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

AVANT LOCATION TECHNOLOGIES LLC, Plaintiff, v. FIBAR GROUP S.A., and NICE S.P.A., Defendants.

Case No.

JURY TRIAL DEMANDED

### **COMPLAINT FOR PATENT INFRINGEMENT**

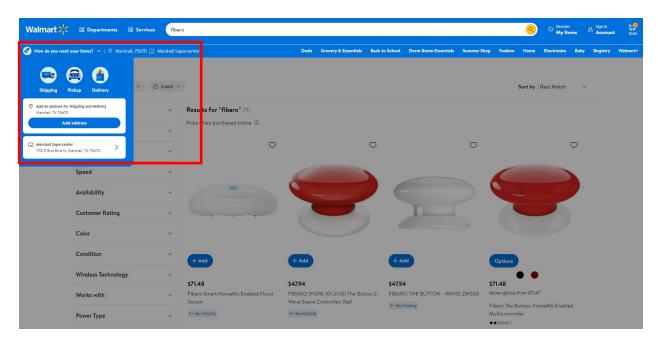
Plaintiff Avant Location Technologies LLC ("ALT" or "Plaintiff") files this Complaint against Defendants Fibar Group S.A. and Nice S.p.A. ("Fibaro" or "Defendants") for patent infringement under 35 U.S.C. § 271 and alleges as follows:

### 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 Fibar Group S.A. is a corporation organized and existing under the laws of Poland, with its principal place of business at Serdeczna 3 Street, 62-081 Wysogotowo, Poland. Upon information and belief, Fibar Group S.A. 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. Defendants own, and are parent companies of, Fibaro<sup>1</sup> and have authorized sellers and sales representatives that offer and sell Fibaro 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 E End Blvd N, Marshall TX 75670 indicated in the figure below.



*Fig. 1:* Depicting Sale of Fibaro Products at Walmart's Marshall Supercenter, available at <u>https://www.walmart.com/search?q=fibaro</u>

4. Upon information and belief, Defendant Nice S.p.A. is a corporation organized and existing under the laws of Italy, with its principal place of business at Via Callalta, 1 31046 Oderzo (TV), Italy. Upon information and belief, Nice S.p.A. 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.

<sup>&</sup>lt;sup>1</sup> See <u>https://www.niceforyou.com/en/nicepost/nice-acquires-fibaro-one-major-players-</u>worldwide-smart-home-consolidating-its-global

### **JURISDICTION**

5. 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.

6. This Court has specific and personal jurisdiction over the Defendants 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 Defendants have sufficient minimum contacts with the forum because Defendants transact 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.

7. Venue is proper in this Judicial District pursuant to 28 U.S.C. §§ 1400(b) and 1391(b) and (c) because each 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. Each Defendant, through its own acts and/or through the acts of the other 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. Further, venue is proper in this Judicial District because Fibar Group S.A. is a foreign corporation formed under the laws of Poland with a principal place of business in Poland and Nice S.p.A. is a foreign corporation formed under the laws of Italy with a principal place of business in Italy. "[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

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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).

### 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 found at <u>https://patentimages.storage.googleapis.com/9a/3b/35/8892a45c6e53e7/US8738040.pdf</u>.

9. On June 26, 2018, the United States 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 found at <a href="https://patentimages.storage.googleapis.com/b3/88/d6/2b5983bbc91869/US10009720.pdf">https://patentimages.storage.googleapis.com/b3/88/d6/2b5983bbc91869/US10009720.pdf</a>.

10. On May 26, 2015, the United States and Trademark Office duly and legally issued U.S. Patent No. 9,042,910 (the "'910 Patent") entitled "Method and System for Monitoring a Mobile Station Presence in a Special Area." A true and correct copy of the '910 Patent is found at <a href="https://patentimages.storage.googleapis.com/b2/06/83/d79dd24de68f26/US9042910.pdf">https://patentimages.storage.googleapis.com/b2/06/83/d79dd24de68f26/US9042910.pdf</a>.

11. On January 13, 2015, the United States Patent and Trademark Office duly and legally issued U.S. Patent No. 8,934,922 (the "922 Patent") entitled "Method and System for Monitoring a Mobile Station Presence in a Special Area." A true and correct copy of the '922 Patent is found at

### https://patentimages.storage.googleapis.com/e5/b0/ac/4abf038fbf0d60/US8934922.pdf.

12. 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 found at

### https://patentimages.storage.googleapis.com/c4/02/d0/3f4261fb322396/US9119030.pdf.

13. 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 found at

### https://patentimages.storage.googleapis.com/ec/0c/66/ff66fee20dde8f/US9485621.pdf.

14. 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 found at <u>https://patentimages.storage.googleapis.com/5a/9d/72/775db5d6f99db6/US9622032.pdf</u>.

15. ALT is the sole and exclusive owner of all right, title, and interest to and in the '040, '720, '910, '922, '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.

16. 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

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

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18. 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.

19. 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.

20. The '910 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 '910 Patent were developed by Carlos A. Perez LaFuente of Afirma Consulting & Technologies, S.L.

21. The '922 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 '922 Patent were developed by Carlos A. Perez LaFuente of Afirma Consulting & Technologies, S.L.

22. 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.

23. 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

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were developed by Carlos A. Perez LaFuente of Afirma Consulting & Technologies, S.L.

24. 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.

25. Defendants have 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 smart home, home automation, and domotics devices that implement the technology claimed by the Patents-in-Suit. For example, the Accused Products include, but are not limited to, Fibaro's Home Center 3, Home Center 3 Lite, Home Center 2, Home Center Lite, Yubii Home, accessories and mobile applications that interoperate with the aforementioned products, and cooperation offerings containing or using the aforementioned products, such as "Become an official FIBARO distributor," "Become a FIBARO smart home installer," "Introduce smart solutions to your investments" for real estate developers, "Create unique smart home offer for your customers" for businesses, "Make your house design start" for architects, and "Perform smart home tests and share your experience" for media / influencers (https://www.fibaro.com/en/contact/).

26. Defendants have had actual notice of the Asserted Patents, at least as of the filing date of this complaint.

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

### <u>COUNT I</u> (Infringement of the '040 Patent)

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

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

30. Defendants and their customers/users have and continue 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, 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 using the Accused Products so as to perform each and every limitation of one or more method claims of the '040 Patent.

31. The Accused Products practice 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.

32. The Accused Products comprise 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, Fibaro Home Center's geofencing service includes the use of a "Home Location" feature that comprises observing means to observe a channel related to the geofencing service

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defining signal. Within the Fibaro geofencing service, the Fibaro Home Center Hub transmits zwaves to all devices, which further act as repeaters and form a smart home network range of the home. Using the Fibaro Home Center App in the mobile station, geofencing can be set. Fibaro Home Center servers receive updated user geolocation data continuously using GPS (*i.e.*, presence related services), which is uncorrelated the cellular call connection (*i.e.*, mobile telephone network), used for identifying the mobile station's presence in the special area.

### Introduction ~

### In this article you can find out about:

- How to set up the geofencing.
- How to create a simple scene on Home Center 3 which uses geofencing.

# What is geofencing?



A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

# **Requirements**

- FIBARO System with configured scenes.
- iPhone or iPad (iOS 10.0 or later) or Android device (Android 4.4 or later).
- FIBARO Home Center app.

2

# Home Location

Geofencing uses the Home Location set in the Home Center gateway.

# <sup>2</sup> <u>https://manuals.fibaro.com/knowledge-base-browse/setting-up-the-geofencing-in-home-center-app/</u>

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### Setting up geofencing on an iPhone (iOS)

- 1 Make sure that you have set the home location in the Configuration Interface (🔅 > General > Location).
- 2 Turn on Geofencing in the Home Center app (Application Settings > Geofencing).

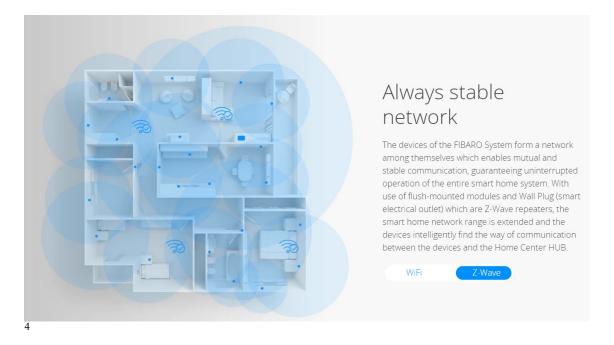
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Geofencing is a location-based feature which determines whether you in or out the specified area. FIBARO Home Center app uses it to run location-based scenes, e.g. turning off the heating when you leave your home. Remember to allow the app to always use your location.	Geofencing is a location-based feature which determines whether you in or out the specified area. FIBARO Home Center app uses it to run location-based scenes, e.g. turning off the heating when you leave your home. Remember to allow the app to always use your location.		
Geofencing	Geofencing		

33. For example, Fibaro Home Center is the provider of the presence related services (*e.g.*, geofencing), and the provider of in-app mobile application for all Android/iPhone mobile stations. Smartphones (iPhone or Android) are operable within a mobile telephone network. The Fibaro Home Center hub (*i.e.*, first radio communication defining device) transmits z-waves to all devices, which further act as repeaters and form a smart home network range (*i.e.*, partly defines

<sup>&</sup>lt;sup>3</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>

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a special area by its coverage) of the home. Using Fibaro Home Center App in the mobile station, geofencing can be set. Different locations can be saved as: "Home," "Work," etc., using GPS coordinates.



34. For example, each Fibaro Home Center user reports their GPS coordinates from the user's smartphone to Home Center server through a Fibaro-compatible app. When a GPS device (*e.g.*, smartphone) enters or exits a special area, the Home Center Hub triggers a routine (*e.g.*, turning lights on or off, turning thermostats on or off, opening gates, etc. based on user presence or absence in the special area) (*i.e.*, 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).

<sup>&</sup>lt;sup>4</sup> <u>https://www.fibaro.com/en/products/home-center-2/</u>



### What is a geofence?

As the name implies, it can simply be described as an invisible "fence" around a geographical location – usually at a set radius distance (30 meters as an example). When a GPS device (such as your smartphone) enters or exits a predefined geofence, the "fence" is considered to be "breached".

### Fibaro Home Center 2 Geofencing

Let's take a look at how Fibaro have implemented Geofencing and how powerful and useful it can be. I am going to use our SmartHome office as an example.

When one of our team arrives at the office in the morning, I would like to turn a light on (keeping it simple for this example) – but only if they are the first to arrive.

~

When the last person leaves the office, I would like to turn a light off.

### **Enabling GPS tracking for Users**

We now need to make sure that each Home Center User is reporting their GPS coordinates via their phone to Home Center (each User will of course need to have the Fibaro app installed).

35. For further example, Fibaro Home Center devices have several servers. Details of all devices connected to Fibaro Home Center are stored on Fibaro server, including IDs, locations, and state of devices of all Smart Devices in the "Home" location (*i.e.*, special area) which can be controlled using Fibaro Home Center Hub are stored on server that link the mobile station to the special area.

<sup>&</sup>lt;sup>5</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>

<sup>&</sup>lt;sup>6</sup> <u>https://www.smarthome.com.au/fibaro-home-center-geofencing/</u>

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- 3. Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:
  - a. with regard to the Integration Service, such data as:
    - names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
    - the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

### **Cookies Policy**

 Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

36. For further example, Fibaro Home Center servers receive updated user geolocation data continuously using GPS (*i.e.*, presence related services), which is uncorrelated the cellular call connection (*i.e.*, mobile telephone network), used for identifying the mobile station's presence in the special area.

<sup>&</sup>lt;sup>7</sup> https://id.cloud.fibaro.com/privacy-policy

# Geofencing

## What is geofencing?



A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

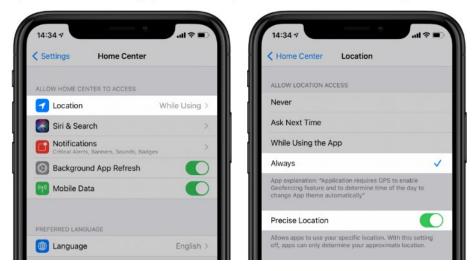
### Home Location

Geofencing uses the Home Location set in the Home Center gateway.

