

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

GENERAL VIDEO, LLC,

Plaintiff,

v.

DELL INC. and DELL TECHNOLOGIES
INC.,

Defendants.

Civil Action X:24-cv-

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff, General Video, LLC (“General Video” or “Plaintiff”), for its Complaint against Defendants, Dell Inc. (“Dell Inc.”) and Dell Technologies Inc. (“Dell Tech”) (collectively, “Dell” or the “Defendants”), alleges as follows:

THE PARTIES

1. General Video is a limited liability company organized and existing under the laws of the State of Delaware and with an address at 8 The Green, Suite B, Dover, DE 19901.
2. Defendant Dell Inc. is a corporation organized and existing under the laws of the State of Delaware, with an address at One Dell Way, Round Rock, Texas 78682, and may be served with process through its registered agent Corporation Service Company, 211 E. 7th Street, Suite 620, Austin, Texas 78701.
3. Defendant Dell Technologies Inc. is a corporation organized and existing under the laws of the State of Delaware, with an address at One Dell Way, Round Rock, Texas 78682, and may be served with process through its registered agent Corporation Service Company, 251 Little Falls Drive, Wilmington, Delaware 19808.

4. On information and belief, Defendant Dell Inc. is a wholly-owned subsidiary of Defendant Dell Tech.

JURISDICTION AND VENUE

5. This action for patent infringement arises under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*

6. This Court has exclusive jurisdiction over the subject matter of this case pursuant to 28 U.S.C. §§ 1331, 1332, and 1338(a).

7. Dell is subject to this Court's specific and general personal jurisdiction consistent with the principles of due process and/or the Texas Long Arm Statute, Tex. Civ. Prac. & Rem. Code Ann. § 17.042.

8. Dell sells and offers to sell products throughout the State of Texas, including in this District, and introduces infringing products into the stream of commerce knowing that they will be sold in the State of Texas and this District. Dell is registered with the Secretary of State to do business in the State of Texas.

9. Dell has authorized sellers and sales representatives that offer for sale and sell products that are the subject of this Complaint throughout the State of Texas, including in this District, and to consumers throughout this District. For example, Best Buy at 4210 Saint Michael Drive, Texarkana, Texas 75503; Costco Wholesale, 3650 West University Drive, McKinney, Texas 75071; Office Depot, 111 Richmond Ranch Road, Texarkana, Texas 75503; Target, 102 Richmond Ranch Road, Texarkana, Texas 75503; Walmart Supercenter, 4000 New Boston Road, Texarkana, Texas 75503; and Sam's Club, 3610 Saint Michael Drive, Texarkana, Texas 75503, offer for sale and sell such subject Dell products.

10. Each of Dell Inc. and Dell Tech is also subject to this Court's specific personal jurisdiction because it, directly, through, or in concert with subsidiaries, affiliates, or

intermediaries, makes, uses, sells, offers for sale, imports, advertises, makes available, and/or markets products within the State of Texas and this District that infringe one or more claims of the asserted patents owned by General Video, as alleged more fully below.

11. Venue is proper in this District pursuant to 28 U.S.C. § 1400(b) because each of Dell Inc. and Dell Tech resides in this District and/or has committed acts of infringement and has a regular and established place of business in this District. For example, Dell has, and advertises on its website, an office at 1125 Alma Road, Suite 160, Richardson, Texas 75081. *See* <https://www.dell.com/en-us/dt/office-locations.htm>.

12. Each of Dell Inc. and Dell Tech makes, uses, sells, offers for sale, and/or imports infringing products into and/or within this District, maintains a permanent and/or continuing presence within this District, and/or has the requisite minimum contacts with this District such that venue in this District is fair and reasonable. On information and belief, each of Dell Inc. and Dell Tech has transacted and, as of the time of the filing of this Complaint, is continuing to transact business within this District.

13. Further, Dell has admitted or not contested personal jurisdiction in this District and “admits that it employs workers who reside throughout the State of Texas, including in this District” *AX Wireless LLC v. Dell Inc. and Dell Technologies Inc.*, No. 2:22-cv-277-JRG-RSP, Dkt. 30 ¶¶ 7, 13 (E.D. Tex. Nov. 17, 2022).

14. Each of Dell Inc. and Dell Tech is properly joined under 35 U.S.C. § 299(a)(1) because Defendants commonly and/or jointly make, use, sell, offer to sell, and/or import infringing instrumentalities, such that at least one right to relief is asserted against Defendants jointly, severally, and/or in the alternative with respect to arising out of the same transaction, occurrence, or series of transactions or occurrences relating to the making, using, importing into the United

States, offering for sale, or selling of the same accused instrumentalities, as set forth in greater detail below.

15. Each of Dell Inc. and Dell Tech is properly joined under 35 U.S.C. § 299(a)(2) because Defendants make, use, sell, offer to sell, and/or import into the United States the same or similar accused instrumentalities, such that questions of fact that are common to all Defendants will arise, as set forth in greater detail below.

THE GENERAL VIDEO PATENTS

16. General Video is the assignee of, and has standing to sue and collect damages for Dell's past and ongoing infringement associated with its products' implementation of DisplayPort functionality of, each of the following patents: U.S. Patent Nos. 6,584,443 ("the 443 Patent"); 7,069,224 ("the 224 Patent"); 7,225,282 ("the 282 Patent"); 7,359,437 ("the 437 Patent"); 9,036,010 ("the 010 Patent"); and 9,843,786 ("the 786 Patent") (collectively, the "General Video Patents").

17. The 443 Patent issued on June 24, 2003. The named inventors of the 443 Patent are: Akihisa Kawamura; Naoki Ejima; and Masatoshi Shimbo. The 443 Patent expired on April 20, 2020. A true and correct copy of the 443 Patent is attached as Exhibit 1 hereto.

18. The 224 Patent issued on June 27, 2006. The named inventors of the 224 Patent are: Akihisa Kawamura; Naoki Ejima; and Masatoshi Shimbo. The 224 Patent expired on April 20, 2020. A true and correct copy of the 224 Patent is attached as Exhibit 2 hereto.

19. The 282 Patent issued on May 29, 2007. The named inventor of the 282 Patent is Jim Lyle. A true and correct copy of the 282 Patent is attached as Exhibit 3 hereto.

20. The 437 Patent issued on April 15, 2008. The named inventors of the 437 Patent are: Seung Ho Hwang; Jano Banks; Paul Daniel Wolf; Eric Lee; Baegin Sung; and Albert M. Scalise. A true and correct copy of the 437 Patent is attached as Exhibit 4 hereto.

21. The 010 Patent issued on May 19, 2015. The named inventor of the 010 Patent is Nicole Burleigh Shepherd. A true and correct copy of the 010 Patent is attached as Exhibit 5 hereto.

22. The 786 Patent issued on December 12, 2017. The named inventor of the 786 Patent is Nicoll Burleigh Shepherd. A true and correct copy of the 786 Patent is attached as Exhibit 6 hereto.

23. The General Video Patents are generally directed to the high-speed, efficient, and secure transmission of audio and video data between transmitting and receiving devices. As set forth more fully in the numbered counts below with respect to each General Video Patent, claimed inventions of the General Video Patents are essential to, and must be used to comply with, implementations of several versions of the DisplayPort standard promulgated by the Video Electronics Standards Association (VESA). The DisplayPort standards generally relate to the connection of source devices (e.g., desktop or laptop computers) and sink devices (e.g., computer monitors or laptop displays) and the transmission of packetized video, audio, and/or other forms of data between such source and sink devices. Further, and as also set forth more fully in the numbered counts below, claimed inventions of certain of the General Video Patents are essential to, and must be used to comply with, implementations of certain versions of the Embedded DisplayPort (eDP) standard, a companion standard to DisplayPort. The eDP standards are directed to display panel interfaces for portable and embedded devices and relate to the signaling interface between graphics cards and integrated displays, such as, for example, the integrated display on a laptop computer. Collectively and generally, the DisplayPort and eDP standards, implementations of which infringe one or more claims of any General Video Patent, are referred to herein as the

“Infringing DP Standards.”¹ VESA DisplayPort Standard, Version 1, Revision 2, which was introduced January 7, 2010 (“DP v1.2”) infringes at least one claim of each of the General Video Patents and is thus always an Infringing DP Standard relative to the assertions herein. Specific additional Infringing DP Standards, and versions thereof, are further identified with respect to each General Video Patent in the numbered counts below. As such, each of the General Video Patents is a standard essential patent (“SEP”) with respect to a respective identified subset of DisplayPort standards, eDP standards, or versions thereof.²

24. Each of the General Video Patents is included among the pool of patents licensed and offered for license as part of the DisplayPort Patent Portfolio License (the “DP License”) offered through Via Licensing Corporation d/b/a Via Licensing Alliance (“Via-LA”). See <https://www.via-la.com/licensing-2/displayport/>; <https://www.via-la.com/licensing-2/displayport/displayport-patent-list/> (see downloadable list of licensed patents). General Video, Maxell, Ltd., Rambus Inc., and Sony Group Corporation are currently licensors under the DP License. See <https://www.via-la.com/licensing-2/displayport/displayport-licensors/>. To date, almost 100 companies are licensed under the DP License. See <https://www.via-la.com/licensing-2/displayport/displayport-licensees/>.

¹ A standard itself cannot infringe a patent claim. Instead, implementations of a standard embodied in the operability or functionality of standard-compliant products, or methods or processes performed pursuant to implementations of a standard, can infringe apparatus and/or method claims of a patent. Subject to that understanding, for ease of reference herein, General Video refers to “Infringing DP Standards.”

² As the Federal Circuit has explained, “Creating some standards ... is a complicated process that involves the collaboration and can involve cooperation of a number of interested parties. Due to the collaborative nature of this process, the chosen standard may include technology developed by a number of different parties. Sometimes that technology is covered by patents. Because the standard *requires* that devices utilize specific technology, compliant devices *necessarily* infringe certain claims in patents that cover technology incorporated into the standard. These patents are called ‘standard essential patents’ (‘SEPs’).” *Ericsson, Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201, 1209 (Fed. Cir. 2014) (emphasis in original).

25. Before the General Video Patents' inclusion as part of the DP License, each such patent was determined by an independent patent consultant to be an SEP with respect to one or more versions of the DisplayPort and/or eDP standards.

26. VESA, which sets industry-wide interface standards for the PC, workstation, and consumer electronics display industry, approved the first version of the DisplayPort standard in May 2006.

27. "VESA is an international nonprofit corporation led by a board of directors, which represents a voting membership of more than 300 corporate members worldwide." See <https://www.displayport.org/>. Dell is a corporate member and partner of VESA. *Id.*

28. VESA describes DisplayPort as

the industry replacement for outmoded display technologies such as DVI, LVDS and VGA and it's currently being built into all new PC chipsets, GPU's [sic] and display controllers from major silicon manufacturers. DisplayPort utilizes a state-of-the-art digital protocol and provides an expandable foundation to enable amazing digital display technology while providing compatibility with existing equipment.

* * *

DisplayPort has unique features and capabilities that enable exciting new types of displays and display usages. And it doesn't require PC owners to replace all of their equipment because simple adaptors allow DisplayPort enabled devices to connect to monitors and projectors that use older technologies such as DVI, HDMI and VGA.

<https://vesa.org/about-displayport/>.

29. VESA further describes DisplayPort as "the Ultimate Digital Connection" that "[d]elivers a true digital display experience" and "[c]onnects to virtually any device."

<https://vesa.org/displayport-developer/about-displayport/>.

30. VESA adopted eDP in December 2008, and describes that standard as follows:

For devices such as laptop PCs with an embedded display, eDP is the electrical interface for transporting video data from the system's graphics hardware to the internal display panel. eDP is widely adopted for larger, higher-resolution displays

as it provides the highest resolutions, refresh rates and color depths using a low wire count with low EMI radiation.

* * *

eDP applications include laptops, all-in-one PCs, premium tablets, automotive displays, and other systems that incorporate a display panel with a video or graphics video source.

<https://vesa.org/featured-articles/vesa-publishes-embedded-displayport-standard-version-1-5/>.

DELL'S ACCUSED PRODUCTS

31. Dell makes, uses, sells, and/or offers to sell in, and/or imports into, the United States products that comply with, implement, and/or embody the Infringing DP Standards (collectively, the "Accused Dell Products"). As set forth more fully in the numbered counts below with respect to each General Video Patent, the Accused Dell Products and the operation thereof infringe the General Video Patents, including without limitation by complying with, implementing, and/or embodying the Infringing DP Standards. A non-exhaustive list of the Accused Dell Products is included in Appendix A hereto.

32. Dell has in the past made, used, sold, and/or offered to sell in, and/or imported into, the United States products that complied with, implemented, and/or embodied the Infringing DP Standards (with the products described in paragraph 31 above, also "Accused Dell Products"). As set forth more fully in the numbered counts below with respect to each General Video Patent, at least by having complied with, implemented, and/or embodied the Infringing DP Standards, the Accused Dell Products that Dell has in the past made, used, sold, offered to sell in, and/or imported into, the United States infringed the standard essential General Video Patents. A non-exhaustive list of Accused Dell Products that Dell has in the past made, used, sold, and/or offered to sell in, and/or imported into, the United States is included in Appendix A hereto.

33. Rule 3-1 of the Rules of Practice for Patent Cases before the Eastern District of Texas requires that "[n]ot later than 10 days before the Initial Case Management Conference with

the Court, [General Video] ... must serve on [Dell] a ‘Disclosure of Asserted Claims and Infringement Contentions[,]’” which identifies “each accused apparatus, product, device, process, method, act, or other instrumentality ... of [Dell] of which [General Video] *is aware*.” P.R. 3-1 (emphasis added). Rule 3-1 further requires that

[t]his identification shall be as specific as possible. Each product, device, and apparatus must be identified by name or model number, *if known*. Each method or process must be identified by name, if known, or by any product, device, or apparatus which, when used, allegedly results in the practice of the claimed method or process....

P.R. 3-1(b) (emphasis added).

34. Accordingly, in identifying Dell products for inclusion among the Accused Dell Products listed in Appendix A hereto, General Video has made such identification as specific as possible based on information of which General Video is aware and information known to General Video through a reasonable prefiling investigation conducted in the ordinary course of business.

35. Despite General Video’s diligent efforts in this regard, it is possible – if not likely – that General Video does not have reasonable access to, is not reasonably aware of, and cannot reasonably know, the identity of all products that Dell makes, uses, sells, and/or offers to sell in, and/or imports into, the United States that comply with, implement, and/or embody, or that Dell has in the past made, used, sold, and/or offered to sell in, and/or imported into, the United States that complied with, implemented, and/or embodied, the Infringing DP Standards. Accordingly, in addition to the Dell Products specifically identified in Appendix A hereto, General Video includes within the definition of “Accused Dell Products” all products that Dell has made, used, sold, and/or offered for sale in, and/or imported into, the United States at any time, that (1) have complied with, implemented, and/or embodied the Infringing DP Standards and/or (2) are or were no more than colorably different from any Accused Dell Product(s) specifically identified in Appendix A hereto

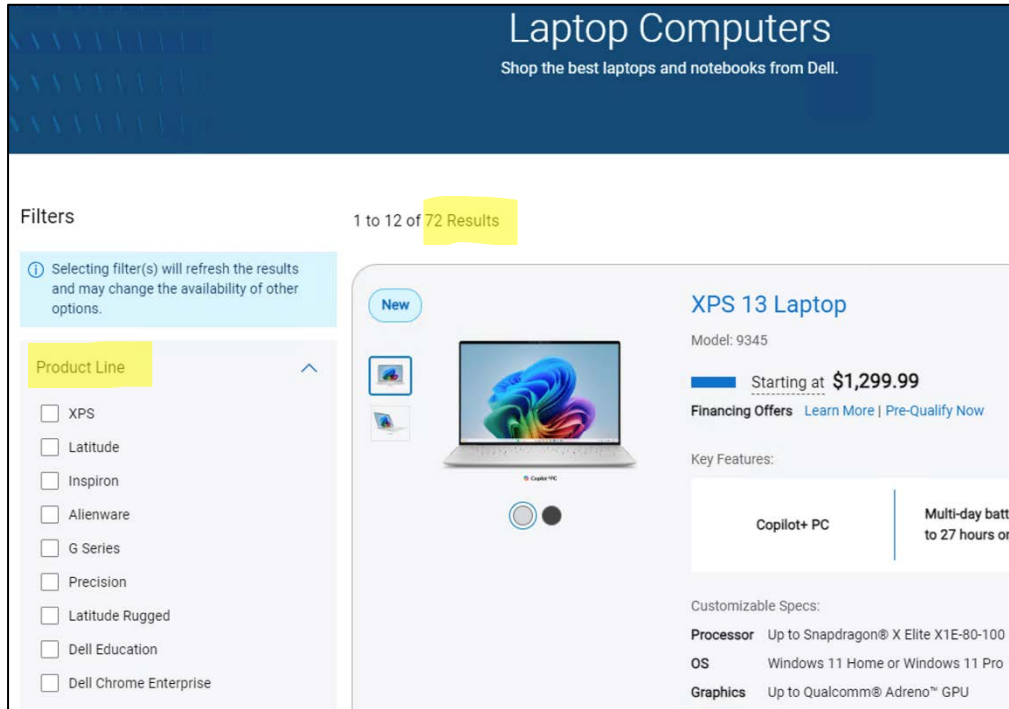
relative to such products' compliance with and/or implementation or embodiment of the Infringing DP Standards.

