IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS AUSTIN DIVISION

ONE-E-WAY, INC.,

Plaintiff,

v.

DELL TECHNOLOGIES INC. and DELL INC.,

Civil Action No. 1:24-cv-01558

Jury Trial Demanded

Defendants.

PLAINTIFF'S ORIGINAL COMPLAINT

Plaintiff One-E-Way, Inc. ("One-E-Way" or "Plaintiff") hereby files its Original Complaint against Defendants Dell Technologies Inc. and Dell Inc. (collectively, "Dell" or "Defendants") alleging infringement of U.S. Patent Nos. 10,129,627; 10,468,047; and 9,107,000 (collectively the "Patents-in-Suit").

I. PARTIES

1. Plaintiff One-E-Way, Inc. is a Delaware corporation that, as of the date of this Complaint, has its principal place of business at 3016 E. Colorado Blvd. No. 70848, Pasadena, California 91107.

Upon information and belief, Defendant Dell Technologies Inc. is a Delaware corporation with its principal place of business located at 1 Dell Way, Round Rock, Texas 78664.
 Dell Technologies Inc. may be served through its registered agent Corporation Service Company, 251 Little Falls Drive, Wilmington, Delaware 19808.

3. Upon information and belief, Defendant Dell Inc. is a Delaware corporation with its principal place of business located at 1 Dell Way, Round Rock, Texas 78664. On information and belief, Dell Inc. is a wholly-owned subsidiary of Dell Technologies Inc. Dell Inc. is registered

ORIGINAL COMPLAINT

to do business in the State of Texas and may be served through its registered agent Corporation Service Company D/B/A+, 211 E. 7th Street, Suite 620, Austin, Texas 78701.

II. JURISDICTION AND VENUE

4. This is an action for patent infringement which arises under the Patent Laws of the United States, in particular 35 U.S.C. §§ 271, 281, 284 and 285. This Court has jurisdiction over the subject matter of this action under 28 U.S.C. §1331, §1338(a).

5. This Court has personal jurisdiction over Dell. Among other reasons, Dell maintains regular and established places of business in Texas, including its global headquarters in the Austin area, in Round Rock, Texas. Dell conducts substantial business in Texas and has established minimum contacts within the forum such that the exercise of jurisdiction over Dell will not offend traditional notions of fair play and substantial justice. Dell has purposefully and voluntarily availed itself of the privileges of conducting business in the United States, the State of Texas, and this District by continuously and systematically placing goods into the stream of commerce through an established distribution channel with the expectation that they will be purchased by consumers in the State of Texas and this District. Dell directly and/or through intermediaries (including distributors, sales agents, and others), ships, distributes, sells, offers to sell, imports, advertises, makes, and/or uses its products (including but not limited to the products accused of infringement herein) in the United States, the State of Texas, and this District. Finally, Dell has participated in many lawsuits in courts within the State of Texas, including this Court. As such, it has long been established that Dell is subject to personal jurisdiction in Texas. One-E-Way's causes of action arise from Dell's contacts with and other activities in the State of Texas and this District.

6. Venue is proper in this Court pursuant to 28 U.S.C. §§1391(b), (c), and 1400. Dell maintains regular and established places of business within this district.

III. FACTUAL BACKGROUND

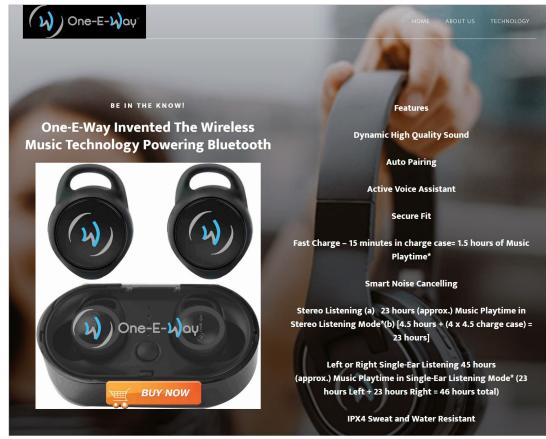
ONE-E-WAY AND THE INVENTOR

7. C. Earl Woolfork first conceived of the wireless audio inventions underlying the Patents-in-Suit in the late 1990s while he was exercising outdoors at the popular Santa Monica Steps in Los Angeles. At that time, Mr. Woolfork observed many people having their exercise routines interrupted or negatively affected by the wire(s) connecting their headphones to their respective portable audio players: "I'd see people going up and down exercising, and the cord was not only a nuisance but it was also potentially dangerous," Mr. Woolfork explained.¹ Determined to address these issues, Mr. Woolfork sought to develop a "wireless" solution that would enable people to enjoy high quality music on-the-go and be free of the complications and frustrations of headphones wire(s). Ultimately, Mr. Woolfork—who had an electrical engineering degree from the University of Southern California in Los Angeles—designed a wireless audio system that could transmit and receive high quality audio data without the physical complications caused by the conventional use of wires to transmit the audio signals. Mr. Woolfork then filed a patent application with the United States Patent and Trademark Office to protect his inventions and ultimately obtained several U.S. patents on various embodiments of his invention(s).

8. Subsequently, in 2004, Mr. Woolfork founded One-E-Way—a small, minorityowned business—in Pasadena, California to commercialize his inventions and One-E-Way also

¹ Earl and Cedric Woolfork: CEO And CFO of One-E-Way, US INVENTOR, <u>https://usinventor.org/portfolio-items/earl-and-cedric-woolfork-ceo-and-cfo-of-one-e-way/</u> (last visited Nov. 14, 2024).

serves as the assignee of Mr. Woolfork's patents. One-E-Way maintains a website at <u>http://one-e-</u>way.com/.



