

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
SHERMAN DIVISION**

FREEDOM PATENTS LLC,

Plaintiff,

v.

CISCO SYSTEMS, INC.,

Defendant.

CIVIL ACTION NO. 4:24-cv-535

ORIGINAL COMPLAINT FOR  
PATENT INFRINGEMENT

**JURY TRIAL DEMANDED**

**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Freedom Patents LLC (“Freedom Patents” or “Plaintiff”) files this original complaint against Defendant Cisco Systems, Inc. (“Cisco” or “Defendant”), alleging, based on its own knowledge as to itself and its own actions and based on information and belief as to all other matters, as follows:

**PARTIES**

1. Freedom Patents is a limited liability company formed under the laws of the State of Texas, with its principal place of business at 2325 Oak Alley, Tyler, Texas, 75703.
2. Defendant Cisco Systems, Inc. (“Cisco”) is a corporation duly organized and existing under the laws of the State of Delaware. It has a place of business at 2250 East President George Bush Highway, Richardson, Texas 75082. Cisco may also be served with process through its registered agent, Corporation Service Company d/b/a CSC- Lawyers Incorporating Service Company, at 211 E. 7th Street, Suite 620, Austin, Texas 78701.
3. Cisco and its affiliates are a part of an interrelated group of companies that together comprise one of the world’s largest internet solutions providers, including software and

hardware devices. Cisco describes itself as “the worldwide leader in technology that powers the internet.”<sup>1</sup>

4. Cisco and its affiliates are part of the same corporate structure and distribution chain for the making, importing, offering to sell, selling, and/or using of the accused devices in the United States, including in the State of Texas generally and this judicial district in particular.

5. Cisco and its affiliates share the same management, common ownership, advertising platforms, facilities, distribution chains and platforms, and accused product lines and products involving related technologies.

6. Cisco and its affiliates regularly contract with customers regarding products made for or on behalf of those customers.

7. Cisco and its affiliates operate as a unitary business venture and are jointly and severally liable for the acts of patent infringement alleged herein.

### **JURISDICTION AND VENUE**

8. This is an action for infringement of United States patents arising under 35 U.S.C. §§ 271, 281, and 284–85, among others. This Court has subject matter jurisdiction of the action under 28 U.S.C. § 1331 and § 1338(a).

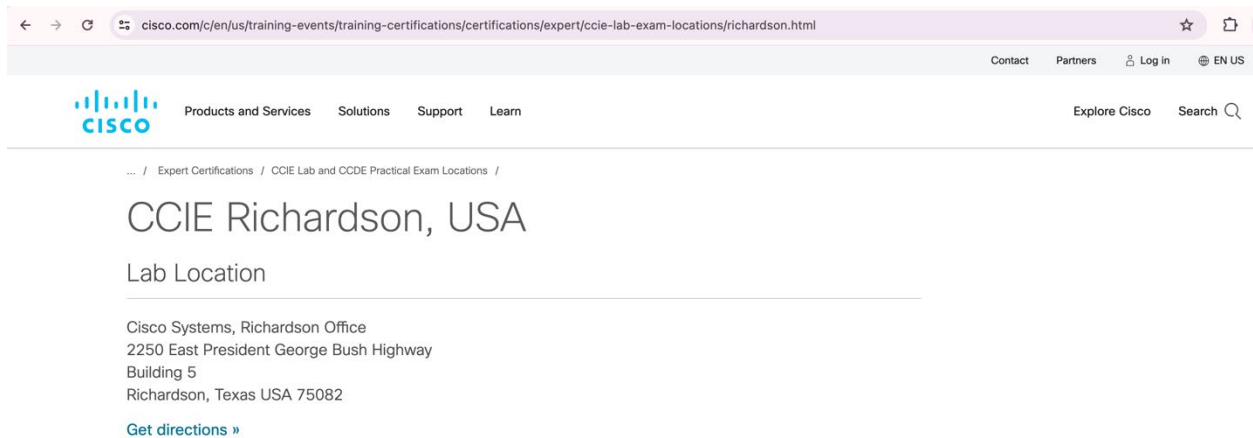
9. This Court has personal jurisdiction over Cisco pursuant to due process and/or the Texas Long Arm Statute because, *inter alia*, (i) Cisco has done and continues to do business in Texas; and (ii) Cisco has committed and continues to commit acts of patent infringement in the State of Texas, including making, using, offering to sell, and/or selling accused products in Texas, and/or importing accused products into Texas, including by Internet sales and sales via retail and wholesale stores, inducing others to commit acts of patent infringement in Texas,

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<sup>1</sup> [https://www.cisco.com/c/dam/m/en\\_us/about/csr/esg-hub/\\_pdf/purpose-report-2023.pdf](https://www.cisco.com/c/dam/m/en_us/about/csr/esg-hub/_pdf/purpose-report-2023.pdf)

and/or committing a least a portion of any other infringements alleged herein; and (iii) Cisco is registered to do business in Texas.

