quality settings and more activity will shorten the amount of time it takes to fill up the internal memory.
- If your camera is using its backup battery, it will honor its maximum video clip length setting. This means that if your camera is recording an event, it will cut off and save the clip even if the event is still happening.
- When the Nest Cam (wired) or Nest Cam (battery) is connected to power and has a 24/7 Video History subscription, they will record continuously for about 8 minutes before switching to event recording.

Source: <https://support.google.com/googlenest/answer/9242083?hl=en>

	<p>HOW TO</p> <h1>See your saved video and event history</h1> <p>SPEAKER: How to see your saved video and event history.</p>  <p>Source: How to see your saved video and event history (youtube.com)</p>
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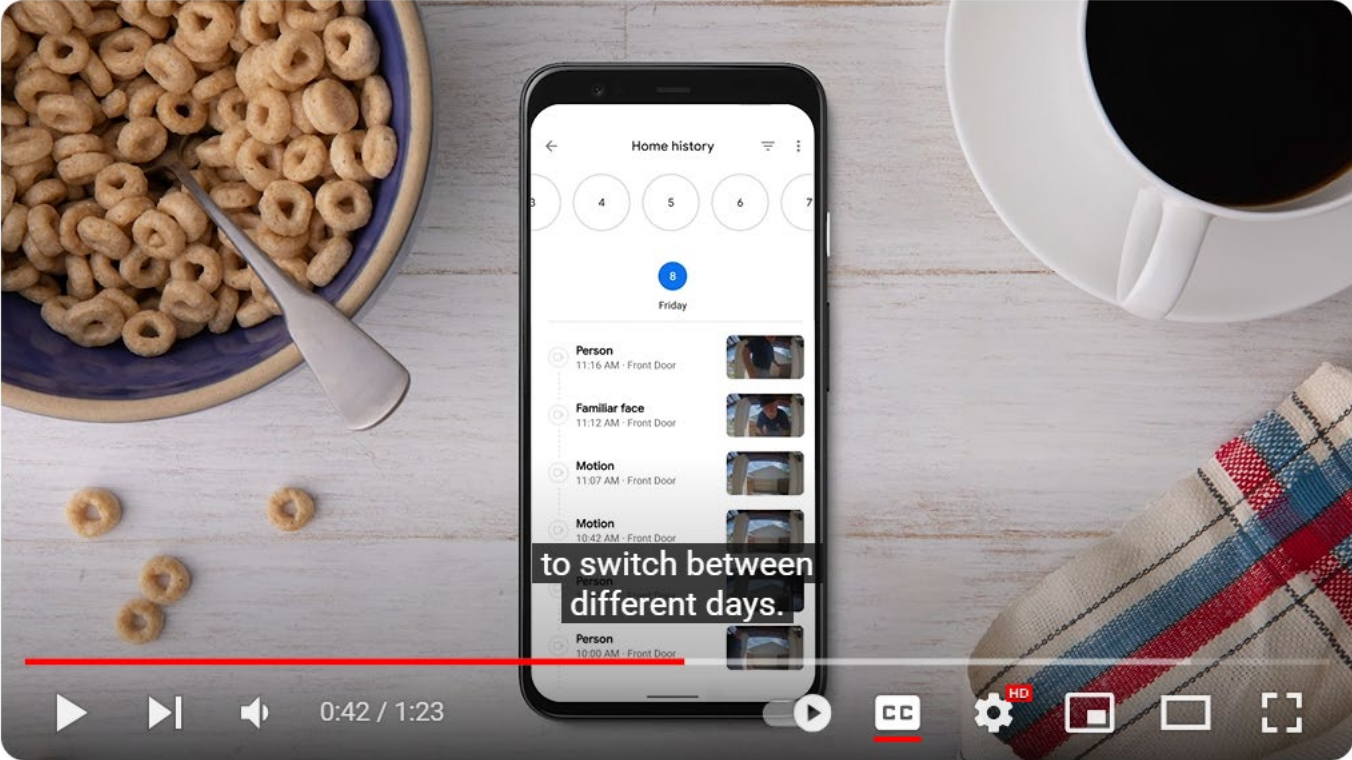
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How to see your saved video and event history