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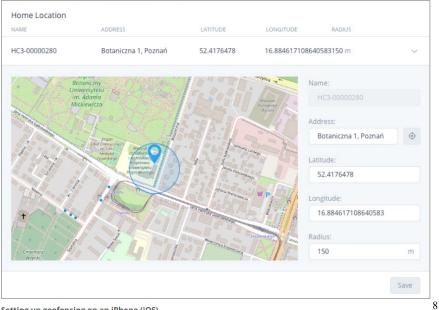


- Go to the iPhone's Settings, scroll down and choose Home Center from the list. 3
- Tap Location and set Always (and make sure you have Precise Location enabled). 4



### Home Location

Geofencing uses the Home Location set in the Home Center gateway.



Setting up geofencing on an iPhone (iOS)

<sup>&</sup>lt;sup>8</sup> https://manuals.fibaro.com/document/hca-geofencing/

### **Enabling GPS tracking for Users**

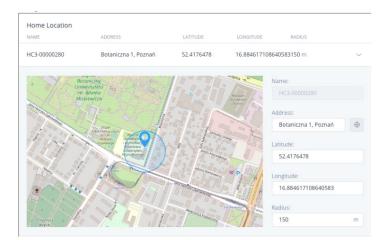
We now need to make sure that each Home Center User is reporting their GPS coordinates via their phone to Home Center (each User will of course need to have the Fibaro app installed). 9

37. The Accused Products comprise 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. For example, a processor within the mobile station processes any received defining signal and uses data previously stored in the mobile station (i.e., checking data), to determine whether or not the defining signal received is a distinctive defining signal that at least partially defines the geofencing special area. If the mobile station determines that it is receiving a distinctive defining signal it consequently identifies that it is present within the special area (as the coverage of the distinctive defining signal party defines it, as detailed below). The Fibaro Home Center hub transmits z-waves to all devices, which further act as repeaters and form a smart home network range of the home. Using Fibaro Home Center App in the mobile station, geofencing can be set.

38. For example, the special area can be defined by the area covered by the Fibaro Home Center hub and the distinctive defining signals of all the devices that are part of the smart home network range of the home. So, the special area is a dynamic special area. The area covered by a given distinctive defining signal from the Fibaro Home Center hub. The Fibaro Home Center is the provider of the presence related services (*e.g.*, geofencing), and the provider of in-app mobile application for all Android/iPhone mobile stations. Smartphones (iPhone or Android) are operable within a mobile telephone network. The Fibaro Home Center hub transmits z-waves to all devices,

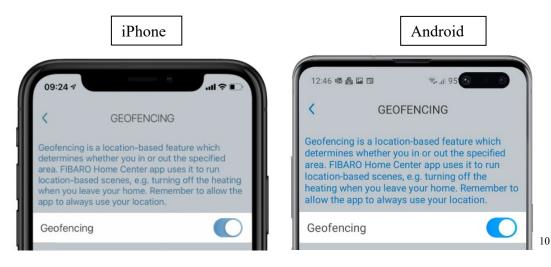
<sup>&</sup>lt;sup>9</sup> https://www.smarthome.com.au/fibaro-home-center-geofencing/

which further act as repeaters and form a smart home network range of the home. Using the Fibaro Home Center App in the mobile station, geofencing can be set.



Setting up geofencing on an iPhone (iOS)

- 1 Make sure that you have set the home location in the Configuration Interface (🔅 > General > Location).
- 2 Turn on Geofencing in the Home Center app (Application Settings > Geofencing).



39. For example, a processor helps the mobile station in determining whether or not a received defining signal is a distinctive defining signal that at least partly defines a special area and whether or not the mobile station is present in the geofencing special area. The Fibaro Home Center devices have several servers. Details of all devices connected to Fibaro Home Center are

<sup>&</sup>lt;sup>10</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>

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stored on the Fibaro server, including IDs, locations, and state of devices of all Smart Devices in the "Home" location (i.e., special area) which can be controlled using Fibaro Home Center Hub are stored on server that link the mobile station to the special area. The Fibaro Home Center servers receive updated user geolocation data continuously using GPS (*i.e.*, presence related services), which is uncorrelated the cellular call connection (*i.e.*, mobile telephone network), used for identifying the mobile station's presence in the special area.

- a. with regard to the Integration Service, such data as:
  - names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
  - the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

### **Cookies Policy**

1. Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

### 40. 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,

<sup>3.</sup> Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:

<sup>&</sup>lt;sup>11</sup> https://id.cloud.fibaro.com/privacy-policy

### Case 2:24-cv-00165-JRG Document 1 Filed 03/08/24 Page 19 of 103 PageID #: 19

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, as a result of the mobile station identifying that is present in the special area, the mobile station sends a signal about the mobile station's presence in the special area to a mobile telephone network, and the mobile telephone network routes the presence updating signal to the Fibaro Home Center servers (Fibaro is the provider of the geofencing presence related services). The User's data, such as names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene, the serial number of the Fibaro Home Center central, the list of devices, is used to create a list of devices and functioning of mechanism searching for scenes and devices which the User may use as part of the services.

41. For further example, Fibaro Home Center devices have several servers. Details of all devices connected to Fibaro Home Center are stored on Fibaro server, including IDs, locations, and state of devices of all Smart Devices in the "Home" location (*i.e.*, special area) which can be controlled using Fibaro Home Center Hub are stored on server that link the mobile station to the special area.

3. Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:

a. with regard to the Integration Service, such data as:

- names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
- the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

### **Cookies Policy**

1. Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

# 42. The Accused Products comprise a processor to send an updating signal, which 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 further example, Fibaro Home Center servers receive updated user geolocation data continuously using GPS (*i.e.*, presence related services), which is uncorrelated the cellular call connection (*i.e.*, mobile telephone

network), used for identifying the mobile station's presence in the special area.

### Geofencing

What is geofencing?

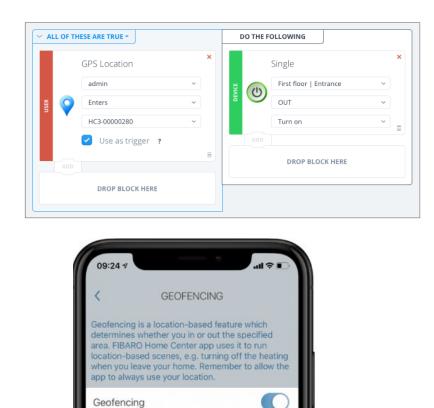


A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

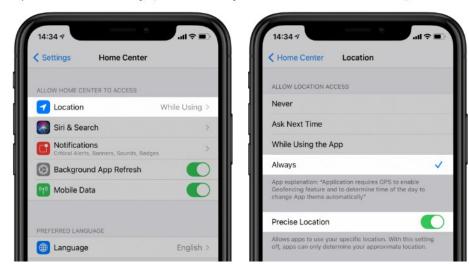
### Home Location

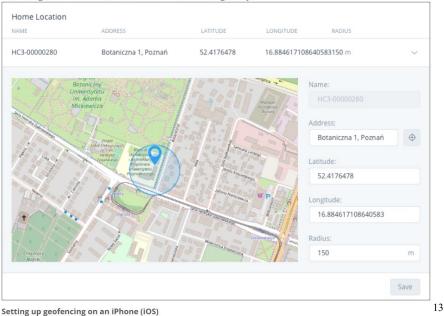
Geofencing uses the Home Location set in the Home Center gateway.

<sup>&</sup>lt;sup>12</sup> https://id.cloud.fibaro.com/privacy-policy



- 3 Go to the iPhone's Settings, scroll down and choose Home Center from the list.
- 4 Tap Location and set Always (and make sure you have Precise Location enabled).





### Home Location

Geofencing uses the Home Location set in the Home Center gateway.

### Enabling GPS tracking for Users

We now need to make sure that each Home Center User is reporting their GPS coordinates via their phone to Home Center (each User will of course need to have the Fibaro app installed). 14

43. For example, the mobile station sends a presence updating signal to the Fibaro Home Center servers (via the mobile telephone network). As shown below, a GPS device (a *finder* device) enters or exits a special area, the Home Center Hub triggers a routine (*e.g.*, turning lights on or off, turning thermostats on or off, opening gates, etc. based on user presence or absence in the special area) and the Fibaro Home Center servers receive updated user geolocation data continuously using GPS, an updating signal indicative of the presence status.

44. For example, the updating signal is sent to a mobile telephone network, and then routed to the Fibaro Home Center servers, when the GPS device enters into a special area and

<sup>&</sup>lt;sup>13</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>

<sup>&</sup>lt;sup>14</sup> <u>https://www.smarthome.com.au/fibaro-home-center-geofencing/</u>

starts receiving the distinctive defining signal from the Home Center Hub. For example, the GPS devices store data connected with the configuration of the Fibaro Home Center central to maintain a list of devices and functioning of mechanisms searching for scenes and devices which the User uses as part of the services.

a. with regard to the Integration Service, such data as:

- names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
- the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

### **Cookies Policy**

 Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

45. Defendants have and continue to indirectly infringe one or more claims of the '040

Patent by inducing infringement by others, such as Defendants' customers and end-users, in this District and elsewhere in the United States. For example, Defendants' customers and end-users directly infringe, either literally or under the doctrine of equivalents, through their use of the

<sup>3.</sup> Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:

<sup>&</sup>lt;sup>15</sup> https://id.cloud.fibaro.com/privacy-policy

inventions claimed in the '621 Patent. Defendants induce this direct infringement through their 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.*, <u>https://manuals.fibaro.com/; https://manuals.fibaro.com/knowledge-base-browse</u> (showing a "Knowledge Base" for "Getting started," "Tutorials," "Questions," and "Use cases."); <u>https://forum.fibaro.com/</u>. Because of Defendants' inducement, Defendants' customers and end-users use the Accused Products in a way Defendants intend and they directly infringe the '040 Patent. Defendants perform these affirmative acts with knowledge of the '040 Patent.

46. Defendants have indirectly infringed and continue 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. Defendants' 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 Defendants, 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 Defendants to be especially made or adapted for use in the infringement of the '040 Patent. Defendants perform 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.

47. Because of Defendants' direct and indirect infringement of the '040 Patent, ALT has suffered damages in an amount to be proved at trial.

### <u>COUNT II</u> (Infringement of the '720 Patent)

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

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

50. Defendants and their customers/users have and continue to directly 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, by using the Accused Products so as to perform each and every limitation of one or more method claims of the '720 Patent.

51. 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 usable by the one or more servers of the provider of presence related services to adjust an

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operating parameter, which comprises one or more of a tariff and a service flat, 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.

52. 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. Fibaro Home Center is the provider of the presence related services (*e.g.*, geofencing), and the provider of in-app mobile application for all Android/iPhone mobile stations. Smartphones (iPhone or Android) are operable within a mobile telephone network. The Fibaro Home Center hub (*i.e.*, first radio communication defining device) transmits z-waves to all devices, which further act as repeaters and form a smart home network range (*i.e.*, partly defines a special area by its coverage) of the home. Using Fibaro Home Center App in the mobile station, geofencing can be set. Different locations can be saved as: "Home," "Work," etc., using GPS coordinates.

### Introduction ^

### In this article you can find out about:

- How to set up the geofencing.
- How to create a simple scene on Home Center 3 which uses geofencing.

# What is geofencing?



A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

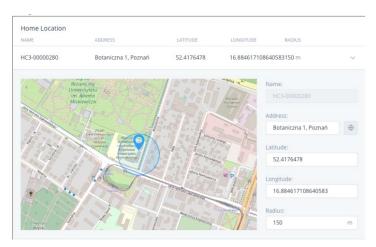
# Requirements ~

- FIBARO System with configured scenes.
- iPhone or iPad (iOS 10.0 or later) or Android device (Android 4.4 or later).
- FIBARO Home Center app.

