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

GENERAL VIDEO, LLC, Plaintiff, v. HP INC., Defendant.	Civil Action X:24-cv- **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff, General Video, LLC ("General Video" or "Plaintiff"), for its Complaint against Defendant, HP Inc. ("HP" or "Defendant"), 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 having a registered agent at 8 The Green, Suite B, Dover, DE 19901.

2. Defendant HP is a corporation organized and existing under the laws of the State of Delaware, with an address at 1501 Page Mill Road, Palo Alto, California 94304, and may be served with process through its registered agent CT Corporation System, 1999 Bryant Street, Suite 900, Dallas, Texas 75201. The Texas Comptroller of Public Accounts lists Defendant HP's mailing address as P.O. Box 703815 Dallas, Texas 75370.

JURISDICTION AND VENUE

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

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

5. HP 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.

6. HP 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. HP is registered with the Secretary of State to do business in the State of Texas.

7. HP 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 HP products.

8. HP 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.

9. Venue is proper in this District pursuant to 28 U.S.C. § 1400(b) because HP resides in this District and/or has committed acts of infringement and has a regular and established place of business in this District.

10. Despite HP's initial assertion in *AX Wireless LLC v. HP Inc.*, No. 2:22-cv-00279-RWS-RSP ("*AX Wireless*"), that it "does not have 'a regular and established place of business' in this District," *id.*, Dkt. 13, HP's Mot. to Dismiss for Improper Venue at 1 (E.D. Tex. Oct. 3, 2022), HP later withdrew that assertion and "its motion to dismiss after discovery [in *AX Wireless*] revealed that HP does maintain a regular and established place of business in this district," *id.*, Dkt. 100, Order Denying HP's Mot. to Transfer to N.D. Cal. at 1 (Dec. 11, 2023).

11. On information and belief, HP currently operates out of or makes use of leased, work-share, co-op or other arrangements for space, offices or facilities in this District, including through its partners and/or agents. According to the Collin County Assessor's website (https://www.collincountytx.gov/Tax-Assessor/property-taxes), on January 31, 2024 Defendant HP paid $171,832.70 in business personal property taxes for property within Collin County, Texas that had a 2023 assessed value of $9,955,470.00. As shown in the chart below from the Collin County Assessor's website, HP has had between $9.6 million and $15.2 million worth of property located in Collin County between 2020 and 2024.

Value History

Year	Improvement	Land	Market	Ag Loss	Appraised	HS Cap Loss	Assessed
2024	$0	$0	$12,248,681	$0	$12,248,681	$0	$12,248,681
2023	$0	$0	$9,955,470	$0	$9,955,470	$0	$9,955,470
2022	$0	$0	$15,187,084	$0	$15,187,084	$0	$15,187,084
2021	$0	$0	$13,203,044	$0	$13,203,044	$0	$13,203,044
2020	$0	$0	$9,625,231	$0	$9,625,231	$0	$9,625,231

Click here to see Property ID 2735605's extended value history.

https://www.collincad.org/propertysearch?prop=2735605&year=2024.

12. Additionally, HP implements a comprehensive work-from-home policy under which it has adopted or ratified one or more additional places of business in this District, including but not limited to the homes of employees, such that the collection of these locations constitutes an aggregate network of regular and established places in this District, in and from which business

is operated. On information and belief, HP specifically advertises jobs for and solicits employees to reside and work remotely in this District, including to support its customers in the District, and provides and/or stores literature, equipment and/or inventory at those locations for the purpose of enabling these employees to conduct their jobs and use such literature, equipment and/or inventory specifically in this District.

13. HP 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, HP has transacted and, as of the time of the filing of this Complaint, is continuing to transact business within this District.

THE GENERAL VIDEO PATENTS

14. General Video is the assignee of, and has standing to sue and collect damages for HP'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").

15. 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.

16. 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.

17. 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.

18. 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.

19. 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.

20. 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.

21. 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]

22. 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

[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).

are licensed under the DP License. *See* https://www.via-la.com/licensing-2/displayport/displayport-licensees/.

23. 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.

24. 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.

25. "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/. HP is a corporate member and partner of VESA. *Id.*

26. 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/.

27. 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/.

28. 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/.

HP'S ACCUSED PRODUCTS

29. HP 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 HP Products"). As set forth more fully in the numbered counts below with respect to each General Video Patent, the Accused HP 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 HP Products is included in Appendix A hereto.

30. HP 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 29 above, also "Accused HP 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 HP Products that HP 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 HP Products that HP 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.

31. 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 [HP] a 'Disclosure of Asserted Claims and Infringement Contentions[,]'" which identifies "each accused apparatus, product, device, process, method, act, or other instrumentality … of [HP] 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).

32. Accordingly, in identifying HP products for inclusion among the Accused HP 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.