36. Upon General Video's discovery of more specific information concerning the identity of additional Accused Dell Products over the course of these proceedings, General Video will seasonably supplement or amend, and/or, if necessary, move for leave to supplement or amend, its identification of Accused Dell Products as permitted under this District's Practice Rules. *See* P.R. 3-6; *see also Team Worldwide Corp. v. Wal-Mart Stores, Inc.*, No. 2:17-cv-00235-JRG, 2018 WL 3533362 (Jul. 23, 2018 E.D. Tex.) (granting plaintiff's motion for leave to amend infringement contentions); *id.*, at *9 ("At the time [plaintiff] TWW served its original infringement contentions, TWW did not know the names or model numbers it seeks to add to its infringement contentions. To determine what it did not know, TWW visited Walmart stores, reviewed Walmart's online sales, and served upon Defendants interrogatories asking for such information. This is not, on its face, an unreasonable course of action.").

37. On information and belief, and unless otherwise made clear by the description of a specific version of the Infringing DP Standards, the Accused Dell Products employ, implement, embody, or utilize materially the same DisplayPort technology, such that the facts material to infringement by one Accused Dell Product will likely be material to all Accused Dell Products.

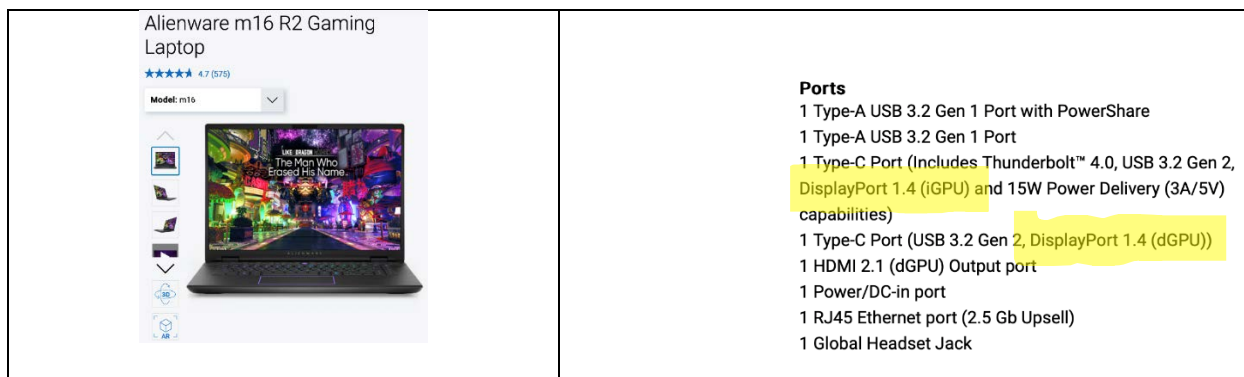
38. Four general categories of Accused Dell Products infringe the General Video Patents: Dell laptop computers (the "Accused Dell Laptops"); Dell desktop computers (the "Accused Dell Desktops"); Dell computer monitors (the "Accused Dell Monitors"); and Dell video/graphics cards (the "Accused Dell Graphics Cards").

39. As shown below, as of July 2024, Dell makes, uses, sells, and/or offers to sell in, and/or imports into, the United States at least seventy-two models of laptop computers, covering at least nine product lines.



See <https://www.dell.com/en-us/shop/dell-laptops/scr/laptops/> (last visited July 2, 2024) (highlighting added).

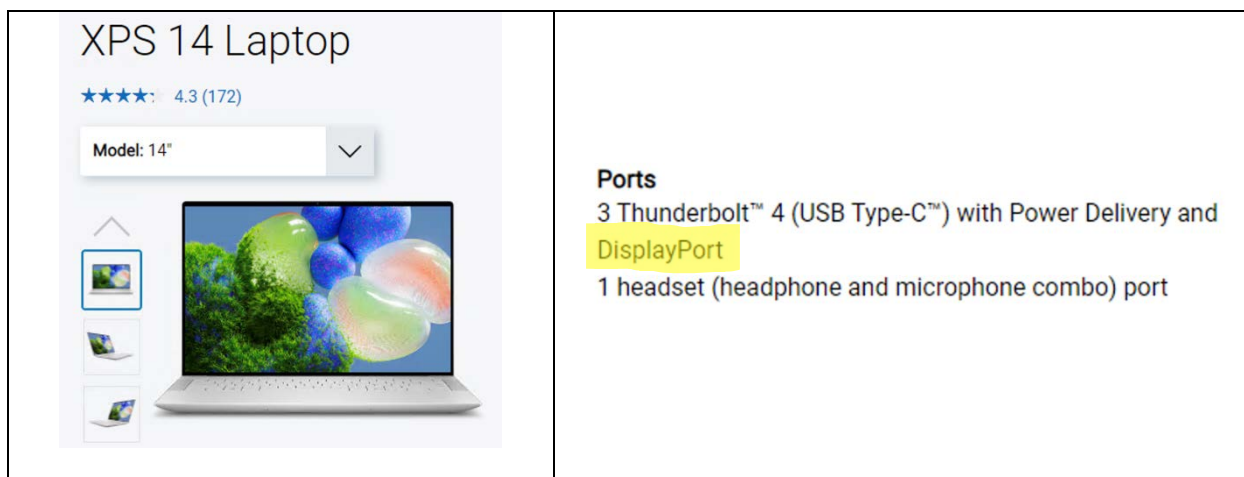
40. Based on information published on Dell’s website, many of the laptop computers Dell sells and offers to sell comply with, implement, and/or embody the Infringing DP Standards, and those that do so are, therefore, Accused Dell Laptops. For example, but without limitation, as shown below Dell advertises its Alienware m16 R2 Gaming Laptop as featuring two different types of DisplayPort media connectivity ports (i.e., DisplayPort 1.4 (iGPU) and DisplayPort 1.4 (dGPU)):



See <https://www.dell.com/en-us/shop/gaming-laptops/alienware-m16-r2-gaming-laptop/spd/alienware-m16-r2-laptop/> (last visited July 2, 2024) (highlighting added).

41. DisplayPort Standard Version 1, Revision 4 (“DP v1.4”), with which the DisplayPort 1.4 ports included with the Accused Dell Laptop described in paragraph 40 above comply, is an Infringing DP Standard as defined in paragraph 23 above and as further defined in the numbered counts below with respect to each of the General Video Patents.

42. By way of additional example, but not limitation, as shown below, Dell advertises its XPS 14 Laptop as featuring three DisplayPort media connectivity ports (i.e., “3 Thunderbolt™ 4 (USB Type-C™) with Power Delivery and DisplayPort”).

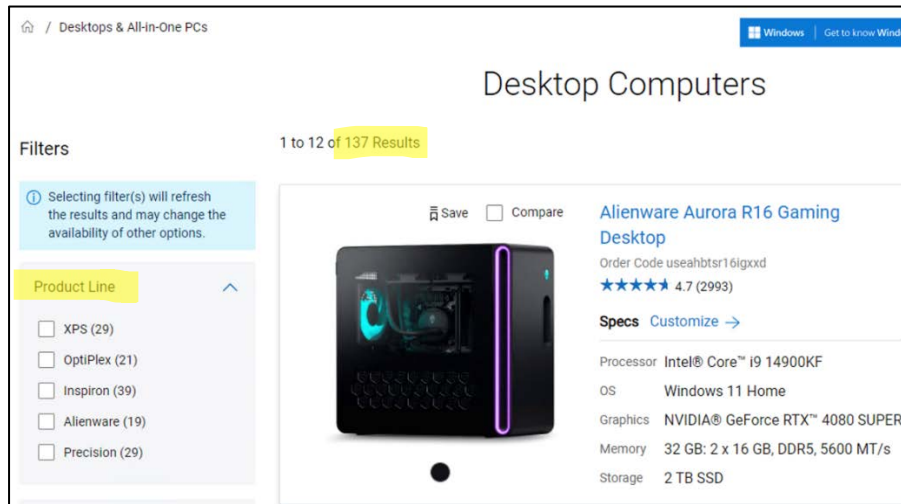


See <https://www.dell.com/en-us/shop/dell-laptops/new-xps-14-laptop/spd/xps-14-9440-laptop/> (last visited July 2, 2024) (highlighting added).

43. The three Thunderbolt 4, USB Type-C, ports included with the Accused Dell Laptop described in paragraph 42 above comply with, implement, and embody DP v2.1, an Infringing DP Standard as defined in paragraph 23 above and as further defined in the numbered counts below with respect to each of the General Video Patents. *See, e.g.,* <https://www.dell.com/en-us/shop/dell-computer-laptops/xps-14-laptop/spd/xps-14-9440-laptop> (depicting and describing “Thunderbolt™ 4 (USB Type-C™) with DisplayPort 2.1 and Power Delivery”).

44. A non-exhaustive list of Accused Dell Laptops is included in the list of Accused Dell Products identified in Appendix A hereto.

45. As shown below, as of July 2024, Dell makes, uses, sells, and/or offers to sell in, and/or imports into, the United States at least 137 models of desktop computer, covering at least five product lines.



See, <https://www.dell.com/en-us/shop/desktop-computers/sr/desktops> (last visited July 2, 2024) (highlighting added).

46. Based on information published on Dell’s website, many of the desktop computers Dell sells and offers to sell comply with, implement, and/or embody the Infringing DP Standards, and those that do so are, therefore, Accused Dell Desktops. For example, but without limitation,

as shown below Dell advertises all 29 models of its XPS Desktop Computer as featuring at least one DisplayPort media connectivity port:

The image shows a screenshot of the Dell XPS Desktop product page. On the left is a photograph of the XPS Desktop tower. To its right is the product listing, which includes the title 'XPS Desktop', a 4.4-star rating from 3607 reviews, and technical specifications: 14th Gen Intel® Core™ i7-14700 processor (20 Core, 28 threads, 2.1 GHz to 5.3GHz), Windows 11 Pro, English, French, Spanish; NVIDIA® GeForce RTX™ 4060 Ti, 8 GB GDDR6; 32GB DDR5, 1X32GB, 5600 MT/s; up to 64GB (additional memory sold separately); 1 TB, M.2, PCIe NVMe, SSD; and 460W Platinum power supply. The price is listed as \$1,759.99 with a current price of \$1,409.99. Below the price are links for 'Ports & Slots', 'Price Match Guarantee', and 'Financing Offers'.

Below the product listing is a detailed view of the back panel of the XPS Desktop tower, annotated with red boxes and dashed lines. The annotations include:

- A red box labeled 'Ports & Slots' with a dashed line pointing to the top of the tower.
- A red box labeled 'Ports & Slots' with a dashed line pointing to the front panel of the tower.
- A red box labeled '8. DisplayPort 1.4 (UMA only)' with a dashed line pointing to the DisplayPort 1.4 port on the back panel.

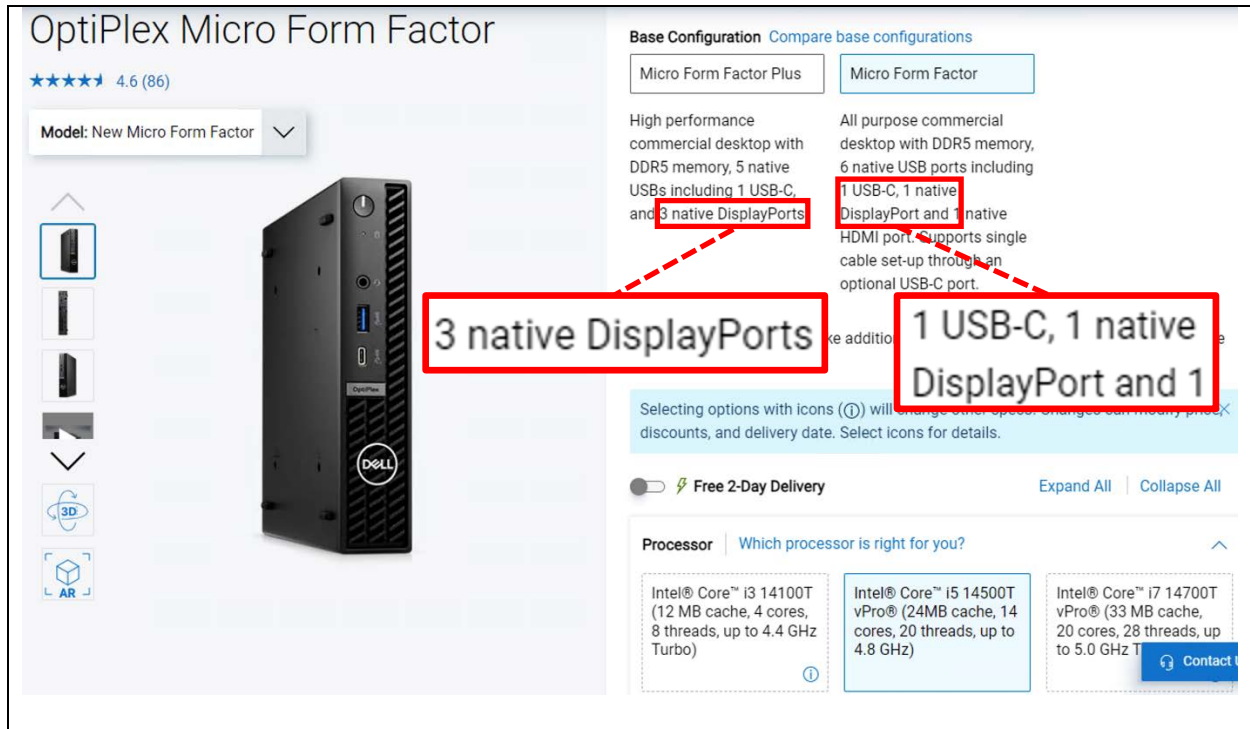
At the bottom of the back panel view is a numbered legend:

1. Power button
2. SD card slot
3. 3.5 mm headphone/microphone combo jack
- 4a. USB 3.2 Gen 1 Type-A (x2)
- 4b. USB 3.2 Gen 1 Type-A with Power Share
5. USB 3.2 Gen 2 Type-C™ with PowerShare (no video/audio output)
6. Kensington lock
7. 7.1 audio connector stack of re-taskable audio ports
8. DisplayPort 1.4 (UMA only)
9. USB 3.2 Type-A Gen 1 (x2)

See, e.g., <https://www.dell.com/en-us/shop/desktop-computers/xps-desktop/spd/xps-8960-desktop/usextpbts8960gskm> (last visited July 2, 2024) (annotations added).

47. The DisplayPort 1.4 port included with the Accused Dell Desktop described in paragraph 46 above complies with, implements, and embodies DP v1.4, an Infringing DP Standard as defined in paragraph 23 above and as further defined in the numbered counts below with respect to each of the General Video Patents.