16

# Home Location

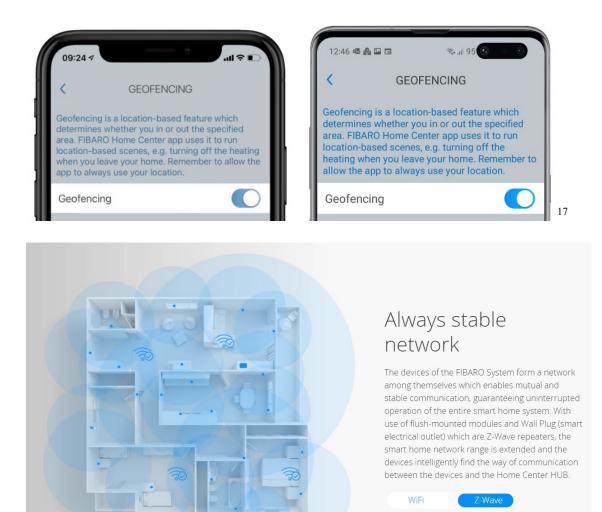
Geofencing uses the Home Location set in the Home Center gateway.



### Setting up geofencing on an iPhone (iOS)

- 1 Make sure that you have set the home location in the Configuration Interface (🔅 > General > Location).
- 2 Turn on Geofencing in the Home Center app (Application Settings > Geofencing).

 $<sup>^{16}\ \</sup>underline{https://manuals.fibaro.com/knowledge-base-browse/setting-up-the-geofencing-in-home-center-app/}$ 