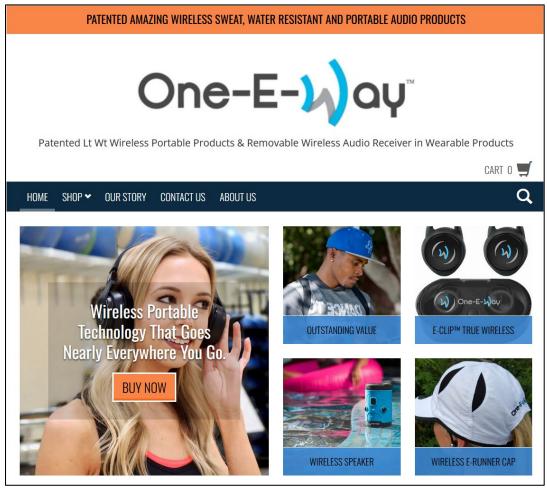
http://one-e-way.com/.

One-E-Way HOME ABOU	T US	TECHNOLOGY
One-E-May"		
One-E-Way, Inc. is an electronic products design and manufacturing Delaware Corporatio with offices in Pasadena, CA. Established in 2004 we are committed to meeting the elect needs of today's mobile society by leveraging cutting edge technology with the objective becoming a major participant in the wireless industry, targeting cross platform wireless business opportunities.	ronic	
Our goal is to provide innovative, convenient and affordable consumer electronic product the domestic and international market. Our emphasis is on creating solutions that provid performance and value.		
One-E-Way's initial product is a new and innovative, Made in the U.S.A., media player access It is a wireless digital stereo device with high quality sound, designed for seamless wireless connectivity to most portable MP3 player, laptop computer, tablet pc, cell phones, smart watches and other portable audio devices. It provides high quality wireless digital sound t allows the mobile user to enjoy music, movies, gaming and other audio sounds without a cable or cord to limit his/her mobility.	that	
Our wireless digital audio system may be utilized with devices such as, iPhone, Apple Wat iPad, Android mobile devices, Smart Watches, Windows mobile devices, tablets, portable gaming devices, laptops etc. and serves as a stand-alone accessory for easy cross platform connectivity to existing portable/mobile devices.		
As a result of our extensive research and development in the area of wireless communica One-E-Way has been awarded significant U.S. patents.	ition,	
Here is a list of One-E-Way's eight issued United States Patents:		
1. 7,412,294		
2. 7,684,885 3. 7,865,258		
4. 8,131,391		
5.9,107,000		
6. 9,282,396		
7. 10,129,627		
8. 10,468,047		

http://one-e-way.com/about-us/.

9. One-E-Way's initial commercial product was a wireless digital audio accessory designed to easily connect with a variety of portable audio devices—e.g. MP3 players, laptops,

tablets, and smartphones—to deliver high-quality, wireless audio for users to enjoy their music, movies, games, and more. One-E-Way sells its patented wireless audio products at least through its online retail outlet <u>https://shop.wayvz.com/</u>.



https://shop.wayvz.com/.

PATENTS-IN-SUIT

10. One-E-Way is the owner of all right, title, and interest in and to U.S. Patent No. 9,107,000, entitled "Wireless Digital Audio Music System," (the "'000 Patent") with a claim of priority to December 21, 2001. The '000 Patent duly and legally issued on August 11, 2015.

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11. One-E-Way is the owner of all right, title, and interest in and to U.S. Patent No. 10,129,627, entitled "Wireless Digital Audio Music System," (the "627 Patent") with a claim of priority to December 21, 2001. The '627 Patent duly and legally issued on November 13, 2018.

12. One-E-Way is the owner of all right, title, and interest in and to U.S. Patent No. 10,468,047, entitled "Wireless Digital Audio Music System," (the "'047 Patent") with a claim of priority to December 21, 2001. The '047 Patent duly and legally issued on November 5, 2019.

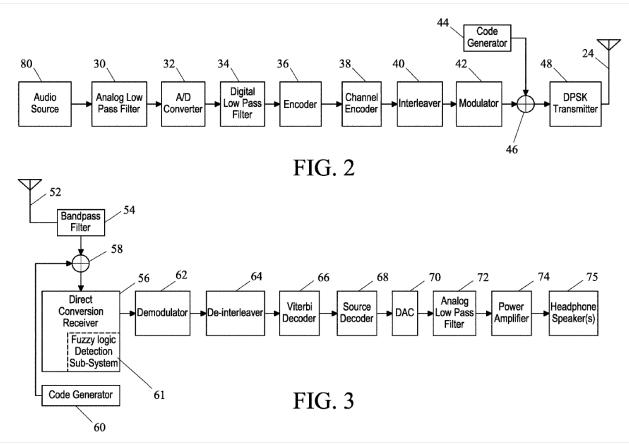
13. The Patents-in-Suit are members of the same patent family and each claims priority to the parent patent application in the family—U.S. Patent Application No. 10/027,391, which was filed on December 21, 2001.

14. The Patents-in-Suit have expired. The "Period of Exclusivity" runs from the period of enforceability until the latest expiration of the Patents-in-Suit.

TECHNICAL OVERVIEW

15. The Patents-in-Suit are generally directed to wireless audio inventions that reduce or eliminate the conventional reliance on physical cables to transmit audio signals, and the problems associated with such cables, while still providing high quality, private listening for users and reducing interference from other device transmissions. For example, the specification of the Patents-in-Suit describes that code division multiple access technology ("CDMA") "may be used to provide each user independent audible enjoyment." *See* '627 Patent, 3:30-32. Further, the patented inventions address interference in the wireless audio spectrum by using, for example, differential phase shift keying and processing for reduction of intersymbol interference. *See, e.g., id.*, 2:55-60; 5:7-8.

16. Figures 2 and 3 of the Patents-in-Suit depict the audio transmitter and audio receiver portions, respectively, of select embodiments of the claimed wireless digital audio systems.



'047 Patent, FIGS. 2-3.

17. In one embodiment, the Patents-in-Suit describe the use of "a code generator 44 that may be used to create a unique user code" and the generated "unique user code" is associated with one wireless digital audio system user. *See* '627 Patent, 2:65-3:1. In one embodiment of the receiver portion, "[t]he receiver code generator 60 may contain the same unique wireless transmission of a signal code word that was transmitted by audio transmitter 20 specific to a particular user." *See id.*, 3:23-26.

