IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

AVANT LOCATION TECHNOLOGIES LLC, Plaintiff, v. APPLE, INC., Defendant.	§	Case No. 2:24-cv-00757-JRG (LEAD CASE) **JURY TRIAL DEMANDED**
AVANT LOCATION TECHNOLOGIES LLC, Plaintiff, v. ECOBEE TECHNOLOGIES ULC d/b/a ECOBEE, Defendant.	§	Case No. 2:24-cv-00354-JRG (MEMBER CASE) **JURY TRIAL DEMANDED**

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Avant Location Technologies LLC ("ALT" or "Plaintiff") files this Complaint against Defendant ecobee Technologies ULC d/b/a ecobee ("ecobee" or "Defendant") for patent infringement under 35 U.S.C. § 271 and alleges as follows:

THE PARTIES

1. Plaintiff ALT is a limited liability company organized and existing under the laws of the State of Texas, with its principal place of business located at 104 E. Houston Street, Suite 140, Marshall, Texas 75670.

2. Upon information and belief, Defendant ecobee Technologies ULC d/b/a ecobee is a British Columbia Unlimited Liability Company with its principal place of business at 25 Dockside Drive, Suite 700, Toronto, ON, Canada, M5A 0B5. Upon information and belief, ecobee Technologies ULC d/b/a ecobee does business in Texas, directly or through intermediaries, and offers its products and/or services, including those accused herein of infringement, to customers and potential customers located in Texas, including in the Judicial District of the Eastern District of Texas.

3. Defendant has authorized sellers and sales representatives that offer and sell products pertinent to this Complaint through the State of Texas, including in this Judicial District, and to consumers throughout this Judicial District, such as the Walmart Marshall Supercenter, 1701 East End Boulevard. North, Marshall, TX 75670 indicated in the figure below.

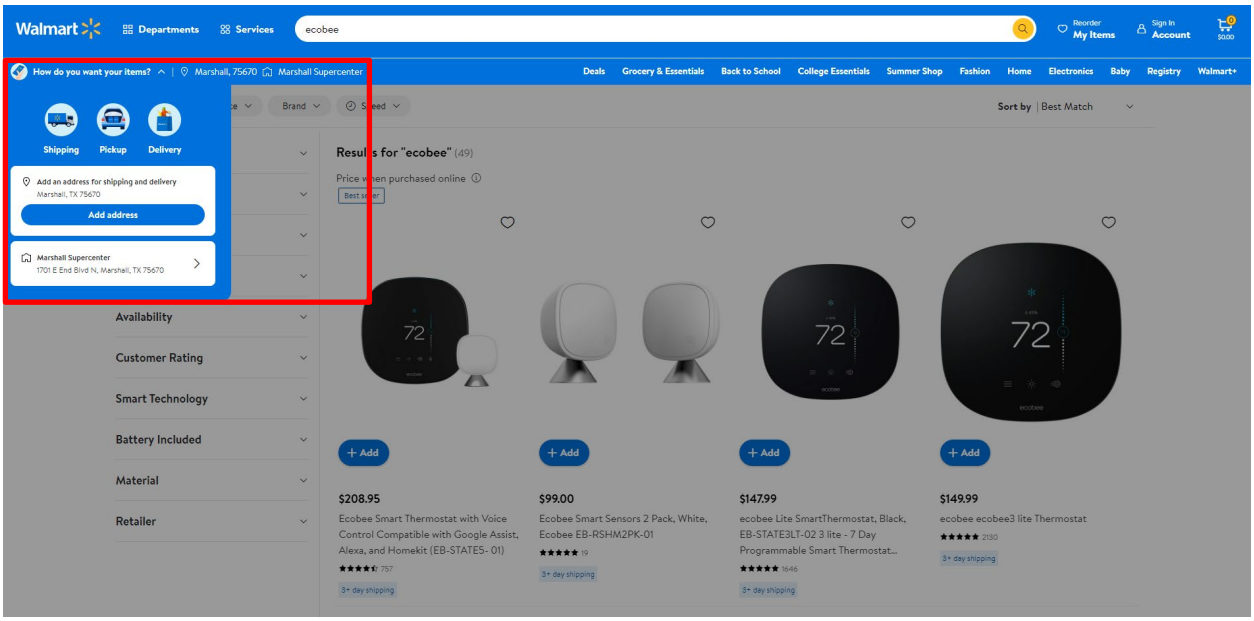


Fig. 1: Depicting Sale of ecobee Products at Walmart's Marshall Supercenter, available at https://www.walmart.com/search?q=ecobee

JURISDICTION

4. This is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. § 1, *et seq*. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331, 1332, 1338, and 1367.

5. This Court has specific and personal jurisdiction over the Defendant consistent with the requirements of the Due Process Clause of the United States Constitution and the Texas Long Arm Statute. Upon information and belief, the Defendant has sufficient minimum contacts with the forum because Defendant transacts substantial business in the State of Texas and in this Judicial District. Further, each Defendant has, directly or through subsidiaries or intermediaries, committed and continues to commit acts of patent infringement in the State of Texas and in this Judicial District as alleged in this Complaint, as alleged more particularly below.

6. Venue is proper in this Judicial District pursuant to 28 U.S.C. §§ 1400(b) and 1391(b) and (c) because Defendant is subject to personal jurisdiction in this Judicial District, has committed acts of patent infringement in this Judicial District, and has a regular and established place of business in this Judicial District. Defendant makes, uses, sells, offers to sell, and/or imports infringing products within this Judicial District, regularly does and solicits business in this Judicial District, and has the requisite minimum contacts with this Judicial District such that this venue is a fair and reasonable one.

7. Venue is also proper in this Judicial District because Defendant is a foreign corporation formed under the laws of the Canada, with a principal place of business in Canada. "[A] defendant not resident in the United States may be sued in any judicial district, and the joinder of such a defendant shall be disregarded in determining where the action may be brought with respect to other defendants." 28 U.S.C. § 1391(c)(3); *In re HTC Corp.,* 889 F.3d 1349 (Fed. Cir.

2018). Further, upon information and belief, Defendant has admitted or not contested proper venue in this Judicial District in other patent infringement actions. *See, e.g.,* ecobee's Answer and Counterclaims filed in *Ollnova Technologies v. ecobee Technologies ULC d/b/a ecobee*, Case No. 2:22-cv-00072, Dkt. 84 (E.D. Tex. Jan. 13, 2023), ¶¶ 5-6 ("To the extent a response is required, ecobee does not contest personal jurisdiction in this District solely 3 for the purposes of this particular action;" "To the extent a response is required, ecobee does not contest that venue is proper in this District for purposes of this particular action.")

PATENTS-IN-SUIT

8. On May 27, 2014, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 8,738,040 (the "'040 Patent") entitled "Method and System for Monitoring a Mobile Station Presence in a Special Area." A true and correct copy of the '040 Patent is attached as Exhibit 1.

9. On June 26, 2018, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 10,009,720 (the "'720 Patent") entitled "Method and System for Monitoring a Mobile Station Presence in a Special Area." A true and correct copy of the '720 Patent is attached as Exhibit 2.

10. On August 25, 2015, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 9,119,030 (the "'030 Patent") entitled "Method and System for Monitoring a Mobile Station Presence in a Special Area." A true and correct copy of the '030 Patent is attached as Exhibit 3.

11. On November 1, 2016, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 9,485,621 (the "'621 Patent") entitled "Method and System for Monitoring a Mobile Station Presence in a Special Area." A true and correct copy of the '621

Patent is attached as Exhibit 4.

12. On April 11, 2017, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 9,622,032 (the "'032 Patent") entitled "Method and System for Monitoring a Mobile Station Presence in a Special Area." A true and correct copy of the '032 Patent is attached as Exhibit 5.

13. The Asserted Patents are directed to patent-eligible systems and methods for monitoring a mobile station presence in a special area, and providing the flexibility to the mobile telephone network to associate new special areas for this mobile station in a secure way without modifying any radio transmitting device. *See* Ex. 1, '040 Patent, 1:15-18; 2:7-12. For example, the '040 Patent highlights the deficiencies in the prior art, including lacking the flexibility to allow the mobile network to add one or more special areas and monitoring the mobile station requires modification of one or more guide units. *Id.* at 1:65-2:3. Further, the '040 Patent discloses the technological innovation of providing "flexibility needed to activate a special way of operating a mobile station in a special area by transmitting a checking data that will be stored in a mobile station database without having to modify, by way of introducing any new data." *Id.* at 2:44-49.

14. As a further example, the Asserted Patents claim patent-eligible systems and methods related to, among other things, monitoring whether a device is present in a special geographic area, and providing or adjusting certain presence-related services when the device is in the special area. In exemplary embodiments, "checking data" of a device, including a device identifier such as IC1 or IC2, "is stored into an internal mobile station database... being associated to this special area." Ex. 4, '621 Patent, 6:56-61. A mobile device "may consequently process the base station identification codes to determine, together with the checking data, whether or not it is receiving any distinctive base station identification code signal." *Id.* at 10:49-53. The Asserted

Patents further provide detailed algorithms to process checking data in order to, among other things, identify a "mobile station" (e.g., a device) within the special area. *See, e.g., id.* at FIGS. 4-5. Moreover, the Asserted Patents disclose exemplary operational and switch parameters for "checking data" based on which the presence of a mobile station in a given special area may be determined. *See, e.g., id.* at FIGS. 6-7.

15. The claims and specifications of the Asserted Patents also disclose several inventive concepts because the claims of the Asserted Patents are not merely directed to providing services based on an individual's or a device's location. For example, as noted above, the Asserted Patents disclose the shortcomings in the prior art, including the inability for the addition for a mobile station of one or more special areas wherein the presence of a mobile station is monitored without having to at least modify units broadcasting in such areas. Ex. 1, 1:65-2:3. However, the Asserted Patents overcome these challenges by, for example, disclosing a method by which the presence of a mobile station is monitored in at least one special area, and the method provides the flexibility to the mobile telephone network of associating new special areas for this mobile station in a secure way without modifying any radio transmitting device. *Id.* at 2:7-12; Ex. 4, 2:15-20. Further, "the invention brings the flexibility needed to activate a special way of operating a mobile station in a special area by transmitting a checking data that will be stored in a mobile station database without having to modify, by way of introducing new data." Ex. 1, 2:44-49.

16. ALT is the sole and exclusive owner of all right, title, and interest to and in the '040, '720, '030, '621, and '032 Patents (collectively, the "Patents-in-Suit"), and holds the exclusive right to take all actions necessary to enforce its rights to the Patents-in-Suit, including the filing of this patent infringement lawsuit. ALT also has the right to recover all damages for past infringement of the Patents-in-Suit as appropriate under the law.

17. ALT has at all times complied with the marking provisions of 35 U.S.C. § 287 with respect to the Patents-in-Suit.

FACTUAL ALLEGATIONS

18. The Patents-in-Suit generally cover systems and methods of providing flexibility to mobile telephone networks by associating these networks with new special areas securely and without the need to modify any radio transmitting device.

19. The ’040 Patent generally relates to a method for monitoring a mobile station presence in a special area, and to a mobile system, a server, a radio transmitting device, and a mobile station suitable for carrying out such a method. The inventions described in the ’040 Patent were developed by Carlos A. Perez LaFuente of Afirma Consulting & Technologies, S.L.

20. The ’720 Patent generally relates to a method for monitoring a mobile station presence in a special area, and to a mobile system, a server, a radio transmitting device, and a mobile station suitable for carrying out such a method. The inventions described in the ’720 Patent were developed by Carlos A. Perez LaFuente of Afirma Consulting & Technologies, S.L.

21. The ’030 Patent generally relates to a method for monitoring a mobile station presence in a special area, and to a mobile system, a server, a radio transmitting device, and a mobile station suitable for carrying out such a method. The inventions described in the ’030 Patent were developed by Carlos A. Perez LaFuente of Afirma Consulting & Technologies, S.L.

22. The ’621 Patent generally relates to a method for monitoring a mobile station presence in a special area, and to a mobile system, a server, a radio transmitting device, and a mobile station suitable for carrying out such a method. The inventions described in the ’621 Patent were developed by Carlos A. Perez LaFuente of Afirma Consulting & Technologies, S.L.

23. The ’032 Patent generally relates to a method for monitoring a mobile station presence in a special area, and to a mobile system, a server, a radio transmitting device, and a mobile station suitable for carrying out such a method. The inventions described in the ’032 Patent were developed by Carlos A. Perez LaFuente of Afirma Consulting & Technologies, S.L.

24. Defendant has infringed and continue to infringe the Patents-in-Suit by making, using, selling, offering to sell, and/or importing, and by actively inducing others to make, use, sell, offer to sell, and/or import products, including thermostats, cameras, sensors that implement the technology claimed by the Patents-in-Suit. For example, the Accused Products include, but are not limited to, ecobee’s Smart Thermostat Premium, Smart Thermostat Enhanced, SmartThermostat with voice control, ecobee3, ecobee3 lite, ecobee4, SmartCamera with voice control, SmartSensor 2-pack, SmartSensor for doors and windows 2-pack, accessories and mobile applications that interoperate with the aforementioned products, bundles containing the aforementioned products, such as ecobee’s Whole Home Bundle, Smart Security Starter Kit, Home Security Bundle, and Motion & Occupancy Bundle, and services containing the aforementioned products, such as Smart Security Complete (formerly Extended), Smart Security Standard (formerly Essential), Professional Installation, SmartBuildings, Pro training, and ecobee Energy.

25. Defendant has had actual notice of the Asserted Patents, at least as of the filing date of this Complaint.

26. ALT has, at all times, complied with the marking provisions of 35 U.S.C. § 287 with respect to the Asserted Patents.

COUNT I
(Infringement of the ’040 Patent)

27. Paragraphs 1 through 26 are incorporated by reference as if fully set forth herein.

28. ALT has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the ’040 Patent.

29. Defendant has and continues to directly infringe the claims of the ’040 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, at least by making, using, offering to sell, selling, and/or importing into the United States products, such as the Accused Products, that satisfy each and every limitation of one or more claims of the ’040 Patent, and by performing each and every limitation of one or more method claims of the ’040 Patent.

30. The Accused Products each comprise the system of at least claim 13 of the ’040 Patent: A mobile station, comprising: observing means to observe a channel and process any received signal in order to determine whether or not it is receiving a defining signal, a processor to process any received defining signal and to determine, based on a previously obtained checking data, whether or not the defining signal received is a distinctive defining signal that at least partially defines a special area, to determine whether or not it is present in one or more special areas, and to send an updating signal at least one of (i) periodically, (ii) when the mobile station enters into or exits from one of the special areas, and (iii) when the mobile station remains into a special area to a mobile telephone network about its presence in one or more of the special areas, where said updating signal sending is uncorrelated to any mobile station phone call establishment and is based on the last determination performed by the mobile station about its presence in the special areas.

31. The Accused Products are each a mobile station comprising an observing means to observe a channel and process any received signal in order to determine whether or not it is receiving a defining signal. For example, ecobee’s Smart Security through the ecobee app (*i.e.*, a mobile station) has an Arm/Disarm Assist feature that works with Autopilot, which uses phone

location (geofencing).

ecobee Smart Security

How does ecobee Smart Security use my location?

Smart Security's Arm/Disarm Assist feature works with Autopilot, which uses a combination of your phone location (geofencing), Wi-Fi connection, and ecobee sensor information to determine if you are home or away.

To edit your Location Settings:

1. Open the **ecobee app**.

2. Tap **Autopilot** on the bottom of the **Home overview screen**.

3. Scroll down and tap **Location Settings**.

4. Toggle **Use phone location** on or off.

Under **Improve accuracy**, you can add or remove your home Wi-Fi network and **Edit** the **Geofence** around your home.

Tip: Adding your Wi-Fi network information improves the reliability of location-based features like Arm/Disarm Assist, allowing them to quickly verify your location based on when your phone connects and disconnects from your Wi-Fi network.

See, e.g., https://support.ecobee.com/s/articles/How-does-ecobee-Smart-Security-use-my-location

$59.99 in bundle savings*

$269.99

Smart Security Starter Kit

Get whole home protection that starts with your thermostat, plus 2 free months of professional monitoring.

What's included:

- 1 × SmartThermostat Premium
- 1 × SmartSensor
- 2 × SmartSensor for doors and windows

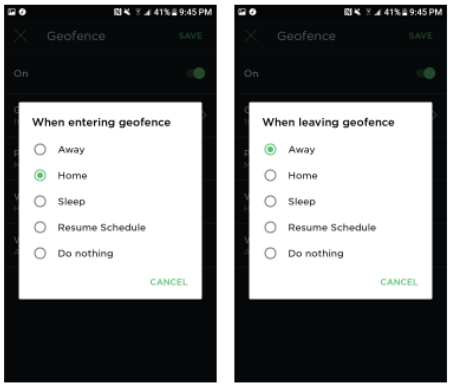
Add to cart | More details

See, e.g., https://www.ecobee.com/en-us/smart-security/

32. For further example, the ecobee app utilizes a processor that processes any received signal in order to determine whether or not it is receiving a defining signal, a processor to process any received defining signal and to determine, based on a previously obtained checking data, whether or not the defining signal received is a distinctive defining signal that at least partially defines a special area. For example, the ecobee app uses stored checking data (*i.e.*, previously obtained checking data) to determine whether a defining signal received from a radio communication defining device is a distinctive defining signal. In the ecobee App, it is possible to define a home location (*i.e.*, a special area) and to opt-in for the app to use your phone's location to determine if you have crossed into the home location. To sense presence in the home location, the phone also uses ecobee sensor signals (*e.g.*, signals from a Smart Sensor) to detect its location (*i.e.*, distinctive defining signal).