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53. For example, within Fibaro Home Center, smartphones (iPhone or Android) are
operable within a mobile telephone network using the in-app mobile application for all
Android/iPhone mobile stations. The Fibaro Home Center hub transmits z-waves to all devices,
which further act as repeaters and form a smart home network range of the home. Using Fibaro
Home Center App in the mobile station, geofencing can be set. Different locations can be saved
```

18

as: "Home," "Work," etc., using GPS coordinates.

<sup>&</sup>lt;sup>17</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>

<sup>&</sup>lt;sup>18</sup> <u>https://www.fibaro.com/en/products/home-center-2/</u>

### Case 2:24-cv-00165-JRG Document 1 Filed 03/08/24 Page 29 of 103 PageID #: 29

54. For further example, the mobile station is a smartphone (iPhone or Android) using the in-app mobile application that is part of the smart home network. The Fibaro Home Center devices have several servers. Details of all devices connected to Fibaro Home Center are stored on Fibaro server, including IDs, locations, and state of devices of all Smart Devices in the "Home" location (*i.e.*, special area) which can be controlled using Fibaro Home Center Hub are stored on servers that link the mobile station to the special area.

- a. with regard to the Integration Service, such data as:
  - names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
  - the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

### **Cookies Policy**

1. Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

### 55. For example, Fibaro Home Center servers receive updated user geolocation data

continuously using GPS, which is uncorrelated to the cellular call connection (i.e., mobile

<sup>3.</sup> Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:

<sup>&</sup>lt;sup>19</sup> https://id.cloud.fibaro.com/privacy-policy

telephone network), used for identifying the mobile station's presence in the special area.

# Geofencing

What is geofencing?



A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

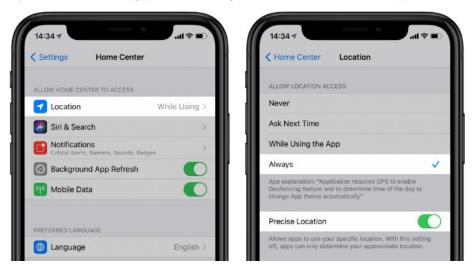
### Home Location

Geofencing uses the Home Location set in the Home Center gateway.

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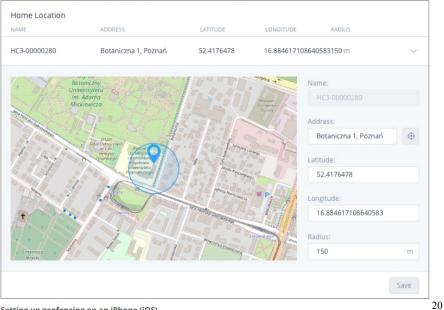


- Go to the iPhone's Settings, scroll down and choose Home Center from the list. 3
- Tap Location and set Always (and make sure you have Precise Location enabled). 4



### Home Location

Geofencing uses the Home Location set in the Home Center gateway.



Setting up geofencing on an iPhone (iOS)

<sup>&</sup>lt;sup>20</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>

### **Enabling GPS tracking for Users**

We now need to make sure that each Home Center User is reporting their GPS coordinates via their phone to Home Center (each User will of course need to have the Fibaro app installed). 21

56. For further example, each Fibaro Home Center user reports their GPS coordinates from the user's smartphone to Home Center server through a Fibaro-compatible app. When a GPS device (*e.g.*, smartphone) enters or exits a special area, it emits a distinctive defining signal that is picked up by the Home Center Hub, and is part of the mobile telephone network.

57. For example, the mobile station sends a presence updating signal to the Fibaro Home Center servers (via the mobile telephone network). As shown below, a GPS device (a *finder* device) enters or exits a special area, the Home Center Hub triggers a routine (*e.g.*, turning lights on or off, turning thermostats on or off, opening gates, etc. based on user presence or absence in the special area) and the Fibaro Home Center servers receive updated user geolocation data continuously using GPS, an updating signal indicative of the presence status.

58. For example, the updating signal is sent to a mobile telephone network, and then routed to the Fibaro Home Center servers, when the GPS device enters into a special area and starts receiving the distinctive defining signal from the Home Center Hub. For example, the GPS devices store data connected with the configuration of the Fibaro Home Center central to maintain a list of devices and functioning of mechanisms searching for scenes and devices which the User uses as part of the services.

<sup>&</sup>lt;sup>21</sup> <u>https://www.smarthome.com.au/fibaro-home-center-geofencing/</u>

- 3. Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:
  - a. with regard to the Integration Service, such data as:
    - names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
    - the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

### **Cookies Policy**

 Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

59. 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, Fibaro Home Center is the provider of the presence related services (*e.g.*, geofencing), and the provider of in-app mobile application for all

<sup>&</sup>lt;sup>22</sup> https://id.cloud.fibaro.com/privacy-policy

Android/iPhone mobile stations. Smartphones (iPhone or Android) are operable within a mobile telephone network. The Fibaro Home Center hub (*i.e.*, radio communication defining device) transmits z-waves to all devices (*i.e.*, distinctive defining signal), which further act as repeaters and form a smart home network range (*i.e.*, defining a special area by its coverage) of the home. Using Fibaro Home Center App in the mobile station, geofencing can be set. Different locations can be saved as: "Home," "Work," etc., using GPS coordinates.

### Introduction ~

### In this article you can find out about:

- How to set up the geofencing.
- How to create a simple scene on Home Center 3 which uses geofencing.

# What is geofencing?



A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

# **Requirements**

- FIBARO System with configured scenes.
- iPhone or iPad (iOS 10.0 or later) or Android device (Android 4.4 or later).
- FIBARO Home Center app.

23

# Home Location

Geofencing uses the Home Location set in the Home Center gateway.

# <sup>23</sup> <u>https://manuals.fibaro.com/knowledge-base-browse/setting-up-the-geofencing-in-home-center-app/</u>

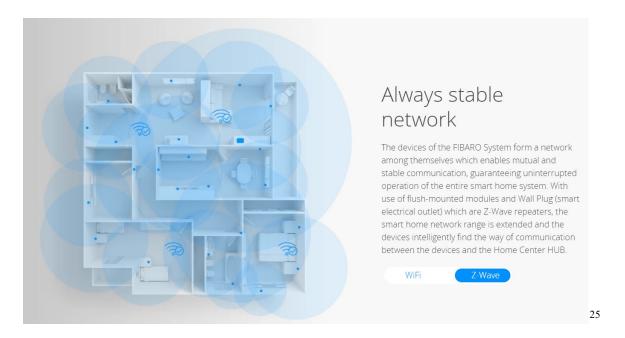
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### Setting up geofencing on an iPhone (iOS)

- 1 Make sure that you have set the home location in the Configuration Interface (🔅 > General > Location).
- 2 Turn on Geofencing in the Home Center app (Application Settings > Geofencing).

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Geofenci	ng 💽 .	Geofencing		

<sup>&</sup>lt;sup>24</sup> https://manuals.fibaro.com/document/hca-geofencing/



60. For example, within Fibaro Home Center, smartphones (iPhone or Android) are operable within a mobile telephone network using the in-app mobile application for all Android/iPhone mobile stations. The Fibaro Home Center hub transmits z-waves to all devices, which further act as repeaters and form a smart home network range of the home. Using Fibaro Home Center App in the mobile station, geofencing can be set. Different locations can be saved as: "Home," "Work," etc., using GPS coordinates.

61. 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 usable 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

<sup>&</sup>lt;sup>25</sup> <u>https://www.fibaro.com/en/products/home-center-2/</u>

is located in the predetermined environment. For example, a GPS device (a *finder* device) enters or exits a special area, the Home Center Hub triggers a routine (*e.g.*, turning lights on or off, turning thermostats on or off, opening gates, etc. based on user presence or absence in the special area) and the Fibaro Home Center servers receive updated user geolocation data continuously using GPS, an updating signal indicative of the presence status. For example, the beneficiary of the presence related service is the mobile stations, that update signals indicative of the presence status and when entering or exiting a special area, the Home Center Hub triggers a routine, as shown above. Thus, the updating signal related to the presence status is, by nature, indicative of the status of the mobile station. As elaborated above, the status of the mobile stations are indicative that the GPS device is located in a predetermined environment.

62. Defendants have and continue to indirectly infringe one or more claims of the '720 Patent by inducing infringement by others, such as Defendants' customers and end-users, in this District and elsewhere in the United States. For example, Defendants' 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. Defendants induce this direct infringement through their 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.*, <u>https://manuals.fibaro.com/; https://manuals.fibaro.com/knowledge-base-browse</u> (showing a "Knowledge Base" for "Getting started," "Tutorials," "Questions," and "Use cases."); <u>https://forum.fibaro.com/</u>. Because of Defendants' inducement, Defendants' customers and end-users use the Accused Products in a way Defendants intend and they directly infringe the '720

Patent. Defendants perform 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.

63. Defendants have indirectly infringed and continue 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. Defendants' 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 Defendants, 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 Defendants to be especially made or adapted for use in the infringement of the '720 Patent. Defendants, that they cause the direct infringement of the '720 Patent.

64. Because of Defendants' direct and indirect infringement of the '720 Patent, ALT has suffered damages in an amount to be proved at trial.

# **<u>COUNT III</u>** (Infringement of the '910 Patent)

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

66. ALT has not licensed or otherwise authorized Defendants to make, use, offer for sale, sell, or import any products that embody the inventions of the '910 Patent.

67. Defendants and their customers/users have and continue to directly infringe the claims of the '910 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 '910 Patent, and by using the Accused Products so as to perform each and every limitation of one or more method claims of the '910 Patent.

68. The Accused Products each comprise the system of at least claim 7 of the '910 Patent: A mobile station capable of receiving first and second distinctive defining signals respectively from first and second radio communication defining devices, the first and second distinctive defining signals at least partly defining a special area by a sum or intersection of their coverage, the first and second distinctive defining signals respectively including first and second data, the mobile station comprising: an electronic storage medium that stores at least a portion of the first and second data; and a processor adapted to process the first and second distinctive defining signals to determine, based on at least portion of one or both of the first and second data, whether or not the mobile station is present in the special area, the processor further adapted to send 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 sending of the updating signal being uncorrelated to any mobile station phone call establishment, the updating signal being sent at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the special area, and (iii) when the mobile station remains in the special area.

69. The Accused Products comprise a mobile station capable of receiving first and second distinctive defining signals respectively from first and second radio communication devices, the first and second distinctive defining signals at least partly defining a special area by a sum or intersection of their coverage, the first and second distinctive defining signals respectively

including first and second data. For example, the Fibaro Home Center is the provider of the presence related services (*e.g.*, geofencing), and the provider of in-app mobile application for all Android/iPhone mobile stations, which implements a method associated with the use of a mobile station and at least first and second radio communication defining devices that respectively transmit first and second distinctive defining signals that partly define a special area by a sum of their coverage. For example, the Fibaro Home Center hub (*i.e.*, first radio communication defining device) transmits z-waves to all devices, which further act as repeaters and form a smart home network range (*i.e.*, partly defines a special area by its coverage) of the home. Using Fibaro Home Center App in the mobile station, geofencing can be set. Different locations can be saved as: "Home," "Work," etc., using GPS coordinates.

# Introduction ~

#### In this article you can find out about:

- How to set up the geofencing.
- How to create a simple scene on Home Center 3 which uses geofencing.

# What is geofencing? ^



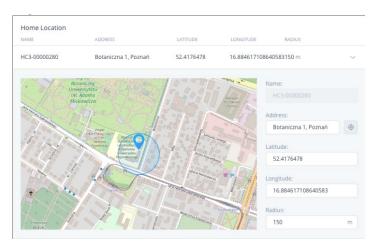
A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

# Requirements ~

- FIBARO System with configured scenes.
- iPhone or iPad (iOS 10.0 or later) or Android device (Android 4.4 or later).
- FIBARO Home Center app.

# Home Location

Geofencing uses the Home Location set in the Home Center gateway.



#### Setting up geofencing on an iPhone (iOS)

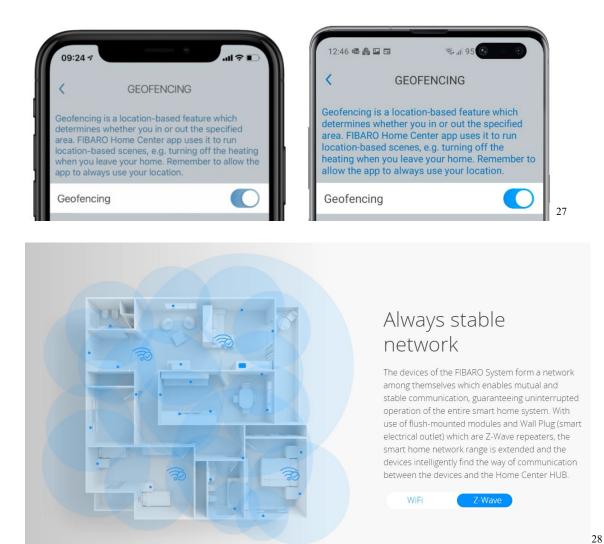
1 Make sure that you have set the home location in the Configuration Interface (🔅 > General > Location).

2 Turn on Geofencing in the Home Center app (Application Settings > Geofencing).

# iPhone

Android

 $<sup>\</sup>frac{^{26}}{\text{https://manuals.fibaro.com/knowledge-base-browse/setting-up-the-geofencing-in-home-center-app/}{}$ 



70. For further example, Fibaro Home Center devices have several servers. Details of all devices connected to Fibaro Home Center are stored on Fibaro server, including IDs, locations, and state of devices of all Smart Devices in the "Home" location (*i.e.*, special area) which can be controlled using Fibaro Home Center Hub are stored on server that link the mobile station to the special area.

<sup>&</sup>lt;sup>27</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>

<sup>&</sup>lt;sup>28</sup> <u>https://www.fibaro.com/en/products/home-center-2/</u>

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- 3. Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:
  - a. with regard to the Integration Service, such data as:
    - names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
    - the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

### **Cookies Policy**

 Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

71. For further example, the mobile station is a smartphone (iPhone or Android) using the in-app mobile application that is part of the smart home network. The Fibaro Home Center devices have several servers. Details of all devices connected to Fibaro Home Center are stored on Fibaro server, including IDs, locations, and state of devices of all Smart Devices in the "Home" location (*i.e.*, special area) which can be controlled using Fibaro Home Center Hub are stored on servers that link the mobile station to the special area.

72. For example, Fibaro Home Center servers receive updated user geolocation data continuously using GPS, which is uncorrelated to the cellular call connection (*i.e.*, mobile

<sup>&</sup>lt;sup>29</sup> https://id.cloud.fibaro.com/privacy-policy

telephone network), used for identifying the mobile station's presence in the special area.

73. For further example, each Fibaro Home Center user reports their GPS coordinates from the user's smartphone to Home Center server through a Fibaro-compatible app. When a GPS device (*e.g.*, smartphone) enters or exits a special area, it emits a distinctive defining signal that is picked up by the Home Center Hub, and is part of the mobile telephone network.

74. For example, the mobile station sends a presence updating signal to the Fibaro Home Center servers (via the mobile telephone network). As shown below, a GPS device (a *finder* device) enters or exits a special area, the Home Center Hub triggers a routine (*e.g.*, turning lights on or off, turning thermostats on or off, opening gates, etc. based on user presence or absence in the special area) and the Fibaro Home Center servers receive updated user geolocation data continuously using GPS, an updating signal indicative of the presence status.