33. 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 HP 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 HP 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 HP Products specifically identified in Appendix A hereto, General Video includes within the definition of "Accused HP Products" all products that HP 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,

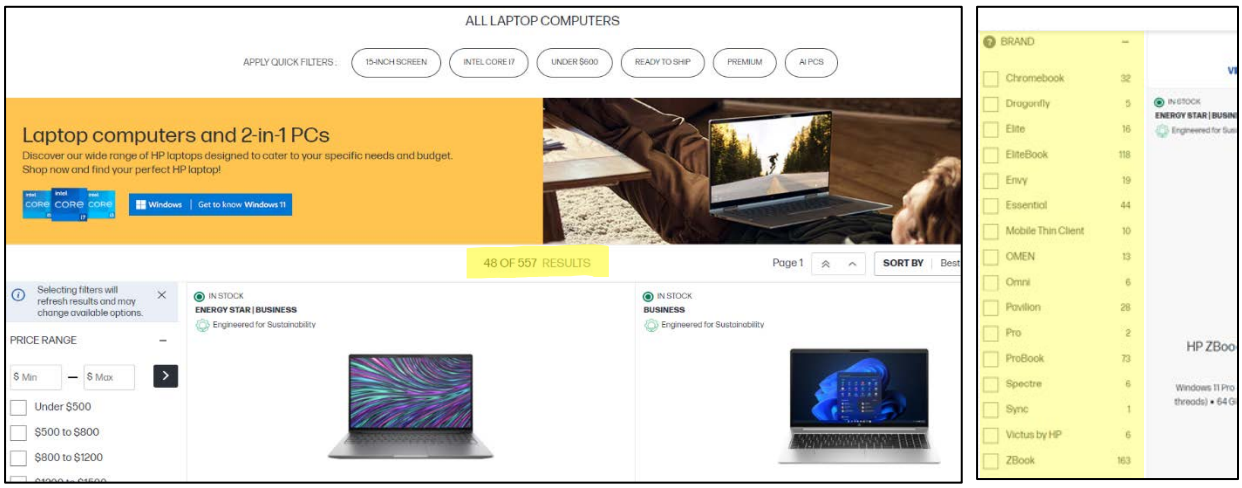
implemented, and/or embodied the Infringing DP Standards and/or (2) are or were no more than colorably different from any Accused HP Product(s) specifically identified in Appendix A hereto relative to such products' compliance with and/or implementation or embodiment of the Infringing DP Standards.

34. Upon General Video's discovery of more specific information concerning the identity of additional Accused HP 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 HP 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.").

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

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

37. As shown below, as of August 2024, HP makes, uses, sells, and/or offers to sell in, and/or imports into, the United States at least 557 models of laptop computers, covering at least sixteen product lines.



See https://www.hp.com/us-en/shop/vwa/laptops?jumpid=ma_lt_featured_na_1_240417 (last visited August 21, 2024) (highlighting added).

38. Based on information published on HP's website, many of the laptop computers HP sells and offers to sell comply with, implement, and/or embody the Infringing DP Standards, and those that do so are, therefore, Accused HP Laptops. For example, but without limitation, as shown below HP advertises its HP Laptop 14-ep1070nr (Product # AE8P6UA#ABA) as featuring DisplayPort 1.4 media connectivity ports:

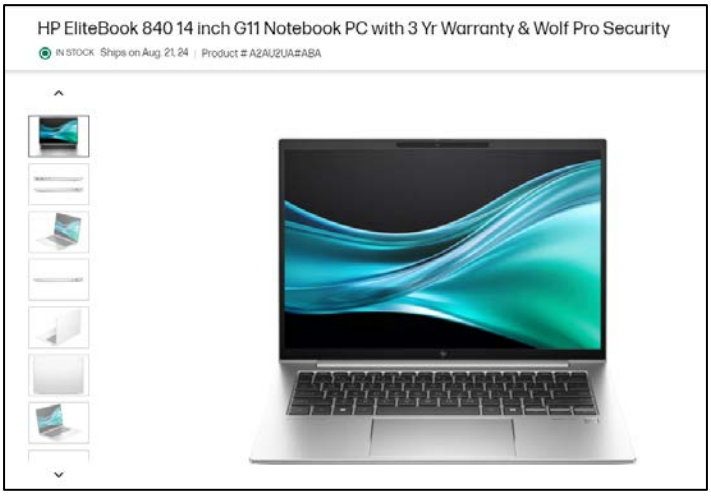


Battery Recharge Time	Supports battery fast charge: approximately 50% in 45 minutes[5]
External I/O Ports	1 USB Type-C® 10Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4, HP Sleep and Charge); 2 USB Type-A 5Gbps signaling rate; 1 AC smart pin; 1 HDMI 1.4b; 1 headphone/microphone combo[19]

See https://www.hp.com/us-en/shop/pdp/hp-laptop-14-ep1070nr (last visited August 21, 2024) (highlighting added).

39. The USB Type-C port included with the Accused HP Laptop described in the paragraph above complies with, implements, and embodies DP v1.4, an Infringing DP Standard as defined in paragraph 21 above and as further defined in the numbered counts below with respect to each of the General Video Patents.

40. By way of additional example, but not limitation, as shown below, HP advertises its HP EliteBook 840 14 inch G11 Notebook PC (Product # A2AU2UA#ABA) as featuring two Thunderbolt™ 4 ports with DisplayPort™ 1.4 media connectivity.