48. By way of additional example, but not limitation, as shown below, Dell advertises all 21 models of its OptiPlex Desktop Computer as featuring at least one, and, for several configurations of the OptiPlex models, three, DisplayPort media connectivity port(s):

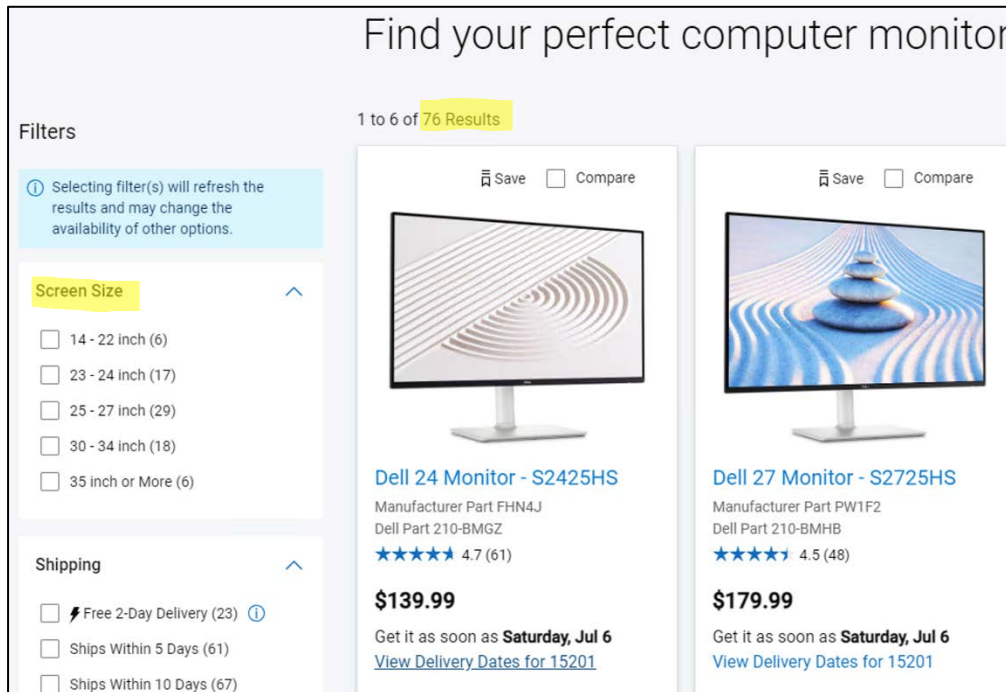


See, e.g., https://www.dell.com/en-us/shop/desktop-computers/new-optiplex-micro-form-factor/spd/optiplex-7020-micro/s012do7020mffus_vp (last visited July 3, 2024) (annotations added).

49. The three native DisplayPorts and one native DisplayPort included with the two versions of the OptiPlex Micro Form Factor Accused Dell Desktop, respectively, described in paragraph 48 above comply with, implement, and embody DP v1.4a, an Infringing DP Standard as defined in paragraph 23 above and as further defined in the numbered counts below with respect to each of the General Video Patents.

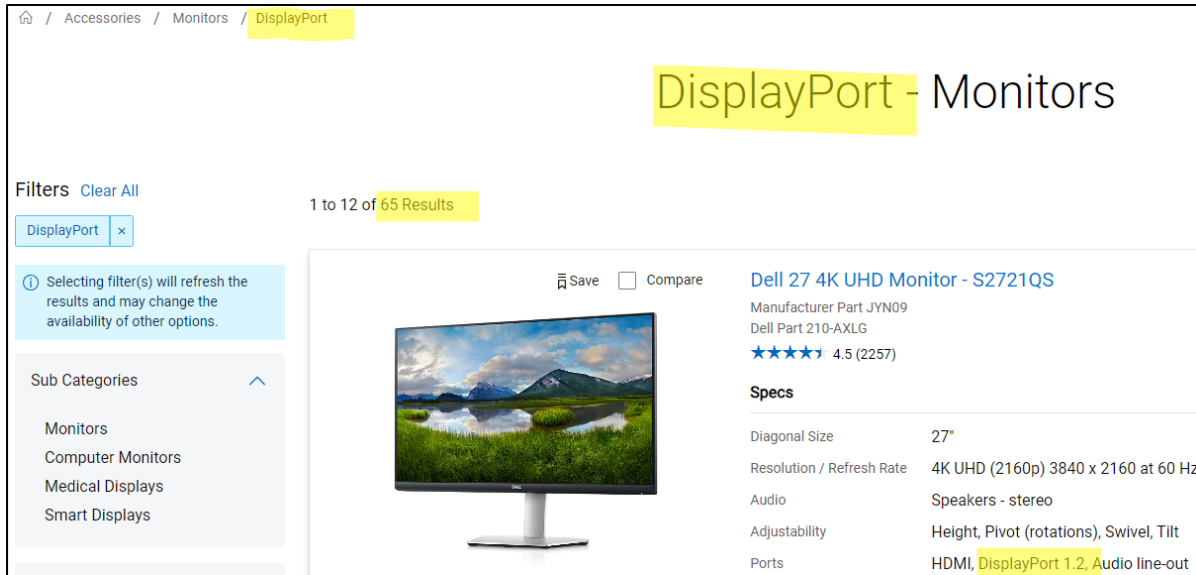
50. A non-exhaustive list of Accused Dell Desktops is included in the list of Accused Dell Products identified in Appendix A hereto.

51. As shown below, as of July 2024, Dell makes, uses, sells, and/or offers to sell in, and/or imports into, the United States at least 76 models of computer monitor, covering five screen size categories.



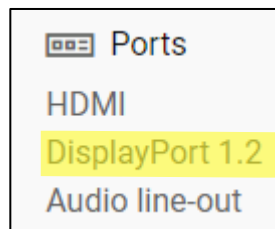
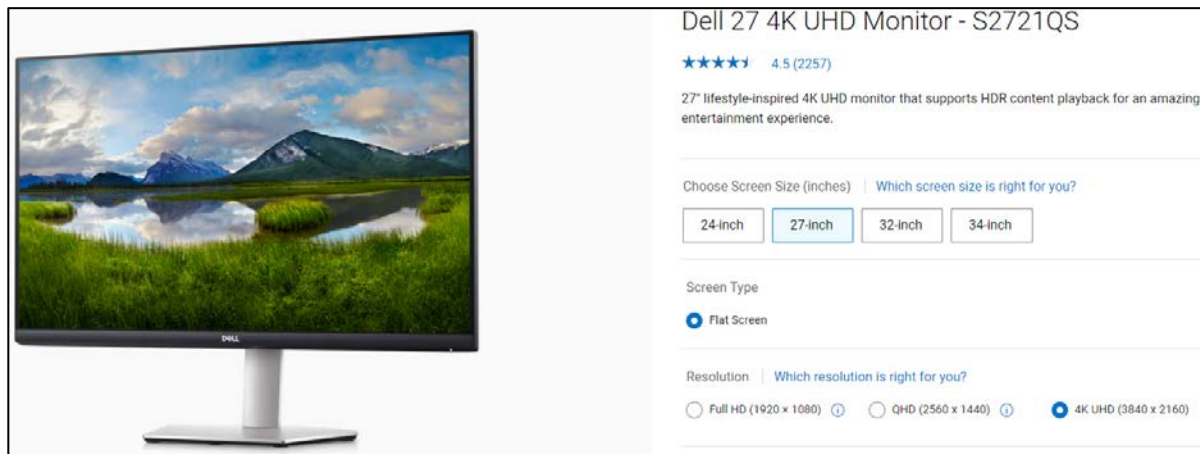
See, e.g., <https://www.dell.com/en-us/shop/all-monitors/sac/monitors/all-monitors> (last visited July 3, 2024) (highlighting added).

52. Based on information published on Dell’s website, the majority of computer monitors Dell sells and offers to sell comply with, implement, and/or embody the Infringing DP Standards, and those that do so are, therefore, Accused Dell Monitors. As shown below, as of July 2024, Dell makes, uses, sells, and/or offers to sell in, and/or imports into, the United States at least 65 models of computer monitor under the heading “DisplayPort – Monitors.”



See, e.g., <https://www.dell.com/en-us/shop/monitors/ar/6481/displayport?appliedRefinements=40647> (highlighting added).

53. By way of example, but without limitation, Dell advertises its Dell 27 4K UHD Monitor – S2721QS as featuring a DisplayPort media connectivity port:

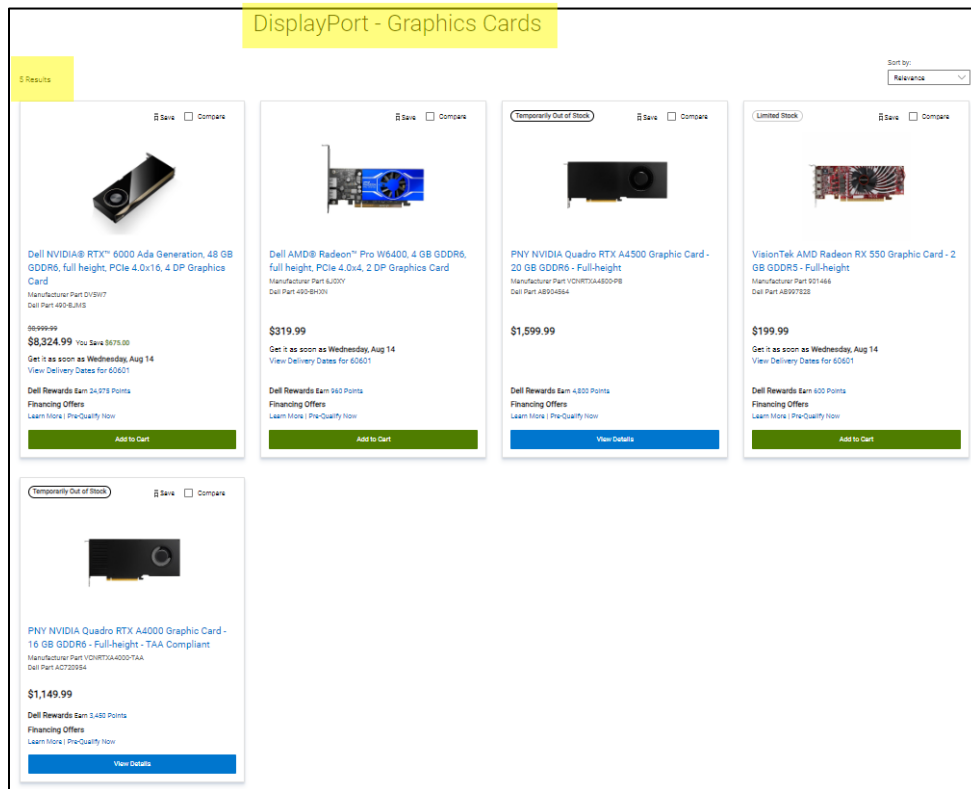


See <https://www.dell.com/en-us/shop/dell-27-4k-uhd-monitor-s2721qs/apd/210-axlg/monitors-monitor-accessories> (lasted visited July 22, 2024) (highlighting added).

54. The DisplayPort media connectivity port included with the Accused Dell Monitor described in paragraph 53 above complies with, implements, and embodies DP v1.2, an Infringing DP Standard as defined in paragraph 23 above and as further defined in the numbered counts below with respect to each of the General Video Patents.

55. A non-exhaustive list of Accused Dell Monitors is included in the list of Accused Dell Products identified in Appendix A hereto.

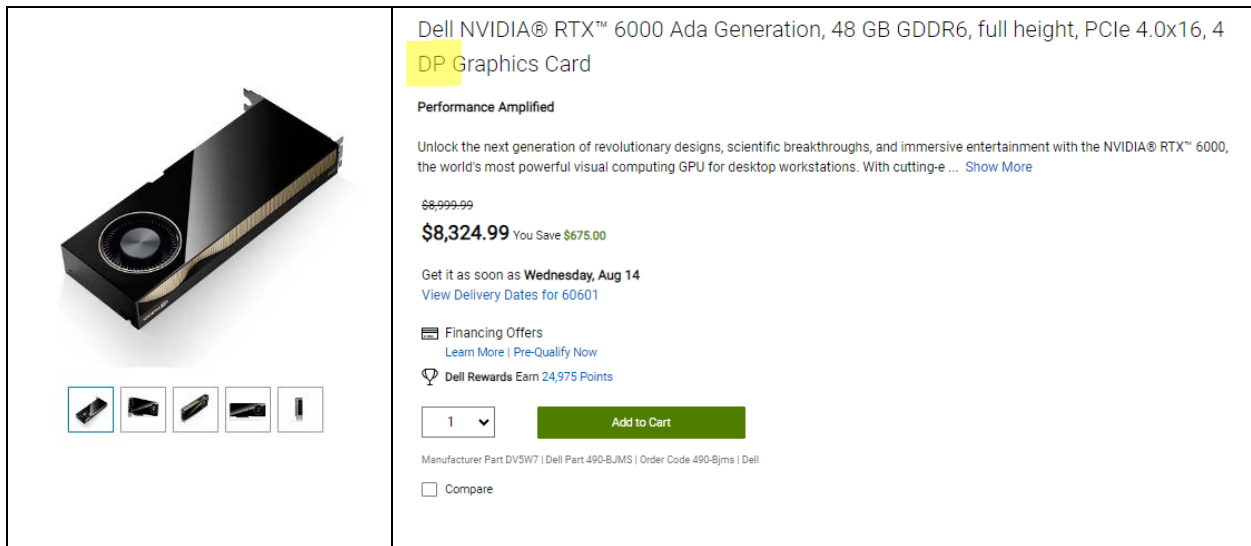
56. As shown below, as of August 2024, Dell uses, sells, and/or offers to sell in, and/or imports into, the United States at least 5 models of graphics card under the heading “DisplayPort – Graphics Cards.”



See <https://www.dell.com/en-us/shop/graphics-cards/ar/8534/displayport?appliedRefinements=44668> (last visited 8/12/2024) (highlighting added).

57. Each of the graphics cards sold and offered for sale by Dell, and described in paragraph 56 above, comply with, implement, and/or embody the Infringing DP Standards, and those that do so are, therefore, Accused Dell Graphics Cards.

58. By way of example, but without limitation, Dell advertises the Dell NVIDIA® RTX™ 6000 Ada Generation, 48 GB GDDR6, full height, PCIe 4.0x16, 4 DP Graphics Card as featuring four DP v1.4-compliant DisplayPort media connectivity ports:



Interfaces
4 x DisplayPort

Compliant Standards
DisplayPort 1.4

See https://www.dell.com/en-us/shop/dell-nvidia-rtx-6000-ada-generation-48-gb-gddr6-full-height-pcie-40x16-4-dp-graphics-card/apd/490-bjms/graphic-video-cards#techspecs_section (last visited 8/12/2024) (highlighting added).

59. The four DisplayPort media connectivity ports included with the Accused Dell Graphics Cards described in paragraph 58 above comply with, implement, and embody DP v1.4,

an Infringing DP Standard as defined in paragraph 23 above and as further defined in the numbered counts below with respect to each of the General Video Patents.

60. Dell currently advertises on its website that the representative examples of Accused Dell Products described above, and currently advertises, or has in the past advertised, that the numerous, specific Accused Dell Products identified in Appendix A hereto, comply with and utilize, or have in the past complied with and utilized, one or more of the Infringing DP Standards. In addition to Dell's own advertising representations in this regard, VESA identifies hundreds of Dell products as being "VESA CERTIFIED DISPLAYPORT PRODUCTS." *See, e.g.*, <https://www.diplayport.org/product-category/computing/?ps=Dell&pman%5B0%5D=dell> (first of 19 search result pages identifying as Certified DisplayPort Products 150 Dell desktop, laptop, and all-in-one computers); <https://www.displayport.org/product-category/monitors-tvs/?ps=Dell> (first of 17 search result pages identifying as Certified DisplayPort Products 130 Dell computer monitors, TVs, and DP displays).

DELL'S KNOWLEDGE OF THE ASSERTED PATENTS

61. In 2015, MPEG LA, a patent pool administration company, administered the DP License (*see* paragraph 24 above). which provided licensing rights to a portfolio of patents found by an independent patent consultant to each be essential to various respective DisplayPort standards, including DP v1.2, an Infringing DP Standard as defined in paragraph 23 above. In April 2023, MPEG LA was acquired by Via-LA.