When entering geofence: Tap here to set the type of Hold to apply to the thermostat when you enter your geofence area.

When leaving geofence: Tap here to set the type of Hold to apply to the thermostat when you leave your geofence area.

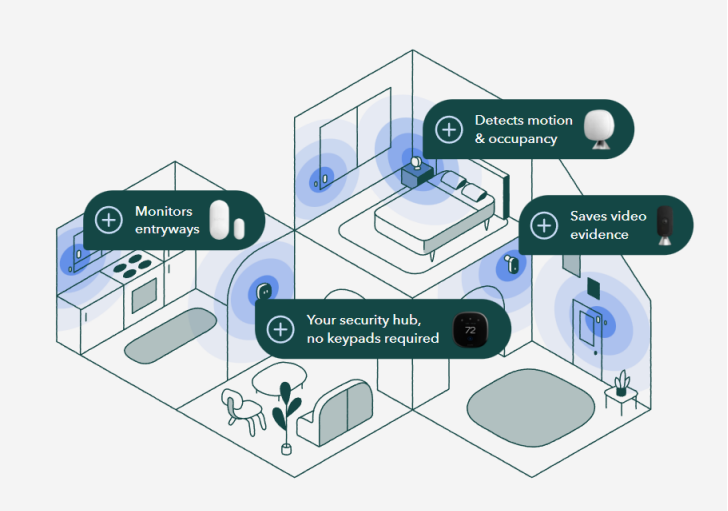


Choose a Comfort Setting from the list to apply an indefinite Hold using that Comfort Setting's temperature/fan settings, or choose "Resume Schedule" to cancel any Holds and resume the ecobee's schedule.

Geofencing actions place your ecobee in a Hold status based on one of your existing Comfort Settings, or if "Resume Schedule" is chosen, the geofence action will cancel any existing Holds.

For example, you can set your "When leaving geofence" action to "Away" and your "When entering geofence" to "Resume Schedule", so when you leave your Home, your ecobee will switch to your Away settings even if Away is not scheduled. Then, when you return home, the ecobee will cancel the Away hold and resume your schedule.

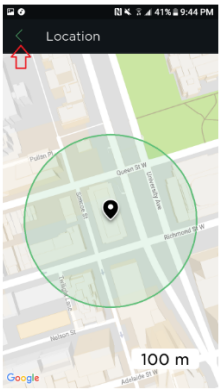
See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android



See, e.g., https://www.ecobee.com/en-us/smart-security/

Geofence Radius: Tap this to open a separate screen to configure the geofence's radius.

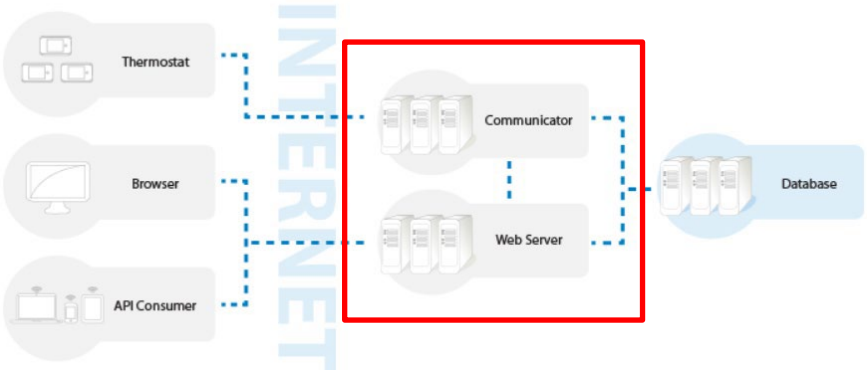
Use your finger to expand or retract the geofence radius to your specifications, and tap the "<" icon in the top left when you are done. The default geofence radius is 1000m, and the radius can be shrunk to as low as 100m.



See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android; *see also* https://www.youtube.com/watch?v=z1w5F1T3YfA

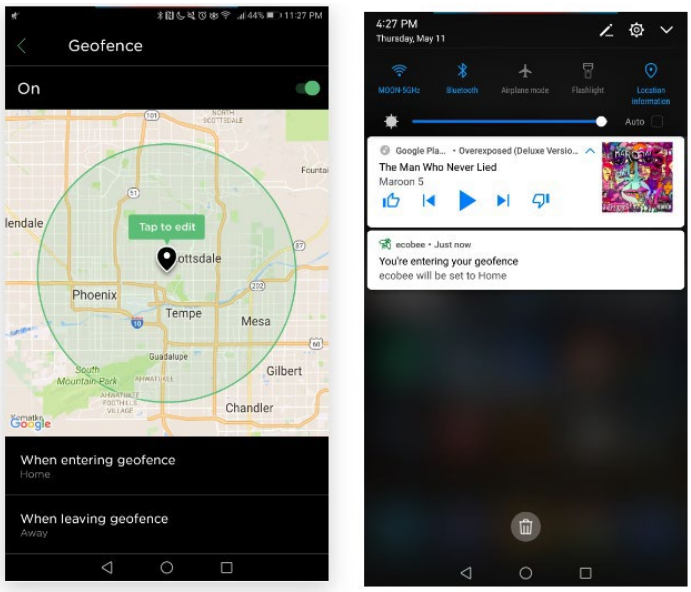
33. The Accused Products comprise a processor to send an updating signal at least one of (i) periodically, (ii) when the mobile station enters into or exits from one of the special areas, and (iii) when the mobile station remains in a special area to a mobile telephone network about its presence in one or more of the special areas. For example, the ecobee app is in communication

with several servers of a provider of presence related services.



See, e.g., https://www.ecobee.com/home/developer/api/introduction/core-concepts.shtml

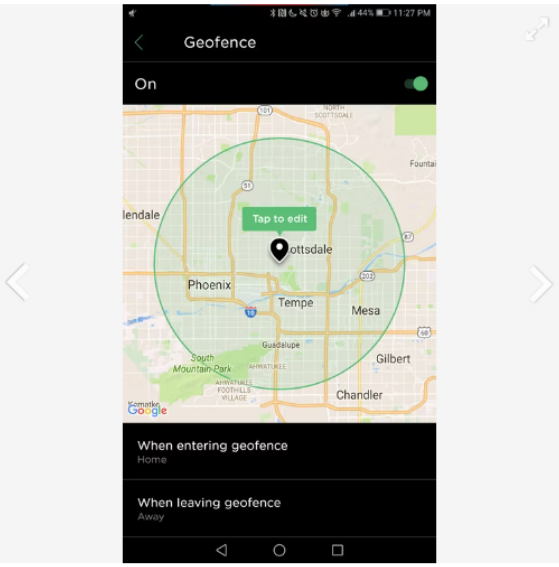
34. For further example, ecobee servers can send a notification (*i.e.*, an updating signal) that a mobile station has entered the Home location (*i.e.*, identifies the mobile station's presence in the special area) ("as I approached my neighborhood, I heard a little ping on my phone. It was a notification from ecobee that my thermostat had switched to the 'home' comfort setting before I even reached my garage"). The ecobee app (*i.e.*, the provider of presence related services) is different from the mobile telephone network that the phone utilizes to receive the notification.



See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android

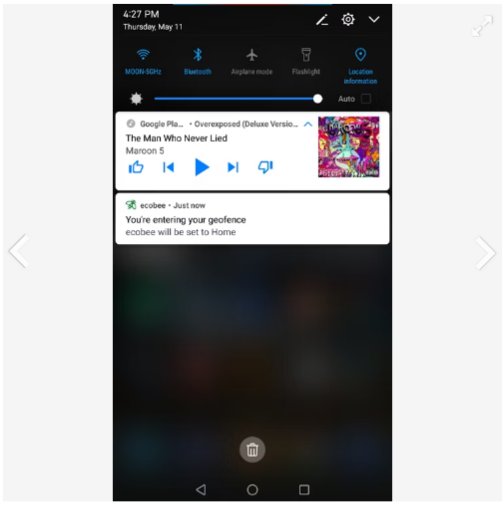
Great idea, right? I sure thought so. I immediately set it to switch back to the 'home' comfort setting when I entered my neighborhood. Cool that house down before I open the door! After spending the day at my office, I headed home, and as I approached my neighborhood, I heard a little ping on my phone. It was a notification from Ecobee that my thermostat had switched to the 'home' comfort setting before I even reached my garage. I walked in, and the air conditioning was already running. I was really feeling that smart home buzz.

2 Images



Setting the geofence and the notification you get when you enter it.

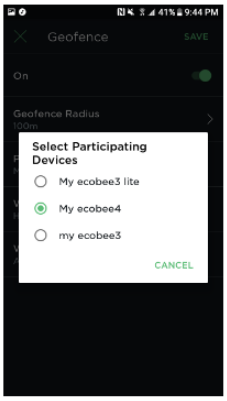
2 Images



Setting the geofence and the notification you get when you enter it.

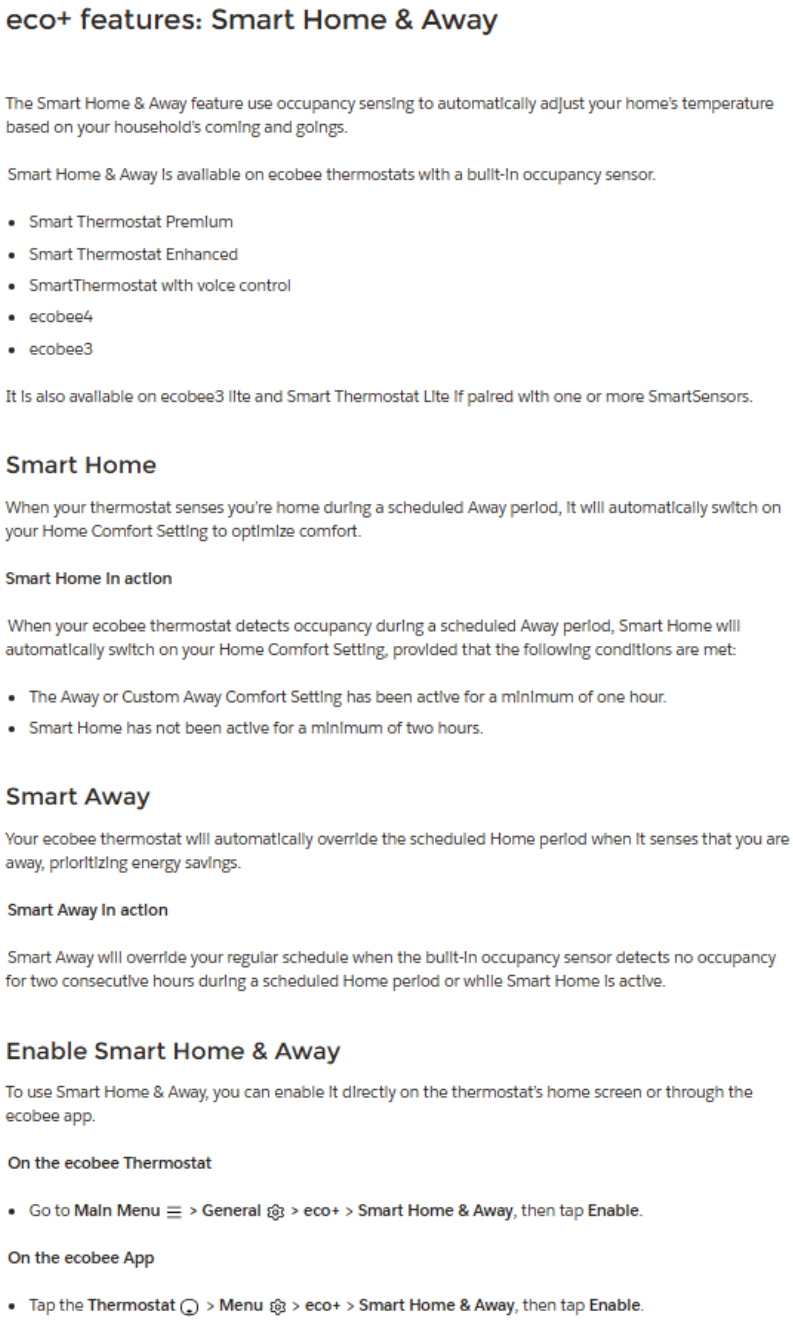
See, e.g., https://www.androidpolice.com/2017/05/12/ecobee-adds-geofencing-smart-thermostat-app-can-strip-intelligence/.

Participating Devices: If you have more than one thermostat connected to your ecobee account, tap this to bring up a selection screen. Tap the thermostat that you wish to apply the geofence settings to.



See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android

35. The ecobee app stores, in one or more servers, a parameters database containing the status and other operating data about all devices registered in the ecobee smart security system. In particular, the databases save a parameter showing the Home/Away status of each user's smartphone. As shown below, this parameter is determined, at least in part, by the updating signal received from the smartphone. The Home/Away parameter is stored in the server, evidenced because a notification is received at the mobile station when the user enters or leaves the geofence area.



eco+ features: Smart Home & Away

The Smart Home & Away feature use occupancy sensing to automatically adjust your home's temperature based on your household's coming and goings.

Smart Home & Away is available on ecobee thermostats with a built-in occupancy sensor.

- Smart Thermostat Premium
- Smart Thermostat Enhanced
- SmartThermostat with voice control
- ecobee4
- ecobee3

It is also available on ecobee3 lite and Smart Thermostat Lite if paired with one or more SmartSensors.

Smart Home

When your thermostat senses you're home during a scheduled Away period, it will automatically switch on your Home Comfort Setting to optimize comfort.

Smart Home in action

When your ecobee thermostat detects occupancy during a scheduled Away period, Smart Home will automatically switch on your Home Comfort Setting, provided that the following conditions are met:

- The Away or Custom Away Comfort Setting has been active for a minimum of one hour.
- Smart Home has not been active for a minimum of two hours.

Smart Away

Your ecobee thermostat will automatically override the scheduled Home period when it senses that you are away, prioritizing energy savings.

Smart Away in action

Smart Away will override your regular schedule when the built-in occupancy sensor detects no occupancy for two consecutive hours during a scheduled Home period or while Smart Home is active.

Enable Smart Home & Away

To use Smart Home & Away, you can enable it directly on the thermostat's home screen or through the ecobee app.

On the ecobee Thermostat

- Go to **Main Menu** ☰ > **General** ⚙ > **eco+** > **Smart Home & Away**, then tap **Enable**.

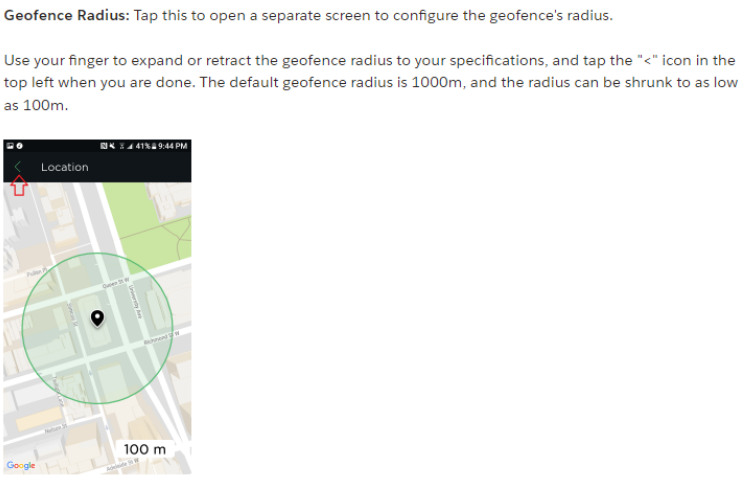
On the ecobee App

- Tap the **Thermostat** ◯ > **Menu** ⚙ > **eco+** > **Smart Home & Away**, then tap **Enable**.