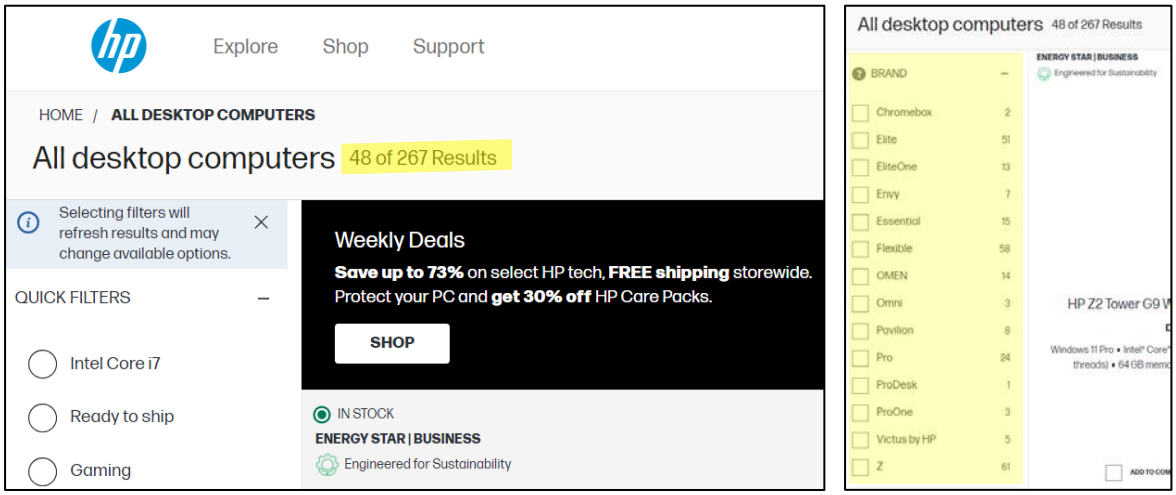
Security software license	HP Wolf Pro Security Edition (3 years)[56]
External I/O Ports	[11]2 Thunderbolt™ 4 with USB Type-C® 40Gbps signaling rate (USB Power Delivery, DisplayPort™ 1.4); 2 USB Type-A 5Gbps signaling rate (1 charging, 1 power); 1 HDMI 2.1; 1 stereo headphone/microphone combo jack

See https://www.hp.com/us-en/shop/pdp/hp-elitebook-840-14-inch-g11-notebook-pc-wolf-pro-security-edition-p-a2au2ua-aba-1 (last visited August 21, 2024) (highlighting added).

41. The Thunderbolt 4, USB Type-C, ports included with the Accused HP Laptop described in the paragraph above comply with, implement, and embody DP v1.4, an Infringing DP Standard as defined in paragraph 21 above and as further defined in the numbered counts below with respect to each of the General Video Patents. *See, e.g.*, https://www.intel.com/content/www/us/en/gaming/resources/devices-make-the-most-out-of-thunderbolt-4.html ("A Thunderbolt 4 port gives you a multitude of monitor options. Connect Thunderbolt™ displays, DisplayPort 1.4 displays, or use a Thunderbolt™ adapter or dock to connect HDMI, DVI, and VGA displays. Your choice.").

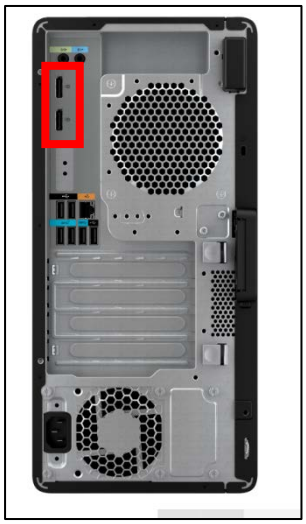
42. A non-exhaustive list of Accused HP Laptops is included in the list of Accused HP Products identified in Appendix A hereto.

43. As shown below, as of August 2024, HP makes, uses, sells, and/or offers to sell in, and/or imports into, the United States at least 267 models of desktop computer, covering at least fourteen product lines.



See, https://www.hp.com/us-en/shop/vwa/desktops (last visited August 21, 2024) (highlighting added).

44. Based on information published on HP's website, many of the desktop computers HP sells and offers to sell comply with, implement, and/or embody the Infringing DP Standards, and those that do so are, therefore, Accused HP Desktops. For example, but without limitation, as shown below HP advertises its HP Z2 Tower G9 Workstation (Product # A1QH3UA#ABA) as including two DisplayPort 1.4 media connectivity ports.



Power supply	700 W 92% efficient, wide-ranging, active PFC
External I/O Ports	Front : 4 SuperSpeed USB Type-A 10Gbps signaling rate (1 charging); 1 universal audio jack Rear : 1 audio-in; 1 audio-out; 1 RJ-45; 2 DisplayPort™ 1.4; 2 SuperSpeed USB Type-A 10Gbps signaling rate; 1 SuperSpeed USB Type-A 5Gbps signaling rate; 3 USB Type-A 480Mbps signaling rate

See, e.g., https://www.hp.com/us-en/shop/pdp/hp-z2-tower-g9-workstation-wolf-pro-security-edition-p-a1qh3ua-aba-1 (last visited August, 2024) (highlighting and red box added).

45. The DisplayPort 1.4 ports included with the Accused HP Desktop described in paragraph 44 above complies with, implements, and embodies DP v1.4, an Infringing DP Standard as defined in paragraph 21 above and as further defined in the numbered counts below with respect to each of the General Video Patents.

46. By way of additional example, but not limitation, as shown below, HP advertises its HP Elite Mini 800 G9 Desktop PC (Product #A1VE3UA#ABA) includes two DisplayPort media connectivity ports.