10. Venue is proper in this district pursuant to 28 U.S.C. § 1400(b). Venue is further proper because Cisco has committed and continues to commit acts of patent infringement in this district, including making, using, offering to sell, and/or selling accused products in this district, and/or importing accused products into this district, including by Internet sales and sales via retail and wholesale stores, inducing others to commit acts of patent infringement in Texas, and/or committing at least a portion of any other infringements alleged herein in this district. Cisco has regular and established places of business in this district, including at least at 2250 East President George Bush Highway, Richardson, Texas 75082.



Source: <https://www.cisco.com/c/en/us/training-events/training-certifications/certifications/expert/ccie-lab-exam-locations/richardson.html>

### **BACKGROUND**

11. The patents-in-suit generally relate to improvements in wireless communication technology that allow users to communicate over a wireless network. In particular, the patents are directed to methods and systems for selecting antennas in multiple-input, multiple-output (MIMO) wireless networks.

12. The technology of the patents-in-suit was developed by engineers at the Mitsubishi Electric Research Laboratories (MERL), which is the North American arm of Mitsubishi Electric. MERL was founded in 1991 in Cambridge, Massachusetts, and has been known for its focus on innovation and long-range research.<sup>2</sup> From its beginning, MERL was focused on pioneering new technologies in various industries, including computer graphics, digital communication, medical imaging, transportation etc.<sup>3</sup> In the early 2000s, for example, “MERL focused on standardization and developments of new emerging technologies,” such as “antenna selection, channel equalization, efficient channel state estimation, and Orthogonal Frequency Division Multiplexing (OFDM).”<sup>4</sup>

13. The inventions disclosed in the patents-in-suit have been cited during patent prosecution multiple times by electronics companies, including Apple, Broadcom, Cisco, Ericsson, Fujitsu, Hewlett Packard, Hitachi, Huawei, Intel, Kyocera, LG Electronics, Marvell, MediaTek, Motorola Mobility, Nokia, NTT Docomo, Panasonic, Philips, Qualcomm, Siemens, Samsung, Sharp, Sony, Toshiba, and ZTE.

## COUNT I

### DIRECT INFRINGEMENT OF U.S. PATENT NO. 8,284,686

14. On October 9, 2012, United States Patent No. 8,284,686 (“the ’686 Patent”) was duly and legally issued by the United States Patent and Trademark Office for an invention entitled “Antenna/Beam Selection Training in MIMO Wireless LANS with Different Sounding Frames.”

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<sup>2</sup> See <https://www.merl.com/company/history>.

<sup>3</sup> See <https://www.merl.com/public/MERL-30Years.pdf>.

<sup>4</sup> *Id.* at 22.

15. Freedom Patents is the owner of the '686 Patent, with all substantive rights in and to that patent, including the sole and exclusive right to prosecute this action and enforce the '686 Patent against infringers, and to collect damages for all relevant times.

16. Cisco made, had made, used, imported, provided, supplied, distributed, sold, and/or offered for sale products and/or systems including, for example, its Cisco Catalyst 9105AXI, Meraki Cloud Managed Wi-Fi 6 MR36, and Cisco Catalyst IR1800 Rugged Series Router IR1821-K9, and other products<sup>5</sup> that comply with the IEEE 802.11ax-2021 standard and implement MIMO Wi-Fi capabilities (“accused products”).

**Cisco Catalyst 9105AXI details**



Figure 2.  
Cisco Catalyst 9105AXI

**Key features**

- Next-generation Wi-Fi 6 (802.11ax) access points with 2x2 Multiuser Multiple-Input Multiple-Output (MU-MIMO) and two spatial streams:
  - 2x2:2 on 5 GHz with downlink and uplink Orthogonal Frequency-Division Multiple Access (OFDMA) and MU-MIMO.
  - 2x2:2 on 2.4 GHz with downlink and uplink OFDMA and MU-MIMO.
- Cisco DNA ready.
- Cisco Spectrum Intelligence.
- Built-in IoT radio: Bluetooth Low Energy (BLE).
- Gigabit Ethernet.
- 1024 QAM radio data rate of 1.2 Gbps.
- Cisco DNA Center on-premises and cloud.
- Supports up to 200 Wi-Fi devices.
- Internal antennas with client analytics to enhance Cisco DNA Assurance.
- Support for Kensington-style lock.
- Small size (16 x 9 x 3.2 cm) U.S. (6.3 x 3.5 x 1.3 inches).
- Weight 0.7 lb. (329.5 g).