62. On information and belief, in early 2015, MPEG LA, on behalf of General Video and its predecessors-in-interest, provided notice to Dell of (1) of the U.S. and foreign DisplayPort SEPs then administered and licensed by MPEG LA; (2) that such patents had been found by an independent patent consultant to be essential to various DisplayPort standards, including DP v1.2, an Infringing DP Standard as defined in paragraph 23 above; and (3) that Dell, as a "company that

offer[ed] products with DisplayPort technology[,] need[ed] to be licensed under [those] essential patents and [would] benefit from the coverage that [the] DisplayPort License provides.” A copy of a representative notice letter dated March 16, 2015, is attached as Exhibit 7 hereto. A list of patents licensed under the DP License as of or about that date is attached as Exhibit 8 hereto (DisplayPort Attachment 1, revised 12/1/2015).

63. On information and belief, U.S. Patent Nos. 7,268,706 and 8,326,129, which appear in the list attached as Exhibit 8 hereto, were not licensed under the DP License Agreement as of MPEG LA’s early 2015, notice letter to Dell. Further, U.S. Patent No. 6,151,334, which is listed in Exhibit 8 hereto as having expired on October 4, 2015, was licensed under the DP License Agreement and still in-term as of early 2015.

64. On further information and belief, in the same communication described in paragraph 63 above, MPEG LA, on behalf of General Video and its predecessors-in-interest, provided notice to Dell of the remainder of the General Video Patents and Dell’s infringement thereof. Specifically, MPEG LA provided Dell with: (1) an unsigned proposed version of the DP License, in which MPEG LA advised Dell that (a) the “DP Patent Portfolio” included “the portfolio of DP Essential Patent(s) which are initially identified in Attachment 1 hereto, [and] which portfolio may be supplemented or reduced from time to time in accordance with the provisions of this Agreement,” DP License § 1.7 (revised March 5, 2015), Exhibit 9 hereto, and (b) “amendments to Attachment 1 hereto, if any, shall be effective upon the posting of the new Attachment 1 on the website of the Licensing Administrator and such posting shall constitute notice pursuant to this Section,” *id.* § 7.2.1, Ex. 9 hereto; and (2) a presentation entitled, on information and belief, “DisplayPort Patent Portfolio License Briefing,” which presentation, on information and belief, notified Lenovo that the list of DisplayPort essential patents, i.e., “Attachment 1 to the License[,]”

is updated regularly” and can be found at “<http://www.mpegla.com/main/programs/DisplayPort/Pages/PatentList.aspx>.”

65. On information and belief, by posting new versions of Attachment 1 on its website as provided for in section 7.2.1 of the DP License, MPEG LA, as of the dates set forth below, provided Dell with notice of the remainder of the General Video Patents and Dell’s infringement thereof at least by MPEG LA’s assertion that Dell had to obtain rights to those and the other patents in the DP Patent Portfolio by entering into the DP License:

- March 1, 2016: the 010 Patent (DisplayPort Attachment 1, revised 3/1/2016, Ex. 13 hereto);
- December 1, 2018: the 282 Patent, the 443 Patent, and the 224 Patent (DisplayPort Attachment 1, revised 12/1/2018, Ex. 10 hereto);
- June 1, 2021: the 437 Patent (DisplayPort Attachment 1, revised 6/1/2021, Ex. 11 hereto); and
- June 1, 2024: the 786 Patent (DisplayPort Attachment 1, revised 6/1/2024, Ex. 12 hereto).

COUNT I: THE 443 PATENT

66. Appendix B hereto is an exemplary patent claim chart that details how the inventions of claims 7 and 9 of the 443 Patent were essential to implementations of DP v1.2, relative to the transport of an audio stream between a source device (e.g., a desktop or laptop computer) and a sink device (e.g., a computer monitor).³ The versions of the DisplayPort standard listed below (and applying the “DP v” abbreviation) include features that are either identical to, or materially the same as, the features of DP v1.2 shown to infringe claims 7 and 9 of the 443 Patent

³ The 443 Patent expired on April 20, 2020.

in Appendix B hereto. As such, these versions of the standard also infringed the 443 Patent during the term of that patent:

- DP v1.1, introduced April 2, 2007;
- DP v1.1a, introduced January 11, 2008;
- DP v1.2a, introduced January 2013;
- DP v1.3, introduced September 15, 2014;
- DP v1.4, introduced March 1, 2016;
- DP v1.4a, introduced April 2018; and
- DP v2.0, introduced June 26, 2019

(collectively with DP v1.2, the “443 Infringing DP Standards”). Thus, whoever used one or more products to perform the methods described in Appendix B hereto with respect to DP v1.2, and described in the corresponding portions of the other 443 Infringing DP Standards, during the term of the 443 Patent, directly infringed claims 7 and 9 of that patent in violation of 35 U.S.C. § 271(a). *See, e.g., Fujitsu Ltd. v. Netgear Inc.*, 620 F.3d 1321, 1328 (Fed. Cir. 2010) (although “claims should be compared to the accused product to determine infringement,” “if an accused product operates in accordance with a standard, then comparing the claims to that standard is the same as comparing the claims to the accused product”).

67. On information and belief, during the term of the 443 Patent, Dell directly infringed at least claims 7 and 9 of that patent by using Accused Dell Products in a manner that complied with the descriptions provided in Appendix B hereto with respect to DP v1.2, and the descriptions provided in the corresponding portions of the other 443 Infringing DP Standards.

68. By way of example and not limitation, and on information and belief, during the term of the 443 Patent, Dell employees used the Accused Dell Products in such an infringing

manner when transmitting audio signals from Accused Dell Laptops, Accused Dell Desktops, and any desktop computers with installed Accused Dell Graphics Cards⁴ via a DisplayPort connection to Accused Dell Monitors, where such audio signals were played as audible sound through (i) one or more built-in speakers on the monitor(s), (ii) one or more external speakers connected to an audio line-out port on the monitor(s), or (iii) headphones or earphones connected to an audio line-out port on the monitor(s). On its website, Dell explains that “a DisplayPort interface can support from two screens (2560x1600 resolutions) up to four (4) screens. [sic] (1920x1200 resolutions) [with] [e]ach screen receiv[ing] independent video and *audio streams*.” <https://www.dell.com/support/kbdoc/en-us/000139468/frequently-asked-questions-faqs-about-the-hdmi-port-on-a-dell-pc?msocid=162f38e1ab1b603c00922c8daf1b6e19> (emphasis added). Dell further explains that “DisplayPort was designed specifically for computers. It is the ultimate display interface to replace the older video standards....” *Id.*

69. During the term of the 443 Patent, Dell advertised Accused Dell Laptops, Desktops, Graphics Cards, and Monitors as supporting DisplayPort media connectivity. By way of example and not limitation, as of and before April 16, 2020, Dell made, used, offered for sale, and sold its “New Inspiron 13 7000 2-in-1 Laptop,” which featured a “Thunderbolt™ 3 with Power Delivery & Display Port” media connectivity port.⁵ By way of further example and not limitation, as of and before December 9, 2019, Dell made, used, offered for sale, and sold at least four configurations of its “XPS Desktop,” each of which configurations featured a “Display Port” media connectivity

⁴ Relative to the Accused Dell Graphics Cards, the alleged direct infringement of method claims 7 and 9 of the 443 Patent by Dell and Dell customers in this Count I presumes performance of the claimed methods by Dell’s and Dell’s customers’ use, in part, of computers having installed Accused Dell Graphics Cards.

⁵ See, e.g., <https://www.dell.com> (archived at *Wayback Machine*, <https://web.archive.org/web/20200416221019mp/https://www.dell.com/en-us/shop/dell-laptops/new-inspiron-13-7000-2-in-1-laptop/spd/inspiron-13-7390-se-2-in-1-laptop> (capture dated 4/16/2020)).

port.⁶ By way of further example and not limitation, as of and before May 5, 2019, Dell at least offered for sale and sold the “AMD Radeon R7 450 Full Height 4GB (DP/DP/SL-DVI-I),” which featured a “DisplayPort 1.2” output media connectivity port.⁷ By way of still further example but not limitation, as of and before July 3, 2018, Dell made, used, offered for sale, and sold its “27 Ultra HD 4k Monitor - P2715Q,” which featured standard “DisplayPort 1.2” input and output media connectivity ports, a “Mini DisplayPort” media connectivity port, and an “[a]udio line-out.”⁸

70. By way of example and not limitation, and on information and belief, during the term of the 443 Patent, Dell employees used Accused Dell Products such as the Accused Dell Laptop, Desktop, Graphics Card, and Monitor described in paragraph 69 above, and other Accused Dell Laptops, Desktops, Graphics Cards, and Monitors, in the directly infringing manner described in paragraph 68 above, described in Appendix B hereto with respect to DP v1.2, and described in the corresponding portions of the other 443 Infringing DP Standards, when transmitting, receiving, playing, and/or recording audio signals at, between, and/or among Dell’s numerous offices and facilities in the United States. *See, e.g.*, https://www.dell.com/en-us/dt/office-locations.htm?msoc_kid=162f38e1ab1b603c00922c8daf1b6e19 (identifying 44 Dell Tech office locations in the United States). On information and belief, one of numerous examples of such directly infringing uses was when Dell employees participated in video conferences or Voice over Internet Protocol (VoIP)

⁶ *See, e.g.*, <https://www.dell.com> (archived at *Wayback Machine*, <https://web.archive.org/web/20191209164311/https://www.dell.com/en-us/shop/dell-desktop-computers/xps-desktop/spd/xps-8930-desktop> (capture dated 12/9/2019)).

⁷ *See, e.g.*, <https://www.dell.com> (archived at *Wayback Machine* <https://web.archive.org/web/20190505180821/https://www.dell.com/en-us/shop/graphic-video-cards/ar/7729> (capture dated 5/5/2019); *see also* <https://www.techpowerup.com/gpu-specs/radeon-r7-450-oem.c2890> (listing DP v1.2).

⁸ *See, e.g.*, <https://www.dell.com> (archived at *Wayback Machine*, <https://web.archive.org/web/20180703134220/https://www.dell.com/en-us/work/shop/dell-27-ultra-hd-4k-monitor-p2715q/apd/210-adof/monitors-monitor-accessories> (capture dated 7/3/2018)).

calls using an Accused Dell Laptop, Accused Dell Desktop, or Accused Dell Graphics Card connected to an Accused Dell Monitor as described above.

71. On information and belief, during the term of the 443 Patent, another example of such directly infringing use was when Dell employees streamed or played recorded or real-time audio-video content using Accused Dell Laptops, Accused Dell Desktops, or Accused Dell Graphics Cards, such as those described in paragraph 69 above, and other Accused Dell Laptops, Desktops, and Graphics Cards, connected to Accused Dell Monitors, such as the one described in paragraph 69 above, and other Accused Dell Monitors, in the manner generally described in paragraph 68 above, described in Appendix B hereto with respect to DP v1.2, and described in the corresponding portions of the other 443 Infringing DP Standards. On information and belief, one of numerous examples of such directly infringing uses was when Dell employees played on an Accused Dell Laptop, Accused Dell Desktop, or Accused Dell Graphics Card connected to an Accused Dell Monitor as described above any of the hundreds of videos with audio content that Dell itself made available for streaming from its online Support Video Library. *See* <https://www.dell.com/support/contents/en-us/videos/>.

72. On information and belief, during the term of the 443 Patent, Dell employees also used Accused Dell Products in the directly infringing manner described above, described in Appendix B hereto with respect to DP v1.2, and described in the corresponding portions of the other 443 Infringing DP Standards, when they demonstrated Accused Dell Products to actual and potential customers of Accused Dell Products at trade shows, during product demonstrations, and – generally – as part of Dell’s marketing and sales operations. By way of example and not limitation, Dell attends and exhibits its products at the annual Consumer Electronics Show (CES) trade show. By way of further example and not limitation, the “Dell UltraSharp 40 Curved

Thunderbolt Hub Monitor,” Model U4025QW – an Accused Dell Monitor (see Appendix A) –, was honored as a “CES 2024 Innovation Award Product” at the 2024 CES, held in Las Vegas, Nevada, January 9 to January 12, 2024. <https://www.ces.tech/innovation-awards/honorees/2024/honorees/d/dell-ultrasharp-40-curved-thunderbolt-hub-monitor.aspx>. Similarly, and by way of example and not limitation, the Dell “Alienware m18 R2 Gaming Laptop,” an Accused Dell Laptop (see Appendix A), was honored as a “CES 2023 Innovation Award Product” at the 2023 CES, held in Las Vegas January 5 to 8, 2023. <https://www.ces.tech/innovation-awards/honorees/2023/honorees/a/alienware-m18.aspx>. During the term of the 443 Patent, Dell attended CES 2020, held in Las Vegas January 7 to 10, 2020. *See, e.g.*, <https://www.dell.com/en-us/blog/ces-2020-dell-and-alienware-bring-battlecry-range-of-gaming-innovations/?msoclid=162f38e1ab1b603c00922c8daf1b6e19>. Among the numerous products Dell showcased at CES 2020 was its Alienware 25 Gaming Monitor AW2521HF, *id.*, which featured a DP 1.2 input and a 3.5mm audio line-out port, *see, e.g.*, https://www.rtings.com/monitor/reviews/dell/alienware-aw2521hf#test_1426. Dell attended and exhibited its products at CES during the term, and before the April 20, 2020, expiration, of the 443 Patent. *See, e.g.*, <https://blogs.windows.com/windowsexperience/2017/01/05/ces-2017-dell-adds-convertible-xps-13-model-unveils-8k-monitor/> (“CES 2017: Dell adds convertible XPS 13 model, unveils 8K monitor and more”) (introducing the Dell Precision 7720 laptop and Dell Latitude 7285, each of which, on information and belief, implemented one or more of the Infringing DP Standards).

73. On information and belief, during the term of the 443 Patent, Dell employees also used Accused Dell Products in the directly infringing manner described above, described in Appendix B hereto with respect to DP v1.2, and described in the corresponding portions of the other 443 Infringing DP Standards, when providing customer support to Dell’s actual and potential

customers. By way of example and not limitation, and on information and belief, Dell employees used Accused Dell Products when troubleshooting and resolving technical issues for Dell's actual and potential customers. In this regard, Dell offered during the term of the 443 Patent, and currently offers, robust technical support services, which services include telephone support, online support, and online support libraries and video libraries that feature articles, tutorials, and videos to assist in troubleshooting and maintaining Accused Dell Products. *See, e.g.,* <https://www.dell.com/support/home/en-us>.

74. By way of further example and not limitation, and on information and belief, during the term of the 443 Patent, Dell employees used and controlled Dell customers' Accused Dell Products in the directly infringing manner described above, described in Appendix B hereto with respect to DP v1.2, and described in the corresponding portions of the other 443 Infringing DP Standards, when remotely controlling customers' Accused Dell Products using the Dell RemoteAssist program, which "gives Dell Support representatives the ability to control [a customer's] computer for troubleshooting purposes" and "have full access to [the customer's] system." *See, e.g.,* <https://www.dell.com/support/incidents-online/en-us/remoteassist>.

75. On information and belief, during the term of the 443 Patent, Dell employees also used Accused Dell Products in the directly infringing manner described above, described in Appendix B hereto with respect to DP v1.2, and described in the corresponding portions of the other 443 Infringing DP Standards, when they tested the Accused Dell Products to confirm compliance with the portions of DP v1.2 described in Appendix B hereto and/or the portions of the other 443 Infringing DP Standards. On information and belief, Dell employees conducted at least some of the testing described in this paragraph using one or more of the "DisplayPort

Authorized Test Tools” previously and still available via links on VESA’s website. *See, e.g.*, <https://vesa.org/authorized-test-tools/>.

