

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

FREEDOM PATENTS LLC,

Plaintiff,

v.

SONY GROUP CORPORATION F/K/A
SONY CORPORATION, SONY
ELECTRONICS, INC., and SONY
INTERACTIVE ENTERTAINMENT LLC

Defendants.

CIVIL ACTION NO. 4:24-cv-542

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 Defendants Sony Group Corporation f/k/a Sony Corporation, Sony Electronics, Inc., and Sony Interactive Entertainment LLC (collectively, “Sony” or “Defendants”), 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 Sony Group Corporation (“Sony Group”) is a corporation duly organized and existing under the laws of Japan with a place of business at 7-1 Konan 1-chome, Minato-ku, Tokyo 108-0075, Japan. Sony may also be served with process by serving the Texas Secretary of State, 1019 Brazos Street, Austin, Texas 78701, as its agent for service because it engages in business in Texas but has not designated or maintained a resident agent for service of

process or a regular place of business in Texas as required by statute. This action arises out of that business.

3. Sony Group—together with its subsidiaries—is one of the world’s largest manufacturers of consumer electronics.

4. Defendant Sony Electronics, Inc. (“Sony Electronics”) is a corporation duly organized and existing under the laws of the State of Delaware. Sony Electronics has places of business at least at 2800 Central Expressway, Plano, Texas 75074 and 3333 Preston Road #00200, Frisco, Texas 75034. Sony Electronics may be served with process through its registered agent, Corporation Service Company d/b/a CSC Lawyers Incorporating Service Co. at 211 E. 7th Street, Suite 620, Austin, Texas 78701.

5. Sony Electronics is a wholly owned subsidiary of Sony Corporation of America, which is a wholly owned subsidiary of Sony Group Corporation. Sony Electronics is involved in providing audio-visual products to the United States.

6. Defendant Sony Interactive Entertainment LLC (“SIE”) is a limited liability company duly organized and existing under the laws of the State of California. SIE has places of business at least at 2800 Summit Avenue, Plano, Texas 75074 and 1221 Coit Road, Plano, Texas 75075. SIE may be served with process through its registered agent, Corporation Service Company d/b/a CSC Lawyers Incorporating Service Co. at 211 E. 7th Street, Suite 620, Austin, Texas 78701.

7. SIE is a wholly owned subsidiary of Sony Corporation of America, which is a wholly owned subsidiary of Sony Group Corporation. SIE is involved in developing and distributing electronic products, such as the PlayStation family of products and services.

8. The Defendants identified in paragraphs 27 above (collectively, “Sony”) are an interrelated group of companies which together comprise one of the top electronic products and solutions companies in the world, including under the Sony and PlayStation brands.

9. The Sony defendants named above and their affiliates are part of the same corporate structure and distribution chain for the making, importing, offering to sell, selling, and using of the accused device in the United States, including in the State of Texas generally and this judicial district in particular.

10. The Sony defendants named above and their affiliates share the same management, common ownership, advertising platforms, facilities, distribution chains and platforms, and accused product lines and products involving related technologies.

11. The Sony defendants named above and their affiliates regularly contract with customers regarding products made for or on behalf of those customers.

12. Thus, the Sony defendants named above and their affiliates operate as a unitary business venture and are jointly and severally liable for the acts of patent infringement alleged herein.

13. The parties to this action are properly joined under 35 U.S.C. § 299 because the right to relief asserted against Defendants jointly and severally arises out of the same series of transactions or occurrences relating to the making and using of the same products or processes, including wireless electronics and related processes bearing at least the Sony and PlayStation brands or that are otherwise made for use with services provided by Sony. Additionally, questions of fact common to all defendants will arise in this action.

JURISDICTION AND VENUE

14. 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).

15. This Court has personal jurisdiction over Sony Group pursuant to due process and/or the Texas Long Arm Statute because, *inter alia*, (i) Sony Group has done and continues to do business in Texas; and (ii) Sony Group 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/or 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 Texas. In addition, or in the alternative, this Court has personal jurisdiction over Sony Group pursuant to Fed. R. Civ. P. 4(k)(2) because: (1) it has substantial contacts with the United States and committed and/or induced acts of patent infringement in the United States; and (2) it is not subject to jurisdiction in any state’s courts of general jurisdiction.