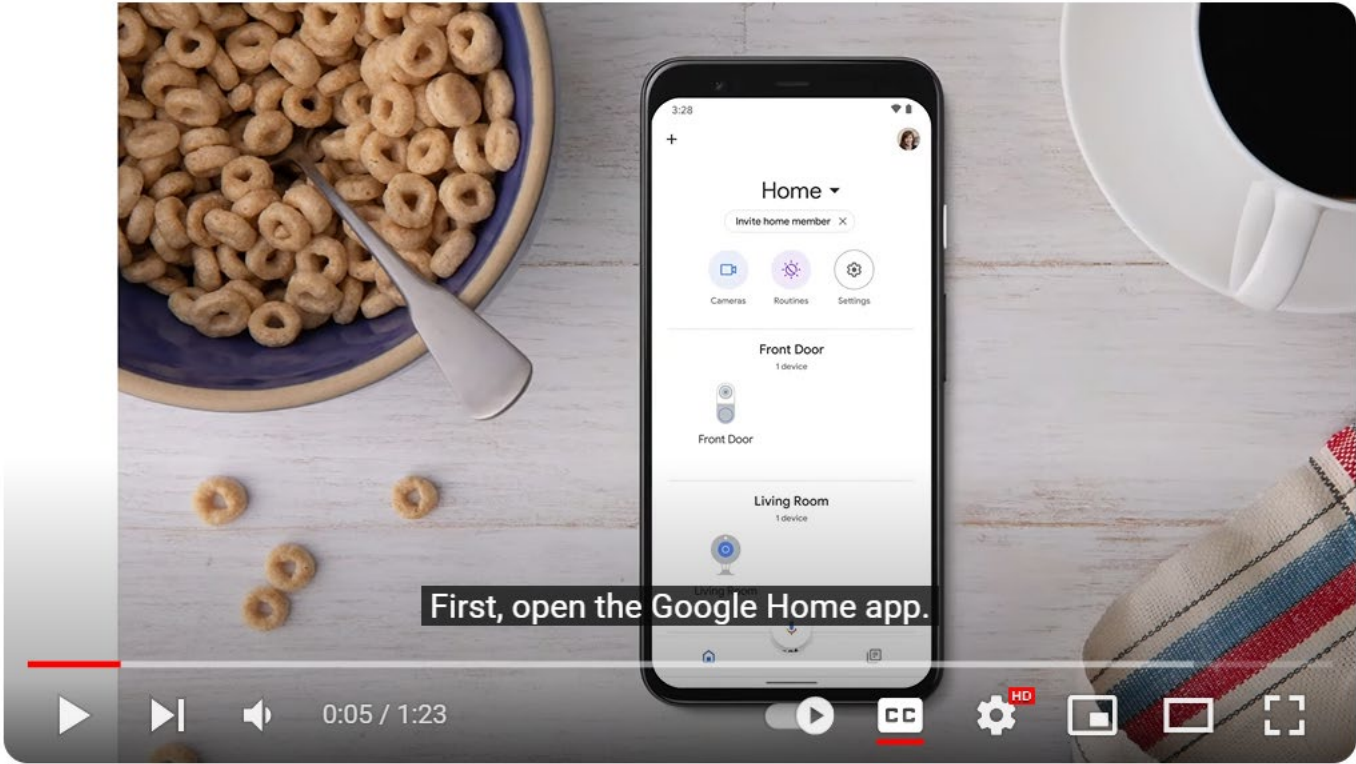
Source: <https://www.youtube.com/watch?v=R0c7kGGbIxs>

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Source: <https://www.youtube.com/watch?v=R0c7kGGbIxs>




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	 <p>How to see your saved video and event history</p> <p>Source: https://www.youtube.com/watch?v=R0c7kGGbIxs</p> <p>Further, to the extent this element is performed at least in part by software source code, ACT reserves the right to supplement these contentions pursuant to production of such source code and to the extent Defendant requires additional information in accordance with P.R. 3-1 and for any other reasons.</p>
[1D] a search unit adapted to respond	The Google Accused Products comprise: a search unit adapted to respond to a data transmission request for the held digital contents from the network player by searching for a location where the held digital contents are