75. For example, the updating signal is sent to a mobile telephone network, and then routed to the Fibaro Home Center servers, when the GPS device enters into a special area and starts receiving the distinctive defining signal from the Home Center Hub. For example, the GPS devices store data connected with the configuration of the Fibaro Home Center central to maintain a list of devices and functioning of mechanisms searching for scenes and devices which the User uses as part of the services.

a. with regard to the Integration Service, such data as:

- names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
- the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

<sup>3.</sup> Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

### **Cookies Policy**

 Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

76. The Accused Products include an electronic storage medium that stores at least a portion of the first and second data; and a processor adapted to process the first and second distinctive defining signals to determine, based on at least a portion of one or both of the first and second data, whether or not the mobile station is present in the special area. For example, if the first radio communication defining device is the Fibaro Home Center hub, it transmits z-waves to all devices, which further act as repeaters and form a smart home network range of the home. The mobile station uses data previously stored in the mobile station (*i.e.*, checking data), to determine whether or not the defining signal received is a distinctive defining signal that at least partially defines the geofencing special area. If the mobile station determines that it is receiving a distinctive defining signal it consequently identifies that it is present within the special area (as the coverage of the distinctive defining signal party defines it, as detailed below).

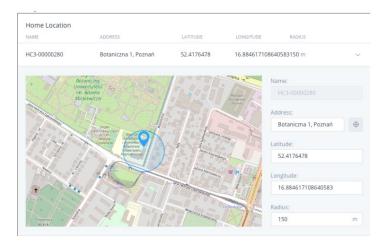
77. For further example, determining whether a received signal is a first/second distinctive defining signal is based on a previously obtained at least portion of the first/second

<sup>&</sup>lt;sup>30</sup> https://id.cloud.fibaro.com/privacy-policy

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data. Therefore, the presence determination is also based on the first and/or second data. Within each device, which further act as repeaters to form a smart home network range of the home, and using the Fibaro Home Center App in the mobile station, geofencing can be set.

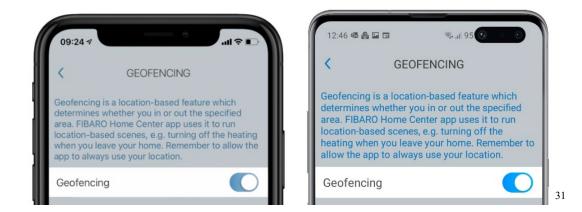
78. For example, the special area can be defined by the area covered by the Fibaro Home Center hub and the distinctive defining signals of all the devices that are part of the smart home network range of the home. So, the special area is a dynamic special area. The area covered by a given distinctive defining signal from the Fibaro Home Center hub. The Fibaro Home Center is the provider of the presence related services (*e.g.*, geofencing), and the provider of in-app mobile application for all Android/iPhone mobile stations. Smartphones (iPhone or Android) are operable within a mobile telephone network. The Fibaro Home Center hub transmits z-waves to all devices, which further act as repeaters and form a smart home network range of the home. Using the Fibaro Home Center App in the mobile station, geofencing can be set.



#### Setting up geofencing on an iPhone (iOS)

- 1 Make sure that you have set the home location in the Configuration Interface (🔅 > General > Location).
- 2 Turn on Geofencing in the Home Center app (Application Settings > Geofencing).

iPhone		Android
	-	



79. The Accused Products include the processor further adapted to send 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 sending of the updating signal being uncorrelated to any mobile station phone call establishment, the updating signal being sent at least one of (i) periodically, (ii) at times recent to when the mobile station enters into or exists from the special area, and (iii) when the mobile station remains in the special area. For example, the mobile station sends a signal about the mobile station's presence in the special area via a mobile telephone network to the Fibaro Home Center servers (Fibaro is the provider of the geofencing presence related services), the signal including the mobile station's location. When sending the presence updating signal, the mobile station is not necessarily within Wi-Fi coverage. In that case, the mobile station must send its updating signal via a mobile telephone network. The presence signal must also include the device identifier of the first and/or second found device, because the Fibaro Home network needs this to subsequently provide presence related services (e.g., triggering a routine). For example, the mobile station sends a presence updating signal to the Fibaro Home Center servers (via the mobile telephone network). As shown below, a GPS device (a *finder* device) enters or exits a special area, the Home Center

<sup>&</sup>lt;sup>31</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>

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Hub triggers a routine (*e.g.*, turning lights on or off, turning thermostats on or off, opening gates, etc. based on user presence or absence in the special area) and the Fibaro Home Center servers receive updated user geolocation data continuously using GPS, an updating signal indicative of the presence status.

80. For example, the updating signal is sent to a mobile telephone network, and then routed to the Fibaro Home Center servers, when the GPS device enters into a special area and starts receiving the distinctive defining signal from the Home Center Hub. For example, the GPS devices store data connected with the configuration of the Fibaro Home Center central to maintain a list of devices and functioning of mechanisms searching for scenes and devices which the User uses as part of the services.

3. Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:

a. with regard to the Integration Service, such data as:

- names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
- the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

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81. For example, the sending of the updating signal is uncorrelated to any mobile station phone call establishment. The updating signal is sent when the mobile station enters into the special area and starts receiving the first and/or second distinctive defining signals from the first/second radio communication defining device. Also, if the mobile station remains nearby the first and/or second device (*i.e.*, remains in the special area), it periodically sends a presence updating signal via mobile telephone network to the Fibaro Home servers, as further elaborated below. The mobile station stores in a local database the determination performed by the mobile station about its presence in the special area, in relation to each devices). After storage, the mobile station sends a presence updating signal containing the ID and location of each device to the Fibaro Home servers. If it is the first (recent) reporting by the mobile station about its presence in the special area, the presence updating signal is then related to the mobile station entering into the special area.

82. For example, the Fibaro Home Center devices have several servers. Details of all devices connected to Fibaro Home Center are stored on the Fibaro server, including IDs, locations, and state of devices of all Smart Devices in the "Home" location (i.e., special area) which can be controlled using Fibaro Home Center Hub are stored on server that link the mobile station to the special area. The Fibaro Home Center servers receive updated user geolocation data continuously using GPS (*i.e.*, presence related services), which is uncorrelated the cellular call connection (*i.e.*,

<sup>&</sup>lt;sup>32</sup> <u>https://id.cloud.fibaro.com/privacy-policy</u>

## mobile telephone network), used for identifying the mobile station's presence in the special area.

- 3. Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:
  - a. with regard to the Integration Service, such data as:
    - names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
    - the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

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83. For example, as a result of the mobile station identifying that is present in the special area, the mobile station sends a signal about the mobile station's presence in the special area to a mobile telephone network, and the mobile telephone network routes the presence updating signal to the Fibaro Home Center servers (Fibaro is the provider of the geofencing presence related services). The User's data, such as names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene, the serial number of the Fibaro Home Center central, the list of devices, is

<sup>33</sup> https://id.cloud.fibaro.com/privacy-policy

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used to create a list of devices and functioning of mechanism searching for scenes and devices which the User may use as part of the services.

84. For further example, Fibaro Home Center devices have several servers. Details of all devices connected to Fibaro Home Center are stored on Fibaro server, including IDs, locations, and state of devices of all Smart Devices in the "Home" location (*i.e.*, special area) which can be controlled using Fibaro Home Center Hub are stored on server that link the mobile station to the special area.

- a. with regard to the Integration Service, such data as:
  - names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
  - the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

#### **Cookies Policy**

 Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

<sup>3.</sup> Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:

<sup>&</sup>lt;sup>34</sup> <u>https://id.cloud.fibaro.com/privacy-policy</u>

85. For further example, Fibaro Home Center servers receive updated user geolocation data continuously using GPS (*i.e.*, presence related services), which is uncorrelated the cellular call connection (*i.e.*, mobile telephone network), used for identifying the mobile station's presence in the special area.

86. Defendants have and continue to indirectly infringe one or more claims of the '910 Patent by inducing infringement by others, such as Defendants' customers and end-users, in this District and elsewhere in the United States. For example, Defendants' customers and end-users directly infringe, either literally or under the doctrine of equivalents through their use of the inventions claimed in the '910 Patent. Defendants induce this direct infringement through their 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://manuals.fibaro.com/; https://manuals.fibaro.com/knowledge-base-browse (showing a "Knowledge Base" for "Getting started," "Tutorials," "Questions," and "Use cases."); https://forum.fibaro.com/. Because of Defendants' inducement, Defendants' customers and endusers use the Accused Products in a way Defendants intend and they directly infringe the '910 Patent. Defendants perform these affirmative acts with knowledge of the '910 Patent and with the intent, or willful blindness, that the induced acts directly infringe the '910 Patent.

87. Defendants have indirectly infringed and continue to indirectly infringe one or more claims of the '910 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. Defendants' affirmative acts of selling and offering to sell the '910 Accused Products in this

District and elsewhere in the United States and causing the '910 Accused Products to be manufactured, used, sold, and offered for sale contribute to others' use and manufacture of the Accused Products, such that the '910 Patent is directly infringed by others. The accused components within the Accused Products including, but not limited to, software manufactured by Defendants, are material to the invention of the '910 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Defendants to be especially made or adapted for use in the infringement of the '910 Patent. Defendants perform these affirmative acts with knowledge of the '910 Patent.

88. Because of Defendants' direct and indirect infringement of the '910 Patent, ALT has suffered damages in an amount to be proved at trial.

# **<u>COUNT IV</u>** (Infringement of the '922 Patent)

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

90. ALT has not licensed or otherwise authorized Defendants to make, use, offer for sale, sell, or import any products that embody the inventions of the '922 Patent.

91. Defendants and their customers/users have and continue to directly infringe the claims of the '922 Patent, either literally or under the doctrine of equivalents, without authority and in violation of 35 U.S.C. § 271, by using the Accused Products so as to perform each and every limitation of one or more method claims of the '922 Patent.

92. The Accused Products practice the method of at least claim 1 of the '922 Patent: A method associated with one or more providers of presence related services in connection with the use of a mobile station and electronically storing in one or more memories data capable of linking the mobile station to the first and second special areas, the data including a first checking data of

the first radio communication defining device, a second checking data of the second 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 first checking data, and transmitting via the mobile telephone network to the mobile station at least a portion of the second checking data, receiving from the mobile station via the mobile telephone network a first updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in at least the first special area, and receiving from the mobile station via the mobile telephone network a second updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in at least the second special area, the first updating signal including a second identifier related to the mobile station, the second updating signal including a third identifier related to the mobile station, deriving from the first 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 deriving from the second updating signal by the one or more processing devices whether or not the mobile station is present in the second 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, 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 second special area.

93. The Accused Products perform a method associated with one or more providers of presence related services in connection with the use of a mobile station. For example, Fibaro Home Center implements a method associated with the use of a mobile station and devices that are part of the Fibaro Home Center network for geofencing and that transmits a distinctive defining signal indicative of when it enters or exits a special area.

94. For example, Fibaro Home Center is the provider of the presence related services (*e.g.*, geofencing), and the provider of in-app mobile application for all Android/iPhone mobile stations. Smartphones (iPhone or Android) are operable within a mobile telephone network. The Fibaro Home Center hub (*i.e.*, first radio communication defining device) transmits z-waves to all devices, which further act as repeaters and form a smart home network range (*i.e.*, partly defines a special area by its coverage) of the home. Using Fibaro Home Center App in the mobile station, geofencing can be set. Different locations can be saved as: "Home," "Work," etc., using GPS coordinates.

# Introduction

In this article you can find out about:

- How to set up the geofencing.
- How to create a simple scene on Home Center 3 which uses geofencing.

# What is geofencing?



A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

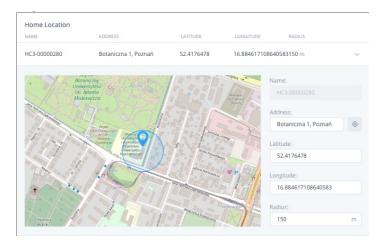
# **Requirements**

- FIBARO System with configured scenes.
- iPhone or iPad (iOS 10.0 or later) or Android device (Android 4.4 or later).
- FIBARO Home Center app.

<sup>&</sup>lt;sup>35</sup> <u>https://manuals.fibaro.com/knowledge-base-browse/setting-up-the-geofencing-in-home-center-app/</u>

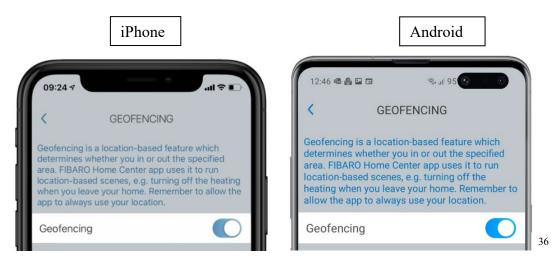