16. This Court has personal jurisdiction over Sony Electronics pursuant to due process and/or the Texas Long Arm Statute because, *inter alia*, (i) Sony Electronics has done and continues to do business in Texas; and (ii) Sony Electronics 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, and/or committing a least a portion of any other infringements alleged herein; and (iii) Sony Electronics is registered to do business in Texas.

This Court has personal jurisdiction over SIE pursuant to due process and/or the Texas Long Arm Statute because, *inter alia*, (i) SIE has done and continues to do business in Texas; and (ii) SIE 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, and/or committing a least a portion of any other infringements alleged herein.

17. Venue is proper in this district as to Sony Group, which is organized under the laws of a foreign jurisdiction. 28 U.S.C. § 1391(c)(3) provides that “a defendant not resident in the United States may be sued in any judicial district, and the joinder of such a defendant shall be disregarded in determining where the action may be brought with respect to other defendants.” *See also In re HTC Corp.*, 889 F.3d 1349 (Fed. Cir. 2018).

18. Venue is proper in this district as to Sony Electronics and SIE pursuant to 28 U.S.C. § 1400(b). Venue is further proper because Sony Electronics and SIE have committed and continue 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. Sony Electronics and SIE have regular and established places of business in this district, including at least at 2800 Central Expressway, Plano, Texas 75074, 3333 Preston Road #00200, Frisco, Texas 75034, 2800 Summit Avenue, Plano, Texas 75074, and 1221 Coit Road, Plano, Texas 75075.

BACKGROUND

19. 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.

20. 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.¹ From its beginning, MERL was focused on pioneering new technologies in various industries, including computer graphics, digital communication, medical imaging, transportation etc.² 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).”³

21. 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.

¹ See <https://www.merl.com/company/history>.

² See <https://www.merl.com/public/MERL-30Years.pdf>.

³ *Id.* at 22.

COUNT I

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

22. 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.”

23. 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.

24. Sony made, had made, used, imported, provided, supplied, distributed, sold, and/or offered for sale products and/or systems including, for example, its Sony BRAVIA 3 65” TV (K-65S30), Sony Xperia 5 IV – 5G smartphone, PlayStation 5 Digital Edition Console, and other products⁴ that comply with the IEEE 802.11ax-2021 standard and implement MIMO Wi-Fi capabilities (“accused products”).

⁴ See, e.g., Bravia 3 Series (K-43S30, K-50S30, K-55S30, K-75S30, K-85S30), Bravia 7 Series (K-55XR70, K-65XR70, K-75XR70, K-85XR70), Bravia 8 Series (K-55XR80, K-65XR80, K-77XR80), Bravia 9 Series (K-75XR90, K-65XR90), Bravia A95L Series (XR-55A95L, XR-65A95L, XR-77A95L), Xperia 1 V, Xperia PRO-I, PDT-FP1, XAV-AX4000, XAV-AX6000, PS5 Console, etc.



BRAVIA 3 65" class LED 4K HDR Google TV (2024)

Model: K-65S30

Screen size

43" \$499.99	50" \$599.99	55" \$699.99	65" \$799.99	75" \$1,299.99
85" \$1,799.99				

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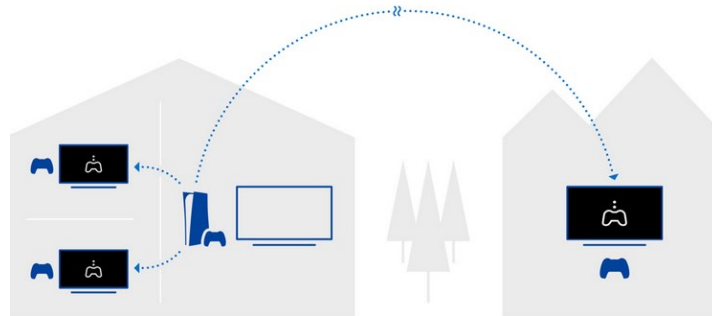
Est. Shipping May 31