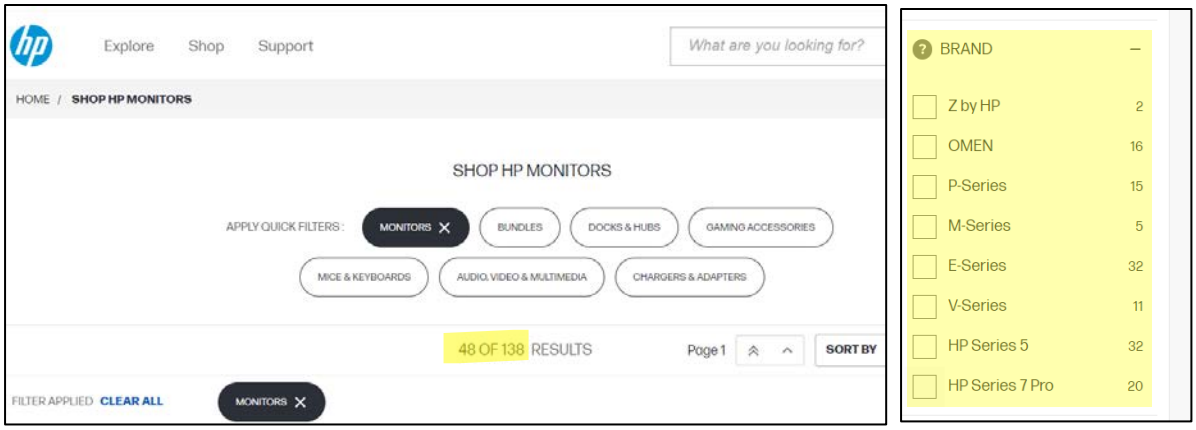
Power supply	90 W external power adapter, up to 89% efficiency, active PFC
External I/O Ports	Front : 1 headset connector; 1 SuperSpeed USB Type-A 10Gbps signaling rate; 1 SuperSpeed USB Type-A 10Gbps signaling rate (charging); 1 SuperSpeed USB Type-C® 20Gbps signaling rate Rear : 1 external antenna connector; 1 power connector; 1 RJ-45; 3 SuperSpeed USB Type-A 10Gbps signaling rate; 2 DisplayPort™ 1.4; 1 HDMI 2.1 1 VGA

See, e.g., https://www.hp.com/us-en/shop/pdp/hp-elite-mini-800-g9-desktop-pc-p-a1ve3ua-aba-1 (last visited August 21, 2024) (highlighting added)

47. The DisplayPort 1.4 ports included with the Accused HP Desktop described in the paragraph above complies with, implements, and embodies DP v1.4, an Infringing DP Standard as defined in paragraph 21 above and as further defined in the numbered counts below with respect to each of the General Video Patents.

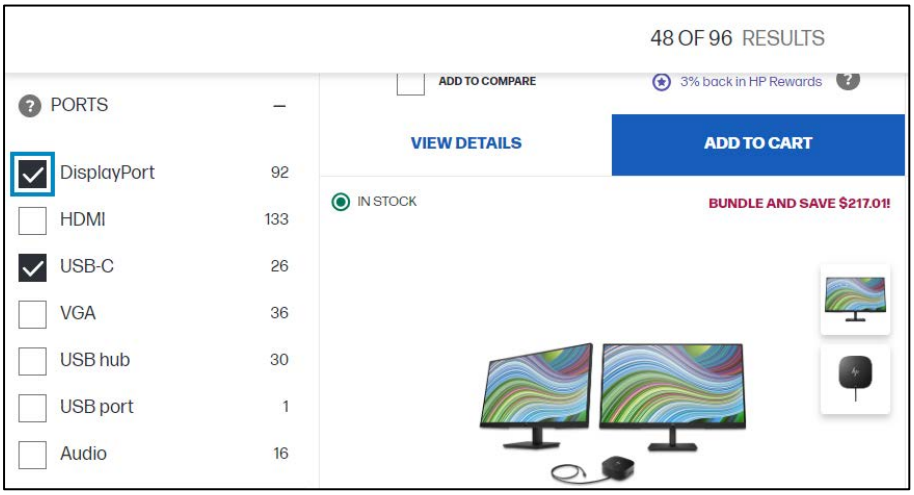
48. A non-exhaustive list of Accused HP Desktops is included in the list of Accused HP Products identified in Appendix A hereto.

49. As shown below, as of August 2024, HP makes, uses, sells, and/or offers to sell in, and/or imports into, the United States at least 138 models of computer monitors, covering eight brands.



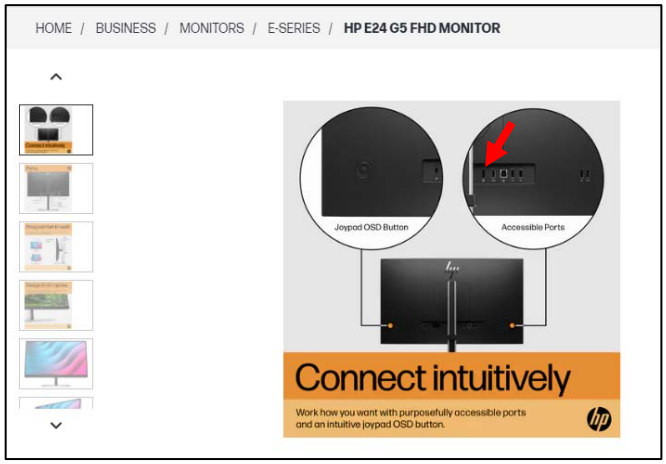
See, e.g., https://www.hp.com/us-en/shop/vwa/accessories-88342--1/subcat=Monitors (last visited August 22, 2024) (highlighting added).