See, e.g., https://support.ecobee.com/s/articles/eco-features-Smart-Home-Away

36. For further example, when the geofence area is set for 1000m and a user's mobile device enters the geofence area, the ecobee app receives a message from the ecobee server that the mobile device the ecobee app is on enters the geofence area. A user can change the geofence area to 100m, and a message is sent again if a user enters the geofence area. Therefore, the special area

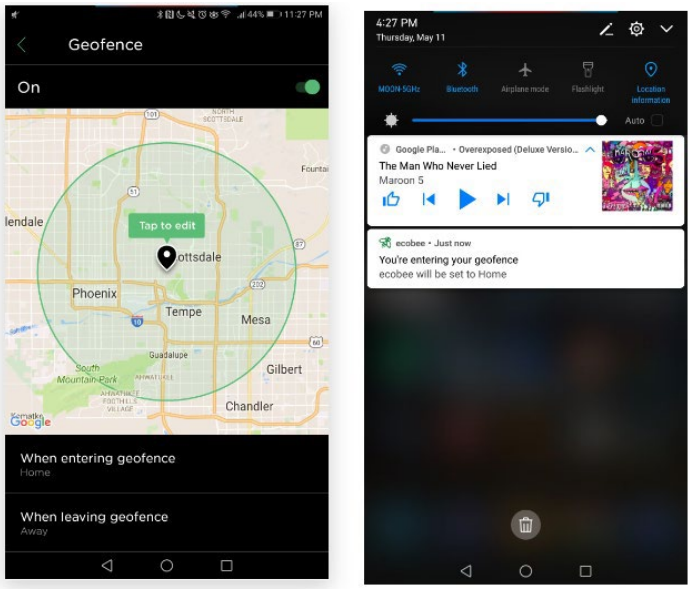
has been modified, and the servers have sent an updated signal to the mobile device that is different from the previously obtained checking data in order to modify the special area.



See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android

37. The Accused Products comprise a processor to send an updating signal, where said updating signal sending is uncorrelated to any mobile station phone call establishment and is based on the last determination performed by the mobile station about its presence in the special areas. For example, in the setup described below, when a smartphone entered the Home location, ecobee servers sent a notification that a mobile station has entered the Home location. At the time when notification was sent, the mobile station was still out of range of the ecobee Smart Thermostat ("my thermostat had switched to the 'home' comfort setting before I even reached my garage"). The only communications link available to the phone was the cellular phone network. Before the servers could send any notification to the mobile station, the servers must have received an updating signal that the mobile station was within the Home location (*i.e.*, within the special area) ("as I approached my neighborhood"). The only communication link available to the mobile station was the cellular network. Therefore, the updating signal was sent over the cellular network. The mobile station did not make a phone call ("heard a little ping"). Therefore, the updating signal

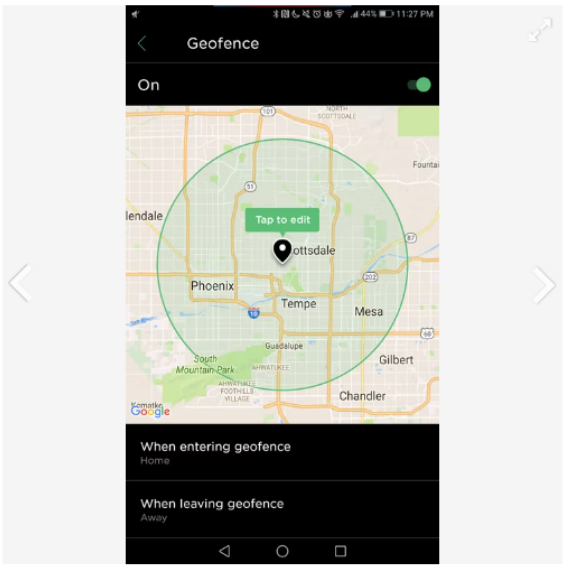
was uncorrelated to any mobile station call establishment and was sent over the cellular network data communications channel.



See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android

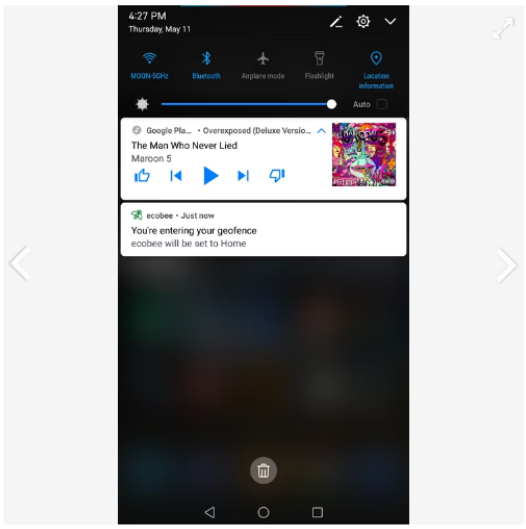
Great idea, right? I sure thought so. I immediately set it to switch back to the 'home' comfort setting when I entered my neighborhood. Cool that house down before I open the door! After spending the day at my office, I headed home, and as I approached my neighborhood, I heard a little ping on my phone. It was a notification from Ecobee that my thermostat had switched to the 'home' comfort setting before I even reached my garage. I walked in, and the air conditioning was already running. I was really feeling that smart home buzz.

2 Images



Setting the geofence and the notification you get when you enter it.

2 Images



Setting the geofence and the notification you get when you enter it.

See, e.g., https://www.androidpolice.com/2017/05/12/ecobee-adds-geofencing-smart-thermostat-app-can-strip-intelligence/

38. Defendant has and continues to indirectly infringe one or more claims of the '040 Patent by inducing infringement by others, such as Defendant's customers and end-users, in this District and elsewhere in the United States. For example, Defendant's customers and end-users directly infringe, either literally or under the doctrine of equivalents, through their use of the inventions claimed in the '040 Patent. Defendant induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products and providing instructions, documentation, and other information to customers and end-users suggesting that they use the Accused Products in an infringing manner, including technical support, marketing, product manuals, advertisements, and online documentation. *See, e.g.*, https://www.ecobee.com/en-us/installing-your-smart-thermostat-with-voice-control/ (instructions on how to install and set up SmartThermostat with Voice Control); https://support.ecobee.com/s/articles/SmartSensors-FAQs-Setup-Guide-and-Troubleshooting#:~:text=SmartSensor%20uses%20915MHz%20radio%20waves,communication%20with%20your%20ecobee%20thermostat. Ecobee also promotes that the Accused Products (such as the SmartThermostat with Voice Control) contain a plurality of sensors and can be used to communicate with other ecobee products, such as the SmartSensor, in an infringing manner. *See* https://www.ecobee.com/en-us/smart-thermostats/smart-wifi-thermostat-with-voicecontrol/#Features-and-Specs; *see also* https://www.ecobee.com/en-us/accessories/smarttemperature-occupancy-sensor/.

39. Because of Defendant's inducement, Defendant's customers and end-users use the Accused Products in a way Defendant intends and they directly infringe the '040 Patent. Defendant performs these affirmative acts with knowledge of the '040 Patent and with the intent, or willful blindness, that the induced acts directly infringe the '040 Patent.

40. Defendant has indirectly infringed and continues to indirectly infringe one or more claims of the ’040 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement by others, such as customers and end-users, in this District and elsewhere in the United States. Defendant’s affirmative acts of selling and offering to sell the ’040 Accused Products in this District and elsewhere in the United States and causing the ’040 Accused Products to be manufactured, used, sold, and offered for sale contribute to others’ use and manufacture of the Accused Products, such that the ’040 Patent is directly infringed by others. The accused components within the Accused Products including, but not limited to, software manufactured by Defendant, are material to the invention of the ’040 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Defendant to be especially made or adapted for use in the infringement of the ’040 Patent. Defendant performs these affirmative acts with knowledge of the ’040 Patent and with intent, or willful blindness, that they cause the direct infringement of the ’040 Patent.

41. Because of Defendant’s direct and indirect infringement of the ’040 Patent, ALT has suffered damages in an amount to be proved at trial.

COUNT II
(Infringement of the ’720 Patent)

42. Paragraphs 1 through 26 are incorporated by reference as if fully set forth herein.

43. ALT has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the ’720 Patent.

44. Defendant has and continues to infringe the claims of the ’720 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, at least by performing each and every limitation of one or more method claims of the ’720 Patent.

45. The Accused Products practice the method of at least claim 1 of the '720 Patent: A method associated with the use of a mobile station and a radio communication defining device that transmits a distinctive defining signal, the method comprising: receiving and processing the distinctive defining signal in the mobile station, the distinctive defining signal at least defining a special area by one or more of: (1) a coverage area of the distinctive defining signal; (2) a portion of the coverage area that intersects with another area of coverage of another radio communication defining device; and (3) a sum of the area of coverage and the another area of coverage, the distinctive defining signal including information indicating whether or not the radio communication defining device is in a predetermined environment; and sending from the mobile station via a mobile telephone network an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal being useable by the one or more servers of the provider of presence related services to adjust an operating parameter, which comprises one or more of a tariff and a service flag, to adjust, activate, or deactivate the presence related services provided to the mobile station, and the updating signal comprising the information indicative of whether or not the radio communication defining device is located in the predetermined environment.

46. The Accused Products perform a method associated with the use of a mobile station and a radio communication defining device that transmits a distinctive defining signal. For example, ecobee's Smart Security through the ecobee app (*i.e.*, a mobile station) performs an Arm/Disarm Assist feature that works with Autopilot, which uses phone location (geofencing).

ecobee Smart Security

How does ecobee Smart Security use my location?

Smart Security's Arm/Disarm Assist feature works with Autopilot, which uses a combination of your phone location (geofencing), Wi-Fi connection, and ecobee sensor information to determine if you are home or away.

To edit your Location Settings:

1. Open the **ecobee app**.

2. Tap **Autopilot** on the bottom of the **Home overview screen**.

3. Scroll down and tap **Location Settings**.

4. Toggle **Use phone location** on or off.

Under **Improve accuracy**, you can add or remove your home Wi-Fi network and **Edit** the **Geofence** around your home.

Tip: Adding your Wi-Fi network information improves the reliability of location-based features like Arm/Disarm Assist, allowing them to quickly verify your location based on when your phone connects and disconnects from your Wi-Fi network.

See, e.g., https://support.ecobee.com/s/articles/How-does-ecobee-Smart-Security-use-my-location

$59.99 in bundle savings*

$269.99

Smart Security Starter Kit

Get whole home protection that starts with your thermostat, plus 2 free months of professional monitoring.

What's included:

- 1 × SmartThermostat Premium
- 1 × SmartSensor
- 2 × SmartSensor for doors and windows

Add to cart | More details

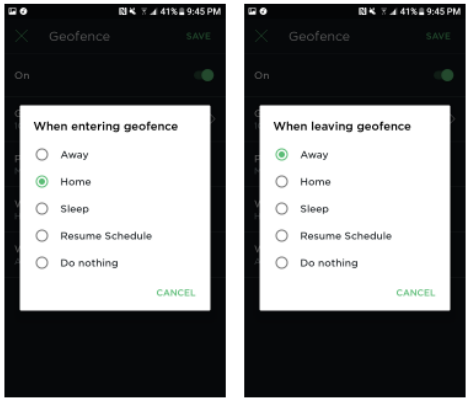
See, e.g., https://www.ecobee.com/en-us/smart-security/

47. The Accused Products perform receiving and processing the distinctive defining signal in the mobile station, the distinctive defining signal at least defining a special area by one

or more of: (1) a coverage area of the distinctive defining signal; (2) a portion of the coverage area that intersects with another area of coverage of another radio communication defining device; and (3) a sum of the area of coverage and the another area of coverage, the distinctive defining signal including information indicating whether or not the radio communication defining device is in a predetermined environment. For example, the ecobee app uses stored location data (i.e., information indicating whether or not the radio communication defining device is in a predetermined environment) to determine whether a defining signal received from a radio communication defining device is a distinctive defining signal. In the ecobee App, it is possible to define a home location (*i.e.*, a special area) and to opt-in for the app to use your phone's location to determine if you have crossed into the home location. To sense presence in the home location, the phone also uses ecobee sensor signals (*e.g.*, signals from a Smart Sensor) to detect its location (i.e., distinctive defining signal).

When entering geofence: Tap here to set the type of Hold to apply to the thermostat when you enter your geofence area.

When leaving geofence: Tap here to set the type of Hold to apply to the thermostat when you leave your geofence area.

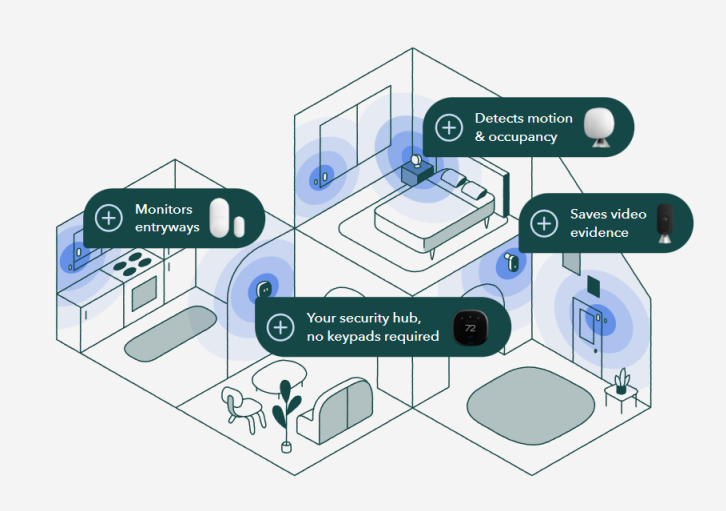


Choose a Comfort Setting from the list to apply an indefinite Hold using that Comfort Setting's temperature/fan settings, or choose "Resume Schedule" to cancel any Holds and resume the ecobee's schedule.

Geofencing actions place your ecobee in a Hold status based on one of your existing Comfort Settings, or if "Resume Schedule" is chosen, the geofence action will cancel any existing Holds.

For example, you can set your "When leaving geofence" action to "Away" and your "When entering geofence" to "Resume Schedule", so when you leave your Home, your ecobee will switch to your Away settings even if Away is not scheduled. Then, when you return home, the ecobee will cancel the Away hold and resume your schedule.

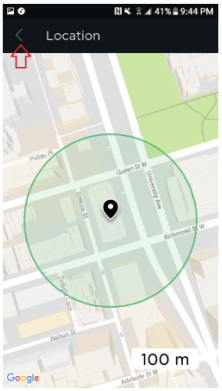
See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android



See, e.g., https://www.ecobee.com/en-us/smart-security/

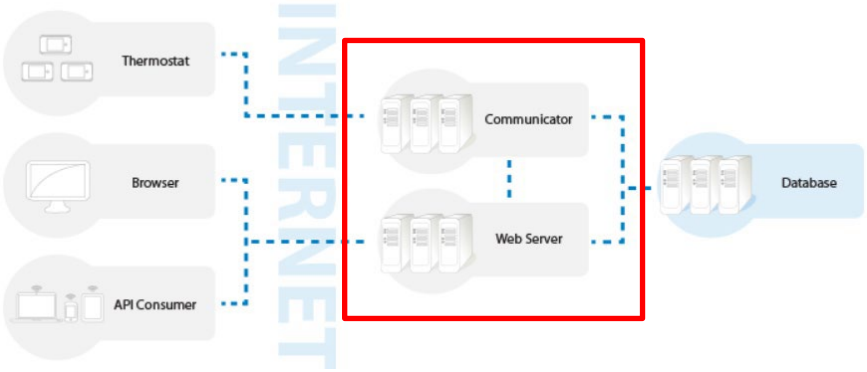
Geofence Radius: Tap this to open a separate screen to configure the geofence's radius.

Use your finger to expand or retract the geofence radius to your specifications, and tap the "<" icon in the top left when you are done. The default geofence radius is 1000m, and the radius can be shrunk to as low as 100m.



See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android; *see also* https://www.youtube.com/watch?v=z1w5F1T3YfA

48. The Accused Products perform sending from the mobile station via a mobile telephone network, an updating signal to one or more servers of a provider of presence related services about the mobile station's presence in the special area, the updating signal being useable by the one or more servers of the provider of presence related services to adjust an operating parameter, which comprises one or more of a tariff and a service flag, to adjust, activate, or deactivate the presence related services provided to the mobile station, and the updating signal comprising the information indicative of whether or not the radio communication defining device is located in the predetermined environment. For example, the ecobee app is in communication with several servers of a provider of presence related services so that it may send updated location information (i.e., an updating signal).