DEFENDANTS' ACTS

18. Dell has manufactured, used, sold, offered to sell, and imported into the United States a variety of wireless audio products that provide wireless transmission and/or reception of

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an audio signal in compliance with versions of the Bluetooth standard from the Bluetooth Special Interest Group ("Bluetooth SIG"), and that infringe the Patents-in-Suit.²

19. Dell has manufactured, used, sold, offered to sell, and imported into the United States portable or mobile wireless audio products that receive a wireless audio signal in accordance with a Bluetooth standard, e.g., Bluetooth 5.0, (the "Accused Receiver Products"), including, but not limited to:

- Wireless headphones, including wireless headsets, made, imported, sold or offered for sale during the Period of Exclusivity, including under the brands Dell, Alienware, and Bose; and
- Wireless speakers, including Bluetooth speakers branded Bose, Logitech and Dell, made, imported, sold or offered for sale during the Period of Exclusivity;

The Accused Receiver Products meet all claim limitations of at least claim 1 of the '047 Patent, at least claim 1 of the '627 Patent, and at least claim 9 of the '000 Patent. Dell's manufacture, use, sale, offer for sale, and importation into the United States of the Accused Receiver Products infringed at least claim 1 of the '047 Patent, at least claim 1 of the '627 Patent, and at least claim 9 of the '000 Patent.

20. The Accused Receiver Products are Bluetooth-compatible products that comprise a portable or mobile digital audio spread spectrum audio receiver.

21. The receivers of the Accused Receiver Products receive a unique user code, e.g., BD_ADDR and unique user-friendly name ("UFN"), from a digital audio spread spectrum transmitter during, e.g., device discovery, pairing, and/or audio streaming.

3.2.2 Bluetooth Device Name (the user-friendly name)

² Dell Electronics Co., Ltd. is an "Associate" member of Bluetooth SIG and Dell Electronics America, Inc. is an "Adopter" member of Bluetooth SIG. *See* <u>https://www.bluetooth.com/develop-with-bluetooth/join/member-directory/</u>. Bluetooth SIG is the organization that oversees the development of Bluetooth standards.

3.2.2.1 Definition

The Bluetooth device name is the user-friendly name that a Bluetooth device exposes to remote devices. For a device supporting the BR/EDR device type, the name is a character string returned in the LMP_name_res in response to an LMP_name_req. For a device supporting the LE-only device type, the name is a character string held in the Device Name characteristic as defined in Section 12.1.

BLUETOOTH CORE SPECIFICATION, Version 5.0 Vol. 3, Part C, Section 3.2.2, p. 1988, available at

https://www.bluetooth.com/specifications/specs/core-specification-amended-5-0/; see also id.,

Section 6, pp. 2022-30; Section 7.1-7.7, pp. 2031-38 (discussing protocols for obtaining the

BD_ADDR and UFN); Vol. 2, Part E, Section 6.23, p. 749 ("The user-friendly Local Name

provides the user the ability to distinguish one BR/EDR Controller from another."); id., Part B,

Section 1.2.1, p. 357 (discussing a "user BD_ADDR"). For example, a unique user code is sent by

the transmitter in response to the "Remote_Name_Request" command.

Command	OCF	Command Parameters	Return Parameters
HCI_Remote_Name_Request	0x0019	BD_ADDR,	
		Page_Scan_Repetition_Mode,	
		Reserved,	
		Clock_Offset	

7.1.19 Remote Name Request Command

Description:

The Remote_Name_Request command is used to obtain the user-friendly name of another BR/EDR Controller. The user-friendly name is used to enable the user to distinguish one BR/EDR Controller from another. The BD_ADDR command parameter is used to identify the device for which the user-friendly name is to be obtained. The Page_Scan_Repetition_Mode parameter specifies the page scan repetition mode supported by the remote device with the BD_ADDR. This is the information that was acquired during the inquiry process. The Clock_Offset parameter is the difference between its own clock

BLUETOOTH CORE SPECIFICATION, Version 5.0 Vol. 2, Part E, Section 7.1.19, p. 800, available at

https://www.bluetooth.com/specifications/specs/core-specification-amended-5-0/.

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22. Users of a Bluetooth-compatible transmitter and of Accused Receiver Products could change or customize the UFN of the Bluetooth-compatible device, for example as shown below in the context of a Dell wireless headset, the Dell Pro WL5022, introduced in 2021. https://www.techforbrains.com/headphones/dell-pro-wl5022-wireless-headset-with-zoom-and-microsoft-teams-certified/ Another example is Bose Quietcomfort 35 II, offered for sale by Dell in 2021. https://www.audiosciencereview.com/forum/index.php?threads/bose-quietcomfort-35-ii-review-noise-cancelling-headphone.20584/; https://www.dell.com/community/en/conversation s/xps/wont-connect-with-bose-headphones-via-bluetooth/647f7ec1f4ccf8a8ded3471d; https://web.archive.org/web/20210501000000*/dell.com

		START THE PARTY	EARLY. DISCOVER OUR BESTSELL	ING PRODUCTS. SHOP.			
BOSE				Search	Q	G Shop Bose	• Stores
	SUPPORT HOME	PRODUCT SUPPORT	REGISTER MY PRODUCT				
SUPPORT > PRO	DUCT FINDER > BOSE QUIETCOMFORT*	EARBUDS					
Bose Q	uietComfort® Ear	buds					
SOLD FROM	2020 – PRESENT						
NOTYOU	R PRODUCT?						
	Search all articles relating to your Bose Q	uietComfort* Earbuds *			SEA	RCH	
	Renaming a p	product					
				or example, to identify your p	roduct when		
	multiple Bluetooth® produc	ts are listed in an ap	p or device menu.				
		_					
	Rename a product using th	ne Bose app.					
	1 In the Bose app, tap the	-					
	If a different product is shown	n, tap the My Bose icon	in upper-left corner the	en select the desired product.			
	(2) Tap Product Name						

(3) Select a name for your Bose product, or scroll to the bottom of the screen and tap Custom Name to enter a specific name.



https://www.boselatam.com/en_ar/support/articles/HC1478/productCodes/qc_earbuds/article.ht

<u>ml</u>.