4 interest-free payments or as low as \$67/mo with **affirm**. Check your purchasing power

Source: <https://electronics.sony.com/tv-video/televisions/all-tvs/p/k65s30>

Stream PlayStation® games to your BRAVIA

Control your PlayStation® remotely wherever you have a compatible BRAVIA connected to the internet. The PS Remote Play app lets you control your PS5® or PS4™ console from another room or location like a friend's house.¹³



Source: <https://electronics.sony.com/tv-video/televisions/all-tvs/p/k65s30>

Wi-Fi Direct

The Wi-Fi Direct feature allows wireless audio and video content playback from mobile phones, cameras, and other devices directly to a compatible TV or projector without a wireless home network or the internet.

- Great to use for presentations, etc., where a quick and direct wireless connection is available
- Creates a direct, or peer-to-peer wireless connection between the device and the TV

[How to use the Wi-Fi Direct feature](#)



Source: <https://www.sony.com/electronics/support/televisions-projectors-lcd-tvs-android-/k-65s30/articles/00295266>

WI-FI STANDARD

Wi-Fi Certified 802.11a/b/g/n/ac/ax

Source: <https://www.sony.com/electronics/support/televisions-projectors-lcd-tvs-android-/k-65s30/specifications>



SALE

Xperia 5 IV – 5G¹, 8GB RAM, 128GB Smartphone, 6.1" FHD 120Hz HDR OLED Display², 4K HDR 120fps video recording⁴ on all rear cameras

Model: Xperia 5 IV

Color



Black

\$799.99 ~~\$999.99~~

Est. Delivery Jun 3-4

4 interest-free payments or as low as \$67/mo with **affirm**. Check your purchasing power

Add to cart 

 Earn 800 Sony Rewards Points 

[Find Another Retailer](#)

Source: <https://electronics.sony.com/mobile/smartphone/all/p/xqcq62b-gc>

Specifications

Connectivity	
Bluetooth	Bluetooth® 5.2 wireless technology, Bluetooth® LE Audio
WIFI	IEEE802.11a/b/g/n/ac/ax, 2.4/5/6GHz

Source: <https://electronics.sony.com/mobile/smartphone/all/p/xqcq62b-gc>



Wi-Fi 6E⁶

With Wi-Fi 6E you get a better connection – with higher speed, lower latency and improved connectivity management when multiple devices are on the same network. And it’s possible to connect to 6GHz frequency band.

Smart connectivity

Smart connectivity continually analyses and assesses Wi-Fi signal quality. If it predicts any compromise in Wi-Fi connection, it uses your mobile data instead – so you’re always on the best connection available.

Source: <https://electronics.sony.com/mobile/smartphone/all/p/xqcq62b-gc>



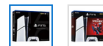
DEAL

PlayStation®5 Digital Edition Console (model group - slim)*

\$399⁹⁹ ~~\$449.99~~ Valid 05/28/24 23:00 - 06/13/24 01:59

Klarna Pay as low as \$38/mo. [Learn more](#)

Storage: 1 TB



The PS5® Digital Edition* unleashes new gaming possibilities that you never anticipated.

Experience lightning-fast loading with an ultra-high-speed SSD, deeper immersion with support for haptic feedback, adaptive triggers and 3D Audio** and an all-new generation of incredible PlayStation® games.

PS5 Digital Edition is an all-digital version of the PS5 console with no disc drive. Sign into your account for PlayStation Network and go to PlayStation®Store to buy and download games***.