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<p>to a data transmission request for the held digital contents from the network player by searching for a location where the held digital contents are currently stored; and</p>	<p>currently stored.</p> <p>For example, the recorded clips (i.e. digital content) of the Nest Cam (i.e. server device) can be viewed or live streamed using Google Home App or Google Home Web work. The Google Home App and Google Home Web work use the RTSP and webRTSP protocols respectively for streaming the content. The RTSP and webRTSP protocols work on the request-response model. Thus, when a user requests to view a Nest Cam clip from the Google Home App and Google Home Web work, the content corresponding to the URL of the click is searched across from Nest aware subscription storage, and a response for delivering the content is generated.</p> <p>You can watch your Nest camera's video history on your phone or tablet, or with a computer.</p> <p>To watch the video history on a computer, sign in to your account at home.google.com or home.nest.com and select a camera that has a Nest Aware subscription.</p> <p>Source: https://support.google.com/googlenest/answer/9225631?hl=en</p> <p>To watch different parts of your video history, simply click the part of the timeline you'd like to watch from. Your video will immediately jump backward or forward and start playing from the point you clicked.</p> <p>Source: https://support.google.com/googlenest/answer/9225631?hl=en</p>

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	<p data-bbox="548 240 695 277">View clips</p> <ol data-bbox="604 329 1661 646" style="list-style-type: none"><li data-bbox="604 329 1178 367">1. Go to home.nest.com  and sign in.<li data-bbox="604 386 1171 423">2. Select the camera you want to view.<li data-bbox="604 443 1440 480">3. Select Clips  in the lower right corner of the screen.<li data-bbox="604 500 932 537">4. Choose View clips.<li data-bbox="604 557 1661 594">5. Pick the clip that you want to view and it will open in a popup window.<li data-bbox="604 613 1136 651">6. Select Play  to watch your clip. <hr data-bbox="548 699 1892 703"/> <p data-bbox="604 732 1822 769">Source: https://support.google.com/googlenest/answer/9207572?sjid=14727395527086856944-</p> <p data-bbox="1037 789 1383 826">AP#zippy=%2Cview-clips</p>

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! If the specific device is a Google Nest Cam Indoor or a Google Nest Cam Outdoor it can be used on either the Nest app or the Google Home app. When the camera is on the Nest app it uses RTSP. And when the camera is on the Google Home app it uses WebRTC.

Source: <https://developers.google.com/nest/device-access/traits/device/camera-live-stream>

RTSP Protocol



Source: groupsingh.com/updates/what-is-rtsp-4C7Bg

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Nest Cam (legacy) Nest Hub Max Nest Doorbell (legacy)

Request a token to access an RTSP live stream URL.

RTSP live stream URLs cannot be shared between clients. A stream URL can only be used by one client at a time. If multiple clients want to stream from the same camera at the same time, RTSP commands must be sent for each individual client, and each individual client must use its own stream URL.

Source: <https://developers.google.com/nest/device-access/traits/device/camera-live-stream>

```
Request Response
POST /enterprises/project-id/devices/device-id:executeCommand
{
  "command" : "sdm.devices.commands.CameraLiveStream.GenerateWebRtcStream",
  "params" : {
    "offerSdp" : "offerSdp"
  }
}
```

Source: <https://developers.google.com/nest/device-access/traits/device/camera-live-stream>