50. Based on information published on HP's website, the majority of computer monitors HP sells and offers to sell comply with, implement, and/or embody the Infringing DP Standards, and those that do so are, therefore, Accused HP Monitors. As shown below, as of August 2024, HP makes, uses, sells, and/or offers to sell in, and/or imports into, the United States at least 92 models of computer monitor under the heading "DisplayPort" and 26 models of computer models of computer monitor under the heading "USB-C".



See, e.g., https://www.hp.com/us-en/shop/vwa/accessories-88342--1/subcat=Monitors (last visited August 22, 2024) (highlighting added).

51. By way of example, but without limitation, HP advertises its HP E24 G5 FHD Monitor (Product # 6N6E9AA#ABA) as featuring a DisplayPort media connectivity port:



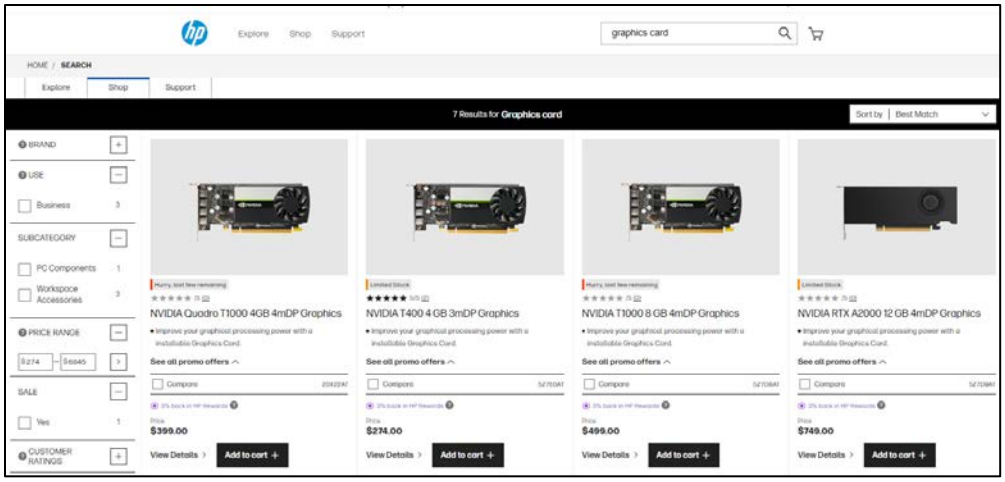


See https://www.hp.com/us-en/shop/pdp/hp-e24-g5-fhd-monitor (lasted visited August 22, 2024) (highlighting and red arrow added).

52. The DisplayPort media connectivity port included with the Accused HP Monitor described in paragraph 51 above complies with, implements, and embodies DP v1.2, an Infringing DP Standard as defined in paragraph 21 above and as further defined in the numbered counts below with respect to each of the General Video Patents.

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

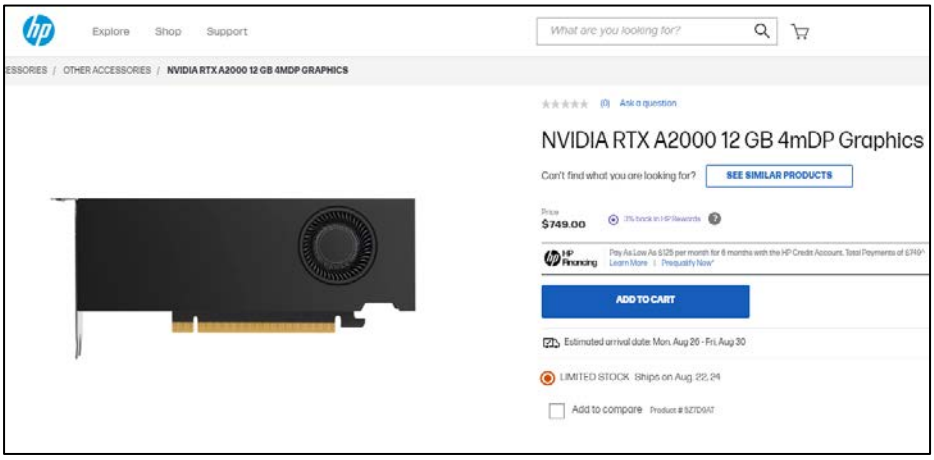
54. As shown below, as of August 2024, HP uses, sells, and/or offers to sell in, and/or imports into, the United States at least 4 models of graphics cards.



See https://www.hp.com/us-en/shop/sitesearch?keyword=graphics%20card (last visited August 22, 2024).

55. Each of the graphics cards sold and offered for sale by HP, and described in paragraph 54 above, comply with, implement, and/or embody the Infringing DP Standards, and those that do so are, therefore, Accused HP Graphics Cards.

56. By way of example, but without limitation, HP advertises the NVIDIA RTX A2000 12 GB 4mDP Graphics Card (Product # 5Z7D9AT) as featuring four compliant DisplayPort media connectivity ports:



What's in the box	NVIDIA RTX A2000 12 GB 4mDP Graphics, Mini DisplayPort™ to DisplayPort™ cable (qty 2), LP bracket, Mid Extender bracket, Product Notices, Warranty card

See https://www.hp.com/us-en/shop/pdp/nvidia-rtx-a2000-12-gb-4mdp-graphics#techSpecs (lasted visited August 22, 2024) (highlighting added).

Specifications

GPU Features	NVIDIA RTX A2000 | A2000 12GB
GPU Memory	6 GB | 12 GB GDDR6 with error-correction code (ECC)
Display Ports	4x mini DisplayPort 1.4

See https://www.nvidia.com/en-us/design-visualization/rtx-a2000/ (lasted visited August 22, 2024) (highlighting added).