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<sup>5</sup> See, e.g., Model Nos. 9136 Access Point, 9166 Access Point, 9166D1, 9164 Access Point, 9130AX Access Point, 9105i Access Point, 9105AXI, 9105w Access Point, Catalyst 9800-40, Catalyst 9800-80, Catalyst 9800-L, Catalyst 9800-CL, CW9163E, MR57, MR36, CW9166, CW9166D1, CW9164, CW9162, IR1821-K9, IR1831-K9, IR1833-K9, IR1835-K9, ISR 1131, Catalyst CG113-4GW6, Catalyst CG113-W6, Cisco Meraki Z4, Cisco Meraki Z4C, IW9165DH-x-AP, IW9165E-x-AP, and IW9167IH-x-AP, etc.

**Source:** <https://www.cisco.com/c/en/us/products/collateral/wireless/catalyst-9100ax-access-points/guide-c07-744444.html>



# MR36

## Cloud-managed Wi-Fi 6

Cloud managed Wi-Fi 6, with Bluetooth® and a security radio, too.

[START YOUR FREE TRIAL](#)

**Source:** <https://meraki.cisco.com/product/wi-fi/indoor-access-points/mr36/>



## It's the details that matter

- Four radios: 2.4 GHz and 5 GHz, dual-band WIDS/WIPS, Bluetooth® Low Energy
- 2x2:2 UL/DL MU-MIMO 802.11ax
- Up to 1.7 Gbps aggregate frame rate
- One 1 Gbps Ethernet port
- PoE: 802.3af

**Source:** <https://meraki.cisco.com/product/wi-fi/indoor-access-points/mr36/>

Cisco Catalyst IR1800 Rugged Series Routers

## Securely connect fixed or mobile assets with 5G and Wi-Fi 6

Power your critical services securely with dual simultaneous 5G cellular support, next-generation firewall (NGFW) capabilities, and more.



[View data sheet](#)

**Source:** <https://www.cisco.com/site/us/en/products/networking/industrial-routers-gateways/catalyst-ir1800-rugged-series/index.html#tabs-35d568e0ff-item-194f491212-tab>

Feature	Benefit
<p><b>Reliable connectivity for mission-critical mobile environments</b></p>	<ul style="list-style-type: none"> <li>• The modular IR1800 with dual cellular slots is capable of running multiple cellular services at once for mission-critical applications, allowing dual cellular band redundancy.</li> <li>• Supports modular <u>IEEE 802.11ax Wi-Fi 6</u>. The dual-radio Wi-Fi (2.4 and 5 GHz) can provide access point capability and also backhaul capability (in a stationary condition) to connect to infrastructure Wi-Fi.</li> <li>• Certified for transportation, making it ideal for transit and public safety applications.</li> <li>• With dead reckoning GNSS, provides the exact location and path of fleet vehicles, even in environments with no cellular connectivity and no line-of-sight satellite connectivity.</li> <li>• Ignition power management keeps the router running while the vehicle is turned off and protects the battery from over-discharging by the router.</li> <li>• Offers native CAN bus support, allowing the extraction of vehicle data that can be used for telematics, enabling predictive maintenance, reducing the cost of fuel, and enhancing safety.</li> </ul>

**Source:** <https://www.cisco.com/c/en/us/products/collateral/routers/catalyst-ir1800-rugged-series-routers/nb-06-cat-ir1800-rugged-ser-rout-ds-cte-en.html?dtid=odicdc000509>

17. By doing so, Cisco has directly infringed (literally and/or under the doctrine of equivalents) at least Claims 1 and 21 of the '686 Patent. *See* Exhibit A. Cisco's infringement in this regard is ongoing.

18. The Cisco Catalyst 9105AXI, Meraki Cloud Managed Wi-Fi 6 MR36, and Cisco Catalyst IR1800 Rugged Series Router IR1821-K9 are exemplary accused products.