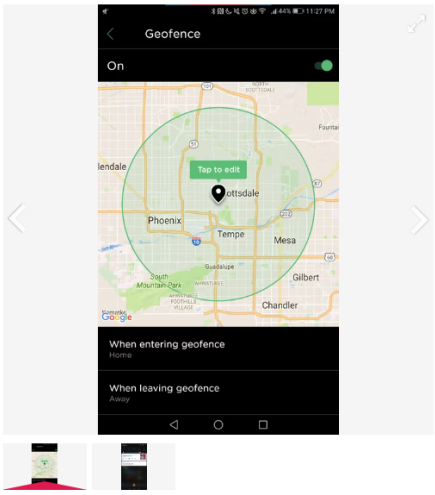


See, e.g., https://www.ecobee.com/home/developer/api/introduction/core-concepts.shtml

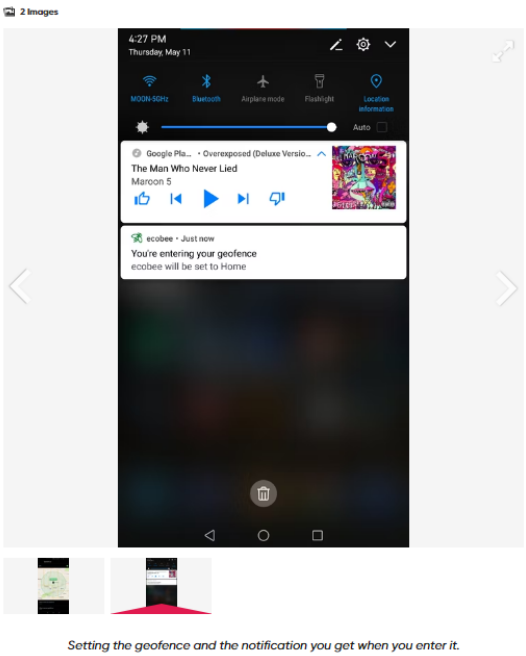
49. One or more ecobee servers store a parameters database containing the status and other operating data about all devices registered in the ecobee smart security system. In particular, the databases save a parameter showing the Home/Away status of each user's smartphone (*i.e.*, a service flag). As shown below, this parameter is determined, at least in part, by the updating signal received from the smartphone. The Home/Away parameter is stored in the server, evidenced because a notification is received at the mobile station when the user enters or leaves the geofence area.

Great idea, right? I sure thought so. I immediately set it to switch back to the 'home' comfort setting when I entered my neighborhood. Cool that house down before I open the door! After spending the day at my office, I headed home, and as I approached my neighborhood, I heard a little ping on my phone. It was a notification from Ecobee that my thermostat had switched to the 'home' comfort setting before I even reached my garage. I walked in, and the air conditioning was already running. I was really feeling that smart home buzz.

2 Images



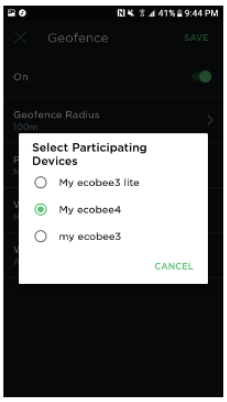
Setting the geofence and the notification you get when you enter it.



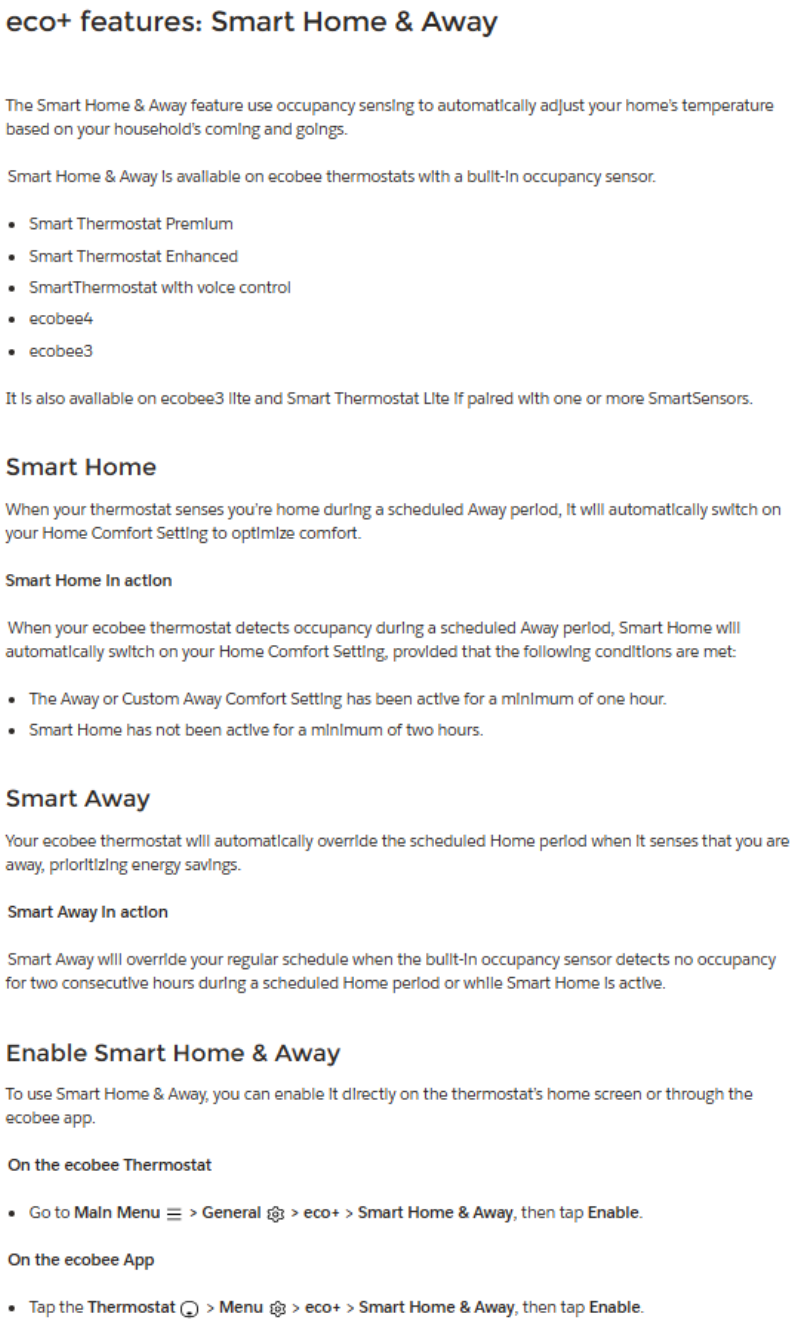
Setting the geofence and the notification you get when you enter it.

See, e.g., https://www.androidpolice.com/2017/05/12/ecobee-adds-geofencing-smart-thermostat-app-can-strip-intelligence/

Participating Devices: If you have more than one thermostat connected to your ecobee account, tap this to bring up a selection screen. Tap the thermostat that you wish to apply the geofence settings to.



See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android



eco+ features: Smart Home & Away

The Smart Home & Away feature use occupancy sensing to automatically adjust your home's temperature based on your household's coming and goings.

Smart Home & Away is available on ecobee thermostats with a built-in occupancy sensor.

- Smart Thermostat Premium
- Smart Thermostat Enhanced
- SmartThermostat with voice control
- ecobee4
- ecobee3

It is also available on ecobee3 lite and Smart Thermostat Lite if paired with one or more SmartSensors.

Smart Home

When your thermostat senses you're home during a scheduled Away period, it will automatically switch on your Home Comfort Setting to optimize comfort.

Smart Home in action

When your ecobee thermostat detects occupancy during a scheduled Away period, Smart Home will automatically switch on your Home Comfort Setting, provided that the following conditions are met:

- The Away or Custom Away Comfort Setting has been active for a minimum of one hour.
- Smart Home has not been active for a minimum of two hours.

Smart Away

Your ecobee thermostat will automatically override the scheduled Home period when it senses that you are away, prioritizing energy savings.

Smart Away in action

Smart Away will override your regular schedule when the built-in occupancy sensor detects no occupancy for two consecutive hours during a scheduled Home period or while Smart Home is active.

Enable Smart Home & Away

To use Smart Home & Away, you can enable it directly on the thermostat's home screen or through the ecobee app.

On the ecobee Thermostat

- Go to **Main Menu** ≡ > **General** ⚙ > **eco+** > **Smart Home & Away**, then tap **Enable**.

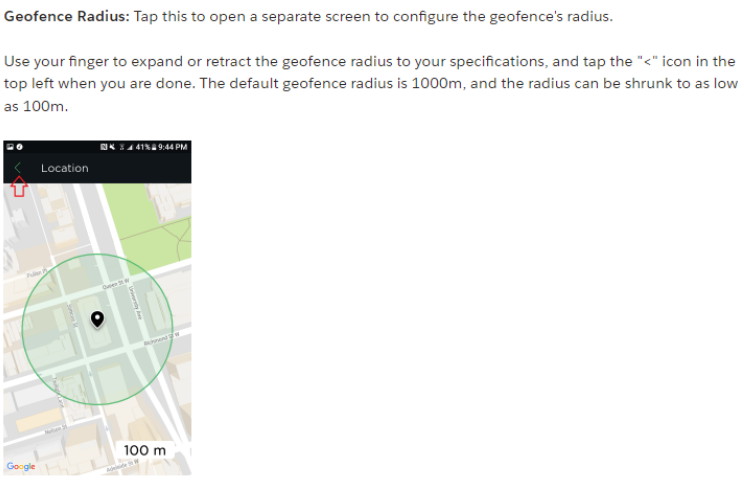
On the ecobee App

- Tap the **Thermostat** ◯ > **Menu** ⚙ > **eco+** > **Smart Home & Away**, then tap **Enable**.

See, e.g., https://support.ecobee.com/s/articles/eco-features-Smart-Home-Away

50. For further example, when the geofence area is set for 1000m and a user's mobile device enters the geofence area, the ecobee app sends an updated location to the ecobee server and receives a message from the ecobee server that the mobile device with the ecobee app has entered the geofence area. A user can change the geofence area to 100m, and a message is sent again if a

user enters the geofence area. Therefore, the special area has been modified, and the servers have been sent an updated signal from the mobile device that is different from the previously predetermined environment data in order to modify the special area.



See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android

51. Defendant has and continues to indirectly infringe one or more claims of the ’720 Patent by inducing infringement by others, such as Defendant’s customers and end-users, in this District and elsewhere in the United States. For example, Defendant’s customers and end-users directly infringe, either literally or under the doctrine of equivalents, through their use of the inventions claimed in the ’720 Patent. Defendant induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products and providing instructions, documentation, and other information to customers and end-users suggesting that they use the Accused Products in an infringing manner, including technical support, marketing, product manuals, advertisements, and online documentation. *See, e.g.*, https://www.ecobee.com/en-us/installing-your-smart-thermostat-with-voice-control/ (instructions on how to install and set up SmartThermostat with Voice Control); https://support.ecobee.com/s/articles/SmartSensors-FAQs-Setup-Guide-and-

Troubleshooting#:~:text=SmartSensor%20uses%20915MHz%20radio%20waves,communication%20with%20your%20ecobee%20thermostat. Ecobee also promotes that the Accused Products (such as the SmartThermostat with Voice Control) contain a plurality of sensors and can be used to communicate with other ecobee products, such as the SmartSensor, in an infringing manner. *See* https://www.ecobee.com/en-us/smart-thermostats/smart-wifi-thermostat-with-voicecontrol/#Features-and-Specs; *see also* https://www.ecobee.com/en-us/accessories/smarttemperature-occupancy-sensor/.

52. Because of Defendant's inducement, Defendant's customers and end-users use the Accused Products in a way Defendant intended and they directly infringe the '720 Patent. Defendant performs these affirmative acts with knowledge of the '720 Patent and with the intent, or willful blindness, that the induced acts directly infringe the '720 Patent.

53. Defendant has indirectly infringed and continues to indirectly infringe one or more claims of the '720 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement by others, such as customers and end-users, in this District and elsewhere in the United States. Defendant's affirmative acts of selling and offering to sell the '720 Accused Products in this District and elsewhere in the United States and causing the '720 Accused Products to be manufactured, used, sold, and offered for sale contribute to others' use and manufacture of the Accused Products, such that the '720 Patent is directly infringed by others. The accused components within the Accused Products including, but not limited to, software manufactured by Defendant, are material to the invention of the '720 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Defendant to be especially made or adapted for use in the infringement of the '720 Patent. Defendant performs these affirmative acts with knowledge of the '720 Patent and with intent, or willful blindness, that

they cause the direct infringement of the ’720 Patent.

54. Because of Defendant’s direct and indirect infringement of the ’720 Patent, ALT has suffered damages in an amount to be proved at trial.

COUNT III
(Infringement of the ’030 Patent)

55. Paragraphs 1 through 26 are incorporated by reference as if fully set forth herein.

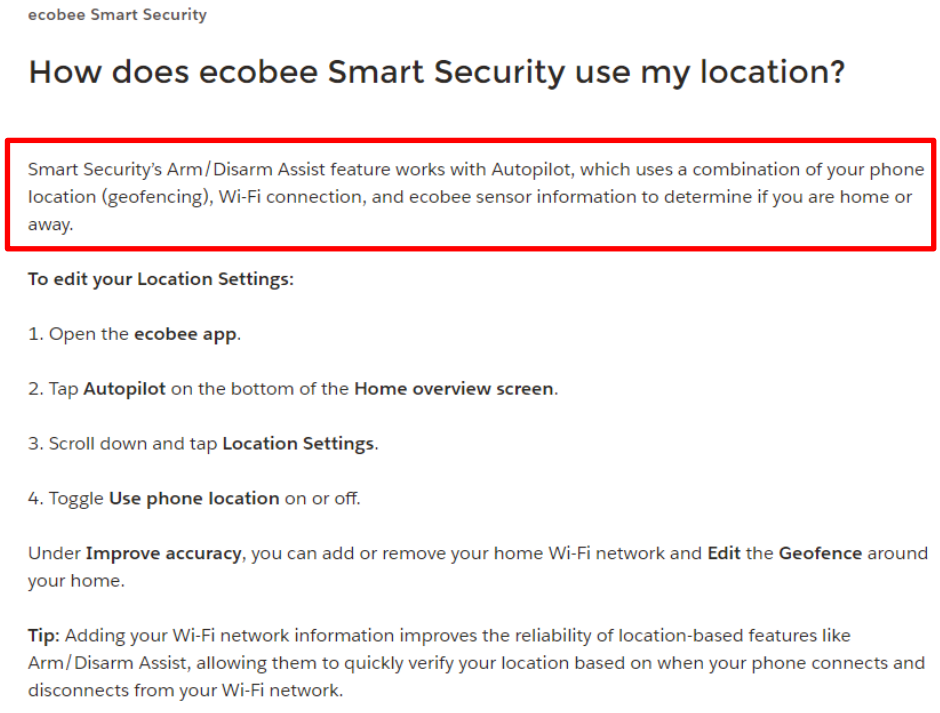
56. ALT has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the ’030 Patent.

57. Defendant has and continues to directly infringe the claims of the ’030 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, at least by performing each and every limitation of one or more method claims of the ’030 Patent.

58. The Accused Products practice the method of at least claim 1 of the ’030 Patent: A method associated with a provider of presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a first special area by its coverage, the method comprising: electronically storing in one or more memories data capable of linking the mobile station to the first special area, the data including a checking data of the first radio communication defining device and a first identifier related to the mobile station, transmitting via a mobile telephone network to the mobile station at least a portion of the checking data, receiving from the mobile station via the mobile telephone network an updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station’s presence in at least the first special area, the updating signal including a second identifier related to the mobile station, deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the first special

area; and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the first special area.

59. The Accused Products perform a method associated with a provider of presence related services in connection with the use of a mobile station and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a first special area by its coverage. For example, ecobee's Smart Security through the ecobee app has an Arm/Disarm Assist feature that works with Autopilot (*i.e.*, a presence related service), which uses phone location (geofencing) (*i.e.*, the use of a mobile station that is operable within a mobile telephone network) and a SmartSensor or Room Sensor (*i.e.*, at least a first radio communication defining service that transmits a first distinctive defining signal).



ecobee Smart Security

How does ecobee Smart Security use my location?

Smart Security's Arm/Disarm Assist feature works with Autopilot, which uses a combination of your phone location (geofencing), Wi-Fi connection, and ecobee sensor information to determine if you are home or away.

To edit your Location Settings:

1. Open the **ecobee app**.
2. Tap **Autopilot** on the bottom of the **Home overview screen**.
3. Scroll down and tap **Location Settings**.
4. Toggle **Use phone location** on or off.

Under **Improve accuracy**, you can add or remove your home Wi-Fi network and **Edit** the **Geofence** around your home.

Tip: Adding your Wi-Fi network information improves the reliability of location-based features like Arm/Disarm Assist, allowing them to quickly verify your location based on when your phone connects and disconnects from your Wi-Fi network.

See, e.g., https://support.ecobee.com/s/articles/How-does-ecobee-Smart-Security-use-my-location

See, e.g., https://www.ecobee.com/en-us/smart-security/

What thermostats are compatible with these smart features?

- Smart Home and Away is available on Smart Thermostat Premium, Smart Thermostat Enhanced, SmartThermostat with voice control, ecobee4, and ecobee3 out of the box, as these thermostats have a built-in occupancy sensor. With the ecobee3 lite, Smart Home and Away can be used once a SmartSensor or Room Sensor is paired with the thermostat.
- Follow Me can be enabled once you pair a SmartSensor or Room Sensor with your ecobee thermostat. For the ecobee3 Lite, two sensors must be paired to enable this feature.