Computer Name Shows as Desktop-XXXXXX on Dell Systems that Ship with Windows 10

Summary: Steps for changing the Computer Name on a Dell system if it shows Desktop-XXXXXX.

Computer Name Shows Desktop-XXXXXX You may notice that your Windows 10 system has a computer name "Desktop-XXXXXX" on both desktop and portable systems. (XXXXXX = any combination of 7 letters or numbers). System - U X v & Search Control Panel P 🚽 🚽 🛧 🔜 > Control Panel > System and Security > System 6 Control Panel Home View basic information about your computer Device Manager Windows edition Remote settings Windows 10 Home Windows10 System protection © 2015 Microsoft Corporation. All rights reserved. Advanced system settings System-Processor Intel(R) Core(TM) i3-4150T CPU @ 3.00GHz 3.00 GHz Installed memory (RAM): 4,00 GB System type: 64-bit Operating System, x64-based processor Pen and Touch: No Pen or Touch Input is available for this Display Computer name, domain, and workgroup settings Computer name: SChange settings Full computer name: DESKTOP -XXXXXXXX Computer description: Workgroup: WORKGROUP

How to Change the Computer Name

You have several options that will allow you to change the computer name of a Windows 10 system.

From the Start menu

- 1. Click/Tap Settings on the Start menu, The Settings Window will open.
- 2. Click/Tap the System icon, (top left).
- 3. Click/Tap **About** at the bottom of the left side menu.
- 4. Then Click/Tap the Rename PC button
- 5. In the **Rename your PC Window**, type in the new name in the box then Click/Tap **Next** and Click/Tap the **Restart Now** button.

https://web.archive.org/web/20220617032523/https://www.dell.com/support/kbdoc/enus/000137111/computer-name-shows-as-desktop-xxxxxx-on-dell-systems-that-ship-withwindows-10 (last published date February 21, 2021). Case 1:24-cv-01558 Document 1 Filed 12/18/24 Page 14 of 31

23. Bose also provided an app that can be used to implement the renaming process. *See, e.g.,* <u>https://support.bose.com/s/display-articles?productId=01t8c000000ydNXAAZ&articleId=ka08c000000hHX6AAM&language=en_CA.</u>

24. The digital audio spread spectrum receivers of the Accused Receiver Products also receive a high-quality audio signal representation with a frequency range of 20 Hz to 20kHz (e.g., the range of sound frequencies that the average human can hear high-quality music) from another Bluetooth-compatible device with a digital audio spread spectrum transmitter.

25. Further, the receivers of the Accused Receiver Products are able to communicate wirelessly with digital audio spread spectrum transmitters and receive audio signal representations representative of audio from an audio source, e.g., music streamed from a Bluetooth-compatible smartphone to an Accused Receiver Product via a Bluetooth connection between the two devices.

26. The digital audio spread spectrum receivers of the Accused Receiver Products include direct conversion modules that can receive wireless spread spectrum signal transmissions representative of the unique user code and the high-quality audio signal representation. For example, on information and belief, all later Bluetooth-compatible devices include a direct conversion module comprising down conversion circuity. Additionally, the received transmissions are encoded for further noise immunity. For example, the received transmissions can be encoded using various spread spectrum techniques to avoid interference, one such spread spectrum technique used is adaptive frequency hopping ("AFH"):

7.2 ADAPTIVE FREQUENCY HOPPING

Adaptive Frequency Hopping (AFH) allows Bluetooth devices to improve their immunity to interference from and avoid causing interference to other devices in the 2.4 GHz ISM band. The basic principle is that Bluetooth channels are classified into two categories, *used* and *unused*, where used channels are part of the hopping sequence and unused channels are replaced in the hopping sequence by used channels in a pseudo-random way. This classification

BLUETOOTH CORE SPECIFICATION, Version 5.0 Vol. 1, Part A, Section 7.1, p. 258, available at <u>https://www.bluetooth.com/specifications/specs/core-specification-amended-5-0/.</u> Additionally, Bluetooth-compatible devices can use pulse shaping to reduce intersymbol interference ("ISI"). BLUETOOTH CORE SPECIFICATION, Version 5.0 Vol. 2, Part A, Section 3.2.1.3, p. 331, available at <u>https://www.bluetooth.com/specifications/specs/core-specification-amended-5-0/.</u>

27. As discussed above, the digital audio spread spectrum receivers of the Accused Receiver Products are able to process the high-quality audio signals, which have frequency ranges of 20 Hz to 20 kHz.

28. Also, the digital audio spread spectrum receivers of the Accused Receiver Products necessarily include digital-to-analog converters ("DAC") to convert the digital information in the received audio signal to corresponding analog information in order to generate an audio output.

29. The Accused Receiver Products included one or more speakers that operated to reproduce the generated audio output. For example, Dell Pro WL5022 included one speaker in each of the left and right portions of the headphones. The one or more speakers of the Accused Receiver Products only reproduce audible audio content sent from the digital audio spread spectrum transmitter in a Bluetooth-compatible device "paired" with the respective Accused Receiver Product.

30. The digital audio spread spectrum receivers of the Accused Receiver Products use independent code division multiple access communication and the received unique user code to communicate only with the digital audio spread spectrum transmitter in a Bluetooth-compatible device "paired" with the respective Accused Receiver Product during a wireless connection. For example, the Bluetooth specification is based on a type of code-division multiple access ("CDMA") known as frequency hopping code division multiple access ("FH-CDMA"). *See, e.g.*,

Jaap Haartsen, IEEE 2000, page 8; Shehu Hassan Ayagi, *Performance Analysis of Bluetooth Network in the Presence of Wi-Fi System*, COMPUTER ENGINEERING AND INTELLIGENT SYSTEMS, Vol. 5, No. 9, 2014

31. The digital audio spread spectrum receivers of the Accused Receiver Products demodulate received modulated transmissions in order to generate a demodulated signal and the demodulation includes at least one of a differential phase shift keying ("DPSK") demodulation and a non-DPSK demodulation.