76. Further, and on information and belief, with knowledge of the General Video Patents as described in paragraphs 61 to 65 above, Dell actively induced infringement of at least claims 7 and 9 of the 443 Patent, during the term of that patent, in violation of 35 U.S.C. § 271(b). On information and belief, past users and customers of the Accused Dell Products directly infringed at least claims 7 and 9 of the 443 Patent when they used the Accused Dell Products for such products’ ordinary, customary, and intended use, and, in particular, used Accused Dell Products in the directly infringing manner described in Appendix B hereto with respect to DP v1.2, and described in the corresponding portions of the other 443 Infringing DP Standards. On information and belief, Dell’s affirmative acts of inducement included, without limitation and with specific intent to encourage the infringement, having knowingly induced consumers to use the Accused Dell Products within the United States in the ordinary, customary, and intended way, and, in particular, in the directly infringing manner described in Appendix B hereto with respect to DP v1.2, and described in the corresponding portions of the other 443 Infringing DP Standards, by, directly or through intermediaries, having supplied such Accused Dell Products to customers within the United States and having instructed and encouraged such customers how to use the Accused Dell Products in the ordinary, customary, and intended way, and, in particular, in the directly infringing manner described in Appendix B hereto with respect to DP v1.2, and described in the corresponding portions of the other 443 Infringing DP Standards, which use Dell knew or should have known infringed at least claims 7 and 9 of the 443 Patent. Dell’s affirmative acts of inducement further included, without limitation and with specific intent to encourage the infringement, any one or a combination of encouraging and/or facilitating third-party infringement

through having advertised, marketed, and disseminated the Accused Dell Products and components thereof, including DisplayPort firmware and/or drivers; and having created, published and/or provided sales, promotional, and marketing materials; supporting materials; product manuals; user guides; and/or technical support and other information relating to the Accused Dell Products and DisplayPort functionality thereof (*see, e.g.*, several links in the paragraphs above to product and support pages and videos from Dell's website) during the term of the 443 Patent.

77. Further and in the alternative, on information and belief, with knowledge of the General Video Patents as described in paragraphs 61 to 65 above, Dell contributed to the infringement of at least claims 7 and 9 of the 443 Patent, during the term of that patent, in violation of 35 U.S.C. § 271(c). Users and customers of the Accused Dell Products directly infringed at least claims 7 and 9 of the 443 Patent when they used the Accused Dell Products for such products' ordinary, customary, and intended use, and, in particular, in the directly infringing manner described in Appendix B hereto with respect to DP v1.2, and described in the corresponding portions of the other 443 Infringing DP Standards. Dell's contributory infringement included, without limitation, Dell's sale and provision of Accused Dell Products, including DisplayPort components thereof, to customers in the United States for use in practicing at least claims 7 and 9 of the 443 Patent, during the term of that patent, knowing that such products and components were material to practicing the claimed inventions, were not staple articles or commodities of commerce suitable for substantial non-infringing use, and were especially made or especially adapted for use in an infringement of the 443 Patent. Specifically, Dell sold the Accused Dell Products to customers knowing that the customers' operation of such products directly infringed at least claims 7 and 9 of the 443 Patent when used for their normal and intended purpose, and, in particular, when used in the directly infringing manner described in Appendix B hereto with respect to DP

v1.2, and described in the corresponding portions of the other 443 Infringing DP Standards. The Accused Dell Products and DisplayPort components thereof were made for the specific purpose of operating as described in Appendix B hereto with respect to DP v1.2, and as described in such corresponding portions of the other 443 Infringing DP Standards, and have no substantial non-infringing use.

78. On information and belief, as of December 1, 2018, Dell knew of the 443 Patent and MPEG LA's assertion that Dell was an infringer as a "company that offers products with DisplayPort technology[,] need[ed] to be licensed under the[] essential patents" (Ex. 7 hereto, representative notice letter dated March 16, 2015), including the 443 Patent (Ex. 10 hereto, DisplayPort Attachment 1, revised 12/1/2018 (providing notice of addition to the DP License of the 282 Patent, the 443 Patent, the 224 Patent, and other patents essential to DisplayPort standards)).

79. To the extent Dell was unaware of the 443 Patent and MPEG LA's assertion that the 443 Patent is essential to the 443 Infringing DP Standards and Dell, as an implementer of the 443 Infringing DP Standards and, thus, an infringer of the 443 Patent, required a license under the DP License as of, or within a reasonable time after, December 1, 2018, then Dell should have known of the 443 Patent and MPEG LA's assertion by then but was willfully blind to the existence of the 443 Patent and its infringement of the same. For at least the foregoing reasons, Dell's infringement of the 443 Patent was willful and deliberate.

COUNT II: THE 224 PATENT

80. Appendix C hereto is an exemplary patent claim chart that details how the inventions of claims 3 and 5 of the 224 Patent were essential to implementations of DP v1.2,

relative to the receipt of audio data and audio-related information associated with such audio data.⁹

The versions of the DisplayPort standard listed below include features that are identical to, or materially the same as, the features of DP v1.2 shown to infringe claims 3 and 5 of the 224 Patent in Appendix C hereto. As such, these versions of the standard also infringed the 224 Patent during the term of that patent:

- DP v1.1, introduced April 2, 2007;
- DP v1.1a, introduced January 11, 2008;
- DP v1.2a, introduced January 2013;
- DP v1.3, introduced September 15, 2014;
- DP v1.4, introduced March 1, 2016;
- DP v1.4a, introduced April 2018; and
- DP v2.0, introduced June 26, 2019

(collectively with DP v1.2, the “224 Infringing DP Standards”). Thus, whoever made, used, offered for sale, or sold any product that complied with, implemented, and/or embodied the portions of DP v1.2 described in Appendix C hereto, and/or complied with, implemented, and/or embodied the corresponding portions of the other 224 Infringing DP Standards, during the term of the 224 Patent, directly infringed claims 3 and 5 of that patent in violation of 35 U.S.C. § 271(a). *See, e.g., Fujitsu*, 620 F.3d at 1328 (Fed. Cir. 2010) (although “claims should be compared to the accused product to determine infringement,” “if an accused product operates in accordance with a standard, then comparing the claims to that standard is the same as comparing the claims to the accused product”).

⁹ The 224 Patent expired on April 20, 2020.

81. During the term of the 224 Patent, Dell directly infringed at least claims 3 and 5 of that patent by making, using, selling, and/or offering to sell in, and/or importing into, the United States Accused Dell Products that complied with, implemented, and embodied the description provided in Appendix C hereto with respect to DP v1.2, and the descriptions provided in the corresponding portions of the other 224 Infringing DP Standards.

82. By way of example and not limitation, and on information and belief, during the term of the 224 Patent, Dell directly infringed at least claims 3 and 5 of that patent by selling and offering to sell Accused Dell Products such as certain Accused Dell Monitors, that included a receiver operable to analyze and process audio data and audio-related information associated with the audio data in the infringing manner described in Appendix C hereto. *See, e.g., Sorrell Holdings, LLC v. Infinity Headwear & Apparel, LLC*, 2024 WL 413432, at *3 (Fed. Cir. Feb. 5, 2024) (“For an ‘accused device[] to be infringing, [it] need only be capable operating’ in the infringing manner.”) (bracketed text in original) (quoting *Intel Corp. v. U.S. Int’l Trade Comm’n*, 946 F.2d 821, 832 (Fed. Cir. 1991)). Evidence of actual operation is not required to prove infringement of apparatus claims 3 and 5 of the 224 Patent. However, on information and belief, there are numerous examples of Accused Dell Monitors actually operating in the infringing manner described in Appendix C hereto with respect to DP v1.2, and described in the corresponding portions of the other 224 Infringing DP Standards, during the term of the 224 Patent. An example is whenever audio signals were transmitted from Accused Dell Laptops, Accused Dell Desktops, and any desktop computers with installed Accused Dell Graphics Cards¹⁰ via a DisplayPort connection to Accused Dell Monitors, where such audio signals were capable of being played as audible sound

¹⁰ Relative to the Accused Dell Graphics Cards, the alleged direct infringement of method claims 7 and 9 of the 443 Patent by Dell and Dell customers in this Count II presumes operation by Dell and Dell customers, in part, of computers having installed Accused Dell Graphics Cards.

through (i) one or more built-in speakers on the monitor(s), (ii) one or more external speakers connected to an audio line-out port on the monitor(s), or (iii) headphones or earphones connected to an audio line-out port on the monitor(s). On its website, Dell explains that “a DisplayPort interface can support from two screens (2560x1600 resolutions) up to four (4) screens. [sic] (1920x1200 resolutions) [with] [e]ach screen receiv[ing] independent video and *audio streams*.” <https://www.dell.com/support/kbdoc/en-us/000139468/frequently-asked-questions-faqs-about-the-hdmi-port-on-a-dell-pc?msockid=162f38e1ab1b603c00922c8daf1b6e19> (emphasis added). Dell further explains that “DisplayPort was designed specifically for computers. It is the ultimate display interface to replace the older video standards....” *Id.*

83. During the term of the 224 Patent, Dell advertised Accused Dell Monitors as supporting DisplayPort media connectivity, including audio connectivity. By way of example and not limitation, as of and before April 16, 2020, Dell made, used, offered for sale, and sold its “27 Ultra HD 4k Monitor - P2715Q,” which featured standard “DisplayPort 1.2” input and output media connectivity ports, a “Mini DisplayPort” media connectivity port, and an “[a]udio line-out.”¹¹ This and any other Accused Dell Monitor sold and offered for sale before the April 20, 2020, expiration of the 224 Patent that supported media connectivity using an Infringing DP Standard and included either an audio line-out and/or built-in speakers infringed at least claims 3 and 5 of the 224 Patent.

84. On information and belief, and in addition to Dell’s direct infringement as described in paragraph 82 above, during the term of the 224 Patent, Dell directly infringed at least claims 3 and 5 of the 224 Patent by using Accused Dell Products in the directly infringing manner described

¹¹ See, e.g., <https://www.dell.com> (archived at Wayback Machine, <https://web.archive.org/web/20180703134220/https://www.dell.com/en-us/work/shop/dell-27-ultra-hd-4k-monitor-p2715q/apd/210-adof/monitors-monitor-accessories> (capture dated 7/3/2018)).

in Appendix C hereto with respect to DP v1.2, and described in the corresponding portions of the other 224 Infringing DP Standards.

85. By way of example and not limitation, and on information and belief, during the term of the 224 Patent, Dell employees used Accused Dell Monitors in such an infringing manner when transmitting audio signals from Accused Dell Laptops, Accused Dell Desktops, and Accused Dell Graphics Cards via a DisplayPort connection to Accused Dell Monitors, where, as discussed in the paragraphs above, such audio signals were played as audible sound through (i) one or more built-in speakers on the monitor(s), (ii) one or more external speakers connected to an audio line-out port on the monitor(s), or (iii) headphones or earphones connected to an audio line-out port on the monitor(s).

86. By way of example and not limitation, and on information and belief, during the term of the 224 Patent, Dell employees used Accused Dell Monitors in the directly infringing manner described in paragraph 82 above, described in Appendix C hereto with respect to DP v1.2, and described in the corresponding portions of the other 224 Infringing DP Standards, when transmitting, receiving, playing, and/or recording audio signals at, between, and/or among Dell's numerous offices and facilities in the United States. *See, e.g.,* <https://www.dell.com/en-us/dt/office-locations.htm?msocid=162f38e1ab1b603c00922c8daf1b6e19> (identifying 44 Dell Tech office locations in the United States). On information and belief, one of numerous examples of such directly infringing uses was when Dell employees participated in video conferences or Voice over Internet Protocol (VoIP) calls using an Accused Dell Laptop, Accused Dell Desktop, or Accused Dell Graphics Card connected to an Accused Dell Monitor as described above.

87. On information and belief, another example of such directly infringing use during the term of the 224 Patent was when Dell employees streamed or played recorded or real-time

audio-video content using Accused Dell Laptops, Accused Dell Desktops, or Accused Dell Graphics Cards such as those described in paragraph 69 above, and other Accused Dell Laptops, Desktops, and Graphics Cards connected to Accused Dell Monitors, such as the one described in paragraph 83 above, and other Accused Dell Monitors, in the manner generally described in paragraph 82 above, described in Appendix C hereto with respect to DP v1.2, and described in the corresponding portions of the other 224 Infringing DP Standards. On information and belief, one of numerous examples of such directly infringing uses was when Dell employees played on an Accused Dell Laptop, Accused Dell Desktop, or Accused Dell Graphics Card connected to an Accused Dell Monitor as described above any of the hundreds of videos with audio content that Dell itself made available for streaming from its online Support Video Library. *See* <https://www.dell.com/support/contents/en-us/videos/>.

88. On information and belief, during the term of the 224 Patent, Dell employees also used Accused Dell Monitors in the directly infringing manner described above, described in Appendix C hereto with respect to DP v1.2, and described in the corresponding portions of the other 224 Infringing DP Standards, when they demonstrated Accused Dell Products to actual and potential customers of Accused Dell Products at trade shows, during product demonstrations, and – generally – as part of Dell’s marketing and sales operations. By way of example and not limitation, Dell attends and exhibits its products at the annual Consumer Electronics Show (CES) trade show. By way of further example and not limitation, the “Dell UltraSharp 40 Curved Thunderbolt Hub Monitor,” Model U4025QW – an Accused Dell Monitor (see Appendix A) –, was honored as a “CES 2024 Innovation Award Product” at the 2024 CES, held in Las Vegas, Nevada, January 9 to January 12, 2024. <https://www.ces.tech/innovation-awards/honorees/2024/honorees/d/dell-ultrasharp-40-curved-thunderbolt-hub-monitor.aspx>. Similarly, and by way of

example and not limitation, the Dell “Alienware m18 R2 Gaming Laptop,” an Accused Dell Laptop (see Appendix A), was honored as a “CES 2023 Innovation Award Product” at the 2023 CES, held in Las Vegas January 5 to 8, 2023. <https://www.ces.tech/innovation-awards/honorees/2023/honorees/a/alienware-m18.aspx>. During the term of the 224 Patent, Dell attended CES 2020, held in Las Vegas January 7 to 10, 2020. *See, e.g.*, <https://www.dell.com/en-us/blog/ces-2020-dell-and-alienware-bring-battlecry-range-of-gaming-innovations/?msocid=162f38e1ab1b603c00922c8daf1b6e19>. Among the numerous products Dell showcased at CES 2020 was its Alienware 25 Gaming Monitor AW2521HF, *id.*, which featured a DP 1.2 input and a 3.5mm audio line-out port, *see, e.g.*, https://www.rtings.com/monitor/reviews/dell/alienware-aw2521hf#test_1426. Dell attended and exhibited its products at CES during the term, and before the April 20, 2020, expiration, of the 224 Patent. *See, e.g.*, <https://blogs.windows.com/windowsexperience/2017/01/05/ces-2017-dell-adds-convertible-xps-13-model-unveils-8k-monitor/> (“CES 2017: Dell adds convertible XPS 13 model, unveils 8K monitor and more”) (introducing the Dell Precision 7720 laptop and Dell Latitude 7285, each of which, on information and belief, implemented one or more of the Infringing DP Standards).

89. On information and belief, during the term of the 224 Patent, Dell employees also used Accused Dell Monitors in the directly infringing manner described above, described in Appendix C hereto with respect to DP v1.2, and described in the corresponding portions of the other 224 Infringing DP Standards, when providing customer support to Dell’s actual and potential customers. By way of example and not limitation, and on information and belief, Dell employees used Accused Dell Monitors when troubleshooting and resolving technical issues for Dell’s actual and potential customers. In this regard, Dell offered during the term of the 224 Patent, and currently offers, robust technical support services, which services include telephone support, online support,

and online support libraries and video libraries that feature articles, tutorials, and videos to assist in troubleshooting and maintaining Accused Dell Products. *See, e.g.*, <https://www.dell.com/support/home/en-us>.

90. By way of further example and not limitation, and on information and belief, during the term of the 224 Patent, Dell employees used and controlled Dell customers' Accused Dell Monitors in the directly infringing manner described above, described in Appendix C hereto with respect to DP v1.2, and described in the corresponding portions of the other 224 Infringing DP Standards, when remotely controlling customers' Accused Dell Products using the Dell RemoteAssist program, which "gives Dell Support representatives the ability to control [a customer's] computer for troubleshooting purposes" and "have full access to [the customer's] system." *See, e.g.*, <https://www.dell.com/support/incidents-online/en-us/remoteassist>.

91. On information and belief, during the term of the 224 Patent, Dell employees also used Accused Dell Monitors in the directly infringing manner described above, described in Appendix C hereto with respect to DP v1.2, and described in the corresponding portions of the other 224 Infringing DP Standards, when they tested the Accused Dell Monitors to confirm compliance with the portions of DP v1.2 described in Appendix C hereto and/or the corresponding portions of the other 224 Infringing DP Standards. On information and belief, Dell employees conducted at least some of the testing described in this paragraph using one or more of the "DisplayPort Authorized Test Tools" previously and still available via links on VESA's website. *See, e.g.*, <https://vesa.org/authorized-test-tools/>.