See, e.g., https://support.ecobee.com/s/articles/Smart-Home-Smart-Away-and-Follow-Me-Features#:~:text=What%20thermostats%20are%20compatible%20with,a%20built%2Din%20occupancy%20sensor

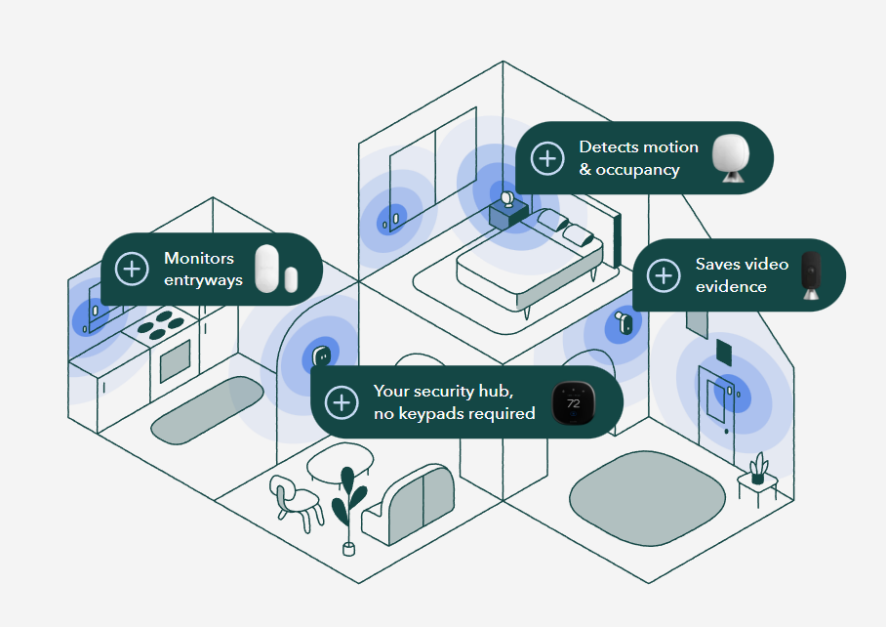
SmartSensor is designed to supplement the temperature and occupancy sensor built into your ecobee thermostat*—unlocking its full potential.

See, e.g., https://support.ecobee.com/s/articles/SmartSensors-FAQs-Setup-Guide-and-Troubleshooting

Occupancy and Temperature detection

- Detects both temperature and occupancy and communicates those readings to the thermostat.
- Occupancy detection uses infrared technology to detect body heat signatures.
- Occupancy is based on a person's continued presence within a SmartSensor's viewing angle—not merely motion detection. The more time you spend in front of a particular sensor, the more weight your ecobee assigns to that sensor's readings.

See, e.g., https://support.ecobee.com/s/articles/SmartSensors-FAQs-Setup-Guide-and-Troubleshooting

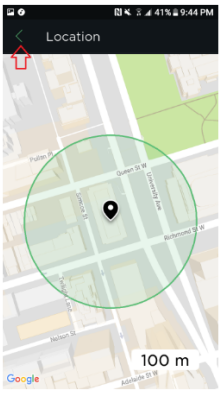


See, e.g., https://www.ecobee.com/en-us/smart-security/

60. For further example, Smart Security's SmartSensor transmits a geofence radius such as the area around a user's home or room (*i.e.*, a special area by its coverage) to determine occupancy:

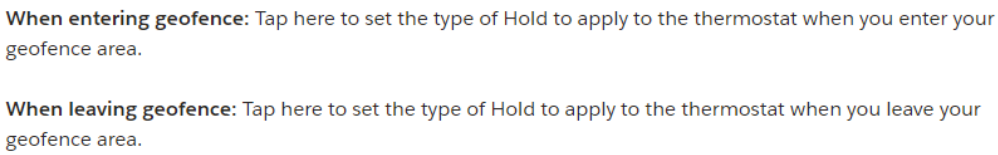
Geofence Radius: Tap this to open a separate screen to configure the geofence's radius.

Use your finger to expand or retract the geofence radius to your specifications, and tap the "<" icon in the top left when you are done. The default geofence radius is 1000m, and the radius can be shrunk to as low as 100m.



See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android; *see also* https://www.youtube.com/watch?v=z1w5F1T3YfA

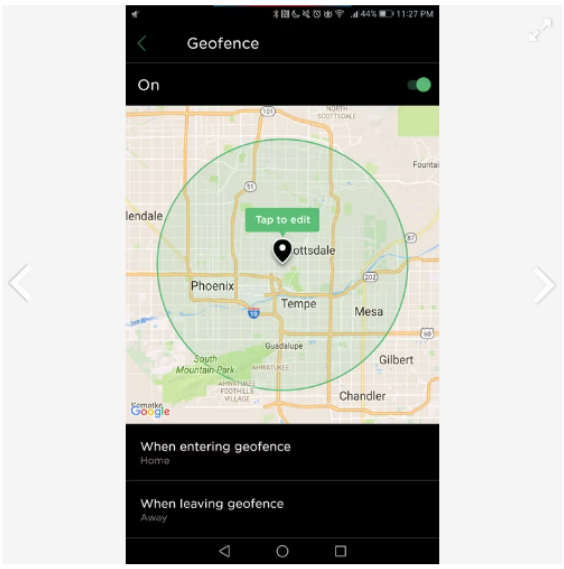
61. The Accused Products perform electronically storing in one or more memories data capable of linking the mobile station to the first special area, the data including a checking data of the first radio communication defining device and a first identifier related to the mobile station, transmitting via a mobile telephone network to the mobile station at least a portion of the checking data. For example, the ecobee Smart Security app servers store data linking the mobile station with the special area that indicates whether a user has entered the special area. For further example, a user may select the ecobee thermostat device for linking with a user account. After linking the device, the mobile device associated with user account is also linked with the thermostat geofencing. All this data is stored on ecobee servers.



See, e.g., https://support.ecobee.com/s/articles/What-is-geofencing

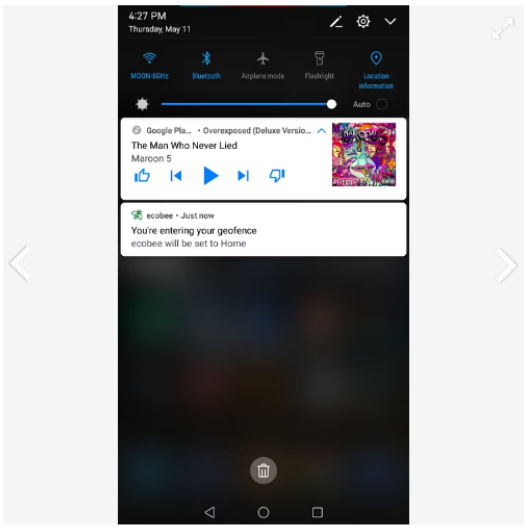
Great idea, right? I sure thought so. I immediately set it to switch back to the 'home' comfort setting when I entered my neighborhood. Cool that house down before I open the door! After spending the day at my office, I headed home, and as I approached my neighborhood, I heard a little ping on my phone. It was a notification from Ecobee that my thermostat had switched to the 'home' comfort setting before I even reached my garage. I walked in, and the air conditioning was already running. I was really feeling that smart home buzz.

2 Images



Setting the geofence and the notification you get when you enter it.

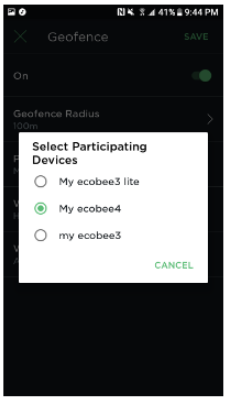
2 Images



Setting the geofence and the notification you get when you enter it.

See, e.g., https://www.androidpolice.com/2017/05/12/ecobee-adds-geofencing-smart-thermostat-app-can-strip-intelligence/

Participating Devices: If you have more than one thermostat connected to your ecobee account, tap this to bring up a selection screen. Tap the thermostat that you wish to apply the geofence settings to.



See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android

62. For further example, an ecobee sensor, such as a SmartSensor or Room Sensor is a first radio communication defining device connected to a Smart Thermostat that is used to confirm the location of the user for whether the user is Away or Home. This sensor data is a checking data which is sent to thermostat for processing. The Smart Thermostat sends this data to ecobee servers.

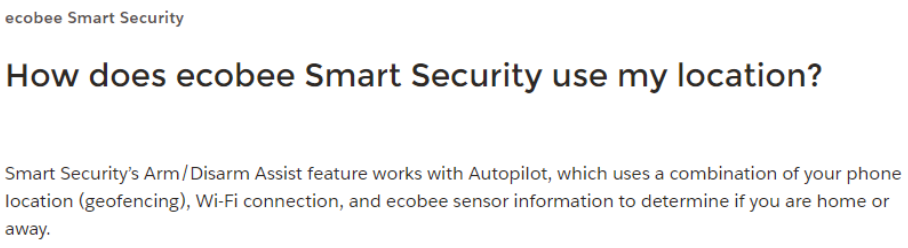
What thermostats are compatible with these smart features?

- Smart Home and Away is available on Smart Thermostat Premium, Smart Thermostat Enhanced, SmartThermostat with voice control, ecobee4, and ecobee3 out of the box, as these thermostats have a built-in occupancy sensor. With the ecobee3 lite, Smart Home and Away can be used once a SmartSensor or Room Sensor is paired with the thermostat.
- Follow Me can be enabled once you pair a SmartSensor or Room Sensor with your ecobee thermostat. For the ecobee3 Lite, two sensors must be paired to enable this feature.

See e.g., https://support.ecobee.com/s/articles/Smart-Home-Smart-Away-and-Follow-Me-Features#:~:text=What%20thermostats%20are%20compatible%20with,a%20built%2Din%20occupancy%20sensor

SmartSensor is designed to supplement the temperature and occupancy sensor built into your ecobee thermostat*—unlocking its full potential.

See, e.g., https://support.ecobee.com/s/articles/SmartSensors-FAQs-Setup-Guide-and-Troubleshooting



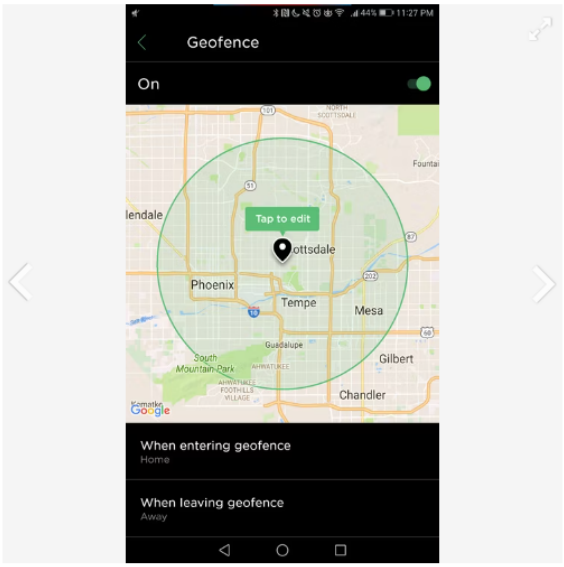
See, e.g., https://support.ecobee.com/s/articles/How-does-ecobee-Smart-Security-use-my-location

63. The Accused Products perform receiving from the mobile station via the mobile telephone network an updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in at least the first special area, the updating signal including a second identifier related to the mobile station, deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the first special area; and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the first special area. For example, in the setup described below, when a smartphone entered the Home location, ecobee servers sent a notification that a mobile station running the ecobee app has entered the Home location. At the time when notification was sent, the mobile station was still out of range of the ecobee Smart Thermostat ("my thermostat had switched to the 'home' comfort setting before I even reached my garage"). The only communications link available to the phone was the cellular phone network. Before the servers could send any notification to the mobile station, the servers must have received an updating signal that the mobile station was within the Home location (*i.e.*, within the special area) ("as I approached my neighborhood"). The only communication link available to the mobile station was the cellular network. Therefore, the updating signal was sent over the cellular network. The mobile station did not make a phone call ("heard a little ping"). Therefore, the updating signal was uncorrelated to

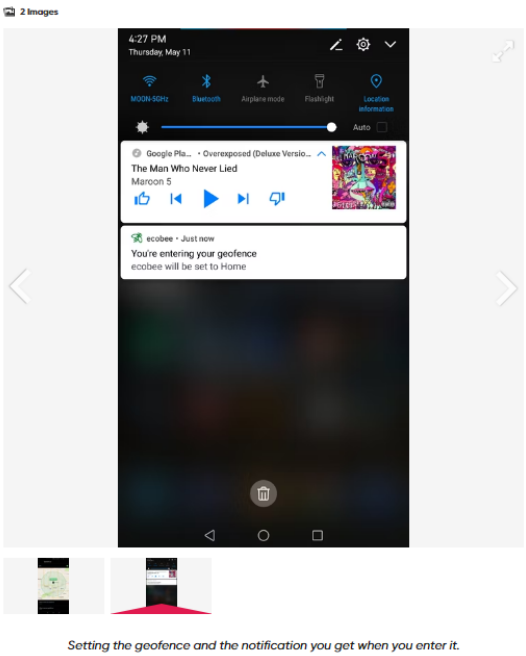
any mobile station call establishment and was sent over the cellular network data communications channel.

Great idea, right? I sure thought so. I immediately set it to switch back to the 'home' comfort setting when I entered my neighborhood. Cool that house down before I open the door! After spending the day at my office, I headed home, and as I approached my neighborhood, I heard a little ping on my phone. It was a notification from Ecobee that my thermostat had switched to the 'home' comfort setting before I even reached my garage. I walked in, and the air conditioning was already running. I was really feeling that smart home buzz.

2 Images



Setting the geofence and the notification you get when you enter it.



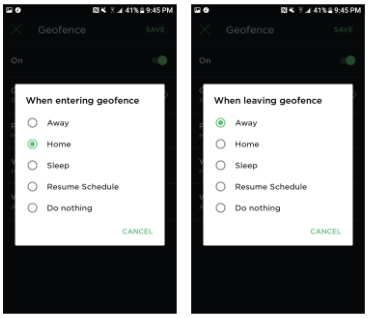
Setting the geofence and the notification you get when you enter it.

See, e.g., https://www.androidpolice.com/2017/05/12/ecobee-adds-geofencing-smart-thermostat-app-can-strip-intelligence/

64. For further example, a user's location changing when the user enters or exits a Home area indicates the mobile station's presence or non-presence in the special area. As shown below, when a user's smartphone enters a Home area, but is outside the ecobee Wi-Fi range, the ecobee servers detect the change of location (i.e., second identifier) from an updating signal sent from the smartphone to the servers. The sending from the ecobee servers to the mobile station of the notification related to the user entering in the home location, is an example of a presence related service enabled by the one or more processing devices of the ecobee servers. In addition, using the same process as described above, ecobee Smart Security can enable or disable other presence related services, such as putting the Smart Thermostat in a hold state or in a resume schedule. Therefore, the presence related services are enabled or disabled based by the processing devices based on the mobile station's presence or non-presence in the special area.

When entering geofence: Tap here to set the type of Hold to apply to the thermostat when you enter your geofence area.

When leaving geofence: Tap here to set the type of Hold to apply to the thermostat when you leave your geofence area.



Choose a Comfort Setting from the list to apply an indefinite Hold using that Comfort Setting's temperature/fan settings, or choose "Resume Schedule" to cancel any Holds and resume the ecobee's schedule.

Geofencing actions place your ecobee in a Hold status based on one of your existing Comfort Settings, or if "Resume Schedule" is chosen, the geofence action will cancel any existing Holds.

For example, you can set your "When leaving geofence" action to "Away" and your "When entering geofence" to "Resume Schedule", so when you leave your Home, your ecobee will switch to your Away settings even if Away is not scheduled. Then, when you return home, the ecobee will cancel the Away hold and resume your schedule.

See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android

65. Defendant has and continues to indirectly infringe one or more claims of the '030 Patent by inducing infringement by others, such as Defendant's customers and end-users, in this District and elsewhere in the United States. For example, Defendant's customers and end-users directly infringe, either literally or under the doctrine of equivalents, through their use of the inventions claimed in the '030 Patent. Defendant induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products and providing instructions, documentation, and other information to customers and end-users suggesting that they use the Accused Products in an infringing manner, including technical support, marketing, product manuals, advertisements, and online documentation. *See, e.g.*, https://www.ecobee.com/en-us/installing-your-smart-thermostat-with-voice-control/ (instructions on how to install and set up SmartThermostat with Voice Control); https://support.ecobee.com/s/articles/SmartSensors-FAQs-Setup-Guide-and-

Troubleshooting#:~:text=SmartSensor%20uses%20915MHz%20radio%20waves,communication%20with%20your%20ecobee%20thermostat. Ecobee also promotes that the Accused Products (such as the SmartThermostat with Voice Control) contain a plurality of sensors and can be used to communicate with other ecobee products, such as the SmartSensor, in an infringing manner. *See* https://www.ecobee.com/en-us/smart-thermostats/smart-wifi-thermostat-with-voicecontrol/#Features-and-Specs; *see also* https://www.ecobee.com/en-us/accessories/smarttemperature-occupancy-sensor/.