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Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
	<div data-bbox="510 237 1929 683" style="border: 1px solid #ccc; padding: 10px; background-color: #f9f9f9;"> <p style="margin: 0;">Request <u>Response</u></p> <pre style="margin: 10px 0 0 20px;"> { "results" : { "answerSdp" : "answerSdp ✎", "expiresAt" : "2020-01-04T18:30:00.000Z", "mediaSessionId" : "B1zGr6Ld7X8yMA9I3UcPS02UFr..." } } </pre> </div> <p style="text-align: center; margin: 10px 0;">Source: https://developers.google.com/nest/device-access/traits/device/camera-live-stream</p> <p>Further, to the extent this element is performed at least in part by software source code, ACT reserves the right to supplement these contentions pursuant to production of such source code and to the extent Defendant requires additional information in accordance with P.R. 3-1 and for any other reasons.</p>
<p>[1E] a digital contents data transmission processing unit adapted to allow the corresponding data in held digital contents to be stream-delivered from the network storage device to the network player, if the result of search</p>	<p>The Google Accused Products comprise: a digital contents data transmission processing unit adapted to allow the corresponding data in held digital contents to be stream-delivered from the network storage device to the network player, if the result of search shows the network storage device.</p> <p>For example, recorded clips of the Nest Cam can viewed or live streamed using Google Home App or Nest App. The Nest App and Google Home App use the RTSP and webRTSP protocols respectively for streaming the content. The RTSP and webRTSP protocols work on the request-response model. Thus, when a user requests to view a Nest Cam clip from the Nest App and Google Home App, the Nest Cam clip corresponding to the URL of the click is searched across from Nest Aware subscription storage. If the URL corresponding to the requested Nest Cam clip is mapped to the Cloud storage, a response containing the requested Nest Cam clip is delivered.</p>

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
<p>shows the network storage device,</p>	<h2 data-bbox="548 240 1850 302">Watch Nest camera video history on a computer</h2> <p data-bbox="548 326 1850 402">If you're a Nest Aware subscriber, your Nest camera's video history will be stored automatically in the cloud.</p> <p data-bbox="548 440 1818 472">You can watch your Nest camera's video history on your phone or tablet, or with a computer.</p> <p data-bbox="548 509 1734 586">To watch the video history on a computer, sign in to your account at home.google.com or home.nest.com and select a camera that has a Nest Aware subscription.</p> <p data-bbox="625 623 1797 656">Source: https://support.google.com/googlenest/answer/9225631?hl=en&ref_topic=9305896</p> <p data-bbox="548 704 1887 737">You can watch your Nest camera's video history on your phone or tablet, or with a computer.</p> <p data-bbox="548 774 1801 850">To watch the video history on a computer, sign in to your account at home.google.com or home.nest.com and select a camera that has a Nest Aware subscription.</p> <p data-bbox="762 888 1661 920">Source: https://support.google.com/googlenest/answer/9225631?hl=en</p> <p data-bbox="527 969 1898 1099">To watch different parts of your video history, simply click the part of the timeline you'd like to watch from. Your video will immediately jump backward or forward and start playing from the point you clicked.</p> <p data-bbox="762 1136 1661 1169">Source: https://support.google.com/googlenest/answer/9225631?hl=en</p>

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
	<p data-bbox="548 240 693 277">View clips</p> <ol data-bbox="604 329 1661 646" style="list-style-type: none"><li data-bbox="604 329 1178 367">1. Go to home.nest.com  and sign in.<li data-bbox="604 386 1171 423">2. Select the camera you want to view.<li data-bbox="604 443 1440 480">3. Select Clips  in the lower right corner of the screen.<li data-bbox="604 500 932 537">4. Choose View clips.<li data-bbox="604 557 1661 594">5. Pick the clip that you want to view and it will open in a popup window.<li data-bbox="604 613 1136 651">6. Select Play  to watch your clip. <hr data-bbox="548 699 1892 703"/> <p data-bbox="604 735 1822 773">Source: https://support.google.com/googlenest/answer/9207572?sjid=14727395527086856944-AP#zippy=%2Cview-clips</p>

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

! If the specific device is a Google Nest Cam Indoor or a Google Nest Cam Outdoor it can be used on either the Nest app or the Google Home app. When the camera is on the Nest app it uses RTSP. And when the camera is on the Google Home app it uses WebRTC.

Source: <https://developers.google.com/nest/device-access/traits/device/camera-live-stream>

RTSP Protocol



Source: groupsingh.com/updates/what-is-rtsp-4C7Bg

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Nest Cam (legacy) Nest Hub Max Nest Doorbell (legacy)

Request a token to access an RTSP live stream URL.

RTSP live stream URLs cannot be shared between clients. A stream URL can only be used by one client at a time. If multiple clients want to stream from the same camera at the same time, RTSP commands must be sent for each individual client, and each individual client must use its own stream URL.