19. Cisco directly infringes the '686 Patent when, for example, it and/or its agents use the accused products, including during testing of the accused products. Cisco also directly infringes the '686 Patent when the accused products are used after purchase by a customer or end user. For example, the accused products are built with hardware and/or software components that control the operation of the accused products. These components cause the accused products to perform the steps of the claimed invention after, for example, receiving sounding packets. Cisco also directly infringes the '686 Patent by exercising direction or control over the use of the accused products by others, including its affiliates, its subsidiaries, its business partners (including certification and testing organizations), and/or its customers and end-users. Cisco contracts with, advises, and/or encourages such persons to engage in conduct satisfying one or more elements of the asserted claims, deriving a financial or other benefit (e.g., improved wireless communications) from doing so. Cisco conditions these benefits on, for example, such persons performing certain activities involving the accused products during specified conditions that cause the accused products to perform the steps of the claimed method (e.g., after receiving sounding packets).

20. Cisco has had knowledge of the '686 Patent at least as of the date when it was notified of the filing of this action.



21. In addition, Cisco has had knowledge of the '686 Patent at least as of May 31, 2012, when it was asserted by the Examiner in an office action (as U.S. Publication No. 2009/0290563) during the prosecution of U.S. Patent No. 8,903,019, which is assigned to Cisco Technology, Inc., a wholly owned subsidiary of Cisco. Cisco Technology Inc. employees, Paul Stager and Xiantao Sun—who are named as inventors of U.S. Patent No. 8,903,019—and others involved in the prosecution of the patent, have had knowledge of the '686 Patent well before this lawsuit was filed.

22. Freedom Patents has been damaged as a result of the infringing conduct by Cisco alleged above. Thus, Cisco is liable to Freedom Patents in an amount that adequately compensates it for such infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

23. Freedom Patents has neither made nor sold unmarked articles that practice the '686 Patent, and is entitled to collect pre-filing damages for the full period allowed by law for infringement of the '686 Patent.

## COUNT II

### DIRECT INFRINGEMENT OF U.S. PATENT NO. 8,374,096

24. On February 12, 2013, United States Patent No. 8,374,096 (“the '096 Patent”) was duly and legally issued by the United States Patent and Trademark Office for an invention entitled “Method for Selecting Antennas and Beams in MIMO Wireless LANs.”

25. Freedom Patents is the owner of the '096 Patent, with all substantive rights in and to that patent, including the sole and exclusive right to prosecute this action and enforce the '096 Patent against infringers, and to collect damages for all relevant times.

26. Cisco used products and/or systems including, for example, its Cisco Catalyst 9105AXI, Meraki Cloud Managed Wi-Fi 6 MR36, and Cisco Catalyst IR1800 Rugged Series

Router IR1821-K9, and other products<sup>6</sup> that comply with the IEEE 802.11ax-2021 standard and implement MIMO Wi-Fi capabilities (“accused products”).

#### Cisco Catalyst 9105AXI details



Figure 2.  
Cisco Catalyst 9105AXI

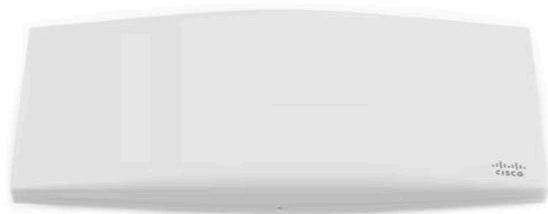
#### Key features

- Next-generation Wi-Fi 6 (802.11ax) access points with 2x2 Multiuser Multiple-Input Multiple-Output (MU-MIMO) and two spatial streams:
  - 2x2:2 on 5 GHz with downlink and uplink Orthogonal Frequency-Division Multiple Access (OFDMA) and MU-MIMO.
  - 2x2:2 on 2.4 GHz with downlink and uplink OFDMA and MU-MIMO.
- Cisco DNA ready.
- Cisco Spectrum Intelligence.
- Built-in IoT radio: Bluetooth Low Energy (BLE).
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- 1024 QAM radio data rate of 1.2 Gbps.
- Cisco DNA Center on-premises and cloud.
- Supports up to 200 Wi-Fi devices.
- Internal antennas with client analytics to enhance Cisco DNA Assurance.
- Support for Kensington-style lock.
- Small size (16 x 9 x 3.2 cm) U.S. (6.3 x 3.5 x 1.3 inches).
- Weight 0.7 lb. (329.5 g).