57. The four DisplayPort media connectivity ports included with the Accused HP Graphics Card described in the paragraphs above comply with, implement, and embody DP v1.4, an Infringing DP Standard as defined in paragraph 21 above and further defined in the numbered counts below with respect to each of the General Video Patents.

58. HP currently advertises on its website that the representative examples of Accused HP Products described above, and currently advertises, or has in the past advertised, that the numerous, specific Accused HP 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 HP's own advertising representations in this regard, VESA identifies hundreds of HP products as being "VESA CERTIFIED DISPLAYPORT PRODUCTS." *See, e.g.*, https://www.displayport.org/product-category/computing/?ps&pman%5B0%5D=hp-inc (first of 20 search

result pages identifying as Certified DisplayPort Products 153 HP desktop, laptop, and all-in-one computers); https://www.displayport.org/product-category/monitors-tvs/?ps&pman%5B0%5D=hp-inc (first of 11 search result pages identifying as Certified DisplayPort Products 83 HP computer monitors, TVs, and DP displays).

HP'S KNOWLEDGE OF THE ASSERTED PATENTS

59. In early 2015, MPEG LA, a patent pool administration company, administered the DP License (*see* paragraph 22 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 21 above. In April 2023, MPEG LA was acquired by Via-LA.

60. On information and belief, on or about March 18, 2015, MPEG LA, on behalf of General Video and its predecessors-in-interest, provided notice to Hewlett-Packard Company ("Hewlett-Packard"), the predecessor of Defendant HP,[3] through its then Senior Intellectual Property Counsel, Elaine K. Lee, (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 21 above; and (3) that Hewlett-Packard, 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 the March 18, 2015, notice letter to Hewlett-Packard 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).

[3] On November 2, 2015, Hewlett-Packard split into Defendant HP and Hewlett Packard Enterprise.

61. On further information and belief, in the same March 18, 2015, communication described in paragraph 60 above, MPEG LA, on behalf of General Video and its predecessors-in-interest, provided notice to HP predecessor, Hewlett-Packard, through its then Senior Intellectual Property Counsel, Elaine K. Lee, of the remainder of the General Video Patents and Hewlett-Packard's infringement thereof. Specifically, MPEG LA provided Hewlett-Packard with: (1) an unsigned proposed version of the DP License, in which license MPEG LA advised Hewlett-Packard 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 Hewlett-Packard 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."

62. 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 Hewlett-Packard, and, as of November 2, 2015, HP, with notice of the remainder of the General Video Patents and Hewlett-Packard's and HP's infringement thereof at least by MPEG LA's assertion that Hewlett-Packard and HP 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. 10 hereto);
- December 1, 2018: the 282 Patent, the 443 Patent, and the 224 Patent (DisplayPort Attachment 1, revised 12/1/2018, Ex. 11 hereto);
- June 1, 2021: the 437 Patent (DisplayPort Attachment 1, revised 6/1/2021, Ex. 12 hereto); and
- June 1, 2024: the 786 Patent (DisplayPort Attachment 1, revised 6/1/2024, Ex. 13 hereto).

COUNT I: THE 443 PATENT

63. 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).[4] 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 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;

[4] The 443 Patent expired on April 20, 2020.

- 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").

64. On information and belief, during the term of the 443 Patent, HP directly infringed at least claims 7 and 9 of that patent by using Accused HP 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.

65. By way of example and not limitation, and on information and belief, during the term of the 443 Patent, HP employees used the Accused HP Products in such an infringing manner when transmitting audio signals from Accused HP Laptops, Accused HP Desktops, and any desktop computers with installed Accused HP Graphics Cards[5] via a DisplayPort connection to Accused HP 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

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

port on the monitor(s). On its website, HP explains that "DisplayPort adds audio signal as well, which means fewer cables," "is capable of supporting 2 monitors at a resolution of 2560 x 1600 or 4 monitors at 1920 x 1200," and that "[t]here's even the possibility of daisy-chaining up to six displays at once if your GPU allows several DisplayPort interfaces." https://www.hp.com/hk-en/shop/tech-takes/post/displayport-vs-hdmi (last visited August 24, 2024). HP further explains, "Developed in 2006, the DisplayPort was intended to update the old VGA and DVI standard connectors." *Id.*

66. During the term of the 443 Patent, HP advertised Accused HP Laptops, Desktops, Graphics Cards, and Monitors as supporting DisplayPort media connectivity. By way of example and not limitation, as of and before March 6, 2020, HP made, used, offered for sale, and sold its Omen 17t laptop (Product # 7LG51AV_1), which featured a "DisplayPort™ 1.4" media connectivity port.[6] By way of further example and not limitation, as of and before October 28, 2018, HP made, used, offered for sale, and sold its HP Z2 Tower G4 Workstation, which featured two "DisplayPort™ (DP 1.2)" media connectivity ports.[7] By way of further example and not limitation, as of and before July 16, 2019, HP at least offered for sale and sold the HP NVIDIA Quadro RTX 5000 Graphics Card, which featured a DisplayPort media connectivity port.[8] By way of still further example but not limitation, as of and before July 9, 2017, HP made, used, offered

[6] *See, e.g.*, https://www.hp.com (archived at *Wayback Machine*, https://web.archive.org/web/20200601000000*/https://store.hp.com/us/en/pdp/omen-laptop-17t-7lg51av-1?jumpid=cp_r12135_us/en/psg/gaming_omen/laptops/new-omen-17-shop (capture date 3/6/2020)).