Acronym or abbreviation	Writing out in full	Comments
DPSK	Differential Phase Shift Keying	Generic description of Enhanced Data Rate modulation

BLUETOOTH CORE SPECIFICATION, Version 5.0 Vol. 1, Part B, Acronyms and Abbreviations, p.

269, available at https://www.bluetooth.com/specifications/specs/core-specification-amended-5-

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The general Enhanced Data Rate packet format is shown in Figure 1.3. Each packet consists of 6 entities: the access code, the header, the guard period, the synchronization sequence, the Enhanced Data Rate payload and the trailer. The access code and header use the same modulation mode as for Basic Rate packets while the synchronization sequence, the Enhanced Data Rate payload and the trailer use the Enhanced Data Rate modulation mode. The guard time allows for the transition between the modulation modes.

ACCESS CODE	HEADER	GUARD	SYNC	ENHANCED DATA RATE PAYLOAD	TRAILER	
← GFSK →						
Figure 1.3: Standard Enhanced Data Rate packet format						

BLUETOOTH CORE SPECIFICATION, Version 5.0 Vol. 2, Part B, Baseband Specification, p. 355,

available at https://www.bluetooth.com/specifications/specs/core-specification-amended-5-0/.

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32. During the Period of Exclusivity, Dell manufactured, used, sold, offered to sell, and imported into the United States portable or mobile wireless audio products that transmit a wireless audio signal in accordance with a Bluetooth standard (the "Accused Transmitter Products"), including, but not limited to:

- Tablets, including the "Dell Latitude" line of tablets; and
- Computer systems, including the "Dell Latitude" line of laptops.

The Accused Transmitter Products meet all claim limitations of at least claim 17 of the '047 Patent, at least claim 5 of the '627 Patent, and at least claim 8 of the '000 Patent and thus Dell's manufacture, use, sale, offer for sale, and importation into the United States of the Accused Receiver Products infringes at least claim 17 of the '047 Patent, at least claim 5 of the '627 Patent, and at least claim 8 of the '000 Patent.

33. The Accused Transmitter Products are Bluetooth-compatible products that comprise a portable or mobile digital audio spread spectrum audio transmitter.

34. The transmitters of the Accused Transmitter Products transmit a unique user code, e.g., BD_ADDR and unique user-friendly name ("UFN"), to a digital audio spread spectrum receiver during, e.g., device discovery, pairing, and/or audio streaming.

3.2.2 Bluetooth Device Name (the user-friendly name)

3.2.2.1 Definition

The Bluetooth device name is the user-friendly name that a Bluetooth device exposes to remote devices. For a device supporting the BR/EDR device type, the name is a character string returned in the LMP_name_res in response to an LMP_name_req. For a device supporting the LE-only device type, the name is a character string held in the Device Name characteristic as defined in Section 12.1.

BLUETOOTH CORE SPECIFICATION, Version 5.0 Vol. 3, Part C, Section 3.2.2, p. 1988, available at

https://www.bluetooth.com/specifications/specs/core-specification-amended-5-0/; see also id.,

Section 6, pp. 2022-30; Section 7.1-7.7, pp. 2031-38 (discussing protocols for obtaining the BD_ADDR and UFN); Vol. 2, Part E, Section 6.23, p. 749 ("The user-friendly Local Name provides the user the ability to distinguish one BR/EDR Controller from another."); *id.*, Part B, Section 1.2.1, p. 357 (discussing a "user BD_ADDR"). For example, a unique user code is sent by the transmitter in response to the "Remote_Name_Request" command.

7.1.19 Remote Name Request Command

Command	OCF	Command Parameters	Return Parameters
HCI_Remote_Name_Request	0x0019	BD_ADDR,	
		Page_Scan_Repetition_Mode,	
		Reserved,	
		Clock_Offset	

Description:

The Remote_Name_Request command is used to obtain the user-friendly name of another BR/EDR Controller. The user-friendly name is used to enable the user to distinguish one BR/EDR Controller from another. The BD_ADDR command parameter is used to identify the device for which the user-friendly name is to be obtained. The Page_Scan_Repetition_Mode parameter specifies the page scan repetition mode supported by the remote device with the BD_ADDR. This is the information that was acquired during the inquiry process. The Clock_Offset parameter is the difference between its own clock

BLUETOOTH CORE SPECIFICATION, Version 5.0 Vol. 2, Part E, Section 7.1.19, p. 800, available at

https://www.bluetooth.com/specifications/specs/core-specification-amended-5-0/.

35. Users of a Bluetooth-compatible receiver and of the Accused Transmitter Products

could change or customize the UFN of the Bluetooth-compatible device.

36. The spread spectrum audio transmitters of the Accused Transmitter Products also

transmit audio signal representations with a frequency range of 20 Hz to 20kHz (i.e., the range of

sound frequencies that the average human can hear high-quality music) to another Bluetooth-

compatible device with a digital audio spread spectrum receiver.

37. Further, the transmitters of the Accused Transmitter Products are able to communicate wirelessly with digital audio spread spectrum receivers, e.g., transmitting music from Accused Transmitter Product to a Bluetooth-compatible receiver via a Bluetooth connection between the two devices and be moved during operation.