**Source:** <https://www.cisco.com/c/en/us/products/collateral/wireless/catalyst-9100ax-access-points/guide-c07-744444.html>

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<sup>6</sup> See, e.g., Model Nos. 9136 Access Point, 9166 Access Point, 9166D1, 9164 Access Point, 9130AX Access Point, 9105i Access Point, 9105AXI, 9105w Access Point, Catalyst 9800-40, Catalyst 9800-80, Catalyst 9800-L, Catalyst 9800-CL, CW9163E, MR57, MR36, CW9166, CW9166D1, CW9164, CW9162, IR1821-K9, IR1831-K9, IR1833-K9, IR1835-K9, ISR 1131, Catalyst CG113-4GW6, Catalyst CG113-W6, Cisco Meraki Z4, Cisco Meraki Z4C, IW9165DH-x-AP, IW9165E-x-AP, and IW9167IH-x-AP, etc.



# MR36

## Cloud-managed Wi-Fi 6

Cloud managed Wi-Fi 6, with Bluetooth® and a security radio, too.

[START YOUR FREE TRIAL](#)

**Source:** <https://meraki.cisco.com/product/wi-fi/indoor-access-points/mr36/>



## It's the details that matter


- Four radios: 2.4 GHz and 5 GHz, dual-band WIDS/WIPS, Bluetooth® Low Energy
- 2x2:2 UL/DL MU-MIMO 802.11ax
- Up to 1.7 Gbps aggregate frame rate
- One 1 Gbps Ethernet port
- PoE: 802.3af

**Source:** <https://meraki.cisco.com/product/wi-fi/indoor-access-points/mr36/>

Cisco Catalyst IR1800 Rugged Series Routers

## Securely connect fixed or mobile assets with 5G and Wi-Fi 6

Power your critical services securely with dual simultaneous 5G cellular support, next-generation firewall (NGFW) capabilities, and more.



[View data sheet](#)

**Source:** <https://www.cisco.com/site/us/en/products/networking/industrial-routers-gateways/catalyst-ir1800-rugged-series/index.html#tabs-35d568e0ff-item-194f491212-tab>

Feature	Benefit
<p><b>Reliable connectivity for mission-critical mobile environments</b></p>	<ul style="list-style-type: none"> <li>• The modular IR1800 with dual cellular slots is capable of running multiple cellular services at once for mission-critical applications, allowing dual cellular band redundancy.</li> <li>• Supports modular <u>IEEE 802.11ax Wi-Fi 6</u>. The dual-radio Wi-Fi (2.4 and 5 GHz) can provide access point capability and also backhaul capability (in a stationary condition) to connect to infrastructure Wi-Fi.</li> <li>• Certified for transportation, making it ideal for transit and public safety applications.</li> <li>• With dead reckoning GNSS, provides the exact location and path of fleet vehicles, even in environments with no cellular connectivity and no line-of-sight satellite connectivity.</li> <li>• Ignition power management keeps the router running while the vehicle is turned off and protects the battery from over-discharging by the router.</li> <li>• Offers native CAN bus support, allowing the extraction of vehicle data that can be used for telematics, enabling predictive maintenance, reducing the cost of fuel, and enhancing safety.</li> </ul>

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27. By doing so, Cisco has directly infringed (literally and/or under the doctrine of equivalents) at least Claim 1 of the '096 Patent. *See* Exhibit B. Cisco's infringement in this regard is ongoing.

28. The Cisco Catalyst 9105AXI, Meraki Cloud Managed Wi-Fi 6 MR36, and Cisco Catalyst IR1800 Rugged Series Router IR1821-K9 exemplary accused products.

29. Cisco directly infringes the '096 Patent when, for example, it and/or its agents use the accused products, including during testing of the accused products. Cisco also directly infringes the '096 Patent when the accused products are used after purchase by a customer or end user. For example, the accused products are built with hardware and/or software components that control the operation of the accused products. These components cause the accused products to perform the steps of the claimed invention after, for example, receiving sounding packets. Cisco also directly infringes the '096 Patent by exercising direction or control over the use of the accused products by others, including its affiliates, its subsidiaries, its business partners (including certification and testing organizations), and/or its customers and end-users. Cisco contracts with, advises, and/or encourages such persons to engage in conduct satisfying one or more elements of the asserted claims, deriving a financial or other benefit (e.g., improved wireless communications) from doing so. Cisco conditions these benefits on, for example, such persons performing certain activities involving the accused products during specified conditions that cause the accused products to perform the steps of the claimed method (e.g., after receiving sounding packets).

30. Cisco has had knowledge of the '096 Patent at least as of the date when it was notified of the filing of this action.