# Home Location

Geofencing uses the Home Location set in the Home Center gateway.

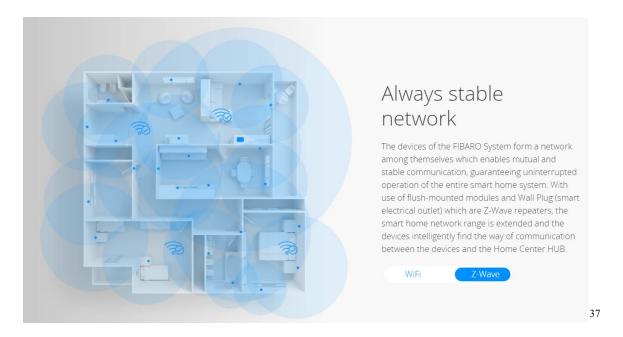


#### Setting up geofencing on an iPhone (iOS)

- Make sure that you have set the home location in the Configuration Interface (↔ > General > Location).
- 2 Turn on Geofencing in the Home Center app (Application Settings > Geofencing).



<sup>&</sup>lt;sup>36</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>



95. For example, within Fibaro Home Center, smartphones (iPhone or Android) are operable within a mobile telephone network using the in-app mobile application for all Android/iPhone mobile stations. The Fibaro Home Center hub transmits z-waves to all devices, which further act as repeaters and form a smart home network range of the home. Using Fibaro Home Center App in the mobile station, geofencing can be set. Different locations can be saved as: "Home," "Work," etc., using GPS coordinates.

96. For further example, the mobile station is a smartphone (iPhone or Android) using the in-app mobile application that is part of the smart home network. The Fibaro Home Center devices have several servers. Details of all devices connected to Fibaro Home Center are stored on Fibaro server, including IDs, locations, and state of devices of all Smart Devices in the "Home" location (*i.e.*, special area) which can be controlled using Fibaro Home Center Hub are stored on servers that link the mobile station to the special area.

<sup>&</sup>lt;sup>37</sup> <u>https://www.fibaro.com/en/products/home-center-2/</u>

- 3. Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:
  - a. with regard to the Integration Service, such data as:
    - names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
    - the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

### **Cookies Policy**

Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

97. For example, Fibaro Home Center servers receive updated user geolocation data continuously using GPS, which is uncorrelated to the cellular call connection (*i.e.*, mobile telephone network), used for identifying the mobile station's presence in the special area.

<sup>&</sup>lt;sup>38</sup> <u>https://id.cloud.fibaro.com/privacy-policy</u>

# Geofencing

What is geofencing?



A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

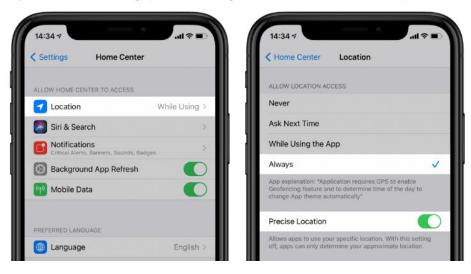
### Home Location

Geofencing uses the Home Location set in the Home Center gateway.

ALL OF	THESE ARE TRUE -		DO THE	FOLLOWING	
	GPS Location	×		Single	>
	admin	~		First floor   Entrance	~
USER	Enters	~		OUT	~
	HC3-0000280	~		Turn on	~
	🕑 Use as trigger  ?		AND		
AND		Ξ		DROP BLOCK HERE	
	DROP BLOCK HERE				
	DROP BLOCK HERE				

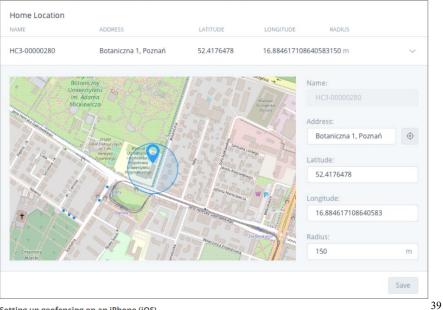


- Go to the iPhone's Settings, scroll down and choose Home Center from the list. 3
- Tap Location and set Always (and make sure you have Precise Location enabled). 4



# Home Location

Geofencing uses the Home Location set in the Home Center gateway.



Setting up geofencing on an iPhone (iOS)

<sup>39</sup> https://manuals.fibaro.com/document/hca-geofencing/

#### **Enabling GPS tracking for Users**

We now need to make sure that each Home Center User is reporting their GPS coordinates via their phone to Home Center (each User will of course need to have the Fibaro app installed). 40

98. For further example, each Fibaro Home Center user reports their GPS coordinates from the user's smartphone to Home Center server through a Fibaro-compatible app. When a GPS device (*e.g.*, smartphone) enters or exits a special area, it emits a distinctive defining signal that is picked up by the Home Center Hub, and is part of the mobile telephone network.

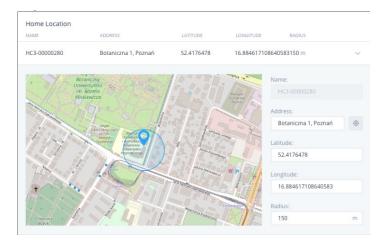
99. For example, the mobile station sends a presence updating signal to the Fibaro Home Center servers (via the mobile telephone network). As shown below, a GPS device (a *finder* device) enters or exits a special area, the Home Center Hub triggers a routine (*e.g.*, turning lights on or off, turning thermostats on or off, opening gates, etc. based on user presence or absence in the special area) and the Fibaro Home Center servers receive updated user geolocation data continuously using GPS, an updating signal indicative of the presence status.

100. The Accused Products perform electronically storing in one or more memories data capable of linking the mobile station to the first and second special areas, the data including a first checking data of the first radio communication defining device, a second checking data of the second 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 first checking data, and transmitting via the mobile telephone network to the mobile station at least a portion of the second checking data. For example, if the first radio communication defining device is the Fibaro Home Center hub, it transmits z-waves to all devices, which further act as repeaters and form a smart home network range of the home. The mobile station uses data previously stored

<sup>&</sup>lt;sup>40</sup> <u>https://www.smarthome.com.au/fibaro-home-center-geofencing/</u>

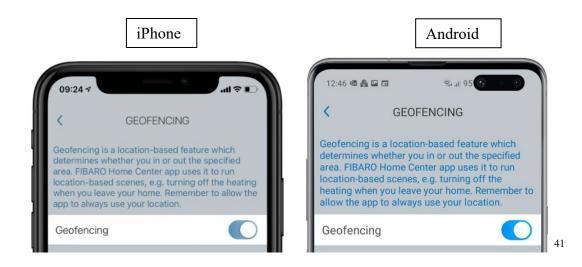
in the mobile station (*i.e.*, checking data), to determine whether or not the defining signal received is a distinctive defining signal that at least partially defines the geofencing special area. If the mobile station determines that it is receiving a distinctive defining signal it consequently identifies that it is present within the special area (as the coverage of the distinctive defining signal party defines it, as detailed below).

101. For example, the special area can be defined by the area covered by the Fibaro Home Center hub and the distinctive defining signals of all the devices that are part of the smart home network range of the home. So, the special area is a dynamic special area. The area covered by a given distinctive defining signal from the Fibaro Home Center hub. The Fibaro Home Center is the provider of the presence related services (*e.g.*, geofencing), and the provider of in-app mobile application for all Android/iPhone mobile stations. Smartphones (iPhone or Android) are operable within a mobile telephone network. The Fibaro Home Center hub transmits z-waves to all devices, which further act as repeaters and form a smart home network range of the home. Using the Fibaro Home Center App in the mobile station, geofencing can be set.



#### Setting up geofencing on an iPhone (iOS)

- 1 Make sure that you have set the home location in the Configuration Interface ( 🎡 > General > Location).
- 2 Turn on Geofencing in the Home Center app (Application Settings > Geofencing).



102. For example, a processor helps the mobile station in determining whether or not a received defining signal is a distinctive defining signal that at least partly defines a special area and whether or not the mobile station is present in the geofencing special area. The Fibaro Home Center devices have several servers. Details of all devices connected to Fibaro Home Center are stored on the Fibaro server, including IDs, locations, and state of devices of all Smart Devices in the "Home" location (i.e., special area) which can be controlled using Fibaro Home Center Hub are stored on server that link the mobile station to the special area. The Fibaro Home Center servers receive updated user geolocation data continuously using GPS (*i.e.*, presence related services), which is uncorrelated the cellular call connection (*i.e.*, mobile telephone network), used for identifying the mobile station's presence in the special area.

<sup>&</sup>lt;sup>41</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>

- 3. Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:
  - a. with regard to the Integration Service, such data as:
    - names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
    - the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

### **Cookies Policy**

Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

103. The Accused Products perform receiving from the mobile station via the mobile telephone network a first updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in at least the first special area, and receiving from the mobile station via the mobile telephone network a second updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station is presence in at least the second updating signal uncorrelated to any mobile station phone call establishment that identifies the mobile station's presence in at least the second special area, the first updating signal including a second identifier related to the mobile station, the second updating signal including a third identifier related to the mobile station. For example, the mobile station sends a signal about the mobile station's presence

<sup>&</sup>lt;sup>42</sup> https://id.cloud.fibaro.com/privacy-policy

in the special area via a mobile telephone network to the Fibaro Home servers (Fibaro is the provider of the geofencing presence related services), the signal including the mobile station's location. When sending the presence updating signal, the mobile station is not necessarily within Wi-Fi coverage. In that case, the mobile station must send its updating signal via a mobile telephone network. The presence signal must also include the device identifier of the first and/or second found device, because the Fibaro Home network needs this to subsequently provide presence related services (*e.g.*, triggering a routine). For example, the mobile station sends a presence updating signal to the Fibaro Home Center servers (via the mobile telephone network). As shown below, a GPS device (a *finder* device) enters or exits a special area, the Home Center Hub triggers a routine (*e.g.*, turning lights on or off, turning thermostats on or off, opening gates, etc. based on user presence or absence in the special area) and the Fibaro Home Center servers receive updated user geolocation data continuously using GPS, an updating signal indicative of the presence status.

104. For example, the sending of the updating signal is uncorrelated to any mobile station phone call establishment. The updating signal is sent when the mobile station enters into the special area and starts receiving the first and/or second distinctive defining signals from the first/second radio communication defining device. Also, if the mobile station remains nearby the first and/or second device (*i.e.*, remains in the special area), it periodically sends a presence updating signal via mobile telephone network to the Fibaro Home servers, as further elaborated below. The mobile station stores in a local database the determination performed by the mobile station about its presence in the special area, in relation to each devices identifier (*i.e.*, in connection to at least the first and/or second radio communication defining devices). After storage, the mobile station sends a presence updating signal containing the ID and location of each device

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to the Fibaro Home servers. If it is the first (recent) reporting by the mobile station about its presence in the special area, the presence updating signal is then related to the mobile station entering into the special area.

105. For example, the Fibaro Home Center devices have several servers. Details of all devices connected to Fibaro Home Center are stored on the Fibaro server, including IDs, locations, and state of devices of all Smart Devices in the "Home" location (i.e., special area) which can be controlled using Fibaro Home Center Hub are stored on server that link the mobile station to the special area. The Fibaro Home Center servers receive updated user geolocation data continuously using GPS (*i.e.*, presence related services), which is uncorrelated the cellular call connection (*i.e.*, mobile telephone network), used for identifying the mobile station's presence in the special area.

3. Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:

a. with regard to the Integration Service, such data as:

- names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
- the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

### **Cookies Policy**

Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

106. For example, as a result of the mobile station identifying that is present in the special area, the mobile station sends a signal about the mobile station's presence in the special area to a mobile telephone network, and the mobile telephone network routes the presence updating signal to the Fibaro Home Center servers (Fibaro is the provider of the geofencing presence related services). The User's data, such as names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene, the serial number of the Fibaro Home Center central, the list of devices, is used to create a list of devices and functioning of mechanism searching for scenes and devices which the User may use as part of the services.

107. For further example, Fibaro Home Center devices have several servers. Details of all devices connected to Fibaro Home Center are stored on Fibaro server, including IDs, locations, and state of devices of all Smart Devices in the "Home" location (*i.e.*, special area) which can be controlled using Fibaro Home Center Hub are stored on server that link the mobile station to the special area.

<sup>43</sup> https://id.cloud.fibaro.com/privacy-policy

- 3. Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:
  - a. with regard to the Integration Service, such data as:
    - names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
    - the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

### **Cookies Policy**

 Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

108. For further example, Fibaro Home Center servers receive updated user geolocation data continuously using GPS (*i.e.*, presence related services), which is uncorrelated the cellular call connection (*i.e.*, mobile telephone network), used for identifying the mobile station's presence in the special area.

109. The Accused Products perform deriving from the first 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 deriving from the second updating signal by the one or more processing devices whether or not the mobile station is present in the second special area.

<sup>&</sup>lt;sup>44</sup> https://id.cloud.fibaro.com/privacy-policy

As shown below, a GPS device (a *finder* device) enters or exits a special area, the Home Center Hub triggers a routine (*e.g.*, turning lights on or off, turning thermostats on or off, opening gates, etc. based on user presence or absence in the special area) and the Fibaro Home Center servers receive updated user geolocation data continuously using GPS, an updating signal indicative of the presence status.

110. 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 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 second special area. For example, the Fibaro Home servers (Fibaro is the provider of the geofencing presence related services) receives the presence updating signal and uses it to provide presence related services (*e.g.*, turning lights on or off, turning thermostats on or off, opening gates, etc. based on user presence or absence in the special area).

111. Defendants have and continue to indirectly infringe one or more claims of the '922 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 '922 Patent. Defendants induce this direct infringement through their 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.*, <u>https://manuals.fibaro.com/; https://manuals.fibaro.com/knowledge-base-browse</u> (showing a

"Knowledge Base" for "Getting started," "Tutorials," "Questions," and "Use cases."); <u>https://forum.fibaro.com/</u>. Because of Defendants' inducement, Defendants' customers and endusers use the Accused Products in a way Defendants intend and they directly infringe the '922 Patent. Defendants perform these affirmative acts with knowledge of the '922 Patent and with the intent, or willful blindness, that the induced acts directly infringe the '922 Patent.