66. Because of Defendant's inducement, Defendant's customers and end-users use the Accused Products in a way Defendant intends and they directly infringe the '030 Patent. Defendant performs these affirmative acts with knowledge of the '030 Patent and with the intent, or willful blindness, that the induced acts directly infringe the '030 Patent.

67. Defendant has indirectly infringed and continues to indirectly infringe one or more claims of the '030 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement by others, such as customers and end-users, in this District and elsewhere in the United States. Defendant's affirmative acts of selling and offering to sell the '030 Accused Products in this District and elsewhere in the United States and causing the '030 Accused Products to be manufactured, used, sold, and offered for sale contribute to others' use and manufacture of the Accused Products, such that the '030 Patent is directly infringed by others. The accused components within the Accused Products including, but not limited to, software manufactured by Defendant, are material to the invention of the '030 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Defendant to be especially made or adapted for use in the infringement of the '030 Patent. Defendant performs these affirmative acts with knowledge of the '030 Patent and with intent, or willful blindness, that

they cause the direct infringement of the ’030 Patent.

68. Because of Defendant’s direct and indirect infringement of the ’030 Patent, ALT has suffered damages in an amount to be proved at trial.

COUNT IV
(Infringement of the ’621 Patent)

69. Paragraphs 1 through 26 are incorporated by reference as if fully set forth herein.

70. ALT has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the ’621 Patent.

71. Defendant has and continue to directly infringe the claims of the ’621 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products, such as the Accused Products, that satisfy each and every limitation of one or more claims of the ’621 Patent.

72. The Accused Products practice the method of at least claim 1 of the ’621 Patent: A method associated with a provider of presence related services in connection with the use of a mobile station that is operable within a mobile telephone network, and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the provider of presence related services having one or more servers, the method comprising: electronically storing in the one or more servers of the provider of presence related services data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station, the provider of presence related services being different than the mobile telephone network, receiving in the one or more servers of the provider of presence related services from the mobile station via the mobile telephone network an

updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in the special area, the one or more servers of the provider of presence related services deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area; and enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area.

73. The Accused Products perform a method associated with a provider of presence related services in connection with the use of a mobile station that is operable within a mobile telephone network, and at least a first radio communication defining device that transmits a first distinctive defining signal, the first distinctive defining signal at least partly defines a special area by its coverage, the provider of presence related services having one or more servers. For example, ecobee's Smart Security has an Arm/Disarm Assist feature that works with Autopilot (*i.e.*, a presence related service), which uses phone location (geofencing) (*i.e.*, the use of a mobile station that is operable within a mobile telephone network) and a SmartSensor or Room Sensor (*i.e.*, at least a first radio communication defining service that transmits a first distinctive defining signal).

ecobee Smart Security

How does ecobee Smart Security use my location?

Smart Security's Arm/Disarm Assist feature works with Autopilot, which uses a combination of your phone location (geofencing), Wi-Fi connection, and ecobee sensor information to determine if you are home or away.

To edit your Location Settings:

1. Open the **ecobee app**.

2. Tap **Autopilot** on the bottom of the **Home overview screen**.

3. Scroll down and tap **Location Settings**.

4. Toggle **Use phone location** on or off.

Under **Improve accuracy**, you can add or remove your home Wi-Fi network and **Edit** the **Geofence** around your home.

Tip: Adding your Wi-Fi network information improves the reliability of location-based features like Arm/Disarm Assist, allowing them to quickly verify your location based on when your phone connects and disconnects from your Wi-Fi network.

See, e.g., https://support.ecobee.com/s/articles/How-does-ecobee-Smart-Security-use-my-location

$59.99 in bundle savings*

$269.99

Smart Security Starter Kit

Get whole home protection that starts with your thermostat, plus 2 free months of professional monitoring.

What's included:

- 1 × SmartThermostat Premium
- 1 × SmartSensor
- 2 × SmartSensor for doors and windows

Add to cart | More details

See, e.g., https://www.ecobee.com/en-us/smart-security/

What thermostats are compatible with these smart features?

- Smart Home and Away is available on Smart Thermostat Premium, Smart Thermostat Enhanced, SmartThermostat with voice control, ecobee4, and ecobee3 out of the box, as these thermostats have a built-in occupancy sensor. With the ecobee3 lite, Smart Home and Away can be used once a SmartSensor or Room Sensor is paired with the thermostat.
- Follow Me can be enabled once you pair a SmartSensor or Room Sensor with your ecobee thermostat. For the ecobee3 Lite, two sensors must be paired to enable this feature.

See, e.g., https://support.ecobee.com/s/articles/Smart-Home-Smart-Away-and-Follow-Me-Features#:~:text=What%20thermostats%20are%20compatible%20with,a%20built%2Din%20occupancy%20sensor

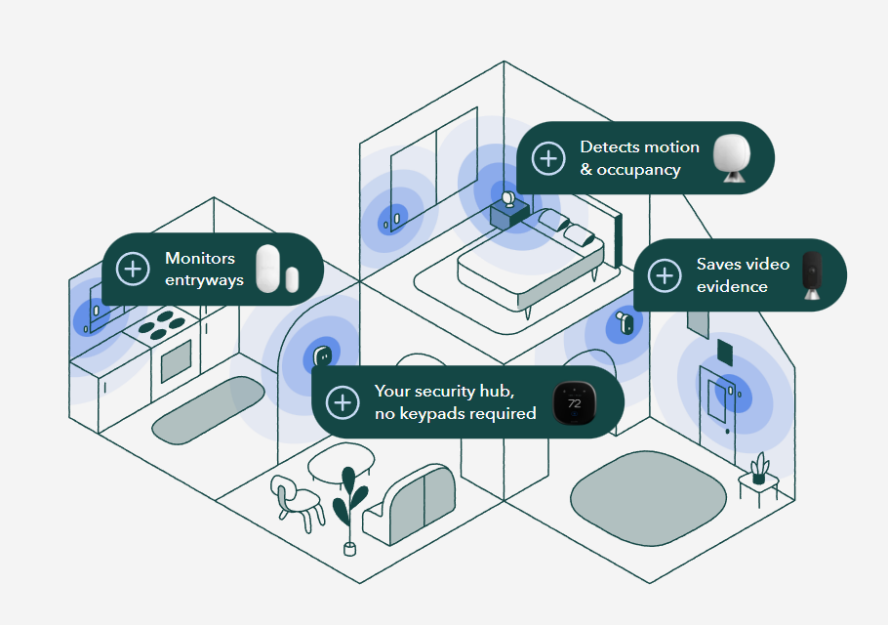
SmartSensor is designed to supplement the temperature and occupancy sensor built into your ecobee thermostat*—unlocking its full potential.

See, e.g., https://support.ecobee.com/s/articles/SmartSensors-FAQs-Setup-Guide-and-Troubleshooting

Occupancy and Temperature detection

- Detects both temperature and occupancy and communicates those readings to the thermostat.
- Occupancy detection uses infrared technology to detect body heat signatures.
- Occupancy is based on a person's continued presence within a SmartSensor's viewing angle—not merely motion detection. The more time you spend in front of a particular sensor, the more weight your ecobee assigns to that sensor's readings.

See, e.g., https://support.ecobee.com/s/articles/SmartSensors-FAQs-Setup-Guide-and-Troubleshooting

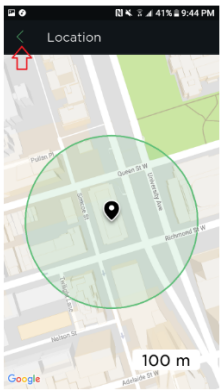


See, e.g., https://www.ecobee.com/en-us/smart-security/

74. For further example, Smart Security's SmartSensor transmits a geofence radius such as the area around a user's home or room (*i.e.*, a special area by its coverage) to determine occupancy:

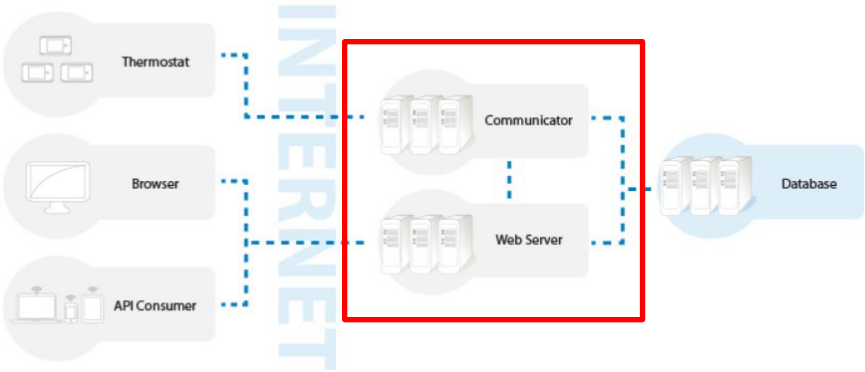
Geofence Radius: Tap this to open a separate screen to configure the geofence's radius.

Use your finger to expand or retract the geofence radius to your specifications, and tap the "<" icon in the top left when you are done. The default geofence radius is 1000m, and the radius can be shrunk to as low as 100m.



See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android; *see also* https://www.youtube.com/watch?v=z1w5F1T3YfA

75. For further example, Smart Security includes a Smart Thermostat in communication with several servers.

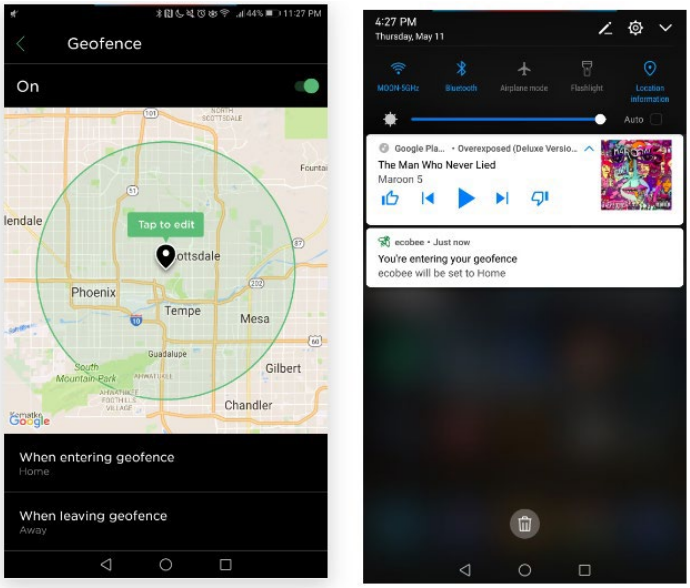


See, e.g., https://www.ecobee.com/home/developer/api/introduction/core-concepts.shtml

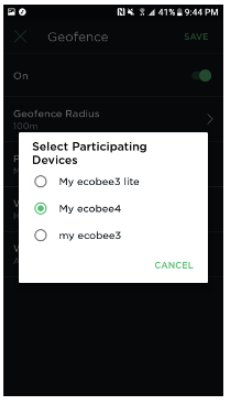
76. The Accused Products perform electronically storing in the one or more servers of the provider of presence related services data capable of linking the mobile station to the special area, the data including a checking data of the first radio communication defining device and an identifier related to the mobile station, the provider of presence related services being different than the mobile telephone network. For example, the Smart Security servers stores data linking the mobile station with the special area that indicates whether a user has entered the special area. A user selects the thermostat device for linking with a user account. After linking the device, the mobile device associated with user account is also linked with the thermostat geofencing. All this data is stored on ecobee servers.

When entering geofence: Tap here to set the type of Hold to apply to the thermostat when you enter your geofence area.

When leaving geofence: Tap here to set the type of Hold to apply to the thermostat when you leave your geofence area.



Participating Devices: If you have more than one thermostat connected to your ecobee account, tap this to bring up a selection screen. Tap the thermostat that you wish to apply the geofence settings to.



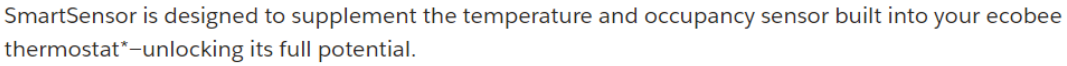
See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android

77. The Accused Products perform receiving in the one or more servers of the provider of presence related services from the mobile station via the mobile telephone network an updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in the special area, the one or more servers of the provider of presence related services deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area. For further example, an ecobee sensor, such as a SmartSensor or Room Sensor connected to a Smart Thermostat is used to confirm the location of the user for whether the user is Away or Home. This sensor data (i.e., at least a portion of the data whether or not the mobile station is present in the special area) is sent to thermostat for processing and the Smart Thermostat sends this data to ecobee servers.

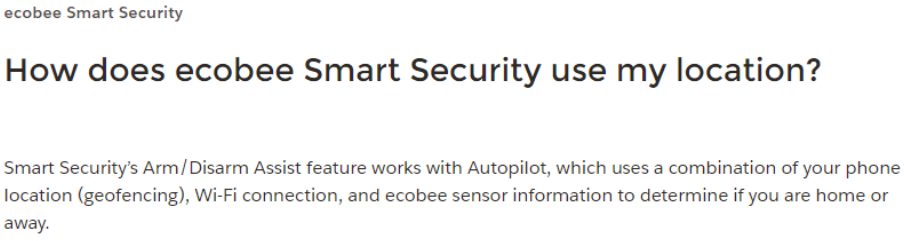
What thermostats are compatible with these smart features?

- Smart Home and Away is available on Smart Thermostat Premium, Smart Thermostat Enhanced, SmartThermostat with voice control, ecobee4, and ecobee3 out of the box, as these thermostats have a built-in occupancy sensor. With the ecobee3 lite, Smart Home and Away can be used once a SmartSensor or Room Sensor is paired with the thermostat.
- Follow Me can be enabled once you pair a SmartSensor or Room Sensor with your ecobee thermostat. For the ecobee3 Lite, two sensors must be paired to enable this feature.

See e.g., https://support.ecobee.com/s/articles/Smart-Home-Smart-Away-and-Follow-Me-Features#:~:text=What%20thermostats%20are%20compatible%20with,a%20built%2Din%20occupancy%20sensor



See, e.g., https://support.ecobee.com/s/articles/SmartSensors-FAQs-Setup-Guide-and-Troubleshooting



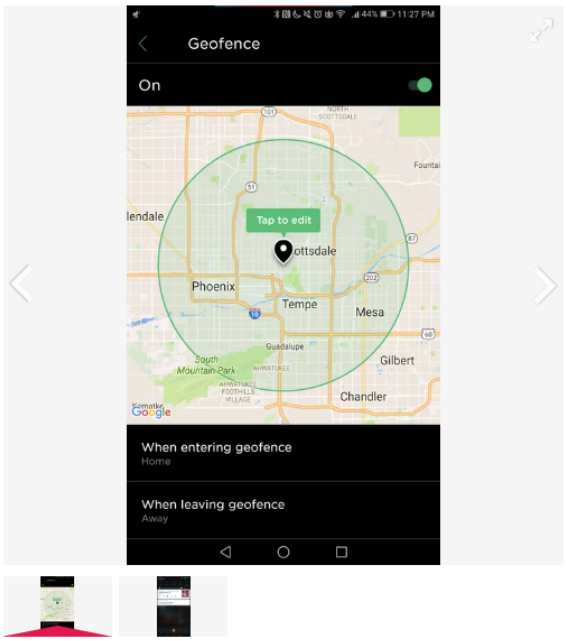
See, e.g., https://support.ecobee.com/s/articles/How-does-ecobee-Smart-Security-use-my-location

78. The Accused Products perform receiving in the one or more servers of the provider of presence related services from the mobile station via the mobile telephone network an updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in the special area, the one or more servers of the provider of presence related services deriving from the updating signal by one or more processing devices having access to at least a portion of the data whether or not the mobile station is present in the special area. For example, in the setup described below, when a smartphone entered the Home location, ecobee servers sent a notification that a mobile station has entered the Home location. At the time when notification was sent, the mobile station was still out of range of the ecobee Smart Thermostat ("my thermostat had switched to the 'home' comfort setting before I even reached my garage"). The only communications link available to the phone was the cellular phone network. Before the servers could send any notification to the mobile station, the servers must have received an updating signal that the mobile station was within the Home location (*i.e.*, within the special area)

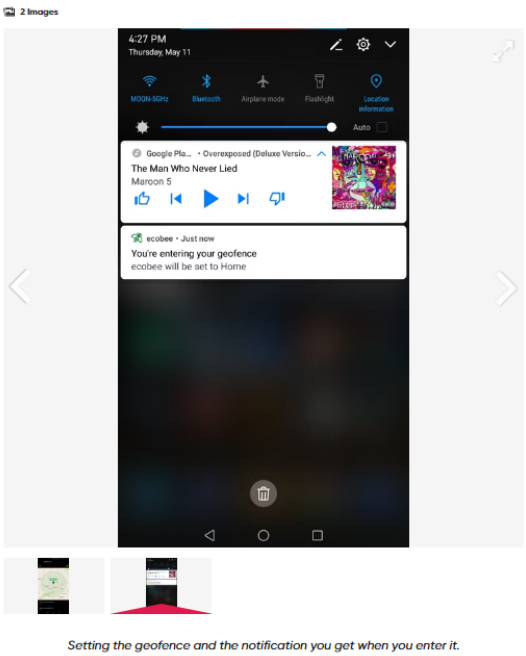
("as I approached my neighborhood"). The only communication link available to the mobile station was the cellular network. Therefore, the updating signal was sent over the cellular network. The mobile station did not make a phone call ("heard a little ping"). Therefore, the updating signal was uncorrelated to any mobile station call establishment and was sent over the cellular network data communications channel.