38. The digital audio spread spectrum transmitters of the Accused Transmitter Products include encoders that can process signals in the 20 Hz to 20kHz frequency range and encode a representation of the audio signal in order to reduce intersymbol interference associated with the transmitted representation of the audio signal. For example, the transmitted representations are encoded using various spread spectrum techniques to avoid interference, one such spread spectrum technique used is adaptive frequency hopping ("AFH"):

7.2 ADAPTIVE FREQUENCY HOPPING

Adaptive Frequency Hopping (AFH) allows Bluetooth devices to improve their immunity to interference from and avoid causing interference to other devices in the 2.4 GHz ISM band. The basic principle is that Bluetooth channels are classified into two categories, *used* and *unused*, where used channels are part of the hopping sequence and unused channels are replaced in the hopping sequence by used channels in a pseudo-random way. This classification

BLUETOOTH CORE SPECIFICATION, Version 5.0 Vol. 1, Part A, Section 7.1, p. 258, available at

https://www.bluetooth.com/specifications/specs/core-specification-amended-5-0/. Additionally,

Bluetooth-compatible devices can use pulse shaping to reduce intersymbol interference ("ISI").

BLUETOOTH CORE SPECIFICATION, Version 5.0 Vol. 2, Part A, Section 3.2.1.3, p. 331, available

at https://www.bluetooth.com/specifications/specs/core-specification-amended-5-0/.

39. Separate from the encoding and processing by the encoder, the digital coded audio spread spectrum transmitters of the Accused Transmitter Products perform a modulation on the representation of the audio signal, using at least one of a differential phase shift keying ("DPSK") modulation and a non-DPSK modulation, and generate a modulated signal based on the performance of the modulation(s).

Acronym or abbreviation	Writing out in full	Comments
DPSK	Differential Phase Shift Keying	Generic description of Enhanced Data Rate modulation

BLUETOOTH CORE SPECIFICATION, Version 5.0 Vol. 1, Part B, Acronyms and Abbreviations, p.

269, available at https://www.bluetooth.com/specifications/specs/core-specification-amended-5-

<u>0/.</u>

The general Enhanced Data Rate packet format is shown in Figure 1.3. Each packet consists of 6 entities: the access code, the header, the guard period, the synchronization sequence, the Enhanced Data Rate payload and the trailer. The access code and header use the same modulation mode as for Basic Rate packets while the synchronization sequence, the Enhanced Data Rate payload and the trailer use the Enhanced Data Rate modulation mode. The guard time allows for the transition between the modulation modes.

	ACCESS CODE	HEADER	GUARD	SYNC	ENHANCED DATA RATE PAYLOAD	TRAILER
GFSK DPSK						

Figure 1.3: Standard Enhanced Data Rate packet format

BLUETOOTH CORE SPECIFICATION, Version 5.0 Vol. 2, Part B, Baseband Specification, p. 355,

available at https://www.bluetooth.com/specifications/specs/core-specification-amended-5-0/.

40. The wireless digital coded audio spread spectrum transmitters of the Accused

Transmitter Products use the modulated signal and independent code division multiple access communication to wirelessly transmit a representation of the audio signal. For example, the Bluetooth specification is based on a type of code-division multiple access ("CDMA") known as frequency hopping code division multiple access ("FH-CDMA"). *See, e.g.,* Jaap Haartsen, IEEE 2000, page 8; Shehu Hassan Ayagi, *Performance Analysis of Bluetooth Network in the Presence of Wi-Fi System*, COMPUTER ENGINEERING AND INTELLIGENT SYSTEMS, Vol. 5, No. 9, 2014. Further, the unique user code transmitted by the wireless digital coded audio spread spectrum

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transmitters of the Accused Transmitter Products distinguishes the audio signal representation transmitted by the corresponding transmitter from other transmitted audio signals that may be present in the spread spectrum transmitter spectrum. For example, a Bluetooth-compatible device "paired" with a respective Accused Transmitter Product will use the unique user code to ignore other audio signal representations that may be present in its vicinity.

41. Dell provided instructions to its customers and users on how to pair the Accused Receiver Products and Accused Transmitter Products with other Bluetooth-compatible products in order to wirelessly send and receive audio signal representations and unique user codes as claimed in the Patents-in-Suit.

Frequently Asked Questions (FAQs) for Pairing Bluetooth Devices

Here are answers to some common questions about pairing Bluetooth devices in Windows 11 and Ubuntu.

1: Can I connect multiple Bluetooth devices to my computer simultaneously?	\checkmark
2: How do I check the Bluetooth version on my computer?	\sim
3: How do I update my Bluetooth drivers?	\checkmark
4: Can I use a Bluetooth adapter if my computer doesn't have integrated Bluetooth?	\sim
5: How do I change the name of my Bluetooth device on my computer?	^
 In Windows 11: Go to Start > Settings > Bluetooth & devices. Select Devices and find your Bluetooth device. Select More options (three dots) and choose Rename. Enter the new name and select Save. In Ubuntu: Open System Settings and select Bluetooth. Select your device and choose Device Settings. Enter the new name and select Save. 	
tps://www.dell.com/support/contents/en-us/article/product-support/self-support-	

https://www.dell.com/support/contents/en-us/article/product-support/self-supportknowledgebase/networking-wifi-and-bluetooth/pair-bluetooth-devices-windowsubuntu#:~:text=Open%20System%20Settings%20and%20select,new%20name%20and%20selec t%20Save.

Computer Name Shows as Desktop-XXXXXX on Dell Systems that Ship with Windows 10

Summary: Steps for changing the Computer Name on a Dell system if it shows Desktop-XXXXXX.

Computer Name Shows Desktop-XXXXXX You may notice that your Windows 10 system has a computer name "Desktop-XXXXXX" on both desktop and portable systems. (XXXXXX = any combination of 7 letters or numbers). System - U X 🚽 🚽 🛧 🔜 > Control Panel > System and Security > System 6 Control Panel Home View basic information about your computer Device Manager Windows edition Remote settings Windows 10 Home Windows10 System protection © 2015 Microsoft Corporation. All rights reserved. Advanced system settings System-Processor Intel(R) Core(TM) i3-4150T CPU @ 3.00GHz 3.00 GHz Installed memory (RAM): 4,00 GB System type: 64-bit Operating System, x64-based processor Pen and Touch: No Pen or Touch Input is available for this Display Computer name, domain, and workgroup settings Computer name: SChange settings Full computer name: DESKTOP -XXXXXXXX Computer description: Workgroup: WORKGROUP

How to Change the Computer Name

You have several options that will allow you to change the computer name of a Windows 10 system.