31. Freedom Patents has been damaged as a result of the infringing conduct by Cisco alleged above. Thus, Cisco is liable to Freedom Patents in an amount that adequately compensates it for such infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

32. Freedom Patents has neither made nor sold unmarked articles that practice the '096 Patent, and is entitled to collect pre-filing damages for the full period allowed by law for infringement of the '096 Patent.

### **COUNT III**

#### **DIRECT INFRINGEMENT OF U.S. PATENT NO. 8,514,815**

33. On August 20, 2013, United States Patent No. 8,514,815 (“the '815 Patent”) was duly and legally issued by the United States Patent and Trademark Office for an invention entitled “Training Signals for Selecting Antennas and Beams in MIMO Wireless LANs.”

34. Freedom Patents is the owner of the '815 Patent, with all substantive rights in and to that patent, including the sole and exclusive right to prosecute this action and enforce the '815 Patent against infringers, and to collect damages for all relevant times.

35. Cisco used products and/or systems including, for example, its Cisco Catalyst 9105AXI, Meraki Cloud Managed Wi-Fi 6 MR36, and Cisco Catalyst IR1800 Rugged Series Router IR1821-K9, and other products<sup>7</sup> that comply with the IEEE 802.11ax-2021 standard and implement MIMO Wi-Fi capabilities (“accused products”):

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<sup>7</sup> See, e.g., Model Nos. 9136 Access Point, 9166 Access Point, 9166D1, 9164 Access Point, 9130AX Access Point, 9105i Access Point, 9105AXI, 9105w Access Point, Catalyst 9800-40, Catalyst 9800-80, Catalyst 9800-L, Catalyst 9800-CL, CW9163E, MR57, MR36, CW9166, CW9166D1, CW9164, CW9162, IR1821-K9, IR1831-K9, IR1833-K9, IR1835-K9, ISR 1131, Catalyst CG113-4GW6, Catalyst CG113-W6, Cisco Meraki Z4, Cisco Meraki Z4C, IW9165DH-x-AP, IW9165E-x-AP, and IW9167IH-x-AP, etc.

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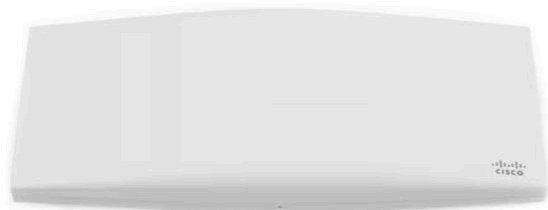


Figure 2.  
Cisco Catalyst 9105AXI

#### Key features

- Next-generation Wi-Fi 6 (802.11ax) access points with 2x2 Multiuser Multiple-Input Multiple-Output (MU-MIMO) and two spatial streams:
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## MR36

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Feature	Benefit
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36. By doing so, Cisco has directly infringed (literally and/or under the doctrine of equivalents) at least Claim 1 of the '815 Patent. *See* Exhibit C. Cisco's infringement in this regard is ongoing.

37. The Cisco Catalyst 9105AXI, Meraki Cloud Managed Wi-Fi 6 MR36, and Cisco Catalyst IR1800 Rugged Series Router IR1821-K9 are exemplary accused products.

38. Cisco directly infringes the '815 Patent when, for example, it and/or its agents use the accused products, including during testing of the accused products. Cisco also directly infringes the '815 Patent when the accused products are used after purchase by a customer or end user. For example, the accused products are built with hardware and/or software components that control the operation of the accused products. These components cause the accused products to perform the steps of the claimed invention after, for example, receiving sounding packets. Cisco also directly infringes the '815 Patent by exercising direction or control over the

use of the accused products by others, including its affiliates, its subsidiaries, its business partners (including certification and testing organizations), and/or its customers and end-users. Cisco contracts with, advises, and/or encourages such persons to engage in conduct satisfying one or more elements of the asserted claims, deriving a financial or other benefit (e.g., improved wireless communications) from doing so. Cisco conditions these benefits on, for example, such persons performing certain activities involving the accused products during specified conditions that cause the accused products to perform the steps of the claimed method (e.g., after receiving sounding packets).

39. Cisco has had knowledge of the '815 Patent at least as of the date when it was notified of the filing of this action.

40. Freedom Patents has been damaged as a result of the infringing conduct by Cisco alleged above. Thus, Cisco is liable to Freedom Patents in an amount that adequately compensates it for such infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

41. Freedom Patents has neither made nor sold unmarked articles that practice the '815 Patent, and is entitled to collect pre-filing damages for the full period allowed by law for infringement of the '815 Patent.