Great idea, right? I sure thought so. I immediately set it to switch back to the 'home' comfort setting when I entered my neighborhood. Cool that house down before I open the door! After spending the day at my office, I headed home, and as I approached my neighborhood, I heard a little ping on my phone. It was a notification from Ecobee that my thermostat had switched to the 'home' comfort setting before I even reached my garage. I walked in, and the air conditioning was already running. I was really feeling that smart home buzz.

2 Images



Setting the geofence and the notification you get when you enter it.



Setting the geofence and the notification you get when you enter it.

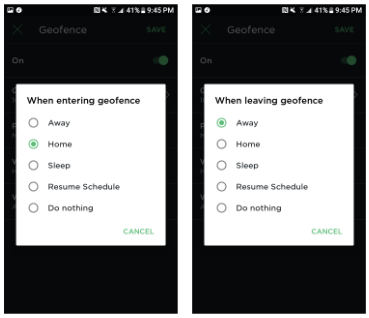
See, e.g., https://www.androidpolice.com/2017/05/12/ecobee-adds-geofencing-smart-thermostat-app-can-strip-intelligence/

79. The Accused Products perform enabling or disabling by use of the one or more processing devices a presence related service based upon the mobile station's presence or non-presence in the special area. For further example, a user's location changing when the user enters or exits a Home area indicates the mobile station's presence or non-presence in the special area. As shown below, when a user's smartphone enters a Home area, but is outside the ecobee Wi-Fi range, the ecobee servers detect the change of location from an updating signal sent from the smartphone to the servers. The sending from the ecobee servers to the mobile station of the notification, related to the user entering in the home location, is an example of a presence related service enabled by the one or more processing devices of the ecobee servers. In addition, using the same process as described above, the ecobee Smart Security can enable or disable other presence related services, such as putting the Smart Thermostat in a hold state or in a resume schedule. Therefore, the presence related services are enabled or disabled based by the processing devices

based on the mobile station's presence or non-presence in the special area.

When entering geofence: Tap here to set the type of Hold to apply to the thermostat when you enter your geofence area.

When leaving geofence: Tap here to set the type of Hold to apply to the thermostat when you leave your geofence area.



Choose a Comfort Setting from the list to apply an indefinite Hold using that Comfort Setting's temperature/fan settings, or choose "Resume Schedule" to cancel any Holds and resume the ecobee's schedule.

Geofencing actions place your ecobee in a Hold status based on one of your existing Comfort Settings, or if "Resume Schedule" is chosen, the geofence action will cancel any existing Holds.

For example, you can set your "When leaving geofence" action to "Away" and your "When entering geofence" to "Resume Schedule", so when you leave your Home, your ecobee will switch to your Away settings even if Away is not scheduled. Then, when you return home, the ecobee will cancel the Away hold and resume your schedule.

See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android

80. Defendant has and continues to indirectly infringe one or more claims of the '621 Patent by inducing infringement by others, such as Defendant's customers and end-users, in this District and elsewhere in the United States. For example, Defendant's customers and end-users directly infringe, either literally or under the doctrine of equivalents, through their use of the inventions claimed in the '621 Patent. Defendant induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products and providing instructions, documentation, and other information to customers and end-users suggesting that they use the Accused Products in an infringing manner, including technical support, marketing, product manuals, advertisements, and online documentation. *See, e.g.*, https://www.ecobee.com/en-us/installing-your-smart-thermostat-with-voice-control/ (instructions on how to install and set up SmartThermostat with Voice Control);

https://support.ecobee.com/s/articles/SmartSensors-FAQs-Setup-Guide-and-Troubleshooting#:~:text=SmartSensor%20uses%20915MHz%20radio%20waves,communication%20with%20your%20ecobee%20thermostat. Ecobee also promotes that the Accused Products (such as the SmartThermostat with Voice Control) contain a plurality of sensors and can be used to communicate with other ecobee products, such as the SmartSensor, in an infringing manner. *See* https://www.ecobee.com/en-us/smart-thermostats/smart-wifi-thermostat-with-voicecontrol/#Features-and-Specs; *see also* https://www.ecobee.com/en-us/accessories/smarttemperature-occupancy-sensor/.

81. Because of Defendant's inducement, Defendant's customers and end-users use the Accused Products in a way Defendant intends and they directly infringe the '621 Patent. Defendant performs these affirmative acts with knowledge of the '621 Patent and with the intent, or willful blindness, that the induced acts directly infringe the '621 Patent.

82. Defendant has indirectly infringed and continues to indirectly infringe one or more claims of the '621 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement by others, such as customers and end-users, in this District and elsewhere in the United States. Defendant's affirmative acts of selling and offering to sell the '621 Accused Products in this District and elsewhere in the United States and causing the '621 Accused Products to be manufactured, used, sold, and offered for sale contribute to others' use and manufacture of the Accused Products, such that the '621 Patent is directly infringed by others. The accused components within the Accused Products including, but not limited to, software manufactured by Defendant, are material to the invention of the '621 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Defendant to be especially made or adapted for use in the infringement of the '621 Patent. Defendant performs

these affirmative acts with knowledge of the ’621 Patent and with intent, or willful blindness, that they cause the direct infringement of the ’621 Patent.

83. Because of Defendant’s direct and indirect infringement of the ’621 Patent, ALT has suffered damages in an amount to be proved at trial.

COUNT V
(Infringement of the ’032 Patent)

84. Paragraphs 1 through 26 are incorporated by reference as if fully set forth herein.

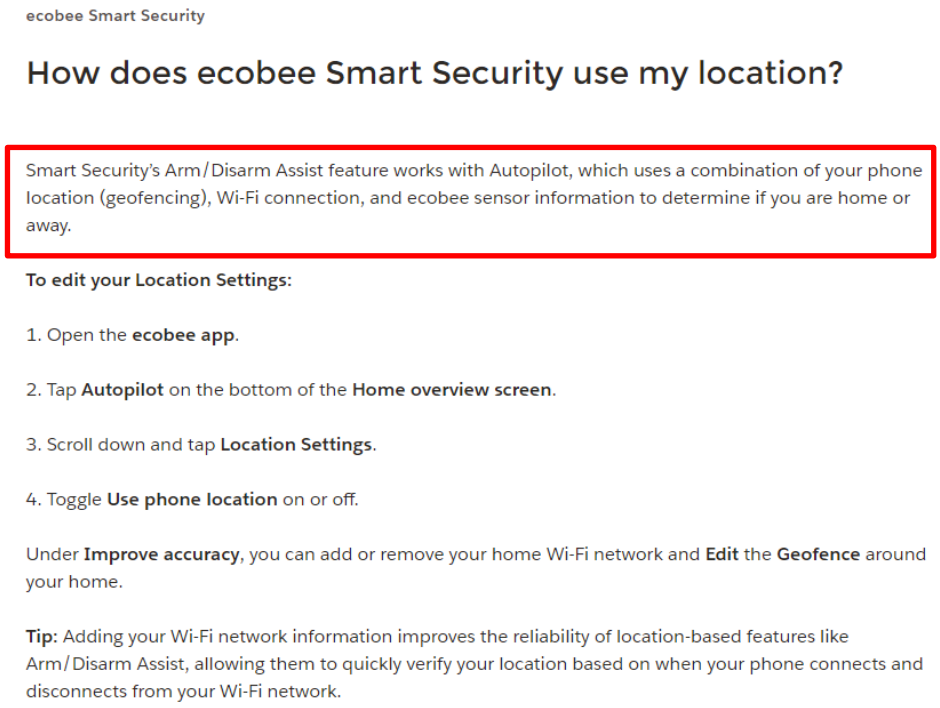
85. ALT has not licensed or otherwise authorized Defendant to make, use, offer for sale, sell, or import any products that embody the inventions of the ’032 Patent.

86. Defendant has and continue to directly infringe the claims of the ’032 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by making, using, offering to sell, selling, and/or importing into the United States products, such as the Accused Products, that satisfy each and every limitation of one or more claims of the ’032 Patent.

87. The Accused Products practice the method of at least claim 1 of the ’032 Patent: A method associated with a provider of presence related services and a mobile station that stores in a memory first checking data and uses the first checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage, the method comprising: one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal that identifies the mobile station's presence in the special area, the provider of presence related services being different than the mobile telephone network; and storing in the one or more servers a parameters database having an operating parameter whose value is determined at least in part by the updating signal received

from the mobile station; and sending from the one or more servers to the mobile station second checking data different from the first checking data to modify the special area.

88. The Accused Products preform a method associated with a provider of presence related services and a mobile station. For example, ecobee's Smart Security running on the ecobee app (*i.e.*, a mobile station) has an Arm/Disarm Assist feature that works with Autopilot (*i.e.*, a presence related service), which uses phone location (geofencing).



ecobee Smart Security

How does ecobee Smart Security use my location?

Smart Security's Arm/Disarm Assist feature works with Autopilot, which uses a combination of your phone location (geofencing), Wi-Fi connection, and ecobee sensor information to determine if you are home or away.

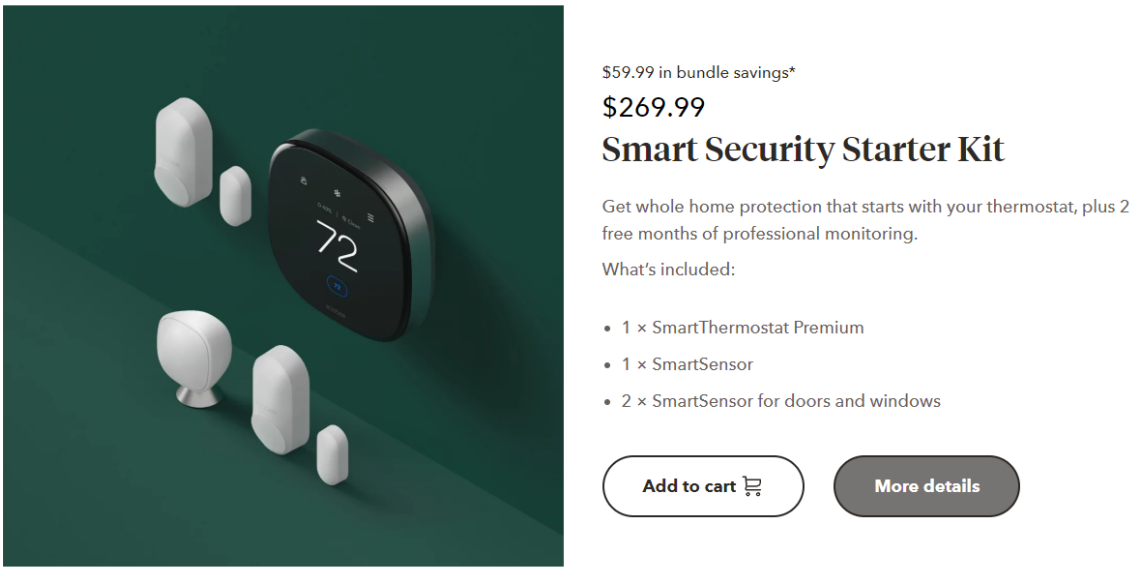
To edit your Location Settings:

1. Open the **ecobee app**.
2. Tap **Autopilot** on the bottom of the **Home overview screen**.
3. Scroll down and tap **Location Settings**.
4. Toggle **Use phone location** on or off.

Under **Improve accuracy**, you can add or remove your home Wi-Fi network and **Edit** the **Geofence** around your home.

Tip: Adding your Wi-Fi network information improves the reliability of location-based features like Arm/Disarm Assist, allowing them to quickly verify your location based on when your phone connects and disconnects from your Wi-Fi network.

See, e.g., https://support.ecobee.com/s/articles/How-does-ecobee-Smart-Security-use-my-location

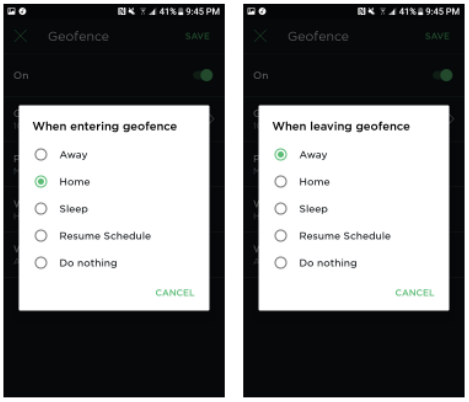


See, e.g., https://www.ecobee.com/en-us/smart-security/

89. The Accused Products perform storing in a memory first checking data and using the first checking data to determine whether or not a defining signal received from a radio communication defining device is a distinctive defining signal, the distinctive defining signal at least partly defines a special area by its coverage. For example, with respect to ecobee Smart Security, through the ecobee app on a smartphone stores in a memory first checking data and uses the first checking data to determine whether a defining signal received from a radio communication defining device is a distinctive defining signal. In the ecobee app, it is possible to define a home location (*i.e.*, a special area) and to opt-in for the app to use your phone's location to determine if you have crossed into the home location. To sense presence in the home location, the phone also uses ecobee sensor signals (*e.g.*, signals from a Smart Sensor) to detect its location which is the distinctive defining signal.

When entering geofence: Tap here to set the type of Hold to apply to the thermostat when you enter your geofence area.

When leaving geofence: Tap here to set the type of Hold to apply to the thermostat when you leave your geofence area.

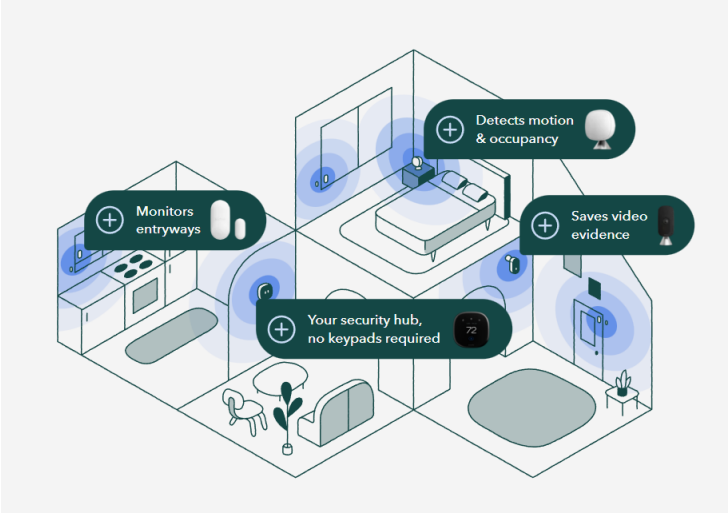


Choose a Comfort Setting from the list to apply an indefinite Hold using that Comfort Setting's temperature/fan settings, or choose "Resume Schedule" to cancel any Holds and resume the ecobee's schedule.

Geofencing actions place your ecobee in a Hold status based on one of your existing Comfort Settings, or if "Resume Schedule" is chosen, the geofence action will cancel any existing Holds.

For example, you can set your "When leaving geofence" action to "Away" and your "When entering geofence" to "Resume Schedule", so when you leave your Home, your ecobee will switch to your Away settings even if Away is not scheduled. Then, when you return home, the ecobee will cancel the Away hold and resume your schedule.

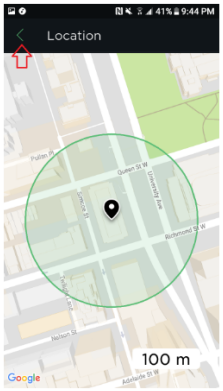
See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android



See, e.g., https://www.ecobee.com/en-us/smart-security/

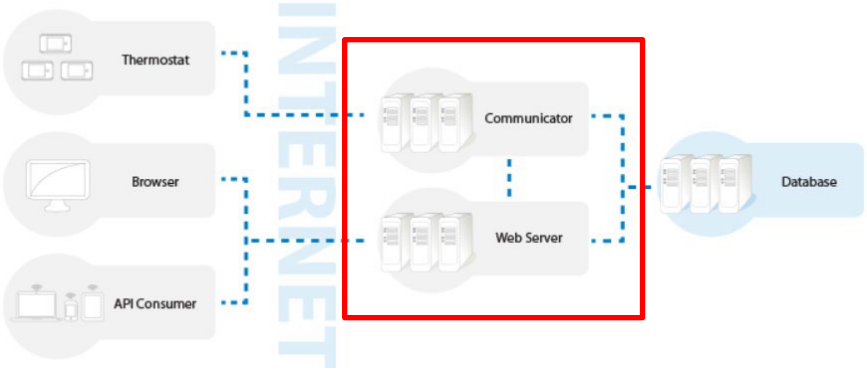
Geofence Radius: Tap this to open a separate screen to configure the geofence's radius.