Source: <https://direct.playstation.com/en-us/buy-consoles/playstation5-digital-edition-console-model-group-slim>

PlayStation 5 Digital Edition Specifications

Input/OutputFront of Console	USB Type-C® port (Super-Speed USB 10Gbps)
	USB Type-C® port (Hi-Speed USB)
Input/OutputBack of Console	USB Type-A port (Super-Speed USB 10Gbps) x2
Networking	Ethernet (10BASE-T, 100BASE-TX, 1000BASE-T)Wi-fi: <u>IEEE 802.11 a/b/g/n/ac/ax</u>

Source: <https://blog.playstation.com/2023/10/10/new-look-for-ps5-console-this-holiday-season>

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

26. The Sony BRAVIA 3 65" TV (K-65S30), Sony Xperia 5 IV – 5G smartphone, and PlayStation 5 Digital Edition Console are exemplary accused products.

27. Sony directly infringes the '686 Patent when, for example, it and/or its agents use the accused products, including during testing of the accused products. Sony 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. Sony 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. Sony 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. Sony 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).

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

29. In addition, Sony has had knowledge of the '686 Patent at least as of July 6, 2015, when it was cited in an IDS (as U.S. Publication No. 2009/0290563) during prosecution of U.S. Patent No. 9,553,638, which is assigned to Sony. Sony employee, Tomoya Yamaura—who was named as an inventor of U.S. Patent No. 9,553,638—and others involved in the prosecution of the patent, have had knowledge of the '686 Patent well before this lawsuit was filed.⁵

30. Freedom Patents has been damaged as a result of the infringing conduct by Sony alleged above. Thus, Sony 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.

31. 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

32. 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.”

⁵ The '686 Patent was also cited in an IDS (as U.S. Publication No. 2009/0290563) on July 10, 2015, during prosecution of U.S. Patent No. 9,344,222, which is assigned to Sony.

33. 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.

34. Sony used products and/or systems including, for example, its Sony BRAVIA 3 65" TV (K-65S30), Sony Xperia 5 IV – 5G smartphone, PlayStation 5 Digital Edition Console, and other products⁶ that comply with the IEEE 802.11ax-2021 standard and implement MIMO Wi-Fi capabilities (“accused products”).



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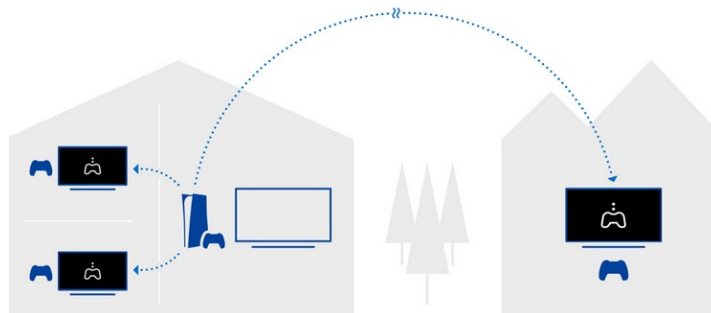
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Specifications

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WIFI

IEEE802.11a/b/g/n/ac/ax, 2.4/5/6GHz

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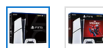


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Networking	Ethernet (10BASE-T, 100BASE-TX, 1000BASE-T) <u>Wi-fi: IEEE 802.11 a/b/g/n/ac/ax</u>

Source: <https://blog.playstation.com/2023/10/10/new-look-for-ps5-console-this-holiday-season>

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

36. The Sony BRAVIA 3 65" TV (K-65S30), Sony Xperia 5 IV – 5G smartphone, and PlayStation 5 Digital Edition Console are exemplary accused products.

37. Sony directly infringes the '096 Patent when, for example, it and/or its agents use the accused products, including during testing of the accused products. Sony 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. Sony 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. Sony 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. Sony 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).

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

39. In addition, Sony has had knowledge of the '096 Patent at least as of October 20, 2015, when it was cited in an IDS during prosecution of U.S. Patent No. 9,331,762, which is assigned to Sony. Sony employee, Tomoya Yamaura—who was named as an inventor of U.S. Patent No. 9,331,762—and others involved in the prosecution of the patent, have had knowledge of the '096 Patent well before this lawsuit was filed.⁷

⁷ The '096 Patent was also cited in an IDS on October 21, 2015, during prosecution of U.S. Patent No. 9,344,222, which is assigned to Sony. During that same prosecution, the published application (U.S. 2009/0290563) that led to the child of the '096 Patent ('686 Patent) was cited in an IDS on July 10, 2015. The '096 Patent was also cited in an IDS on February 24, 2016, during prosecution of U.S. Patent No. 9,553,638, which is assigned to Sony. During that same prosecution, the published application (U.S. 2009/0290563) that led to the child of the '096 Patent ('686 Patent), was cited in an IDS on July 6, 2015.