**ADDITIONAL ALLEGATIONS REGARDING INFRINGEMENT  
AND PERSONAL JURISDICTION**

42. Cisco has also indirectly infringed the '686 Patent, the '096 Patent, and the '815 Patent by inducing others to directly infringe the '686 Patent, the '096 Patent, and the '815 Patent.

43. Cisco has induced the end users and/or Cisco's customers to directly infringe (literally and/or under the doctrine of equivalents) the '686 Patent, the '096 Patent, and the '815 Patent by using the accused products.

44. Cisco took active steps, directly and/or through contractual relationships with others, with the specific intent to cause them to use the accused products in a manner that infringes one or more claims of the '686 Patent, the '096 Patent, and the '815 Patent, including, for example, claims 1 and 21 of the '686 Patent, claim 1 of the '096 Patent, and claim 1 of the '815 Patent.

45. Such steps by Cisco included, among other things, advising or directing customers, end users, and others (including distributors and equipment services entities) to use the accused products in an infringing manner; advertising and promoting the use of the accused products in an infringing manner; and/or distributing instructions that guide users to use the accused products in an infringing manner.

46. Cisco performed these steps, which constitute joint and/or induced infringement, with the knowledge of the '686 Patent, the '096 Patent, and the '815 Patent and with the knowledge that the induced acts constitute infringement.

47. Cisco was and is aware that the normal and customary use of the accused products by Cisco's customers would infringe the '686 Patent, the '096 Patent, and the '815 Patent. Cisco's inducement is ongoing.

48. Cisco has also induced its affiliates, or third-party manufacturers, shippers, distributors, retailers, or other persons acting on its or its affiliates' behalf, to directly infringe (literally and/or under the doctrine of equivalents) at least claim 21 of the '686 Patent by importing, selling or offering to sell the accused products.

49. Cisco has a significant role in placing the accused products in the stream of commerce with the expectation and knowledge that they will be purchased by consumers in Texas and elsewhere in the United States.

50. Cisco purposefully directs or controls the making of accused products and their shipment to the United States, using established distribution channels, for sale in Texas and elsewhere within the United States.

51. Cisco purposefully directs or controls the sale of the accused products into established United States distribution channels, including sales to nationwide retailers and wholesalers, including, for example, Amazon and Walmart. Cisco's established United States distribution channels include one or more United States based affiliates (e.g., Cisco Systems, Inc.) and third-parties working on behalf of Cisco.

52. Cisco purposefully directs or controls the sale of the accused products online and in nationwide retailers and wholesalers, including for sale in Texas and elsewhere in the United States, and expects and intends that the accused products will be so sold.

53. Cisco purposefully places the accused products—whether by itself or through subsidiaries, affiliates, or third parties—into an international supply chain, knowing that the accused products will be sold in the United States, including Texas. Therefore, Cisco also facilitates the sale of the accused products in Texas.

54. Cisco took active steps, directly and/or through contractual relationships with others, with the specific intent to cause such persons to import, sell, or offer to sell the accused products in a manner that infringes claim 21 of the '686 Patent.

55. Such steps by Cisco included, among other things, making or selling the accused products outside of the United States for importation into or sale in the United States, or knowing

that such importation or sale would occur; and directing, facilitating, or influencing its affiliates, or third-party manufacturers, shippers, distributors, retailers, or other persons acting on its or its affiliates' behalf, to import, sell, or offer to sell the accused products in an infringing manner.

56. Cisco performed these steps, which constitute induced infringement, with the knowledge of the '686 Patent, the '096 Patent, and the '815 Patent, and with the knowledge that the induced acts would constitute infringement.

57. Cisco performed such steps in order to profit from the eventual sale of the accused products in the United States.

58. Cisco's inducement is ongoing.

59. Cisco has also indirectly infringed by contributing to the infringement of the '686 Patent, the '096 Patent, and the '815 Patent. Cisco has contributed to the direct infringement of the '686 Patent, the '096 Patent, and the '815 Patent by the end user of the accused products.

60. The accused products have special features that are specially designed to be used in an infringing way and that have no substantial uses other than ones that infringe the '686 Patent, the '096 Patent, and the '815 Patent, including, for example, claims 1 and 21 of the '686 Patent, claim 1 of the '096 Patent, and claim 1 of the '815 Patent.

61. The special features include, for example, hardware and/or software components especially adapted for transmitting/receiving sounding packets and estimating channel matrices for the selection of antennas in a multiple-input, multiple-output wireless network, used in a manner that infringes the '686 Patent, the '096 Patent, and the '815 Patent.