112. Defendants have indirectly infringed and continue to indirectly infringe one or more claims of the '922 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. Defendants' affirmative acts of selling and offering to sell the '922 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 '922 Patent is directly infringed by others. The accused components within the Accused Products including, but not limited to, software manufactured by Defendants, are material to the invention of the '922 Patent, are not staple articles or commodities of commerce, have no substantial non-infringing uses, and are known by Defendants perform these affirmative acts with knowledge of the '922 Patent and with intent, or willful blindness, that they cause the direct infringement of the '922 Patent.

113. Because of Defendants' direct and indirect infringement of the '922 Patent, ALT has suffered damages in an amount to be proved at trial.

# <u>COUNT V</u> (Infringement of the '030 Patent)

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

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

116. Defendants and their customers/users have and continue 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, by using the Accused Products so as to perform each and every limitation of one or more method claims of the '030 Patent.

The Accused Products practice the method of at least claim 1 of the '030 Patent: A 117. 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.

118. 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, if the first radio communication defining device is the Fibaro Home Center hub, it transmits z-waves to all devices, which further act as repeaters and form a smart home network range of the home. The mobile station uses data previously stored in the mobile station (*i.e.*, checking data), to determine whether or not the defining signal received is a distinctive defining signal that at least partially defines the geofencing special area. If the mobile station determines that it is receiving a distinctive defining signal it consequently identifies that it is present within the special area (as the coverage of the distinctive defining signal party defines it, as detailed below).

119. For example, the special area can be defined by the area covered by the Fibaro Home Center hub and the distinctive defining signals of all the devices that are part of the smart home network range of the home. So, the special area is a dynamic special area. The area covered by a given distinctive defining signal from the Fibaro Home Center hub. The Fibaro Home Center is the provider of the presence related services (*e.g.*, geofencing), and the provider of in-app mobile application for all Android/iPhone mobile stations. Smartphones (iPhone or Android) are operable within a mobile telephone network. The Fibaro Home Center hub transmits z-waves to all devices, which further act as repeaters and form a smart home network range of the home. Using the Fibaro Home Center App in the mobile station, geofencing can be set.

NAME	ADDRESS	LATITUDE	LONGITUDE	RADIUS	
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#### Setting up geofencing on an iPhone (iOS)

- 1 Make sure that you have set the home location in the Configuration Interface (🎡 > General > Location).
- 2 Turn on Geofencing in the Home Center app (Application Settings > Geofencing).

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C GEOFENCING	C GEOFENCING
Geofencing is a location-based feature which determines whether you in or out the specified area. FIBARO Home Center app uses it to run location-based scenes, e.g. turning off the heating when you leave your home. Remember to allow the app to always use your location.	Geofencing is a location-based feature which determines whether you in or out the specified area. FIBARO Home Center app uses it to run location-based scenes, e.g. turning off the heating when you leave your home. Remember to allow the app to always use your location.
Geofencing	Geofencing

120. 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 and transmitting via a mobile telephone network to the mobile station at least a portion of the checking data. For example, a mobile device can help the mobile station in determining whether or not a received defining signal is a distinctive defining signal that at least partly defines a special area

<sup>&</sup>lt;sup>45</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>

and whether or not the mobile station is present in the geofencing special area. The Fibaro Home Center devices have several servers. Details of all devices connected to Fibaro Home Center are stored on the Fibaro server, including IDs, locations, and state of devices of all Smart Devices in the "Home" location (i.e., special area) which can be controlled using Fibaro Home Center Hub are stored on server that link the mobile station to the special area. The Fibaro Home Center servers receive updated user geolocation data continuously using GPS (*i.e.*, presence related services), which is uncorrelated the cellular call connection (*i.e.*, mobile telephone network), used for identifying the mobile station's presence in the special area, as described below.

a. with regard to the Integration Service, such data as:

- names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
- the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

#### **Cookies Policy**

 Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

<sup>3.</sup> Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:

<sup>&</sup>lt;sup>46</sup> https://id.cloud.fibaro.com/privacy-policy

121. 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 services based upon the mobile station's presence or non-presence in the first special area. For example, the mobile station sends a signal about the mobile station's presence in the special area via a mobile telephone network to the Fibaro Home servers (Fibaro is the provider of the geofencing presence related services), the signal including the mobile station's location. When sending the presence updating signal, the mobile station is not necessarily within Wi-Fi coverage. In that case, the mobile station must send its updating signal via a mobile telephone network. The presence signal must also include the device identifier of the first and/or second found device, because the Fibaro Home network needs this to subsequently provide presence related services (e.g., triggering a routine). For example, the mobile station sends a presence updating signal to the Fibaro Home Center servers (via the mobile telephone network). As shown below, a GPS device (a *finder* device) enters or exits a special area, the Home Center Hub triggers a routine (e.g., turning lights on or off, turning thermostats on or off, opening gates, etc. based on user presence or absence in the special area) and the Fibaro Home Center servers receive updated user geolocation data continuously using GPS, an updating signal indicative of the presence status.

122. For example, the Fibaro Home servers (Fibaro is the provider of the geofencing presence related services) receives the presence updating signal and uses it to provide presence

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related services (*e.g.*, turning lights on or off, turning thermostats on or off, opening gates, etc. based on user presence or absence in the special area).

123. For example, a GPS device (a *finder* device) identifies that it is present within the area of coverage of a device when it enters or exits a special area (*e.g.*, the first and/or second radio communication defining device) and is part of the Fibaro Home Center network. The Home Center Hub triggers a routine (*e.g.*, turning lights on or off, turning thermostats on or off, opening gates, etc. based on user presence or absence in the special area) and the Fibaro Home Center servers receive updated user geolocation data continuously using GPS, an updating signal indicative of the presence status.

124. For example, the sending of the updating signal is uncorrelated to any mobile station phone call establishment. The updating signal is sent when the mobile station enters into the special area and starts receiving the first and/or second distinctive defining signals from the first/second radio communication defining device. Also, if the mobile station remains nearby the first and/or second device (*i.e.*, remains in the special area), it periodically sends a presence updating signal via mobile telephone network to the Fibaro Home servers, as further elaborated below. The mobile station stores in a local database the determination performed by the mobile station about its presence in the special area, in relation to each devices identifier (*i.e.*, in connection to at least the first and/or second radio communication defining devices). After storage, the mobile station sends a presence updating signal containing the ID and location of each device to the Fibaro Home servers. If it is the first (recent) reporting by the mobile station about its presence in the special area, in relation to each device station of each device to the Fibaro Home servers. If it is the first (recent) reporting by the mobile station about its presence in the special area, the presence updating signal is then related to the mobile station about its presence in the special area.

125. Defendants have and continue 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. Defendants induce this direct infringement through their 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://manuals.fibaro.com/; https://manuals.fibaro.com/knowledge-base-browse (showing a "Knowledge Base" for "Getting started," "Tutorials," "Questions," and "Use cases."); https://forum.fibaro.com/. Because of Defendants' inducement, Defendants' customers and endusers use the Accused Products in a way Defendants intend and they directly infringe the '030 Patent. Defendants perform 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.

126. Defendants have indirectly infringed and continue 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. Defendants' 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

Defendants, 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 Defendants to be especially made or adapted for use in the infringement of the '030 Patent. Defendants perform 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.

127. Because of Defendants' direct and indirect infringement of the '030 Patent, ALT has suffered damages in an amount to be proved at trial.

### <u>COUNT VI</u> (Infringement of the '621 Patent)

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

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

130. Defendants and their customers/users have 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 using the Accused Products so as to performing each and every limitation of one or more method claims of the '621 Patent.

131. 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.

132. 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, Fibaro Home Center is the provider of the presence related services (*e.g.*, geofencing), and the provider of in-app mobile application for all Android/iPhone mobile stations. Smartphones (iPhone or Android) are operable within a mobile telephone network. The Fibaro Home Center hub (*i.e.*, first radio communication defining device) transmits z-waves to all devices, which further act as repeaters and form a smart home network range (*i.e.*, partly defines a special area by its coverage) of the home. Using Fibaro Home Center App in the mobile station, geofencing can be set. Different locations can be saved as: "Home," "Work," etc., using GPS coordinates.

### Introduction ~

#### In this article you can find out about:

- How to set up the geofencing.
- How to create a simple scene on Home Center 3 which uses geofencing.

# What is geofencing? ~



A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

# Requirements ~

- FIBARO System with configured scenes.
- iPhone or iPad (iOS 10.0 or later) or Android device (Android 4.4 or later).
- FIBARO Home Center app.

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# Home Location

Geofencing uses the Home Location set in the Home Center gateway.

<sup>&</sup>lt;sup>47</sup> <u>https://manuals.fibaro.com/knowledge-base-browse/setting-up-the-geofencing-in-home-center-app/</u>

## Case 2:24-cv-00165-JRG Document 1 Filed 03/08/24 Page 81 of 103 PageID #: 81

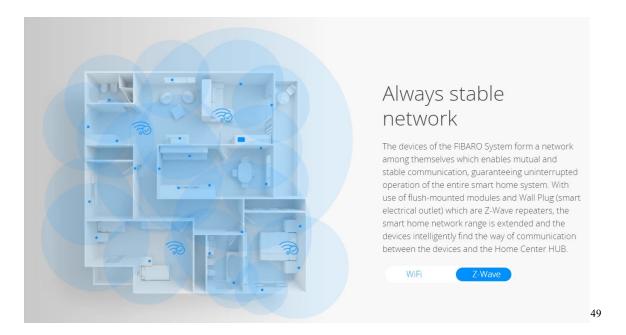
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#### Setting up geofencing on an iPhone (iOS)

- Make sure that you have set the home location in the Configuration Interface (۞ > General > Location).
- 2 Turn on Geofencing in the Home Center app (Application Settings > Geofencing).

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Geofenci	ng 🚺	Geofencing	

<sup>&</sup>lt;sup>48</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>



133. 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 further example, Fibaro Home Center devices have several servers. Details of all devices connected to Fibaro Home Center are stored on Fibaro server, including IDs, locations, and state of devices of all Smart Devices in the "Home" location (*i.e.*, special area) which can be controlled using Fibaro Home Center Hub are stored on server that link the mobile station to the special area.

<sup>&</sup>lt;sup>49</sup> <u>https://www.fibaro.com/en/products/home-center-2/</u>

- 3. Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:
  - a. with regard to the Integration Service, such data as:
    - names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
    - the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

#### **Cookies Policy**

 Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

134. 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, Fibaro Home Center servers receive updated user geolocation data continuously using GPS (*i.e.*, presence related services), which is uncorrelated the cellular call connection (*i.e.*, mobile

<sup>&</sup>lt;sup>50</sup> https://id.cloud.fibaro.com/privacy-policy

telephone network), used for identifying the mobile station's presence in the special area.

## Geofencing

What is geofencing?



A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

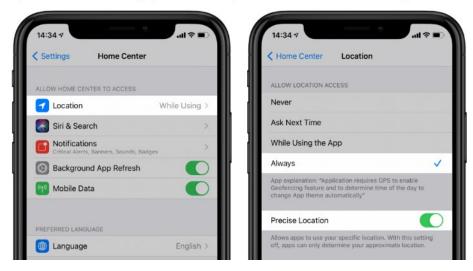
### Home Location

Geofencing uses the Home Location set in the Home Center gateway.

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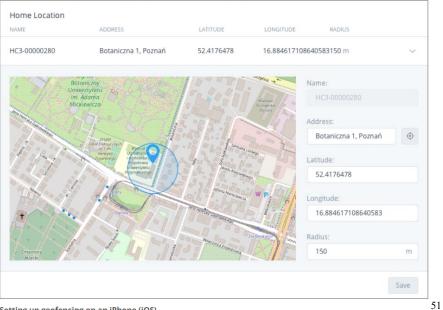


- Go to the iPhone's Settings, scroll down and choose Home Center from the list. 3
- Tap Location and set Always (and make sure you have Precise Location enabled). 4



### Home Location

Geofencing uses the Home Location set in the Home Center gateway



Setting up geofencing on an iPhone (iOS)

<sup>&</sup>lt;sup>51</sup> https://manuals.fibaro.com/document/hca-geofencing/

#### **Enabling GPS tracking for Users**

We now need to make sure that each Home Center User is reporting their GPS coordinates via their phone to Home Center (each User will of course need to have the Fibaro app installed). 52

135. 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 example, each Fibaro Home Center user reports their GPS coordinates from the user's smartphone to Home Center server through a Fibaro-compatible app (*i.e.*, 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). When a GPS device (*e.g.*, smartphone) enters or exits a special area, the Home Center Hub triggers a routine (*e.g.*, turning lights on or off, turning thermostats on or off, opening gates, etc. based on user presence or absence in the special area) (*i.e.*, 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).



<sup>&</sup>lt;sup>52</sup> <u>https://www.smarthome.com.au/fibaro-home-center-geofencing/</u>

<sup>&</sup>lt;sup>53</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>

#### What is a geofence?

As the name implies, it can simply be described as an invisible "fence" around a geographical location – usually at a set radius distance (30 meters as an example). When a GPS device (such as your smartphone) enters or exits a predefined geofence, the "fence" is considered to be "breached".

#### Fibaro Home Center 2 Geofencing

Let's take a look at how Fibaro have implemented Geofencing and how powerful and useful it can be. I am going to use our SmartHome office as an example.

When one of our team arrives at the office in the morning, I would like to turn a light on (keeping it simple for this example) – but only if they are the first to arrive.

When the last person leaves the office, I would like to turn a light off.