Source: <https://developers.google.com/nest/device-access/traits/device/camera-live-stream>

```
Request Response
POST /enterprises/project-id/devices/device-id:executeCommand
{
  "command" : "sdm.devices.commands.CameraLiveStream.GenerateWebRtcStream",
  "params" : {
    "offerSdp" : "offerSdp"
  }
}
```

Source: <https://developers.google.com/nest/device-access/traits/device/camera-live-stream>



Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
	<div data-bbox="506 237 1929 683"> <pre> Request Response ----- { "results" : { "answerSdp" : "answerSdp", "expiresAt" : "2020-01-04T18:30:00.000Z", "mediaSessionId" : "B1zGr6Ld7X8yMA9I3UcPS02UFr..." } } </pre> </div> <p data-bbox="632 735 1787 764">Source: https://developers.google.com/nest/device-access/traits/device/camera-live-stream</p> <p data-bbox="499 789 1913 894">Further, to the extent this element is performed at least in part by software source code, ACT reserves the right to supplement these contentions pursuant to production of such source code and to the extent Defendant requires additional information in accordance with P.R. 3-1 and for any other reasons.</p>
<p data-bbox="201 940 422 1078">[1F] wherein the server device for media is a media player.</p>	<p data-bbox="499 940 1719 969">The Google Accused Products comprise: wherein the server device for media is a media player.</p> <p data-bbox="499 1013 1898 1118">For example, the live feed of the Google Nest Can be viewed or live streamed via Google Home App or Google Home Web work. Thus, the Google Nest Cam in integration with the Nest App or Google Home App is capable of playing the media files of recorded videos, and hence acts as a media player.</p> <p data-bbox="543 1138 1824 1243">Nest cameras also have the ability to record footage, allowing you to store and review events that may have happened at your home.</p> <p data-bbox="758 1317 1661 1346">Source: https://superhomepursuits.com/how-does-a-nest-camera-work/</p>



Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
	<p data-bbox="716 240 1234 267">How does Google Home for web work?</p> <ol data-bbox="758 310 1692 480" style="list-style-type: none"><li data-bbox="758 310 1444 337">1. Go to home.google.com on your desktop computer.<li data-bbox="758 354 1692 381">2. Sign in with the same Google account you use in the Google Home app.<li data-bbox="758 397 1419 425">3. Immediately view live streams from your cameras.<li data-bbox="758 441 1562 469">4. Toggle between a single camera view and multi-camera view. <p data-bbox="716 591 1024 618">What can I live stream?</p> <ul data-bbox="758 659 1493 781" style="list-style-type: none"><li data-bbox="758 659 1493 686">• View live streams of all your Nest cameras and doorbells.<li data-bbox="758 703 1346 730">• View the live stream of one camera at a time.<li data-bbox="758 747 1493 774">• View full-screen to see more details of what’s happening. <p data-bbox="520 824 1902 911">Source: https://www.googlenestcommunity.com/t5/Blog/Check-out-your-cameras-on-the-web-with-Google-Home/ba-p/242119</p>

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
	<h2 data-bbox="548 248 1791 310">Watch live video stream with the Home app</h2> <p data-bbox="548 339 1845 418">View live video from your Nest cameras and doorbells with the Home app. Check multiple cameras on the same screen or select one camera and zoom in for a detailed view.</p> <p data-bbox="548 461 1856 540">Note: Live video is available only for Nest cameras and doorbells that you control with the Home app.</p> <ol data-bbox="548 579 1824 878" style="list-style-type: none"><li data-bbox="548 579 1045 613">1. Open the Google Home app .<li data-bbox="548 634 1824 714">2. Tap Cameras  to view all your cameras and doorbells, or scroll down and select a specific one.<li data-bbox="548 740 1814 820">3. If the camera isn't streaming, tap Turn on. Or you can tap Turn off to manually stop streaming.<li data-bbox="548 846 1419 878">4. If your camera is offline, you can tap Retry to reconnect. <p data-bbox="548 919 1415 951">To save power, the live video stream will stop automatically:</p> <ul data-bbox="548 976 1839 1055" style="list-style-type: none"><li data-bbox="548 976 1839 1008">• Live video from battery-powered Nest cameras and doorbells stops after five minutes.<li data-bbox="548 1032 1612 1065">• Live video from wired Nest cameras and doorbells stops after 12 hours. <p data-bbox="548 1101 1220 1133">To start the live stream again, tap Watch live.</p> <p data-bbox="548 1174 1850 1206">Learn how to view your cameras and doorbells on a computer with Google Home for web.</p> <p data-bbox="1163 1235 1262 1260">Source:</p> <p data-bbox="506 1287 1913 1367">https://support.google.com/googlenest/answer/10065055?hl=en&ref_topic=9305896&sjid=14727395527086856944-AP</p>