92. Further, and on information and belief, with knowledge of the General Video Patents as described in paragraphs 61 to 65 above, Dell actively induced infringement of at least claims 3 and 5 of the 224 Patent, during the term of that patent, in violation of 35 U.S.C. § 271(b).

On information and belief, past users and customers of the Accused Dell Products directly infringed at least claims 3 and 5 of the 224 Patent when they used the Accused Dell Products for such products' ordinary, customary, and intended use, and, in particular, used Accused Dell Products in the directly infringing manner described in Appendix C hereto with respect to DP v1.2, and described in the corresponding portions of the other 224 Infringing DP Standards. On information and belief, Dell's affirmative acts of inducement included, without limitation and with specific intent to encourage the infringement, having knowingly induced consumers to use the Accused Dell Products within the United States in the ordinary, customary, and intended way, and, in particular, in the directly infringing manner described in Appendix C hereto with respect to DP v1.2, and described in the corresponding portions of the other 224 Infringing DP Standards, by, directly or through intermediaries, having supplied such Accused Dell Products to customers within the United States and having instructed and encouraged such customers how to use the Accused Dell Products in the ordinary, customary, and intended way, and, in particular, in the directly infringing manner described in Appendix C hereto with respect to DP v1.2, and described in the corresponding portions of the other 224 Infringing DP Standards, which use Dell knew or should have known infringed at least claims 3 and 5 of the 224 Patent. Dell's affirmative acts of inducement further included, without limitation and with specific intent to encourage the infringement, any one or a combination of encouraging and/or facilitating third-party infringement through having advertised, marketed, and disseminated the Accused Dell Products and components thereof, including DisplayPort firmware and/or drivers; and having created, published and/or provided sales, promotional, and marketing materials; supporting materials; product manuals; user guides; and/or technical support and other information relating to the Accused Dell

Products and DisplayPort functionality thereof (*see, e.g.*, several links in the paragraphs above to product and support pages and videos from Dell's website) during the term of the 224 Patent.

93. Further and in the alternative, on information and belief, with knowledge of the General Video Patents as described in paragraphs 61 to 65 above, Dell contributed to the infringement of at least claims 3 and 5 of the 224 Patent, during the term of that patent, in violation of 35 U.S.C. § 271(c). Users and customers of the Accused Dell Products directly infringed at least claims 3 and 5 of the 224 Patent when they used the Accused Dell Products for such products' ordinary, customary, and intended use, and, in particular, in the directly infringing manner described in Appendix C hereto with respect to DP v1.2, and described in the corresponding portions of the other 224 Infringing DP Standards. Dell's contributory infringement included, without limitation, Dell's sale and provision of Accused Dell Products, including DisplayPort components thereof, to customers in the United States for use in practicing at least claims 3 and 5 of the 224 Patent, during the term of that patent, knowing that such products and components were material to practicing the claimed inventions, were not staple articles or commodities of commerce suitable for substantial non-infringing use, and were especially made or especially adapted for use in an infringement of the 224 Patent. Specifically, Dell sold the Accused Dell Products to customers knowing that the customers' operation of such products directly infringed at least claims 3 and 5 of the 224 Patent when used for their normal and intended purpose, and, in particular, when used in the directly infringing manner described in Appendix C hereto with respect to DP v1.2, and described in the corresponding portions of the other 224 Infringing DP Standards. The Accused Dell Products and DisplayPort components thereof were made for the specific purpose of operating according to the one or more of the Infringing DP Standards and had no substantial non-infringing use.

94. On information and belief, as of December 1, 2018, Dell knew of the 224 Patent and MPEG LA's assertion that Dell was an infringer as a "company that offers products with DisplayPort technology[,] need[ed] to be licensed under the[] essential patents" (Ex. 7 hereto, representative notice letter dated March 16, 2015), including the 224 Patent (Ex. 10 hereto, DisplayPort Attachment 1, revised 12/1/2018 (providing notice of addition to the DP License of the 282 Patent, the 443 Patent, the 224 Patent, and other patents essential to DisplayPort standards)).

95. To the extent Dell was unaware of the 224 Patent and MPEG LA's assertion that the 224 Patent is essential to the 224 Infringing DP Standards and Dell, as an implementer of the 224 Infringing DP Standards and, thus, an infringer of the 224 Patent, required a license under the DP License as of, or within a reasonable time after, December 1, 2018, then Dell should have known of the 224 Patent and MPEG LA's assertion by then but was willfully blind to the existence of the 224 Patent and its infringement of the same. For at least the foregoing reasons, Dell's infringement of the 224 Patent was willful and deliberate.

COUNT III: THE 282 PATENT

96. Appendix D hereto is an exemplary patent claim chart that details how the invention of claim 1 of the 282 Patent is essential to implementations of DP v1.2, relative to the bi-directional transmission of data between a source device (e.g., a desktop or laptop computer) and a sink device (e.g., a computer monitor). The versions of the DisplayPort and eDP standards listed below include features that are either identical to, or materially the same as, the features of DP v1.2 shown to infringe claim 1 of the 282 Patent in Appendix D hereto. As such, these versions of the DisplayPort and eDP standards also infringe the 282 Patent:

- DP v1.1, introduced April 2, 2007;
 - DP v1.1a, introduced January 11, 2008;
 - DP v1.2a, introduced January 2013;
 - DP v1.3, introduced September 15, 2014;
 - DP v1.4, introduced March 1, 2016;
 - DP v1.4a, introduced April 2018;
 - DP v2.0, introduced June 26, 2019; and
 - DP v2.1, introduced October 17, 2022
- eDP v1.1, introduced October 2009;
 - eDP v1.2, introduced May 2010;
 - eDP v1.3, introduced February 2011;
 - eDP v1.4, introduced February 2013;
 - eDP v1.4a, introduced February 2015;
 - eDP v1.4b, introduced October 2015; and
 - eDP v1.5, introduced October 2021

(collectively with DP v1.2, the “282 Infringing DP Standards”). Thus, whoever uses one or more products to perform the methods described in Appendix D hereto with respect to DP v1.2, and described in the corresponding portions of the other 282 Infringing DP Standards, directly infringes claim 1 of the 282 Patent in violation of 35 U.S.C. § 271(a). *See, e.g., Fujitsu*, 620 F.3d at 1328 (Fed. Cir. 2010) (although “claims should be compared to the accused product to determine infringement,” “if an accused product operates in accordance with a standard, then comparing the claims to that standard is the same as comparing the claims to the accused product”).

97. On information and belief, Dell directly infringes at least claim 1 of the 282 Patent by using Accused Dell Products in a manner that complies with the description provided in Appendix D hereto with respect to DP v1.2, and the descriptions provided in the corresponding portions of the other 282 Infringing DP Standards.

98. By way of example and not limitation, and on information and belief, Dell employees use the Accused Dell Products in such a directly infringing manner when transmitting data, such as video and audio data, from Accused Dell Laptops, Accused Dell Desktops, and any

desktop computers with installed Accused Dell Graphics Cards¹² via a DisplayPort connection to Accused Dell Monitors. On its website, Dell explains that “a DisplayPort interface can support from two screens (2560x1600 resolutions) up to four (4) screens. [sic] (1920x1200 resolutions) [with] [e]ach screen receiv[ing] independent video and audio streams.” <https://www.dell.com/support/kbdoc/en-us/000139468/frequently-asked-questions-faqs-about-the-hdmi-port-on-a-dell-pc?msocid=162f38e1ab1b603c00922c8daf1b6e19>. Dell further explains that “DisplayPort was designed specifically for computers. It is the ultimate display interface to replace the older video standards....” *Id.* As explained in paragraphs 31 to 60 above, Dell advertises all the Accused Dell Laptops, Desktops, Graphics Cards, and Monitors as supporting DisplayPort media connectivity. By way of further example and not limitation, and on information and belief, Dell employees and Dell customers also use Accused Dell Laptops in a directly infringing manner during any operation of an Accused Dell Laptop because such operation complies with the description provided in Appendix D hereto with respect to DP v1.2, and the descriptions provided in the corresponding portions of the other 282 Infringing DP Standards, including the corresponding portions of the eDP subset of such 282 Infringing DP Standards, by facilitating the bi-directional transmission of data between such Accused Dell Laptop’s iGPU/dGPU and such Accused Dell Laptop’s screen/display as recited in claim 1 of the 282 Patent. The independent ground for direct infringement by standalone use of an Accused Dell Laptop described in the preceding sentence applies in addition to, and irrespective of, the several examples of direct infringement by Dell employees and Dell customers described in paragraphs 99 to 106 below.

¹² Relative to the Accused Dell Graphics Cards, the alleged direct infringement of method claim 1 of the 282 Patent by Dell and Dell customers in this Count III presumes performance of the claimed methods by Dell’s and Dell’s customers’ use, in part, of computers having installed Accused Dell Graphics Cards.

99. By way of example and not limitation, and on information and belief, Dell employees have used, and continue to use, Accused Dell Products in a manner that directly infringes claim 1 of the 282 Patent as described above, as described in Appendix D hereto with respect to DP v1.2, and as described in the corresponding portions of the other 282 Infringing DP Standards, when operating Accused Dell Laptops, Accused Dell Desktops, and Accused Dell Graphics Cards connected to Accused Dell Monitors via a DisplayPort connection at, between, and/or among Dell's numerous offices and facilities in the United States. *See, e.g.*, <https://www.dell.com/en-us/dt/office-locations.htm?msocid=162f38e1ab1b603c00922c8daf1b6e19> (identifying 44 Dell Tech office locations in the United States).

100. On information and belief, another example of Dell employees having used, and continuing to use, Accused Dell Products in a manner that directly infringes claim 1 of the 282 Patent is when Dell employees stream or play recorded or real-time video content using an Accused Dell Laptop, Accused Dell Desktop, or Accused Dell Graphics Card connected to an Accused Dell Monitor via a DisplayPort connection as described above. On information and belief, one of numerous examples of such directly infringing uses is when Dell employees play on an Accused Dell Laptop, Accused Dell Desktop, or Accused Dell Graphics Card connected to an Accused Dell Monitor via a DisplayPort connection as described above any of the hundreds of videos that Dell itself makes available for streaming from its online Support Video Library. *See* <https://www.dell.com/support/contents/en-us/videos/>.

101. On information and belief, Dell employees have also used, and continue to use, Accused Dell Products in a manner that directly infringes claim 1 of the 282 Patent as described above, as described in Appendix D hereto with respect to DP v1.2, and as described in the corresponding portions of the other 282 Infringing DP Standards, when they demonstrate Accused

Dell Products to actual and potential customers of Accused Dell Products at trade shows, during product demonstrations, and – generally – as part of Dell’s marketing and sales operations. By way of example and not limitation, Dell attends and exhibits its products at the annual Consumer Electronics Show (CES) trade show. By way of further example and not limitation, the “Dell UltraSharp 40 Curved Thunderbolt Hub Monitor,” Model U4025QW – an Accused Dell Monitor (see Appendix A) –, was honored as a “CES 2024 Innovation Award Product” at the 2024 CES, held in Las Vegas, Nevada, January 9 to January 12, 2024. <https://www.ces.tech/innovation-awards/honorees/2024/honorees/d/dell-ultrasharp-40-curved-thunderbolt-hub-monitor.aspx>.

Similarly, and by way of example and not limitation, the Dell “Alienware m18 R2 Gaming Laptop,” an Accused Dell Laptop (see Appendix A), was honored as a “CES 2023 Innovation Award Product” at the 2023 CES, held in Las Vegas January 5 to 8, 2023. <https://www.ces.tech/innovation-awards/honorees/2023/honorees/a/alienware-m18.aspx>.

102. On information and belief, Dell employees have also used, and continue to use, Accused Dell Products in a manner that directly infringes claim 1 of the 282 Patent as described above, as described in Appendix D hereto with respect to DP v1.2, and as described in the corresponding portions of the 282 Infringing DP Standards, when providing customer support to Dell’s actual and potential customers. By way of example and not limitation, and on information and belief, Dell employees have used, and continue to use, Accused Dell Products in such a directly infringing manner when troubleshooting and resolving technical issues for Dell’s actual and potential customers. In this regard, Dell offers robust technical support services, which include telephone support, online support, and online support libraries and video libraries that feature articles, tutorials, and videos to assist in troubleshooting and maintaining Accused Dell Products. *See, e.g.,* <https://www.dell.com/support/home/en-us>.

103. By way of further example and not limitation, and on information and belief, Dell employees have used and controlled, and continue to use and control, Dell customers' Accused Dell Products in the directly infringing manner described above, described in Appendix D hereto with respect to DP v1.2, and described in the corresponding portions of the other 282 Infringing DP Standards, when remotely controlling customers' Accused Dell Products using the Dell RemoteAssist program, which "gives Dell Support representatives the ability to control [a customer's] computer for troubleshooting purposes" and "have full access to [the customer's] system." *See, e.g.*, <https://www.dell.com/support/incidents-online/en-us/remoteassist>.

104. On information and belief, Dell employees have also used, and continued to use, Accused Dell Products in the directly infringing manner described in Appendix D hereto with respect to DP v1.2, and described in the corresponding portions of the other 282 Infringing DP Standards, when they have tested, and continue to test, the Accused Dell Products to confirm compliance with the portions of DP v1.2 described in Appendix D hereto and/or the corresponding portions of the other 282 Infringing DP Standards. On information and belief, Dell employees conducted at least some of the testing described in this paragraph using one or more of the "DisplayPort Authorized Test Tools" made available via links on VESA's website. *See, e.g.*, <https://vesa.org/authorized-test-tools/>.

105. Further, and on information and belief, with knowledge of the General Video Patents as described in paragraphs 61 to 65 above, Dell has been actively inducing, and continues to actively induce, infringement of at least claim 1 of the 282 Patent in violation of 35 U.S.C. § 271(b). Users and customers of the Accused Dell Products have directly infringed and continue to directly infringe at least claim 1 of the 282 Patent when they use the Accused Dell Products for such products' ordinary, customary, and intended use, including by operation as described in

Appendix D hereto with respect to DP v1.2, as described in the corresponding portions of the other 282 Infringing DP Standards, and, with respect to the standalone use of Accused Dell Laptops, as described in paragraph 98 above. Dell's affirmative acts of inducement have included, and continue to include, without limitation and with specific intent to encourage the infringement, knowingly inducing consumers to use the Accused Dell Products within the United States in the ordinary, customary, and intended way by, directly or through intermediaries, supplying such Accused Dell Products to customers within the United States and instructing and encouraging such customers how to use the Accused Dell Products in the ordinary, customary, and intended way, which Dell knows or should know infringes at least claim 1 of the 282 Patent. Dell's affirmative acts of inducement have further included and continue to include, without limitation and with specific intent to encourage the infringement, any one or a combination of encouraging and/or facilitating third-party infringement through the advertisement, marketing, and dissemination of the Accused Dell Products and components thereof; including DisplayPort firmware and/or drivers; and creating, publishing, and/or providing sales, promotional, and marketing materials; supporting materials; product manuals; user guides; and/or technical support and information relating to the Accused Dell Products and DisplayPort functionality thereof (*see, e.g.*, several links in the paragraphs above to product and support pages and videos from Dell's website).

106. Further and in the alternative, on information and belief, with knowledge of the General Video Patents as described in paragraphs 61 to 65 above, Dell has been contributing to, and continues to contribute to, the infringement of at least claim 1 of the 282 Patent in violation of 35 U.S.C. § 271(c). Users and customers of the Accused Dell Products have directly infringed and continue to directly infringe at least claim 1 of the 282 Patent when they use the Accused Dell Products for such products' ordinary, customary, and intended use, and, in particular, in the

directly infringing manner described in Appendix D hereto with respect to DP v1.2, described in the corresponding portions of the other 282 Infringing DP Standards, and, with respect to the standalone use of Accused Dell Laptops, as described in paragraph 98 above. Dell's contributory infringement has included and continues to include, without limitation, Dell's sale and provision of Accused Dell Products, including DisplayPort components thereof, to customers in the United States for use in practicing at least claim 1 of the 282 Patent, knowing that such products and components are material to practicing the claimed inventions, are not staple articles or commodities of commerce suitable for substantial non-infringing use, and are especially made or especially adapted for use in an infringement of the 282 Patent. Specifically, Dell has sold, and continues to sell, the Accused Dell Products and components thereof to customers knowing that the customers' operation of such products directly infringes at least claim 1 of the 282 Patent when used for their normal and intended purpose, and, in particular, when used in the directly infringing manner described in Appendix D hereto with respect to DP v1.2, described in the corresponding portions of the other 282 Infringing DP Standards, and, with respect to the standalone use of Accused Dell Laptops, as described in paragraph 98 above. The Accused Dell Products and DisplayPort components thereof have been made, and are made, for the specific purpose of operating as described in Appendix D hereto with respect to DP v1.2, as described in such corresponding portions of the other 282 Infringing DP Standards, and, with respect to the standalone use of Accused Dell Laptops, as described in paragraph 98 above, and have no substantial non-infringing use.