40. Freedom Patents has been damaged as a result of the infringing conduct by Sony alleged above. Thus, Sony 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 '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

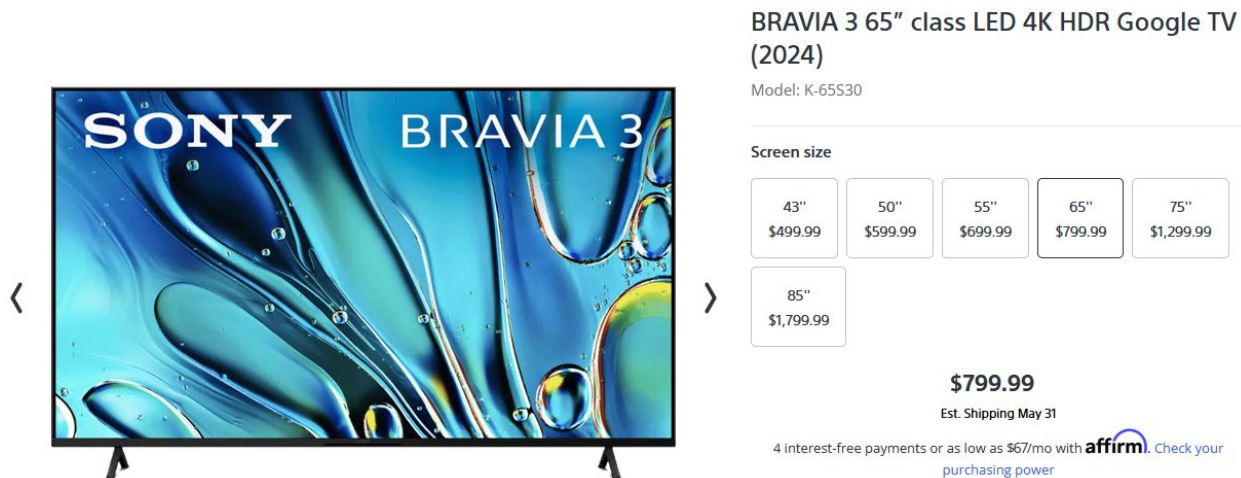
DIRECT INFRINGEMENT OF U.S. PATENT NO. 8,514,815

42. 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.”

43. 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.

44. Sony used products and/or systems including, for example, its Sony BRAVIA 3 65” TV (K-65S30), Sony Xperia 5 IV – 5G smartphone, PlayStation 5 Digital Edition Console, and other products⁸ that comply with the IEEE 802.11ax-2021 standard and implement MIMO Wi-Fi capabilities (“accused products”).

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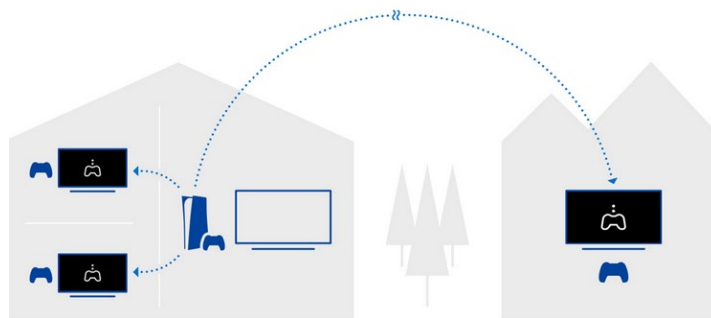
\$799.99
Est. Shipping May 31

4 interest-free payments or as low as \$67/mo with **affirm**. Check your purchasing power