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
	<p data-bbox="527 289 1856 431">Watch live video stream with the Google Home app</p> <p data-bbox="527 459 1892 583">You can watch live video from your Nest cameras and doorbells in the Home app. Select one camera and zoom in for a detailed view or watch video from multiple cameras on the Home app’s favorites tab.</p> <p data-bbox="1163 678 1262 704">Source:</p> <p data-bbox="506 732 1913 813">https://support.google.com/googlenest/answer/10065055?hl=en&ref_topic=9305896&sjid=14727395527086856944-AP</p> <p data-bbox="648 885 863 911">From Cameras</p> <ol data-bbox="653 943 1772 1101" style="list-style-type: none">1. Open the Google Home app .2. Tap Cameras  to view all your cameras and doorbells, or scroll down and select a specific one.3. If the camera isn't streaming, tap Turn on. Or you can tap Turn off to manually stop streaming.4. If your camera is offline, you can tap Retry to reconnect. <p data-bbox="1163 1170 1262 1196">Source:</p> <p data-bbox="506 1224 1913 1305">https://support.google.com/googlenest/answer/10065055?hl=en&ref_topic=9305896&sjid=14727395527086856944-AP</p>

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
	<p>Further, to the extent this element is performed at least in part by software source code, ACT reserves the right to supplement these contentions pursuant to production of such source code and to the extent Defendant requires additional information in accordance with P.R. 3-1 and for any other reasons.</p>
<p>[2] The server device for media according to claim 1, wherein said digital contents data transmission processing unit causes the network storage device to transmit the corresponding data to the server device for media, and then transmits the corresponding data received from the network storage device from the server device for media to the network player.</p>	<p>The Google Accused Products comprise: The server device for media according to claim 1, wherein said digital contents data transmission processing unit causes the network storage device to transmit the corresponding data to the server device for media, and then transmits the corresponding data received from the network storage device from the server device for media to the network player.</p> <p><i>See Claim [1E].</i></p> <p>As shown below, when a device is not on the local network such as when “your Wi-Fi goes down or there’s a power outage,” the digital contents data transmission processing unit causes the network storage device (e.g., Nest Cam) to transmit the data to the server (e.g., local memory) as a relay to the client device for playing.</p> <div style="text-align: center;"> <p>Stay connected.</p> <p>If your Wi-Fi goes down or there’s a power outage, Nest Cam will automatically store up to one hour of recorded events in its local memory.⁵ When things are up and running again, you’ll be able to see exactly what happened.</p> </div> <p>Source: https://store.google.com/us/product/nest_cam_battery?hl=en-US</p> <p>Further, to the extent this element is performed at least in part by software source code, ACT reserves the right to supplement these contentions pursuant to production of such source code and to the extent Defendant requires additional information in accordance with P.R. 3-1 and for any other reasons.</p>
<p>[3] The server device for media according to claim 1,</p>	<p>The Google Accused Products comprise: The server device for media according to claim 1, wherein said digital contents data transmission processing unit transmits the corresponding data and information for identifying the network storage device to the network player, and causes the network storage device to directly</p>

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
<p>wherein said digital contents data transmission processing unit transmits the corresponding data and information for identifying the network storage device to the network player, and causes the network storage device to directly transmit the corresponding data to the network player.</p>	<p>transmit the corresponding data to the network player.</p> <p><i>See Claim [1E].</i></p> <p>As shown below, the digital contents data transmission processing unit transmits corresponding data and information for identification of the network storage device to the network player because, when the network storage device is on the same Wi-Fi network as the network player, it is particularly identified to the network player.</p>





Check that your devices are on the same Wi-Fi network

To confirm if your phone or tablet and your Google devices are on the same Wi-Fi network, follow the steps below.