From the Start menu

- 1. Click/Tap Settings on the Start menu, The Settings Window will open.
- 2. Click/Tap the System icon, (top left).
- 3. Click/Tap **About** at the bottom of the left side menu.
- 4. Then Click/Tap the Rename PC button
- 5. In the **Rename your PC Window**, type in the new name in the box then Click/Tap **Next** and Click/Tap the **Restart Now** button.

https://web.archive.org/web/20220617032523/https://www.dell.com/support/kbdoc/enus/000137111/computer-name-shows-as-desktop-xxxxxx-on-dell-systems-that-ship-withwindows-10 (last published date February 21, 2021).

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42. On information and belief, Defendants also implemented contractual controls and protections in the form of license and use restrictions with their customers to preclude the unauthorized reproduction, distribution, and modification of their products.

43. Moreover, on information and belief, Defendants implemented technical precautions to attempt to thwart customers who would circumvent the intended operation of Defendants' products.

NOTICE

44. Dell received notice of its infringement of the Patents-in-Suit via its receipt of a certified letter from One-E-Way dated April 10, 2020. As stated in the letter, the purpose of the April 10, 2020 certified letter was "to address infringement of One-E-Way's patents by initiating a patent licensing discussion with the aim of avoiding patent infringement litigation." The April 10, 2020 letter to Dell explained, in part, that the One-E-Way patents are "directed to wireless audio devices that transmit and/or receive data suitable for high-quality music," and Dell's "conduct of making, offering and selling these wireless computer products in the United States constitutes infringement of One-E-Way's patents, namely the '885, '258, '391, '000, '396, '627 and '047 Patents."

45. One-E-Way has complied with the requirements of 35 U.S.C §287 with respect to each of the Patents-in-Suit.

46. Given Dell's knowledge of the Patents-in-Suit, Dell knew or was willfully blind to the fact that its products infringed the Patents-in-Suit.

IV. PATENT INFRINGEMENT

COUNT I — INFRINGEMENT OF U.S. PATENT NO. 10,129,627

47. One-E-Way incorporates by reference the foregoing paragraphs as if fully set forth herein.

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48. Dell has directly infringed and has induced or contributed to the infringement of at least claims 1 and 5 of the '627 Patent in this judicial district and elsewhere in the United States by, among other things, having made, imported, used, offered for sale, and/or sold without authority of license the claimed systems of the '627 Patent.

49. The infringing products include the Accused Receiver Products and the Accused Transmitter Products. One-E-Way alleges that each and every element is literally present in the Accused Receiver Products and/or the Accused Transmitter Products. To the extent not literally present, One-E-Way reserves the right to proceed under the doctrine of equivalents.

50. Dell has also actively induced the infringement of the '627 Patent under 35 U.S.C. § 271(b) by customers and other users. With knowledge of the '627 Patent (at least as of the date of its receipt of the April 2020 letter), Dell actively directed and aided its customers regarding how to use the Accused Receiver Products and the Accused Transmitter Products in an infringing manner and did so with the intent to encourage its customers and users to directly infringe the '627 Patent. This direction and aid came from Dell's provision of the Accused Receiver Products and the Accused Transmitter Products along with software, guides, manuals, tutorials, and other documentation and instruction (including, by way of example, information located that was at <u>https://www.dell.com/support/home/en-us</u>, as described above). Dell's direction and aid was further found in the firmware and source code embedded in the Accused Receiver Products and the Accused Transmitter Products that directed and executed the direct infringement of the '627 Patent.

51. Dell has also contributed to the infringement of one or more claims of the '627 Patent under 35 U.S.C. § 271(c) and/or 271(f), either literally and/or under the doctrine of equivalents, by having sold, offered for sale, and/or imported into the United States, the Accused

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Receiver Products, and the Accused Transmitter Products. Dell knew that the components of the Accused Receiver Products and the Accused Transmitter Products: constituted a material part of the inventions claimed in the '627 Patent; were especially made or adapted to infringe the '627 Patent; and were not staple articles or commodities of commerce suitable for non-infringing use, but rather the components were used for or in systems that infringe one or more claims of the '627 Patent. The hardware and/or software components were not a staple article or commodity of commerce because they were specifically designed to perform the claimed functionality. These products were specifically designed for their infringing purpose, namely operating as part of a wireless digital audio system to wirelessly transmit and/or receive representations of an audio signal between corresponding transmitters and receivers, in part, via the use of a unique user code in accordance with the claims of the '627 Patent. Any other use of the hardware and/or software components would have been unusual, far-fetched, illusory, impractical, occasional, aberrant, and/or experimental.

52. One-E-Way has been damaged as a result of Dell's infringing conduct. Dell is thus liable to One-E-Way in an amount that adequately compensates it for Dell's 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.

COUNT II - INFRINGEMENT OF U.S. PATENT NO. 10,468,047

53. One-E-Way incorporates by reference the foregoing paragraphs as if fully set forth herein.

54. Dell has directly infringed and has induced or contributed to the infringement of at least claims 1 and 17 of the '047 Patent in this judicial district and elsewhere in the United States

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by, among other things having made, imported, used, offered for sale, and/or sold without authority of license the claimed systems of the '047 Patent.

55. The infringing products include the Accused Receiver Products and the Accused Transmitter Products. One-E-Way alleges that each and every element is literally present in the Accused Receiver Products and/or the Accused Transmitter Products. To the extent not literally present, One-E-Way reserves the right to proceed under the doctrine of equivalents.

56. Dell has also actively induced the infringement of the '047 Patent under 35 U.S.C. § 271(b) by customers and other users. With knowledge of the '047 Patent (at least as of the date of its receipt of the April 2020 letter), Dell actively directed and aided its customers regarding how to use the Accused Receiver Products and the Accused Transmitter Products in an infringing manner and did so with the intent to encourage its customers and users to directly infringe the '047 Patent. This direction and aid came from Dell's provision of the Accused Receiver Products and the Accused Transmitter Products along with software, guides, manuals, tutorials, and other documentation and instruction (including, by way of example, information that was located at <u>https://www.dell.com/support/home/en-us</u>, as described above). Dell's direction and aid cam was further found in the firmware and source code embedded in the Accused Receiver Products and the Accused Transmitter Products that directed and executed the direct infringement of the '047 Patent.