Use your finger to expand or retract the geofence radius to your specifications, and tap the "<" icon in the top left when you are done. The default geofence radius is 1000m, and the radius can be shrunk to as low as 100m.



See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android; *see also* https://www.youtube.com/watch?v=z1w5F1T3YfA

90. The Accused Products perform the method comprising one or more servers of a provider of presence related services receiving from the mobile station via a mobile telephone network an updating signal that identifies the mobile station's presence in the special area. For further example, a Smart Thermostat is in communication with several servers of a provider of presence related services, the provider of presence related services being different than the mobile telephone network.

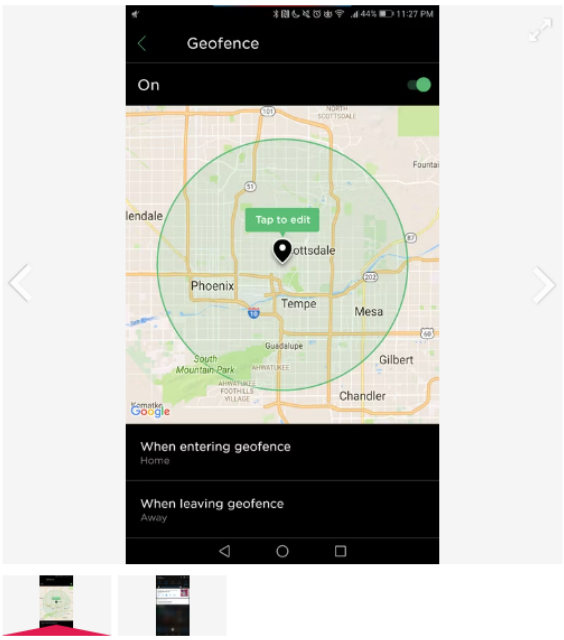


See, e.g., https://www.ecobee.com/home/developer/api/introduction/core-concepts.shtml

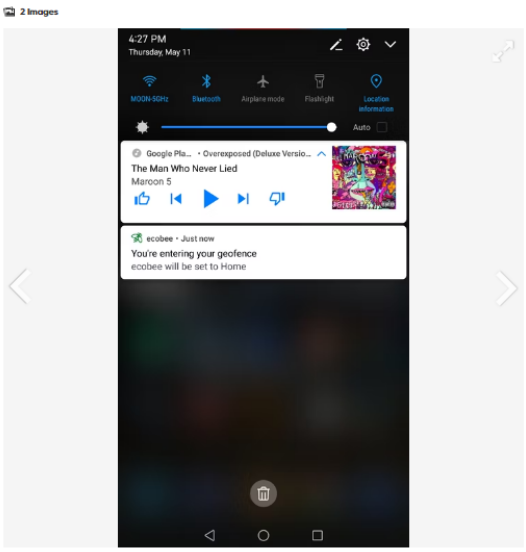
91. For further example, ecobee servers can send a notification (*i.e.*, an updating signal) that a mobile station has entered the Home location (*i.e.*, identifies the mobile station's presence in the special area) ("as I approached my neighborhood, I heard a little ping on my phone. It was a notification from ecobee that my thermostat had switched to the 'home' comfort setting before I even reached my garage"). The ecobee smart security solution (*i.e.*, the provider of presence related services) is different from the mobile telephone network that the phone utilizes to receive the notification.

Great idea, right? I sure thought so. I immediately set it to switch back to the 'home' comfort setting when I entered my neighborhood. Cool that house down before I open the door! After spending the day at my office, I headed home, and as I approached my neighborhood, I heard a little ping on my phone. It was a notification from Ecobee that my thermostat had switched to the 'home' comfort setting before I even reached my garage. I walked in, and the air conditioning was already running. I was really feeling that smart home buzz.

2 Images



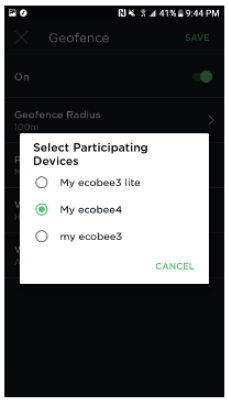
Setting the geofence and the notification you get when you enter it.



Setting the geofence and the notification you get when you enter it.

See, e.g., https://www.androidpolice.com/2017/05/12/ecobee-adds-geofencing-smart-thermostat-app-can-strip-intelligence/

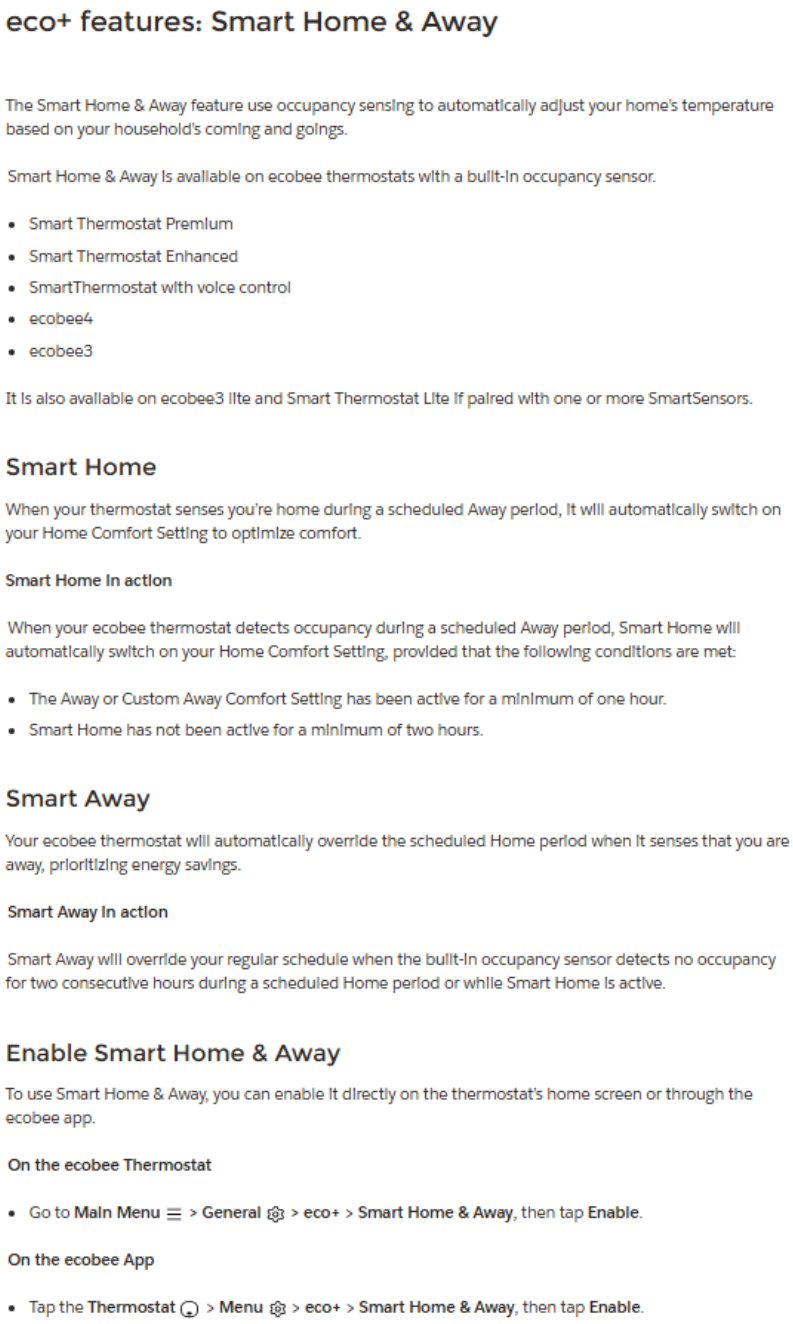
Participating Devices: If you have more than one thermostat connected to your ecobee account, tap this to bring up a selection screen. Tap the thermostat that you wish to apply the geofence settings to.



See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android

92. The Accused Products perform storing in the one or more servers a parameters database having an operating parameter whose value is determined at least in part by the updating signal received from the mobile station; and sending from the one or more servers to the mobile station second checking data different from the first checking data to modify the special area. For

example, the ecobee Smart Security system running on the ecobee app stores, in one or more servers, a parameters database containing the status and other operating data about all devices registered in the ecobee smart system. In particular, the databases save a parameter showing the Home/Away status of each user's smartphone. As shown below, this parameter is determined, at least in part, by the updating signal received from the smartphone. The Home/Away parameter is stored in the server, evidenced because a notification is received at the mobile station when the user enters or leaves the geofence area.



eco+ features: Smart Home & Away

The Smart Home & Away feature use occupancy sensing to automatically adjust your home's temperature based on your household's coming and goings.

Smart Home & Away is available on ecobee thermostats with a built-in occupancy sensor.

- Smart Thermostat Premium
- Smart Thermostat Enhanced
- SmartThermostat with voice control
- ecobee4
- ecobee3

It is also available on ecobee3 lite and Smart Thermostat Lite if paired with one or more SmartSensors.

Smart Home

When your thermostat senses you're home during a scheduled Away period, it will automatically switch on your Home Comfort Setting to optimize comfort.

Smart Home in action

When your ecobee thermostat detects occupancy during a scheduled Away period, Smart Home will automatically switch on your Home Comfort Setting, provided that the following conditions are met:

- The Away or Custom Away Comfort Setting has been active for a minimum of one hour.
- Smart Home has not been active for a minimum of two hours.

Smart Away

Your ecobee thermostat will automatically override the scheduled Home period when it senses that you are away, prioritizing energy savings.

Smart Away in action

Smart Away will override your regular schedule when the built-in occupancy sensor detects no occupancy for two consecutive hours during a scheduled Home period or while Smart Home is active.

Enable Smart Home & Away

To use Smart Home & Away, you can enable it directly on the thermostat's home screen or through the ecobee app.

On the ecobee Thermostat

- Go to **Main Menu** ☰ > **General** ⚙ > **eco+** > **Smart Home & Away**, then tap **Enable**.

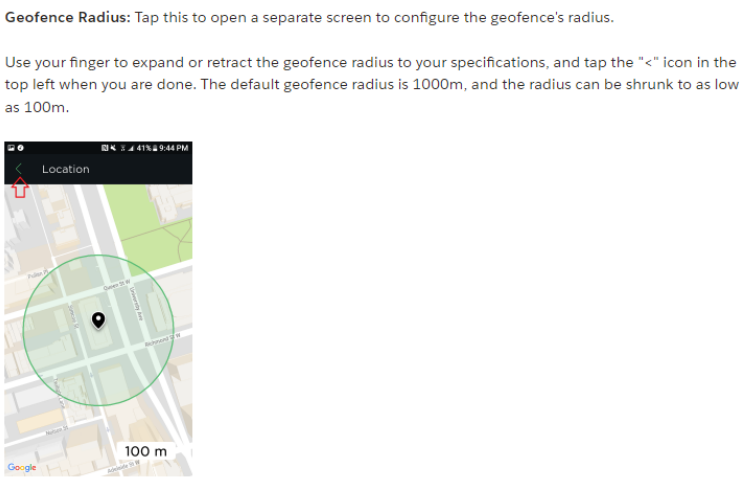
On the ecobee App

- Tap the **Thermostat** ◯ > **Menu** ⚙ > **eco+** > **Smart Home & Away**, then tap **Enable**.

See, e.g., https://support.ecobee.com/s/articles/eco-features-Smart-Home-Away

93. For further example, when the geofence area is set for 1000m and a user's mobile device enters the geofence area, it receives a message from the ecobee server that the mobile device enters the geofence area. A user can change the geofence area to 100m, and a message is sent again if a user enters the geofence area. Therefore, the special area has been modified, and the servers

have sent second checking data to the mobile device that is different from the first checking data in order to modify the special area.



See, e.g., https://support.ecobee.com/s/articles/Using-thermostat-geofencing-on-the-ecobee-app-for-Android

94. Defendant has and continues to indirectly infringe one or more claims of the '032 Patent by inducing infringement by others, such as Defendant's customers and end-users, in this District and elsewhere in the United States. For example, Defendant's customers and end-users directly infringe, either literally or under the doctrine of equivalents, through their use of the inventions claimed in the '032 Patent. Defendant induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Products and providing instructions, documentation, and other information to customers and end-users suggesting that they use the Accused Products in an infringing manner, including technical support, marketing, product manuals, advertisements, and online documentation. *See, e.g.*, https://www.ecobee.com/en-us/installing-your-smart-thermostat-with-voice-control/ (instructions on how to install and set up SmartThermostat with Voice Control); https://support.ecobee.com/s/articles/SmartSensors-FAQs-Setup-Guide-and-Troubleshooting#:~:text=SmartSensor%20uses%20915MHz%20radio%20waves,communicatio

n%20with%20your%20ecobee%20thermostat. Ecobee also promotes that the Accused Products (such as the SmartThermostat with Voice Control) contain a plurality of sensors and can be used to communicate with other ecobee products, such as the SmartSensor, in an infringing manner. *See* https://www.ecobee.com/en-us/smart-thermostats/smart-wifi-thermostat-with-voicecontrol/#Features-and-Specs; *see also* https://www.ecobee.com/en-us/accessories/smarttemperature-occupancy-sensor/.

95. Because of Defendant's inducement, Defendant's customers and end-users use the Accused Products in a way Defendant intends and they directly infringe the '032 Patent. Defendant performs these affirmative acts with knowledge of the '032 Patent and with the intent, or willful blindness, that the induced acts directly infringe the '032 Patent.

96. Defendant has indirectly infringed and continues to indirectly infringe one or more claims of the '032 Patent, as provided by 35 U.S.C. § 271(c), by contributing to direct infringement by others, such as customers and end-users, in this District and elsewhere in the United States. Defendant's affirmative acts of selling and offering to sell the '032 Accused Products in this District and elsewhere in the United States and causing the '032 Accused Products to be manufactured, used, sold, and offered for sale contribute to others' use and manufacture of the Accused Products, such that the '032 Patent is directly infringed by others. The accused components within the Accused Products including, but not limited to, software manufactured by Defendant, are material to the invention of the '032 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Defendant to be especially made or adapted for use in the infringement of the '032 Patent. Defendant performs these affirmative acts with knowledge of the '032 Patent and with intent, or willful blindness, that they cause the direct infringement of the '032 Patent.

97. Because of Defendant's direct and indirect infringement of the '032 Patent, ALT has suffered damages in an amount to be proved at trial.

DEMAND FOR JURY TRIAL

Plaintiff hereby demands a jury for all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, ALT prays for relief against Defendant as follows:

a. Entry of judgment declaring that Defendant has directly and/or indirectly infringed one or more claims of each of the Patents-in-Suit;

b. An order awarding damages sufficient to compensate ALT for Defendant's infringement of the Patents-in-Suit, but in no event less than a reasonable royalty, together with pre-judgment and post-judgment interest and costs;

c. Enhanced damages pursuant to 35 U.S.C. § 284;

d. Entry of judgment declaring that this case is exceptional and awarding AWT its costs and reasonable attorney fees under 35 U.S.C. § 285; and

e. Such other and further relief as the Court deems just and proper.

Dated: December 20, 2024

Respectfully submitted,

/s/ Peter Lambrianakos

Alfred R. Fabricant
NY Bar No. 2219392
Email: ffabricant@fabricantllp.com
Peter Lambrianakos
NY Bar No. 2894392
Email: plambrianakos@fabricantllp.com
Vincent J. Rubino, III
NY Bar No. 4557435
Email: vrubino@fabricantllp.com
Enrique Iturralde
NY Bar No. 4784930
Email: @fabricantllp.com

FABRICANT LLP
411 Theodore Fremd Road, Suite 206 South
Rye, New York 10580
Telephone: (212) 257-5797
Facsimile: (212) 257-5796

William E. Davis, III
Texas Bar No. 24047416
Email: bdavis@davisfirm.com
Rudolph "Rudy" Fink IV
Texas State Bar No. 24082997
Email: rfink@davisfirm.com
Ty Wilson
Texas State Bar No. 24106583
Email: twilson@davisfirm.com
DAVIS FIRM PC
213 N. Fredonia Street, Suite 230
Longview, Texas 75601
Telephone: (903) 230-9090
Facsimile: (903) 230-9661

ATTORNEYS FOR PLAINTIFF AVANT LOCATION TECHNOLOGIES LLC

CERTIFICATE OF SERVICE

The undersigned hereby certifies that, on December 20, 2024, all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3).

/s/ Peter Lambrianakos
Peter Lambrianakos