Step 1. Check the Wi-Fi network of your phone or tablet

1. Open your device's Settings app.
2. Tap **Network & internet** > **Internet**.
3. The Wi-Fi network labeled "Connected" is the network your phone or tablet is connected to.
4. If your Wi-Fi network doesn't match, or if you need to change the network:
 - Tap a new network > enter password > **Connect**.
 - If you've entered the password for that network before, you just need to tap the network and your device should connect automatically.

Step 2. Check the Wi-Fi network of your Google device

1. Open the Google Home app .
2. Tap **Favorites**  or **Devices** .
3. Tap and hold your device's tile.
4. Tap Settings  > **Device information**.
5. Check what Wi-Fi network your device is connected to.

Source: <https://support.google.com/googlenest/answer/7360025?hl=en&co=GENIE.Platform%3DAndroid>

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
	<p>Further, to the extent this element is performed at least in part by software source code, ACT reserves the right to supplement these contentions pursuant to production of such source code and to the extent Defendant requires additional information in accordance with P.R. 3-1 and for any other reasons.</p>
<p>[4] The server device for media according to claim 1, further comprising a return control unit adapted to cause the digital contents corresponding to a predetermined condition among the digital contents which have been transferred to the network storage device to be returned from the network storage device to the internal storage device.</p>	<p>The Google Accused Products comprise: The server device for media according to claim 1, further comprising a return control unit adapted to cause the digital contents corresponding to a predetermined condition among the digital contents which have been transferred to the network storage device to be returned from the network storage device to the internal storage device</p> <p>As shown below, when a device is not on the local network such as when “your Wi-Fi goes down or there’s a power outage” (i.e., a predetermined condition), a return control unit is adapted to cause the network storage device (i.e., Nest Cam) to return data to the server (i.e., local memory).</p> <div style="text-align: center;"> <p>Stay connected.</p> <p>If your Wi-Fi goes down or there’s a power outage, Nest Cam will automatically store up to one hour of recorded events in its local memory.⁵ When things are up and running again, you’ll be able to see exactly what happened.</p> <p>Source: https://store.google.com/us/product/nest_cam_battery?hl=en-US</p> </div> <p>Further, to the extent this element is performed at least in part by software source code, ACT reserves the right to supplement these contentions pursuant to production of such source code and to the extent Defendant requires additional information in accordance with P.R. 3-1 and for any other reasons.</p>
<p>[5] The server device for media according to claim 1, wherein</p>	<p>The Google Accused Products comprise: The server device for media according to claim 1, wherein said list information transmission unit makes the list information to be transmitted to the network player include information for identifying whether each digital content is currently stored in the internal storage device or the network storage device in the display list of the network player.</p>

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
<p>said list information transmission unit makes the list information to be transmitted to the network player include information for identifying whether each digital content is currently stored in the internal storage device or the network storage device in the display list of the network player.</p>	<p><i>See Claims [1C] and [1E].</i></p> <p>For example, as shown below, the list information transmission unit provides a user information identifying the source of the digital content that can correspond to the internal storage device (local memory) or network storage device (Nest Cams) depending on whether it is connected to the local Wi-Fi network or not, which may also correspond to whether the clips are live or stored in the timeline of recorded clips in local memory.</p>





Check that your devices are on the same Wi-Fi network

To confirm if your phone or tablet and your Google devices are on the same Wi-Fi network, follow the steps below.

Step 1. Check the Wi-Fi network of your phone or tablet

1. Open your device's Settings app.
2. Tap **Network & internet** > **Internet**.
3. The Wi-Fi network labeled "Connected" is the network your phone or tablet is connected to.
4. If your Wi-Fi network doesn't match, or if you need to change the network:
 - Tap a new network > enter password > **Connect**.
 - If you've entered the password for that network before, you just need to tap the network and your device should connect automatically.

Step 2. Check the Wi-Fi network of your Google device

1. Open the Google Home app .
2. Tap **Favorites**  or **Devices** .
3. Tap and hold your device's tile.
4. Tap Settings  > **Device information**.
5. Check what Wi-Fi network your device is connected to.