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#### **Enabling GPS tracking for Users**

We now need to make sure that each Home Center User is reporting their GPS coordinates via their phone to Home Center (each User will of course need to have the Fibaro app installed). 54

# 136. Defendants have and continue 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. Defendants induce this direct infringement through their 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.*, <u>https://manuals.fibaro.com/; https://manuals.fibaro.com/knowledge-base-browse</u> (showing a "Knowledge Base" for "Getting started," "Tutorials," "Questions," and "Use cases."); <u>https://forum.fibaro.com/</u>. Because of Defendants' inducement, Defendants' customers and endusers use the Accused Products in a way Defendants intend and they directly infringe the '621

<sup>&</sup>lt;sup>54</sup> <u>https://www.smarthome.com.au/fibaro-home-center-geofencing/</u>

Patent. Defendants perform 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.

137. Defendants have indirectly infringed and continue 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. Defendants' 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 Defendants, 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 Defendants to be especially made or adapted for use in the infringement of the '621 Patent. Defendants perform these affirmative acts with knowledge of the '621 Patent.

138. Because of Defendants' direct and indirect infringement of the '621 Patent, ALT has suffered damages in an amount to be proved at trial.

### <u>COUNT VII</u> (Infringement of the '032 Patent)

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

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

141. Defendants and their customers/users have and continue to directly infringe the claims of the '032 Patent, either literally or under the doctrine of equivalents, without authority

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and in violation of 35 U.S.C. § 271, by using the Accused Products so as to performing each and every limitation of one or more method claims of the '032 Patent.

142. 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.

143. The Accused Products perform 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. For example, Fibaro Home Center devices are a provider of the presence related services (*e.g.*, geofencing), and the provider of in-app mobile application for all Android/iPhone mobile stations. Smartphones (iPhone or Android) are operable within a mobile telephone network. A mobile station can store a configured home location (*i.e.*, checking data). It is possible to define a Home location (*i.e.*, the special area), and to opt-in for a Fibaro-compatible

mobile application (*e.g.*, Yubii Home app) to use your phone's location to determine if you have crossed into the Home area. To sense presence in the Home location, the phone may also use Wi-Fi or Z-Wave (*i.e.*, distinctive defining signal which is partly defining a special area).

### Introduction ~

In this article you can find out about:

- How to set up the geofencing.
- How to create a simple scene on Home Center 3 which uses geofencing.

# What is geofencing?



A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

# Requirements ~

- FIBARO System with configured scenes.
- iPhone or iPad (iOS 10.0 or later) or Android device (Android 4.4 or later).
- FIBARO Home Center app.

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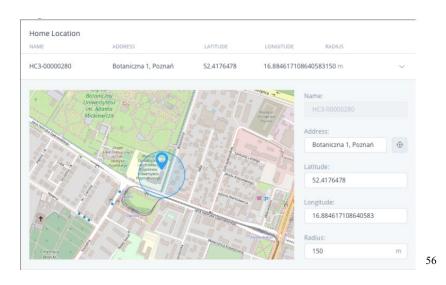
A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

# Requirements ^

- FIBARO System with configured scenes.
- iPhone or iPad (iOS 10.0 or later) or Android device (Android 4.4 or later).
- Yubii Home Center app.
- Configured Home Location:

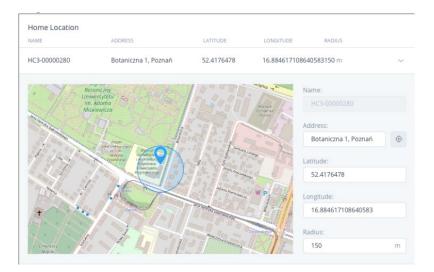
<sup>&</sup>lt;sup>55</sup> <u>https://manuals.fibaro.com/knowledge-base-browse/setting-up-the-geofencing-in-home-center-app/</u>

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# Home Location

Geofencing uses the Home Location set in the Home Center gateway.



Setting up geofencing on an iPhone (iOS)

1 Make sure that you have set the home location in the Configuration Interface ( 🎡 > General > Location).

2 Turn on Geofencing in the Home Center app (Application Settings > Geofencing).

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<sup>&</sup>lt;sup>56</sup> <u>https://manuals.fibaro.com/document-category/hca-additional-features/</u>

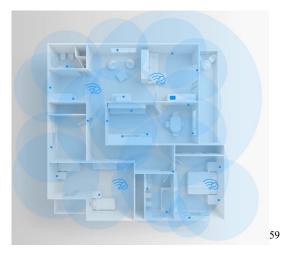
<sup>&</sup>lt;sup>57</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>

# What exactly the Home Center (Gateway) is?

With the Fibaro Home Center, you can automate your home and **control all smart devices** remotely. Use the HomeCenter **app on your mobile** or the web interface, to control your home, for eg. lights, speakers, temperature, windows, blinds, doors, gates and much more – **from any location.** 

Home Center communicates wirelessly via Z-Wave Plus as well as via WiFi. As a result, you can connect a large number of smart devices from other manufacturers, in addition to Fibaro products. On top of that, you can give **voice commands** via Google Assistant, Siri, or Alexa.

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FIBARO Home Center 3 Lite is the core element of the FIBARO System.

It enables the integration of smart home devices into a single system to provide convenient control and a powerful automation platform. The gateway is now even more secure, reliable, and versatile.

<sup>&</sup>lt;sup>58</sup> <u>https://inthomeautomation.com/home-center-fibaro-ireland-yubii-nice/</u>

<sup>&</sup>lt;sup>59</sup> <u>https://www.fibaro.com/en/products/home-center-2/</u>

### Features

- · Provides a reliable foundation for FIBARO System,
- Capable of controlling all FIBARO and other compatible devices using the following radio standards:
   Z-Wave (700 series),
  - Wi-Fi 2.4 GHz (802.11 b/g/n).
- Allows to add up to:
  - 40 Z-Wave devices (recommended),
  - 1 IP camera,
  - 40 scenes,
  - 10 Quick Apps,
  - 5 plugins.
- No Internet cable required, works on Wi-Fi,
- Modern interface designed for ease of use,
- Enhanced and convenient scene editor,

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### 144. For further example, Fibaro Home Center devices work in integration with IFTTT

to check device location using Wi-Fi networks to determine its approximate location.

# **FIBARO System integration with IFTTT**

TABLE OF CONTENTS
1. Description
2. Requirements
3. Connecting
4. Creating the applet
5. Triggers and actions available for FIBARO devices
Description ^

IFTTT (If this, then that) is the easy, free way to get your apps and devices working together. Now you can use your FIBARO devices in applets, both via browser interface and mobile app.

#### Requirements ^

- FIBARO Home Center Lite/2/3 connected to remote access,
- FIBARO ID account,
- IFTTT account (with optional app).

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<sup>&</sup>lt;sup>60</sup> <u>https://manuals.fibaro.com/home-center-3-lite/</u>

<sup>&</sup>lt;sup>61</sup> https://manuals.fibaro.com/knowledge-base-browse/ifttt/



### Location

Location allows apps and websites to use information from cellular, Wi-Fi, and GPS networks to determine your approximate location. This service requires downloading the IFTTT app for iPhone or Android. Locate your phone or find your mobile device. 62

145. The Accused Products perform a method, wherein one or more servers of a provider of presence related services receive 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. For further example, Fibaro Home Center devices include communication with several servers of a provider of presence related services.

a. with regard to the Integration Service, such data as:

- names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
- the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

<sup>3.</sup> Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:

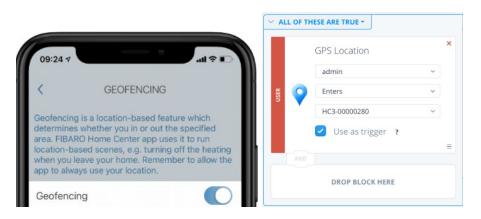
<sup>&</sup>lt;sup>62</sup> <u>https://ifttt.com/connect/fibaro/location/</u>

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

#### **Cookies Policy**

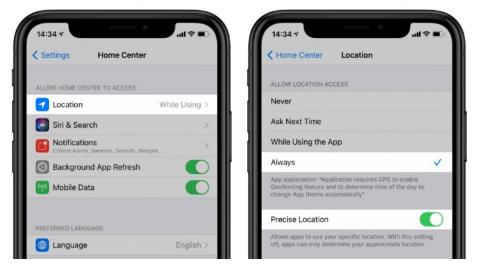
146. For further example, Fibaro Home Center servers receive updated mobile geolocation data continuously from the mobile station using GPS with mobile internet, which is uncorrelated to the cellular call connection used for identifying mobile station's presence in the special area. Similarly, Fibaro Home Center cloud services (*e.g.*, GPS services) are different from a user's mobile device telephone network (*e.g.*, cellular services).



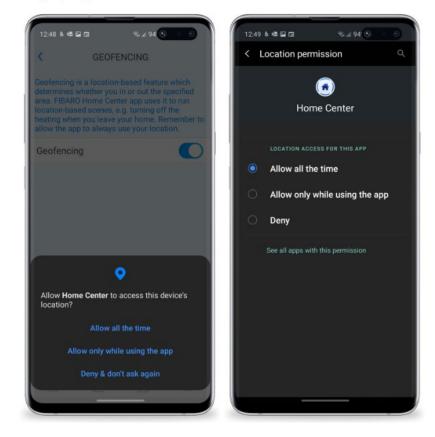
Cookie files ("Cookies") are text files saved and stored in the memory of the device used to browse Internet websites (e.g. a PC computer, notebook, tablet, palmtop, cellphone). After saving being saved, these files are connected with a server or servers that gain appropriate access to them.

<sup>63</sup> https://id.cloud.fibaro.com/privacy-policy

- **3** Go to the iPhone's Settings, scroll down and choose Home Center from the list.
- 4 Tap Location and set Always (and make sure you have Precise Location enabled).



Select "Allow all the time". If you have any issues, check in the phone settings, whether you have selected the right privileges level.



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nser	Enters	~	DEV	0	OUT	~	
	HC3-0000280	~			Turn on	~	)
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	DROP BLOCK HERE						_

# Geofencing

What is geofencing?



A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

# Home Location

Geofencing uses the Home Location set in the Home Center gateway.

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147. 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, Fibaro servers store a parameter database containing the status and other operating data about all devices registered in the Fibaro Home Center system. In particular, the databases store

<sup>&</sup>lt;sup>64</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>

parameters showing the scenes defined for different locations on a user's smartphone. As shown below, this parameter is determined, at least in part, by the updating signal received from the smartphone when a smartphone enters or leaves a particular geographical area.

3. Fibaro provides Services to the User which consist in sharing and allowing to use the IT system, whose elements are primarily the central device Fibaro Home Center, Fibaro ID system and the Fibaro mobile apps, in which the User's data are processed. Their type depends on the Service chosen by the User and may include:

a. with regard to the Integration Service, such data as:

- names of devices, names of scenes, names of rooms, the state of devices (switched on or off), types of actions possible for the application to perform with a given device or scene - in order to integrate with Amazon Alexa and Google Assistant applications, and other data necessary for future integrations that Fibaro may introduce
- the serial number of the FIBARO Home Center central, the list of devices, information about FIBARO Wall Plug FGBWHWPEF-102 devices connected to the Fibaro ID Service - in order to create a list of devices and functioning of mechanisms searching for scenes and devices which the User shall use as part of the Service.

b. with regard to the Access Service, such data as:

- image from cameras, the FIBARO Home Center Interface in order to allow the User to steer and view the situation at home, whereby these data are not recorded anywhere.
- the phone's UID number, telephone number, sending SMS notifications about the state of devices or other events defined by the User - sending push notifications, email notifications in order to inform the User about a situation defined by the User, or an emergency or system situation;
- location (GPS data) in order to make it possible to account for the User's location in arranging of scenes (e.g. turning the heater on when the User comes into a specific distance on their way back home);
- All data connected with configuration of the FIBARO Home Center central in order to ensure the User has the option to restore the previous configuration of the system.

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<sup>&</sup>lt;sup>65</sup> <u>https://id.cloud.fibaro.com/privacy-policy</u>

	GPS Location	×		Single	×
	admin	~	bence	First floor   Entrance	~
	Enters	~		OUT	~
	HC3-0000280	~		Turn on	~
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	DROP BLOCK HERE				

148. For further example, Fibaro Home Center devices can set a location for Home or Work. The radius of the geofence can be updated anytime by the user. The updated radius (*i.e.*, checking data) which modifies special area is then transmitted to one or more Fibaro servers and updated in mobile phones.

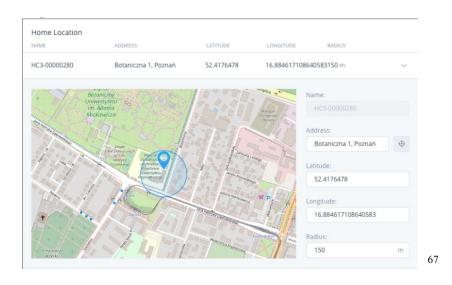
A geofence is an invisible boundary, a virtual perimeter for a real-world geographic area. For example, with geofencing you can create "triggers" so that when a device enters or leaves the pre-defined boundaries, some actions happens.

# Requirements 🔨

- FIBARO System with configured scenes.
- iPhone or iPad (iOS 10.0 or later) or Android device (Android 4.4 or later).
- Yubii Home Center app.
- Configured Home Location:

<sup>&</sup>lt;sup>66</sup> <u>https://manuals.fibaro.com/document/hca-geofencing/</u>

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#### Location

Setting location in the gateway allows you to personalize your smart home experience. Location is used for weather retrieving and can also be useful for automation purposes. Once you set your home and/or work location, you can trigger certain scenes via entering or leaving the zone. **To set your home location:** 

- 1 Go to 🔅 > General > Location (tab).
- 2 Drag the map so that you see your home address.
- 3 Click the location of your home to update the pin.
- 4 Set the radius accordingly to your house and property size, e.g. 100m.
- 5 Save.

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149. Defendants have and continue 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, Defendants' 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. Defendants induce this direct infringement through their affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the

<sup>67</sup> <u>https://manuals.fibaro.com/document-category/hca-additional-features/</u>

<sup>&</sup>lt;sup>68</sup> https://manuals.fibaro.com/home-center-3-lite/

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.*, <u>https://manuals.fibaro.com/; https://manuals.fibaro.com/knowledge-base-browse</u> (showing a "Knowledge Base" for "Getting started," "Tutorials," "Questions," and "Use cases."); <u>https://forum.fibaro.com/</u>. Because of Defendants' inducement, Defendants' customers and end-users use the Accused Products in a way Defendants intend and they directly infringe the '032 Patent. Defendants perform these affirmative acts with knowledge of the '032 Patent.

150. Defendants have indirectly infringed and continue 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 Defendants, 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 Defendants to be especially made or adapted for use in the infringement of the '032 Patent. Defendants, end the work of the '032 Patent and with intent, or willful blindness, that they cause the direct infringement of the '032 Patent.

151. Because of Defendants' 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 Defendants as follows:

a. Entry of judgment declaring that Defendants have 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 Defendants' 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

e. Such other equitable relief which may be requested and to which Plaintiff is entitled; and

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

Dated: March 8, 2024

Respectfully submitted,

<u>/s/ Alfred R. Fabricant</u> 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 Joseph M. Mercadante NY Bar No. 4784930 Email: jmercadante@fabricantllp.com **FABRICANT LLP** 411 Theodore Fremd Avenue, Suite 206 South Rye, New York 10580 Telephone: (212) 257-5797 Facsimile: (212) 257-5796

### ATTORNEYS FOR PLAINTIFF AVANT LOCATION TECHNOLOGIES LLC