Source: <https://electronics.sony.com/tv-video/televisions/all-tvs/p/k65s30>

Stream PlayStation® games to your BRAVIA

Control your PlayStation® remotely wherever you have a compatible BRAVIA connected to the internet. The PS Remote Play app lets you control your PS5® or PS4™ console from another room or location like a friend's house.¹³



Source: <https://electronics.sony.com/tv-video/televisions/all-tvs/p/k65s30>

Wi-Fi Direct

The Wi-Fi Direct feature allows wireless audio and video content playback from mobile phones, cameras, and other devices directly to a compatible TV or projector without a wireless home network or the internet.

- Great to use for presentations, etc., where a quick and direct wireless connection is available
- Creates a direct, or peer-to-peer wireless connection between the device and the TV

[How to use the Wi-Fi Direct feature](#)



Source: <https://www.sony.com/electronics/support/televisions-projectors-lcd-tvs-android-/k-65s30/articles/00295266>

WI-FI STANDARD

Wi-Fi Certified 802.11a/b/g/n/ac/ax

Source: <https://www.sony.com/electronics/support/televisions-projectors-lcd-tvs-android-/k-65s30/specifications>



SALE

Xperia 5 IV – 5G¹, 8GB RAM, 128GB Smartphone, 6.1" FHD 120Hz HDR OLED Display², 4K HDR 120fps video recording⁴ on all rear cameras

Model: Xperia 5 IV


Color

Black

\$799.99 ~~\$999.99~~

Est. Delivery Jun 3-4

4 interest-free payments or as low as \$67/mo with **affirm**. Check your purchasing power

Add to cart 

 Earn 800 Sony Rewards Points 

[Find Another Retailer](#)

Source: <https://electronics.sony.com/mobile/smartphone/all/p/xqcq62b-gc>

Specifications

Connectivity	
Bluetooth	Bluetooth® 5.2 wireless technology, Bluetooth® LE Audio
WIFI	IEEE802.11a/b/g/n/ac/ax, 2.4/5/6GHz

Source: <https://electronics.sony.com/mobile/smartphone/all/p/xqcq62b-gc>



Wi-Fi 6E⁶

With Wi-Fi 6E you get a better connection – with higher speed, lower latency and improved connectivity management when multiple devices are on the same network. And it’s possible to connect to 6GHz frequency band.

Smart connectivity

Smart connectivity continually analyses and assesses Wi-Fi signal quality. If it predicts any compromise in Wi-Fi connection, it uses your mobile data instead – so you’re always on the best connection available.

Source: <https://electronics.sony.com/mobile/smartphone/all/p/xqcq62b-gc>



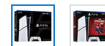
DEAL

PlayStation®5 Digital Edition Console (model group - slim)*

\$399⁹⁹ ~~\$449.99~~ Valid 05/28/24 23:00 - 06/13/24 01:59

Klarna Pay as low as \$38/mo. [Learn more](#)

Storage: 1 TB



The PS5® Digital Edition* unleashes new gaming possibilities that you never anticipated.

Experience lightning-fast loading with an ultra-high-speed SSD, deeper immersion with support for haptic feedback, adaptive triggers and 3D Audio** and an all-new generation of incredible PlayStation® games.

PS5 Digital Edition is an all-digital version of the PS5 console with no disc drive. Sign into your account for PlayStation Network and go to PlayStation®Store to buy and download games***.

Source: <https://direct.playstation.com/en-us/buy-consoles/playstation5-digital-edition-console-model-group-slim>

PlayStation 5 Digital Edition Specifications

Input/OutputFront of Console	USB Type-C® port (Super-Speed USB 10Gbps)
	USB Type-C® port (Hi-Speed USB)
Input/OutputBack of Console	USB Type-A port (Super-Speed USB 10Gbps) x2
Networking	Ethernet (10BASE-T, 100BASE-TX, 1000BASE-T) <u>Wi-fi: IEEE 802.11 a/b/g/n/ac/ax</u>

Source: <https://blog.playstation.com/2023/10/10/new-look-for-ps5-console-this-holiday-season>

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

46. The Sony BRAVIA 3 65" TV (K-65S30), Sony Xperia 5 IV – 5G smartphone, and PlayStation 5 Digital Edition Console are exemplary accused products.