Source: <https://support.google.com/googlenest/answer/7360025?hl=en&co=GENIE.Platform%3DAndroid>

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
	<p style="text-align: center;">Stay connected.</p> <p style="text-align: center;">If your Wi-Fi goes down or there’s a power outage, Nest Cam will automatically store up to one hour of recorded events in its local memory.⁵ When things are up and running again, you’ll be able to see exactly what happened.</p> <p style="text-align: center;">Source: https://store.google.com/us/product/nest_cam_battery?hl=en-US</p> <p>Further, to the extent this element is performed at least in part by software source code, ACT reserves the right to supplement these contentions pursuant to production of such source code and to the extent Defendant requires additional information in accordance with P.R. 3-1 and for any other reasons.</p>
<p>[7P] A method for controlling a server device for media which is equipped with an internal storage device for storing digital contents, the method comprising the steps of:</p>	<p>Users of the Google Accused Products perform a method for controlling a server device for media which is equipped with an internal storage device for storing digital contents. Google directly infringes and induces infringement by causing a user to perform the claimed method on the Google Accused Products. Users of the Google Accused Products directly infringe by using the Google Accused Products. Google induces infringement by users by supplying the Google Accused Products and instructing and encouraging users to use the Google Accused Products in an infringing manner.</p> <p><i>See Claim [1P].</i></p>
<p>[7A] responding to a data transmission request from a network player by stream-delivering corresponding data in corresponding digital contents from the internal storage</p>	<p>Users of the Google Accused Products perform responding to a data transmission request from a network player by stream-delivering corresponding data in corresponding digital contents from the internal storage device to the network player during connection to a network.</p> <p><i>See Claim [1A].</i></p>

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
device to the network player during connection to a network;	
[7B] transferring and storing part of held digital contents in the internal storage device to a network storage device, wherein the network storage device is connected to the network and is capable of storing data, and wherein the digital contents that cannot be recovered if a network failure occurs during the transferring of the digital contents are not transferred from the internal storage device to the network storage device;	<p>Users of the Google Accused Products perform transferring and storing part of held digital contents in the internal storage device to a network storage device, wherein the network storage device is connected to the network and is capable of storing data, and wherein the digital contents that cannot be recovered if a network failure occurs during the transferring of the digital contents are not transferred from the internal storage device to the network storage device.</p> <p><i>See Claim [1B].</i></p>
[7C] responding to a list presentation request for the held digital contents of	<p>Users of the Google Accused Products perform responding to a list presentation request for the held digital contents of the server device for media from the network player by transmitting list information to the network player, wherein the list information lists the digital contents left in the internal storage device and the digital contents transferred from the internal storage device to the network storage device and stored in the network</p>

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
<p>the server device for media from the network player by transmitting list information to the network player, wherein the list information lists the digital contents left in the internal storage device and the digital contents transferred from the internal storage device to the network storage device and stored in the network storage device, and wherein the list information maintains a tree structure of the digital contents in the internal storage device before transferring the digital contents to the network storage device;</p>	<p>storage device, and wherein the list information maintains a tree structure of the digital contents in the internal storage device before transferring the digital contents to the network storage device.</p> <p><i>See Claim [1C].</i></p>
<p>[7D] responding to a data transmission request for the held</p>	<p>Users of the Google Accused Products perform responding to a data transmission request for the held digital contents from the network player by searching for a location where the held digital contents are currently stored.</p>

Appendix E-3 - Claim Chart for U.S. Patent No. 8,230,101 Against Google Home App and Compatible Google Products

Claim – 8,230,101	Exemplary Supporting Evidence Regarding Google’s Accused Products
digital contents from the network player by searching for a location where the held digital contents are currently stored; and	<i>See Claim [1D].</i>
[7E] allowing the corresponding data in held digital contents to be stream-delivered from the network storage device to the network player, if the result of search shows the network storage device,	Users of the Google Accused Products perform allowing the corresponding data in held digital contents to be stream-delivered from the network storage device to the network player, if the result of search shows the network storage device. <i>See Claim [1E].</i>
[7F] wherein the service device for media is a media player.	Users of the Google Accused Products perform the claimed method wherein the service device for media is a media player. <i>See Claim [1F].</i>