57. Dell has also contributed to the infringement of one or more claims of the '047 Patent under 35 U.S.C. § 271(c) and/or 271(f), either literally and/or under the doctrine of equivalents, by having sold, offered for sale, and/or imported into the United States, the Accused Receiver Products and the Accused Transmitter Products. Dell knew that the components of the Accused Receiver Products and the Accused Transmitter Products: constituted a material part of

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the inventions claimed in the '047 Patent; were especially made or adapted to infringe the '047 Patent; and were not staple articles or commodities of commerce suitable for non-infringing use, but rather the components were used for or in systems that infringed one or more claims of the '047 Patent. The hardware and/or software components were not a staple article or commodity of commerce because they were specifically designed to perform the claimed functionality. These products were specifically designed for their infringing purpose, namely operating as part of a wireless digital audio system to wirelessly transmit and/or receive representations of an audio signal between corresponding transmitters and receivers, in part, via the use of a unique user code in accordance with the claims of the '047 Patent. Any other use of the hardware and/or software components would have been unusual, far-fetched, illusory, impractical, occasional, aberrant, and/or experimental.

58. One-E-Way has been damaged as a result of Dell's infringing conduct. Dell is thus liable to One-E-Way in an amount that adequately compensates it for Dell's 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.

<u>COUNT III — INFRINGEMENT OF U.S. PATENT NO. 9,107,000</u>

59. One-E-Way incorporates by reference the foregoing paragraphs as if fully set forth herein.

60. Dell has directly infringed and has induced or contributed to the infringement of at least claim 8 by the Accused Transmitter Products and claim 9 by the Accused Receiver Products in this judicial district and elsewhere in the United States by, among other things having made, imported, used, offered for sale, and/or sold without authority of license the claimed systems of the '000 Patent.

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61. The infringing products include the Accused Receiver Products and the Accused Transmitter Products. One-E-Way alleges that each and every element is literally present in the Accused Receiver Products and/or the Accused Transmitter Products. To the extent not literally present, One-E-Way reserves the right to proceed under the doctrine of equivalents.

62. Dell has also actively induced the infringement of the '000 Patent under 35 U.S.C. § 271(b) by customers and other users. With knowledge of the '000 Patent (at least as of the date of its receipt of the April 2020 letter), Dell actively directed and aided its customers regarding how to use the Accused Receiver Products and the Accused Transmitter Products in an infringing manner and did so with the intent to encourage its customers and users to directly infringe the '000 Patent. This direction and aid came from Dell's provision of the Accused Receiver Products and the Accused Transmitter Products along with software, guides, manuals, tutorials, and other documentation and instruction (including, by way of example, information that was located at https://www.dell.com/support/home/en-us, as described above). Dell's direction and aid was further found in the firmware and source code embedded in the Accused Receiver Products and the Accused Transmitter Products that directed and executed the direct infringement of the '000 Patent.

63. Dell has also contributed to the infringement of one or more claims of the '000 Patent under 35 U.S.C. § 271(c) and/or 271(f), either literally and/or under the doctrine of equivalents, by having sold, offered for sale, and/or imported into the United States, the Accused Receiver Products and the Accused Transmitter Products. Dell knew that the components of the Accused Receiver Products and the Accused Transmitter Products: constituted a material part of the inventions claimed in the '000 Patent; were especially made or adapted to infringe the '000 Patent; and were not staple articles or commodities of commerce suitable for non-infringing use,

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but rather the components were used for or in systems that infringed one or more claims of the '000 Patent. The hardware and/or software components were not a staple article or commodity of commerce because they were specifically designed to perform the claimed functionality. These products were specifically designed for their infringing purpose, namely operating as part of a wireless digital audio system to wirelessly transmit and/or receive representations of an audio signal between corresponding transmitters and receivers, in part, via the use of a unique user code in accordance with the claims of the '000 Patent. Any other use of the hardware and/or software components would have been unusual, far-fetched, illusory, impractical, occasional, aberrant, and/or experimental.

64. One-E-Way has been damaged as a result of Dell's infringing conduct. Dell is thus liable to One-E-Way in an amount that adequately compensates it for Dell's 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.

V. WILLFULNESS

65. Dell was provided notice of One-E-Way's claims at least by way of the April 2020 letter.

66. Dell acted with knowledge of the Patents-in-Suit despite an objectively high likelihood that its actions constituted infringement of One-E-Way's valid patent rights.

67. This objectively defined risk was either known or so obvious that it should have been known to Dell. One-E-Way seeks enhanced damages pursuant to 35 U.S.C. §284.

VI. JURY DEMAND

68. One-E-Way demands a trial by jury of all matters to which it is entitled to trial by jury, pursuant to FED. R. CIV. P. 38.

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VII. PRAYER FOR RELIEF

69. WHEREFORE, Plaintiff One-E-Way prays for judgment and seeks relief against Defendants as follows:

- a. Judgment that one or more claims of the Patents-in-Suit have been directly and/or indirectly infringed, either literally and/or under the doctrine of equivalents;
- b. Award Plaintiff past damages together with prejudgment and post-judgment interest to compensate for the infringement by Dell of the Patents-in-Suit in accordance with 35 U.S.C. § 284, and increase such award by up to three times the amount found or assessed in accordance with 35 U.S.C. § 284;
- c. That the Court declare this an exceptional case and award Plaintiff its reasonable attorneys' fees and costs in accordance with 35 U.S.C. § 285; and
- d. That Plaintiff be granted such other and further relief as the Court may deem just and proper under the circumstances.

Dated: December 18, 2024

Respectfully submitted,

/s/ Andrew G. DiNovo

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