47. Sony directly infringes the '815 Patent when, for example, it and/or its agents use the accused products, including during testing of the accused products. Sony 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. Sony 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. Sony 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. Sony 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).

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

49. In addition, Sony has had knowledge of the '815 Patent at least as of July 6, 2015, when its child patent, the '686 Patent, was cited in an IDS (as U.S. Publication No. 2009/0290563) during prosecution of U.S. Patent No. 9,553,638, which is assigned to Sony. Sony employee, Tomoya Yamaura—who was named as an inventor of U.S. Patent No. 9,553,638—and others involved in the prosecution of the patent, have had knowledge of the '815 Patent well before this lawsuit was filed.

50. Freedom Patents has been damaged as a result of the infringing conduct by Sony alleged above. Thus, Sony 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.

51. 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**

52. Sony 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.

53. Sony has induced the end users and/or Sony'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.

54. Sony 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.

55. Such steps by Sony 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.

56. Sony 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.

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

58. Sony 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.

59. Sony 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.

60. Sony 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.

61. Sony 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, Best Buy, and Walmart. Sony's established United States distribution channels include one or more United States based affiliates (e.g., Sony Corporation of America, Sony Electronics, Inc., and Sony Interactive Entertainment LLC) and third-parties working on behalf of Sony.

62. Sony's United States based affiliates (e.g., Sony Corporation of America, Sony Electronics, Inc., and Sony Interactive Entertainment LLC) operate entirely in support of Sony and are not free to sell products of Sony's competitors.

63. Sony's United States based affiliates (e.g., Sony Corporation of America, Sony Electronics, Inc., and Sony Interactive Entertainment LLC) were formed by Sony to further its domestic sales of the accused infringing products and are controlled by Sony to ensure that result.

64. Sony 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.

65. Sony 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, Sony also facilitates the sale of the accused products in Texas.

66. Sony 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.

67. Such steps by Sony 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.

68. Sony 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.

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

70. Sony's inducement is ongoing.

71. Sony has also indirectly infringed by contributing to the infringement of the '686 Patent, the '096 Patent, and the '815 Patent. Sony 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.

72. 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.

73. 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.

74. 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.

75. Sony's contributory infringement is ongoing.

76. Sony has had actual knowledge of the '686 Patent at least as early as July 6, 2015, when it was cited in an IDS (as U.S. Publication No. 2009/0290563) during prosecution of U.S. Patent No. 9,553,638, which is assigned to Sony. Since at least that time, Sony has known the scope of the claims of the '686 Patent and the products that practice the '686 Patent.

77. Sony has had actual knowledge of the '096 Patent at least as as early as October 20, 2015, when it was cited in an IDS during prosecution of U.S. Patent No. 9,331,762, which is assigned to Sony. Since at least that time, Sony has known the scope of the claims of the '096 Patent and the products that practice the '096 Patent.

78. Sony has had actual knowledge of the '815 Patent at least as early as July 6, 2015, when its child patent, the '686 Patent, was cited in an IDS (as U.S. Publication No. 2009/0290563) during prosecution of U.S. Patent No. 9,553,638, which is assigned to Sony. Since at least that time, Sony has known the scope of the claims of the '815 Patent and the products that practice the '815 Patent.

79. By the time of trial, Sony 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.

80. Furthermore, Sony 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).

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

82. Sony'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.

83. Freedom Patents has been damaged as a result of Sony's infringing conduct alleged above. Thus, Sony 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 Sony, 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 Sony and/or all others acting in concert therewith;

b. A permanent injunction enjoining Sony 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 Sony account for and pay to Freedom Patents all damages to and costs incurred by Freedom Patents because of Sony'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 Sony'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.

Dated: June 14, 2024

Respectfully submitted,

/s/ Zachariah S. Harrington

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