[7] *See, e.g.*, https://www.hp.com (archived at *Wayback Machine*, https://web.archive.org/web/20181028131508/http://www8.hp.com/us/en/workstations/z2-tower/index.html?jumpid=in_r12139_us/en/psg/ws_desktops/products/z2-tower-learn-more (capture dated 10/28/2018)).

[8] *See, e.g.*, https://www.amazon.com/HP-NVIDIA-Quadro-Graphics-GDDR6/dp/B07VF9ZVYP?ref_=ast_sto_dp (last visited 8/16/2024) (page indicating product became available 7/16/2019).

for sale, and sold its HP Pavilion 32 QHD 32-Inch Display, which featured a DisplayPort 1.2 media connectivity port and "an audio-out jack."[9]

67. By way of example and not limitation, and on information and belief, during the term of the 443 Patent, HP employees used Accused HP Products such as the Accused HP Laptop, Desktop, Graphics Card, and Monitor described in paragraph 66 above, and other Accused HP Laptops, Desktops, Graphics Cards, and Monitors, in the directly infringing manner described in paragraph 65 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 HP's offices in the United States. *See, e.g.*, https://www.hp.com/us-en/contact-hp/office-locations.html (identifying four HP offices in the United States). On information and belief, one of numerous examples of such directly infringing uses was when HP employees participated in video conferences or Voice over Internet Protocol (VoIP) calls using an Accused HP Laptop, Accused HP Desktop, or Accused HP Graphics Card connected to an Accused HP Monitor as described above.

68. On information and belief, during the term of the 443 Patent, another example of such directly infringing use was when HP employees streamed or played recorded or real-time audio-video content using Accused HP Laptops, Accused HP Desktops, or Accused HP Graphics Cards, such as those described in paragraph 66 above, and other Accused HP Laptops, Desktops, and Graphics Cards, connected to Accused HP Monitors, such as the one described in paragraph 66 above, and other Accused HP Monitors, in the manner generally described in paragraph 65 above, described in Appendix B hereto with respect to DP v1.2, and described in the corresponding

[9] *See, e.g.*, Tony Hoffman, *HP Pavilion 32 QHD 32-Inch Display Review*, PC MAG (Aug. 28, 2019), https://www.pcmag.com/reviews/hp-pavilion-32-qhd-32-inch-display.

portions of the other 443 Infringing DP Standards. On information and belief, one of numerous examples of such directly infringing uses was when HP employees played on an Accused HP Laptop, Accused HP Desktop, or Accused HP Graphics Card connected to an Accused HP Monitor as described above any of the thousands of videos with audio content that HP itself made available for streaming on its HP Support YouTube Channel. *See* https://www.youtube.com/channel/UCHranSHHa1qo6Pg4JStkL7Q ("Welcome to HP Support on YouTube! Within our channel you'll find over 20,000 videos designed to help you find solutions to everyday tech issues.").

69. On information and belief, during the term of the 443 Patent, HP employees also used Accused HP 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 HP Products to actual and potential customers of Accused HP Products at trade shows, during product demonstrations, and – generally – as part of HP's marketing and sales operations. By way of example and not limitation, HP attends and exhibits its products at the annual Consumer Electronics Show (CES) trade show. *See*, *e.g.*, https://www.hp.com/us-en/ces.html ("CES 2024 New innovations from HP personalized to the way you live and play"). HP 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://www.hp.com/us-en/newsroom/press-releases/2018/hp_at_ces_2019.html ("HP Opens CES 2019 with Stunning Displays, PCs, and Security Innovations").

70. On information and belief, during the term of the 443 Patent, HP employees also used Accused HP 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 HP's actual and potential

customers. By way of example and not limitation, and on information and belief, HP employees used Accused HP Products when troubleshooting and resolving technical issues for HP's actual and potential customers. In this regard, HP offered during the term of the 443 Patent, and currently offers, robust technical support services, which services include telephone support, online support (including but not limited to the "HP Virtual Repair Center"), and online support libraries and video libraries that feature articles, tutorials, and videos to assist in troubleshooting and maintaining Accused HP Products. *See, e.g.*, https://www.youtube.com/channel/UCHranSHHa1qo6Pg4JStkL7Q; *see also* https://support.hp.com/us-en.

71. By way of further example and not limitation, and on information and belief, during the term of the 443 Patent, HP employees and/or HP's automated server-based customer support systems used and controlled HP customers' Accused HP 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 HP Products during such customers' use of, by way of example and not limitation, the "HP Support Assistant" program, https://h10032.www1.hp.com/ctg/Manual/c06593496.pdf, "an AI-powered chatbot that provides product information and troubleshooting to HP customers," https://lkc.hp.com/blog/hp-support-assistant-and-virtual-agent#:~:text=The%20Virtual%20Agent%20is%20an%20AI-powered%20chatbot%20that,provides%20product%20information%20and%20troubleshooting%20to%20HP%20customers.

72. On information and belief, during the term of the 443 Patent, HP employees also used Accused HP 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 HP 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, HP 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/.