107. On information and belief, as of December 1, 2018, Dell knew of the 282 Patent and MPEG LA's assertion that Dell was an infringer as a "company that offers products with DisplayPort technology[,] need[ed] to be licensed under the[] essential patents" (Ex. 7 hereto,

representative notice letter dated March 16, 2015), including the 282 Patent (Ex. 10 hereto, DisplayPort Attachment 1, revised 12/1/2018 (providing notice of addition to the DP License of the 282 Patent, the 443 Patent, the 224 Patent, and other patents essential to DisplayPort standards)).

108. To the extent Dell was unaware of the 282 Patent and MPEG LA's assertion that the 282 Patent is essential to the 282 Infringing DP Standards and Dell, as an implementer of the 282 Infringing DP Standards and, thus, an infringer of the 282 Patent, required a license under the DP License as of, or within a reasonable time after, December 1, 2018, then Dell should have known of the 282 Patent and MPEG LA's assertion by then but was willfully blind to the existence of the 282 Patent and its infringement of the same. For at least the foregoing reasons, Dell's infringement of the 282 Patent has been, and continues to be, willful and deliberate.

109. By the time of the trial of this case, Dell will have known and intended that its continued actions since receiving the notice described above and, additionally, since receiving the notice provided by this Complaint, would infringe and actively induce and contribute to the infringement of at least claim 1 of the 282 Patent. For this reason as well, Dell's infringement of the 282 Patent has been, and continues to be, willful and deliberate.

COUNT IV: THE 437 PATENT

110. Appendix E hereto is an exemplary patent claim chart that details how the invention of claim 41 of the 437 Patent is essential to implementations of DP v1.2, relative to encoding data for transmission over a serial link. The versions of the DisplayPort and eDP standards listed below include features that are either identical to, or materially the same as, the features of DP v1.2 shown to infringe claim 41 of the 437 Patent in Appendix E hereto. As such, these versions of the DisplayPort and eDP standards also infringe the 437 Patent:

- DP v1.0, introduced May 3, 2006;
 - DP v1.1, introduced April 2, 2007;
 - DP v1.1a, introduced January 11, 2008;
 - DP v1.2a, introduced January 2013;
 - DP v1.3, introduced September 15, 2014;
 - DP v1.4, introduced March 1, 2016;
 - DP v1.4a, introduced April 2018;
 - DP v2.0, introduced June 26, 2019; and
 - DP v2.1, introduced October 17, 2022
- eDP v1.1, introduced October 2009;
 - eDP v1.2, introduced May 2010;
 - eDP v1.3, introduced February 2011;
 - eDP v1.4, introduced February 2013;
 - eDP v1.4a, introduced February 2015;
 - eDP v1.4b, introduced October 2015; and
 - eDP v1.5, introduced October 2021

(collectively with DP v1.2, the “437 Infringing DP Standards”). Thus, whoever uses one or more products to perform the methods described in Appendix E hereto with respect to DP v1.2, and described in the corresponding portions of the other 437 Infringing DP Standards, directly infringes claim 41 of the 437 Patent in violation of 35 U.S.C. § 271(a). *See, e.g., Fujitsu Ltd. v. Netgear Inc.*, 620 F.3d 1321, 1328 (Fed. Cir. 2010) (although “claims should be compared to the accused product to determine infringement,” “if an accused product operates in accordance with a standard, then comparing the claims to that standard is the same as comparing the claims to the accused product”).

111. On information and belief, Dell directly infringes claim 41 of the 437 Patent by using Accused Dell Products in a manner that complies with the description provided in Appendix E hereto with respect to DP v1.2, and the descriptions provided in the corresponding portions of the other 437 Infringing DP Standards.

112. By way of example and not limitation, and on information and belief, Dell employees have used, and continue to use, the Accused Dell Products in such a directly infringing manner when transmitting data from Accused Dell Laptops, Accused Dell Desktops, and any desktop computers with installed Accused Dell Graphics Cards¹³ via a DisplayPort connection to Accused Dell Monitors or other non-Dell monitors. On its website, Dell explains that “a DisplayPort interface can support from two screens (2560x1600 resolutions) up to four (4) screens. [sic] (1920x1200 resolutions) [with] [e]ach screen receiv[ing] independent video and audio streams.” <https://www.dell.com/support/kbdoc/en-us/000139468/frequently-asked-questions-faqs-about-the-hdmi-port-on-a-dell-pc?msocid=162f38e1ab1b603c00922c8daf1b6e19>. Dell further explains that “DisplayPort was designed specifically for computers. It is the ultimate display interface to replace the older video standards....” *Id.* As explained in paragraphs 31 to 60 above, Dell advertises all the Accused Dell Laptops, Desktops, Graphics Cards, and Monitors as supporting DisplayPort media connectivity. By way of further example and not limitation, and on information and belief, Dell employees and Dell customers also use Accused Dell Laptops in a directly infringing manner during any operation of an Accused Dell Laptop because such operation complies with the description provided in Appendix D hereto with respect to DP v1.2, and the descriptions provided in the corresponding portions of the other 437 Infringing DP Standards, including the corresponding portions of the eDP subset of such 437 Infringing DP Standards, by facilitating the encoding of data for transmission over a serial link between such Accused Dell Laptop’s iGPU/dGPU and such Accused Dell Laptop’s screen/display as recited in claim 41 of the 437 Patent. The independent ground for direct infringement by standalone use of an Accused Dell

¹³ Relative to the Accused Dell Graphics Cards, the alleged direct infringement of method claim 41 of the 437 Patent by Dell and Dell customers in this Count IV presumes performance of the claimed methods by Dell’s and Dell’s customers’ use, in part, of computers having installed Accused Dell Graphics Cards.

Laptop described in the preceding sentence applies in addition to, and irrespective of, the several examples of direct infringement by Dell employees and Dell customers described in paragraphs 113 to 120 below.

113. By way of example and not limitation, and on information and belief, Dell employees have used, and continue to use, Accused Dell Products in a manner that directly infringes claim 41 of the 437 Patent as described above, as described in Appendix E hereto with respect to DP v1.2, and as described in the corresponding portions of the other 437 Infringing DP Standards, when operating Accused Dell Laptops, Accused Dell Desktops, and Accused Dell Graphics Cards connected to Accused Dell Monitors via a DisplayPort connection at, between, and/or among Dell's numerous offices and facilities in the United States. *See, e.g.,* <https://www.dell.com/en-us/dt/office-locations.htm?msockid=162f38e1ab1b603c00922c8daf1b6e19>

(identifying 44 Dell Tech office locations in the United States).

114. On information and belief, another example of Dell employees having used, and continuing to use, Accused Dell Products in a manner that directly infringes claim 41 of the 437 Patent is when Dell employees stream or play recorded or real-time video content using an Accused Dell Laptop, Accused Dell Desktop, or Accused Dell Graphics Card connected to an Accused Dell Monitor via a DisplayPort connection as described above. On information and belief, one of numerous examples of such directly infringing uses is when Dell employees play on an Accused Dell Laptop, Accused Dell Desktop, or Accused Dell Graphics Card connected to an Accused Dell Monitor via a DisplayPort connection as described above any of the hundreds of videos that Dell itself makes available for streaming from its online Support Video Library. *See* <https://www.dell.com/support/contents/en-us/videos/>.

115. On information and belief, Dell employees have also used, and continue to use, Accused Dell Products in a manner that directly infringes claim 41 of the 437 Patent as described above, as described in Appendix E hereto with respect to DP v1.2, and as described in the corresponding portions of the other 437 Infringing DP Standards with respect to the same claims, when they demonstrate Accused Dell Products to actual and potential customers of Accused Dell Products at trade shows, during product demonstrations, and – generally – as part of Dell’s marketing and sales operations. By way of example and not limitation, Dell attends and exhibits its products at the annual Consumer Electronics Show (CES) trade show. By way of further example and not limitation, the “Dell UltraSharp 40 Curved Thunderbolt Hub Monitor,” Model U4025QW – an Accused Dell Monitor (see Appendix A) –, was honored as a “CES 2024 Innovation Award Product” at the 2024 CES, held in Las Vegas, Nevada, January 9 to January 12, 2024. <https://www.ces.tech/innovation-awards/honorees/2024/honorees/d/dell-ultrasharp-40-curved-thunderbolt-hub-monitor.aspx>. Similarly, and by way of example and not limitation, the Dell “Alienware m18 R2 Gaming Laptop,” an Accused Dell Laptop (see Appendix A), was honored as a “CES 2023 Innovation Award Product” at the 2023 CES, held in Las Vegas January 5 to 8, 2023. <https://www.ces.tech/innovation-awards/honorees/2023/honorees/a/alienware-m18.aspx>.

116. On information and belief, Dell employees have also used, and continue to use, Accused Dell Products in a manner that directly infringes claim 41 of the 437 Patent as described above, as described in Appendix E hereto with respect to DP v1.2, and as described in the corresponding portions of the 437 Infringing DP Standards, when providing customer support to Dell’s actual and potential customers. By way of example and not limitation, and on information and belief, Dell employees have used, and continue to use, Accused Dell Products in such a directly infringing manner when troubleshooting and resolving technical issues for Dell’s actual and

potential customers. In this regard, Dell offers robust technical support services, which include telephone support, online support, and online support libraries and video libraries that feature articles, tutorials, and videos to assist in troubleshooting and maintaining Accused Dell Products. *See, e.g.*, <https://www.dell.com/support/home/en-us>.

117. By way of further example and not limitation, and on information and belief, Dell employees have used and controlled, and continue to use and control, Dell customers' Accused Dell Products in the directly infringing manner described above, described in Appendix E hereto with respect to DP v1.2, and described in the corresponding portions of the other 437 Infringing DP Standards, when remotely controlling customers' Accused Dell Products using the Dell RemoteAssist program, which "gives Dell Support representatives the ability to control [a customer's] computer for troubleshooting purposes" and "have full access to [the customer's] system." *See, e.g.*, <https://www.dell.com/support/incidents-online/en-us/remoteassist>.

118. On information and belief, Dell employees have also used, and continued to use, Accused Dell Products in the directly infringing manner described above, described in Appendix E hereto with respect to DP v1.2, and described in the corresponding portions of the other 437 Infringing DP Standards, when they have tested, and continue to test, the Accused Dell Products to confirm compliance with the portions of DP v1.2 described in Appendix E hereto and/or the corresponding portions of the other 437 Infringing DP Standards. On information and belief, Dell employees conducted at least some of the testing described in this paragraph using one or more of the "DisplayPort Authorized Test Tools" made available via links on VESA's website. *See, e.g.*, <https://vesa.org/authorized-test-tools/>.

119. Further, and on information and belief, with knowledge of the General Video Patents as described in paragraphs 61 to 65 above, Dell has been actively inducing, and continues

to actively induce, infringement of at least claim 41 of the 437 Patent in violation of 35 U.S.C. § 271(b). Users and customers of the Accused Dell Products have directly infringed and continue to directly infringe at least claim 41 of the 437 Patent when they use the Accused Dell Products for such products' ordinary, customary, and intended use, including by operation as described in Appendix E hereto with respect to DP v1.2, as described in the corresponding portions of the other 437 Infringing DP Standards, and, with respect to the standalone use of Accused Dell Laptops, as described in paragraph 112 above. Dell's affirmative acts of inducement have included, and continue to include, without limitation and with specific intent to encourage the infringement, knowingly inducing consumers to use the Accused Dell Products within the United States in the ordinary, customary, and intended way by, directly or through intermediaries, supplying such Accused Dell Products to customers within the United States and instructing and encouraging such customers how to use the Accused Dell Products in the ordinary, customary, and intended way, which Dell knows or should know infringes at least claim 41 of the 437 Patent. Dell's affirmative acts of inducement have further included and continue to include, without limitation and with specific intent to encourage the infringement, any one or a combination of encouraging and/or facilitating third-party infringement through the advertisement, marketing, and dissemination of the Accused Dell Products and components thereof, including DisplayPort firmware and/or drivers; and creating, publishing, and/or providing sales, promotional, and marketing materials; supporting materials; product manuals; user guides; and/or technical support and information relating to the Accused Dell Products and DisplayPort functionality thereof (*see, e.g.*, several links in the paragraphs above to product and support pages and videos from Dell's website).

120. Further and in the alternative, on information and belief, with knowledge of the General Video Patents as described in paragraphs 61 to 65 above, Dell has been contributing to,

and continues to contribute to, the infringement of at least claim 41 of the 437 Patent in violation of 35 U.S.C. § 271(c). Users and customers of the Accused Dell Products have directly infringed and continue to directly infringe at least claim 41 of the 437 Patent when they use the Accused Dell Products for such products' ordinary, customary, and intended use, including by operation as described in Appendix E hereto with respect to DP v1.2, as described in the corresponding portions of the other 437 Infringing DP Standards, and, with respect to the standalone use of Accused Dell Laptops, as described in paragraph 112 above. Dell's contributory infringement has included and continues to include, without limitation, Dell's sale and provision of Accused Dell Products, including DisplayPort components thereof, to customers in the United States for use in practicing at least claim 41 of the 437 Patent, knowing that such products and components are material to practicing the claimed inventions, are not staple articles or commodities of commerce suitable for substantial non-infringing use, and are especially made or especially adapted for use in an infringement of the 437 Patent. Specifically, Dell sold the Accused Dell Products to customers knowing that the customers' operation of such products directly infringes at least claim 41 of the 437 Patent when used for their normal and intended purpose, including by operation as described in Appendix E hereto with respect to DP v1.2, as described in the corresponding portions of the other 437 Infringing DP Standards, and, with respect to the standalone use of Accused Dell Laptops, as described in paragraph 112 above. The Accused Dell Products and DisplayPort components thereof are made for the specific purpose of operating as described in Appendix E hereto with respect to DP v1.2, as described in such corresponding portions of the other 437 Infringing DP Standards, and, with respect to the standalone use of Accused Dell Laptops, as described in paragraph 112 above, and have no substantial non-infringing use.

121. On information and belief, as of June 1, 2021, Dell knew of the 437 Patent and MPEG LA's assertion that Dell was an infringer as a "company that offers products with DisplayPort technology[,] need[ed] to be licensed under the[] essential patents" (Ex. 7 hereto, representative notice letter dated March 16, 2015), including the 437 Patent (Ex. 11 hereto, DisplayPort Attachment 1, revised 6/1/2021 (providing notice of addition to the DP License of the 437 Patent and other patents essential to DisplayPort standards)).

122. To the extent Dell was unaware of the 437 Patent and MPEG LA's assertion that the 437 Patent is essential to the 437 Infringing DP Standards and Dell, as an implementer of the 437 Infringing DP Standards and, thus, an infringer of the 437 Patent, required a license under the DP License as of, or within a reasonable time after, June 1, 2021, then Dell should have known of the 437 Patent and MPEG LA's assertion by then but was willfully blind to the existence of the 437 Patent and its infringement of the same. For at least the foregoing reasons, Dell's infringement of the 437 Patent has been, and continues to be, willful and deliberate.

123. By the time of the trial of this case, Dell will have known and intended that its continued actions since receiving the notice described above and, additionally, since receiving the notice provided by this Complaint, would infringe and actively induce and contribute to the infringement of at least claim 41 of the 437 Patent. For this reason as well, Dell's infringement of the 437 Patent has been, and continues to be, willful and deliberate.