62. These special features constitute a material part of the invention of one or more of the claims of the '686 Patent, the '096 Patent, and the '815 Patent, and are not staple articles of commerce suitable for substantial non-infringing use.

63. Cisco's contributory infringement is ongoing.

64. Cisco has had actual knowledge of the '096 Patent and the '815 Patent at least as of the date when it was notified of the filing of this action. Since at least that time, Cisco has known the scope of the claims of the '096 Patent and the '815 Patent, the products that practice the '096 Patent and the '815 Patent, and that Freedom Patents is the owner of the '686 Patent, the '096 Patent, and the '815 Patent.

65. Cisco has had actual knowledge of the '686 Patent at least as early as May 31, 2012, when Samsung received notice of the '686 Patent during prosecution of one of its subsidiary's patents, and/or as of the date when it was notified of the filing of this action. Since at least that time, Samsung has known the scope of the claims of the '686 Patent and the products that practice the '686 Patent.

66. By the time of trial, Cisco will have known and intended (since receiving such notice) that its continued actions would infringe and actively induce and contribute to the infringement of one or more claims of the '686 Patent, the '096 Patent, and the '815 Patent.

67. Furthermore, Cisco has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Freedom Patents' patent rights. *See, e.g.*, M. Lemley, "Ignoring Patents," 2008 Mich. St. L. Rev. 19 (2008).

68. Cisco's customers have infringed the '686 Patent, the '096 Patent, and the '815 Patent. Cisco encouraged its customers' infringement.

69. Cisco's direct and indirect infringement of the '686 Patent, the '096 Patent, and the '815 Patent has been, and/or continues to be willful, intentional, deliberate, and/or in conscious disregard of Freedom Patents' rights under the patents-in-suit.

70. Freedom Patents has been damaged as a result of Cisco's infringing conduct alleged above. Thus, Cisco is liable to Freedom Patents in an amount that adequately compensates it for such infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

**JURY DEMAND**

Freedom Patents hereby requests a trial by jury on all issues so triable by right.

**PRAYER FOR RELIEF**

Freedom Patents requests that the Court find in its favor and against Cisco, and that the Court grant Freedom Patents the following relief:

- a. Judgment that one or more claims of the '686 Patent, the '096 Patent, and the '815 Patent have been infringed, either literally and/or under the doctrine of equivalents, by Cisco and/or all others acting in concert therewith;
- b. A permanent injunction enjoining Cisco and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in concert therewith from infringement of the '686 Patent, the '096 Patent, and the '815 Patent; or, in the alternative, an award of a reasonable ongoing royalty for future infringement of the '686 Patent, the '096 Patent, and the '815 Patent by such entities;
- c. Judgment that Cisco account for and pay to Freedom Patents all damages to and costs incurred by Freedom Patents because of Cisco's infringing activities and other conduct complained of herein, including an award of all increased damages to which Freedom Patents is entitled under 35 U.S.C. § 284;
- d. That Freedom Patents be granted pre-judgment and post-judgment interest on the damages caused by Cisco's infringing activities and other conduct complained of herein;
- e. That this Court declare this an exceptional case and award Freedom Patents its

reasonable attorney's fees and costs in accordance with 35 U.S.C. § 285; and

f. That Freedom Patents be granted such other and further relief as the Court may deem just and proper under the circumstances.



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Respectfully submitted,

/s/ Zachariah S. Harrington

Matthew J. Antonelli

Texas Bar No. 24068432

matt@ahtlawfirm.com

Zachariah S. Harrington

Texas Bar No. 24057886

zac@ahtlawfirm.com

Larry D. Thompson, Jr.

Texas Bar No. 24051428

larry@ahtlawfirm.com

Rehan M. Safiullah

Texas Bar No. 24066017

[rehan@ahtlawfirm.com](mailto:rehan@ahtlawfirm.com)

Hannah D. Price

Texas Bar No. 24116921

hannah@ahtlawfirm.com

ANTONELLI, HARRINGTON

& THOMPSON LLP

4306 Yoakum Blvd., Ste. 450

Houston, TX 77006

(713) 581-3000

Stafford Davis

State Bar No. 24054605

sdavis@stafforddavisfirm.com

Catherine Bartles

Texas Bar No. 24104849

cbartles@stafforddavisfirm.com

THE STAFFORD DAVIS FIRM

815 South Broadway Avenue

Tyler, Texas 75701

(903) 593-7000

(903) 705-7369 fax

*Attorneys for Freedom Patents LLC*