COUNT V: THE 010 PATENT

124. Appendix F hereto is an exemplary patent claim chart that details how the inventions of claims 1 and 12 of the 010 Patent are essential to implementations of DP v1.2, relative to the transport of stereoscopic image data over a display interface. The versions of the DisplayPort and eDP standards listed below include features that are either identical to, or

materially the same as, the features of DP v1.2 shown to infringe claims 1 and 12 of the 010 Patent in Appendix F hereto. As such, these versions of the DisplayPort and eDP standards also infringe the 010 Patent:

- DP v1.2a, introduced January 2013;
- DP v1.3, introduced September 15, 2014;
- DP v1.4, introduced March 1, 2016;
- DP v1.4a, introduced April 2018;
- DP v2.0, introduced June 26, 2019;
and
- DP v2.1, introduced October 17, 2022
- eDP v1.2, introduced May 2010;
- eDP v1.3, introduced February 2011;
- eDP v1.4, introduced February 2013;
- eDP v1.4a, introduced February 2015;
- eDP v1.4b, introduced October 2015; and
- eDP v1.5, introduced October 2021

(collectively with DP v1.2, the “010 Infringing DP Standards”). Thus, whoever makes, uses, offers to sell, or sells any product that complies with, implements, and/or embodies the portions of DP v1.2 described in Appendix F hereto, and/or complies with, implements, and/or embodies the corresponding portions of the other 010 Infringing DP Standards, during the term of the 010 Patent, directly infringes claims 1 and 12 of that patent in violation of 35 U.S.C. § 271(a). *See, e.g., Fujitsu Ltd. v. Netgear Inc.*, 620 F.3d 1321, 1328 (Fed. Cir. 2010) (although “claims should be compared to the accused product to determine infringement,” “if an accused product operates in accordance with a standard, then comparing the claims to that standard is the same as comparing the claims to the accused product”).

125. Dell directly infringes at least claims 1 and 12 of the 010 Patent by making, using, selling, and/or offering to sell in, and/or importing into, the United States Accused Dell Products that comply with, implement, and/or embody the portions of DP v1.2 as described in Appendix F

hereto, and that comply with, implement, and/or embody the corresponding portions of the other 010 Infringing DP Standards.

126. By way of example and not limitation, and on information and belief, Dell directly infringes at least claims 1 and 12 of the 010 Patent by selling and offering to sell Accused Dell Products such as Accused Dell Laptops, Accused Dell Desktops, and Accused Dell Graphics Cards that include a digital display interface part that supports a digital display interface between source devices, such as Accused Dell Laptops, Accused Dell Desktops, and Accused Dell Graphics Cards on the one hand, and sink devices, such as computer monitors or displays, on the other hand, where such interface part is operable in the infringing manner described in Appendix F hereto with respect to DP v1.2, and described in the corresponding portions of the other 010 Infringing DP Standards. *See, e.g., Sorrell Holdings, LLC v. Infinity Headwear & Apparel, LLC*, 2024 WL 413432, at *3 (Fed. Cir. Feb. 5, 2024) (“For an ‘accused device[] to be infringing, [it] need only be capable operating’ in the infringing manner.”) (bracketed text in original) (quoting *Intel Corp. v. U.S. Int’l Trade Comm’n*, 946 F.2d 821, 832 (Fed. Cir. 1991)).

127. Further, and on information and belief, with knowledge of the General Video Patents as described in paragraphs 61 to 65 above, Dell has been actively inducing, and continues to actively induce, infringement of at least claims 1 and 12 of the 010 Patent in violation of 35 U.S.C. § 271(b). Users and customers of the Accused Dell Products have directly infringed and continue to directly infringe at least claims 1 and 12 of the 010 Patent when they use the Accused Dell Products for such products’ ordinary, customary, and intended use, including by operation as described in Appendix F hereto with respect to DP v1.2 as to those claims, and as described in the corresponding portions of the other 010 Infringing DP Standards with respect to the same claims. Dell’s affirmative acts of inducement have included, and continue to include, without limitation

and with specific intent to encourage the infringement, knowingly inducing consumers to use the Accused Dell Products within the United States in the ordinary, customary, and intended way by, directly or through intermediaries, supplying such Accused Dell Products to customers within the United States and instructing and encouraging such customers how to use the Accused Dell Products in the ordinary, customary, and intended way, which Dell knows or should know infringes at least claims 1 and 12 of the 010 Patent. Dell's affirmative acts of inducement have further included and continue to include, without limitation and with specific intent to encourage the infringement, any one or a combination of encouraging and/or facilitating third-party infringement through the advertisement, marketing, and dissemination of the Accused Dell Products and components thereof, including DisplayPort firmware and/or drivers; and creating, publishing, and/or providing sales, promotional, and marketing materials; supporting materials; product manuals; user guides; and/or technical support and information relating to the Accused Dell Products and DisplayPort functionality thereof (*see, e.g.*, several links in the paragraphs above to product and support pages and videos from Dell's website).

128. Further and in the alternative, on information and belief, with knowledge of the General Video Patents as described in paragraphs 61 to 65 above, Dell has been contributing to, and continues to contribute to, the infringement of at least claims 1 and 12 of the 010 Patent in violation of 35 U.S.C. § 271(c). Users and customers of the Accused Dell Products have directly infringed and continue to directly infringe at least claims 1 and 12 of the 010 Patent when they use the Accused Dell Products for such products' ordinary, customary, and intended use, including by operation as described in Appendix F hereto with respect to DP v1.2 as to those claims, and as described in the corresponding portions of the other 010 Infringing DP Standards with respect to the same claims. Dell's contributory infringement has included and continues to include, without

limitation, Dell's sale and provision of Accused Dell Products, including DisplayPort components thereof, to customers in the United States for use in practicing at least claims 1 and 12 of the 010 Patent, knowing that such products and components are material to practicing the claimed inventions, are not staple articles or commodities of commerce suitable for substantial non-infringing use, and are especially made or especially adapted for use in an infringement of the 010 Patent. Specifically, Dell sold the Accused Dell Products to customers knowing that the customers' operation of such products directly infringes at least claims 1 and 12 of the 010 Patent when used for their normal and intended purpose, including by operation as described in Appendix F hereto with respect to DP v1.2 as to those claims, and as described in the corresponding portions of the other 010 Infringing DP Standards with respect to the same claims. The Accused Dell Products and DisplayPort components thereof are made for the specific purpose of operating as described in Appendix F hereto with respect to DP v1.2, and as described in such corresponding portions of the other 010 Infringing DP Standards, and have no substantial non-infringing use.

129. On information and belief, at least as of late 2018, Dell knew of the 010 Patent and MPEG LA's assertion that Dell was an infringer as a "company that offers products with DisplayPort technology[,] need[ed] to be licensed under the[] essential patents" (Ex. 7 hereto, representative notice letter dated March 16, 2015), including the 010 Patent (Ex. 13 hereto, DisplayPort Attachment 1, revised 3/1/2016 (including 010 Patent on list of patents essential to DisplayPort standards)).

130. To the extent Dell was unaware of the 010 Patent and MPEG LA's assertion that the 010 Patent is essential to the 010 Infringing DP Standards and Dell, as an implementer of the 010 Infringing DP Standards and, thus, an infringer of the 010 Patent, required a license under the DP License as of, or within a reasonable time after 2018, then Dell should have known of the 010

Patent and MPEG LA's assertion by then but was willfully blind to the existence of the 010 Patent and its infringement of the same. For at least the foregoing reasons, Dell's infringement of the 010 Patent has been, and continues to be, willful and deliberate.

131. By the time of the trial of this case, Dell will have known and intended that its continued actions since receiving the notice described in above and, additionally, since receiving the notice provided by this Complaint, would infringe at least claims 1 and 12 of the 010 Patent. For this reason as well, Dell's infringement of the 010 Patent has been, and continues to be, willful and deliberate.

COUNT VI: THE 786 PATENT

132. Appendix G hereto is an exemplary patent claim chart that details how the invention of claim 1 of the 786 Patent is essential to implementations of DP v1.2, with respect to the transport of stereoscopic image data over a display interface. The versions of the DisplayPort and eDP standards listed below include features that are either identical to, or materially the same as, the features of DP v1.2 shown to infringe claim 1 of the 786 Patent in Appendix G hereto. As such, these versions of the DisplayPort and eDP standards also infringe the 786 Patent:

- DP v1.2a, introduced January 2013;
- DP v1.3, introduced September 15, 2014;
- DP v1.4, introduced March 1, 2016;
- DP v1.4a, introduced April 2018;
- DP v2.0, introduced June 26, 2019;
and
- DP v2.1, introduced October 17, 2022
- eDP v1.2, introduced May 2010;
- eDP v1.3, introduced February 2011;
- eDP v1.4, introduced February 2013;
- eDP v1.4a, introduced February 2015;
- eDP v1.4b, introduced October 2015; and
- eDP v1.5, introduced October 2021

(collectively with DP v1.2, the “786 Infringing DP Standards”). Thus, whoever makes, uses, offers to sell, or sells any product that complies with, implements, and/or embodies the portions of DP v1.2 described in Appendix G hereto, and/or complies with, implements, and/or embodies the corresponding portions of the other 786 Infringing DP Standards, during the term of the 786 Patent, directly infringes claim 1 of that patent in violation of 35 U.S.C. § 271(a). *See, e.g., Fujitsu Ltd. v. Netgear Inc.*, 620 F.3d 1321, 1328 (Fed. Cir. 2010) (although “claims should be compared to the accused product to determine infringement,” “if an accused product operates in accordance with a standard, then comparing the claims to that standard is the same as comparing the claims to the accused product”).

133. Dell directly infringes at least claim 1 of the 786 Patent by making, using, selling, and/or offering to sell in, and/or importing into, the United States Accused Dell Products that comply with, implement, and embody the portions of DP v1.2 as described in Appendix G hereto, and that comply with, implement, and embody the corresponding portions of the other 786 Infringing DP Standards.

134. By way of example and not limitation, and on information and belief, Dell directly infringes at least claim 1 of the 786 Patent by selling and offering to sell Accused Dell Products such as Accused Dell Laptops, Accused Dell Desktops, and Accused Dell Graphics Cards that include a digital display interface part that supports a digital display interface between source devices, such as Accused Dell Laptops, Accused Dell Desktops, and Accused Dell Graphics Cards, on the one hand, and sink devices, such as computer monitors or displays, on the other hand, where such interface part is operable in the infringing manner described in Appendix G hereto with respect to DP v1.2, and described in the corresponding portions of the other 786 Infringing DP Standards. *See, e.g., Sorrell Holdings, LLC v. Infinity Headwear & Apparel, LLC*, 2024 WL

413432, at *3 (Fed. Cir. Feb. 5, 2024) (“For an ‘accused device[] to be infringing, [it] need only be capable operating’ in the infringing manner.”) (bracketed text in original) (quoting *Intel Corp. v. U.S. Int’l Trade Comm’n*, 946 F.2d 821, 832 (Fed. Cir. 1991)).

135. Further, and on information and belief, with knowledge of the General Video Patents as described in paragraphs 61 to 65 above, Dell has been actively inducing, and continues to actively induce, infringement of at least claim 1 of the 786 Patent in violation of 35 U.S.C. § 271(b). Users and customers of the Accused Dell Products have directly infringed and continue to directly infringe at least claim 1 of the 786 Patent when they use the Accused Dell Products for such products’ ordinary, customary, and intended use, including by operation as described in Appendix G hereto with respect to DP v1.2 as to that claim, and as described in the corresponding portions of the other 786 Infringing DP Standards with respect to the same claim. Dell’s affirmative acts of inducement have included, and continue to include, without limitation and with specific intent to encourage the infringement, knowingly inducing consumers to use the Accused Dell Products within the United States in the ordinary, customary, and intended way by, directly or through intermediaries, supplying such Accused Dell Products to customers within the United States and instructing and encouraging such customers how to use the Accused Dell Products in the ordinary, customary, and intended way, which Dell knows or should know infringes at least claim 1 of the 786 Patent. Dell’s affirmative acts of inducement have further included and continue to include, without limitation and with specific intent to encourage the infringement, any one or a combination of encouraging and/or facilitating third-party infringement through the advertisement, marketing, and dissemination of the Accused Dell Products and components thereof, including DisplayPort firmware and/or drivers; and creating, publishing, and/or providing sales, promotional, and marketing materials; supporting materials; product manuals; user guides; and/or

technical support and information relating to the Accused Dell Products and DisplayPort functionality thereof (*see, e.g.*, several links in the paragraphs above to product and support pages and videos from Dell's website).

136. Further and in the alternative, on information and belief, with knowledge of the General Video Patents as described in paragraphs 61 to 65 above, Dell has been contributing to, and continues to contribute to, the infringement of at least claim 1 of the 786 Patent in violation of 35 U.S.C. § 271(c). Users and customers of the Accused Dell Products have directly infringed and continue to directly infringe at least claim 1 of the 786 Patent when they use the Accused Dell Products for such products' ordinary, customary, and intended use, including by operation as described in Appendix G hereto with respect to DP v1.2 as to that claim, and as described in the corresponding portions of the other 786 Infringing DP Standards with respect to the same claim. Dell's contributory infringement has included and continues to include, without limitation, Dell's sale and provision of Accused Dell Products, including DisplayPort components thereof, to customers in the United States for use in practicing at least claim 1 of the 786 Patent, knowing that such products and components are material to practicing the claimed inventions, are not staple articles or commodities of commerce suitable for substantial non-infringing use, and are especially made or especially adapted for use in an infringement of the 786 Patent. Specifically, Dell sold the Accused Dell Products to customers knowing that the customers' operation of such products directly infringes at least claim 1 of the 786 Patent when used for their normal and intended purpose, including by operation as described in Appendix G hereto with respect to DP v1.2 as to that claim, and as described in the corresponding portions of the other 786 Infringing DP Standards with respect to the same claim. The Accused Dell Products and DisplayPort components thereof are made for the specific purpose of operating as described in Appendix G hereto with respect to

DP v1.2, and as described in such corresponding portions of the other 786 Infringing DP Standards, and have no substantial non-infringing use.

137. On information and belief, as of June 1, 2024, Dell knew of the 786 Patent and MPEG LA's assertion that Dell was an infringer as a "company that offers products with DisplayPort technology[,] need[ed] to be licensed under the[] essential patents" (Ex. 7 hereto, representative notice letter dated March 16, 2015), including the 786 Patent (Ex. 12 hereto, DisplayPort Attachment 1, revised 6/1/2024 (providing notice of addition of the 786 Patent to DP License)).

138. To the extent Dell was unaware of the 786 Patent and MPEG LA's assertion that the 786 Patent is essential to the 786 Infringing DP Standards and Dell, as an implementer of the 786 Infringing DP Standards and, thus, an infringer of the 786 Patent, required a license under the DP License as of, or within a reasonable time after June 1, 2024, then Dell should have known of the 786 Patent and MPEG LA's assertion by then but was willfully blind to the existence of the 786 Patent and its infringement of the same. For at least the foregoing reasons, Dell's infringement of the 786 Patent has been, and continues to be, willful and deliberate.

139. By the time of the trial of this case, Dell will have known and intended that its continued actions since receiving the notice described above and, additionally, since receiving the notice provided by this Complaint, would infringe at least claim 1 of the 786 Patent. For this reason as well, Dell's infringement of the 786 Patent has been, and continues to be, willful and deliberate.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff General Video respectfully requests that this Court:

A. Enter judgment in favor of General Video that each of the General Video Patents is valid and enforceable;

B. Enter judgment in favor of General Video that Dell has infringed each of the General Video Patents, continues to infringe the 282, 437, 010, and 786 Patents, and that such infringement is willful;

C. Award General Video all monetary relief available under the laws of the United States, including but not limited to 35 U.S.C. § 284;

D. Order Dell to pay ongoing royalties in an amount to be determined for any continuing infringement after the date of judgment;

E. Declare this case exceptional and award General Video its reasonable attorney fees under 35 U.S.C. § 285;

F. Enter judgment awarding General Video its reasonable costs and expenses along with prejudgment and post-judgment interest as allowed by law;

G. Enjoin Dell and its subsidiaries, and their officers, agents, servants, employees, and all persons in active concert with any of the foregoing from further infringement; and

H. Grant General Video all such other relief as the Court deems just and reasonable.

JURY DEMAND

General Video demands a jury trial on all issues so triable pursuant to Federal Rule of Civil Procedure 38.

Dated: August 30, 2024

Respectfully submitted,

/s/ Geoffrey Culbertson

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