73. Further, and on information and belief, with knowledge of the General Video Patents as described in paragraphs 59 to 62 above, HP 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 HP Products directly infringed at least claims 7 and 9 of the 443 Patent when they used the Accused HP Products for such products' ordinary, customary, and intended use, and, in particular, used Accused HP 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, HP's affirmative acts of inducement included, without limitation and with specific intent to encourage the infringement, having knowingly induced consumers to use the Accused HP 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 HP Products to customers within the United States and having instructed and encouraged such customers how to use the Accused HP 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 HP knew or should

have known infringed at least claims 7 and 9 of the 443 Patent. HP'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 HP 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 HP Products and DisplayPort functionality thereof (*see, e.g.*, links in the paragraphs above to product and support pages and videos from HP's website) during the term of the 443 Patent.

74. Further and in the alternative, on information and belief, with knowledge of the General Video Patents as described in paragraphs 59 to 62 above, HP 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 HP Products directly infringed at least claims 7 and 9 of the 443 Patent when they used the Accused HP 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. HP's contributory infringement included, without limitation, HP's sale and provision of Accused HP 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, HP sold the Accused HP 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 HP 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.

75. On information and belief, as of December 1, 2018, HP knew of the 443 Patent and MPEG LA's assertion that HP was an infringer as a "company that offers products with DisplayPort technology[,] need[ed] to be licensed under the[] essential patents" (Ex. 7 hereto, March 18, 2015, notice letter from MPEG LA to HP predecessor Hewlett-Packard), including the 443 Patent (Ex. 11 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)).

76. To the extent HP was unaware of the 443 Patent and MPEG LA's assertion that the 443 Patent is essential to the 443 Infringing DP Standards and HP, 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 HP 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, HP's infringement of the 443 Patent was willful and deliberate.

COUNT II: THE 224 PATENT

77. 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.[10] 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

[10] The 224 Patent expired on April 20, 2020.

standard, then comparing the claims to that standard is the same as comparing the claims to the accused product").

78. During the term of the 224 Patent, HP 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 HP 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.

79. By way of example and not limitation, and on information and belief, during the term of the 224 Patent, HP directly infringed at least claims 3 and 5 of that patent by selling and offering to sell Accused HP Products such as certain Accused HP 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 HP Monitors actually operating 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, during the term of the 224 Patent. An example is whenever audio signals were transmitted from Accused HP Laptops, Accused HP Desktops, and any desktop

computers with installed Accused HP Graphics Cards[11] via a DisplayPort connection to Accused HP Monitors, where such audio signals were capable of being 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, HP explains that "DisplayPort adds audio signal as well, which means fewer cables," "is capable of supporting 2 monitors at a resolution of 2560 x 1600 or 4 monitors at 1920 x 1200," and that "[t]here's even the possibility of daisy-chaining up to six displays at once if your GPU allows several DisplayPort interfaces." https://www.hp.com/hk-en/shop/tech-takes/post/displayport-vs-hdmi (last visited August 24, 2024). HP further explains, "Developed in 2006, the DisplayPort was intended to update the old VGA and DVI standard connectors." *Id.*

80. During the term of the 224 Patent, HP advertised Accused HP Monitors as supporting DisplayPort media connectivity, including audio connectivity. By way of example and not limitation, as of and before April 16, 2020, HP made, used, offered for sale, and sold its HP Pavilion 32 QHD 32-Inch Display, which featured a DisplayPort 1.2 media connectivity port and "an audio-out jack."[12] This and any other Accused HP 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.

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

[12] *See, e.g.,* Tony Hoffman, *HP Pavilion 32 QHD 32-Inch Display Review*, PC MAG (Aug. 28, 2019), https://www.pcmag.com/reviews/hp-pavilion-32-qhd-32-inch-display.

81. On information and belief, and in addition to HP's direct infringement as described in paragraph 79 above, during the term of the 224 Patent, HP directly infringed at least claims 3 and 5 of the 224 Patent by using Accused HP 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.

82. By way of example and not limitation, and on information and belief, during the term of the 224 Patent, HP employees used Accused HP Monitors in such an infringing manner when transmitting audio signals from Accused HP Laptops, Accused HP Desktops, and Accused HP Graphics Cards via a DisplayPort connection to Accused HP 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).

83. By way of example and not limitation, and on information and belief, during the term of the 224 Patent, HP employees used Accused HP Monitors in the directly infringing manner described in paragraph 79 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 HP's offices in the United States. *See, e.g.*, https://www.hp.com/us-en/contact-hp/office-locations.html (identifying four HP offices in the United States). On information and belief, one of numerous examples of such directly infringing uses was when HP employees participated in video conferences or Voice over Internet Protocol (VoIP) calls using an Accused HP Laptop, Accused

HP Desktop, or Accused HP Graphics Card connected to an Accused HP Monitor as described above.

84. On information and belief, another example of such directly infringing use during the term of the 224 Patent was when HP employees streamed or played recorded or real-time audio-video content using Accused HP Laptops, Accused HP Desktops, or Accused HP Graphics Cards such as those described in paragraph 66 above, and other Accused HP Laptops, Desktops, and Graphics Cards connected to Accused HP Monitors, such as the one described in paragraph 83 above, and other Accused HP Monitors, in the manner generally described in paragraph 79 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 HP employees played on an Accused HP Laptop, Accused HP Desktop, or Accused HP Graphics Card connected to an Accused HP Monitor as described above any of the thousands of videos with audio content that HP itself made available for streaming on its HP Support YouTube Channel. *See* https://www.youtube.com/channel/UCHranSHHa1qo6Pg4JStkL7Q ("Welcome to HP Support on YouTube! Within our channel you'll find over 20,000 videos designed to help you find solutions to everyday tech issues.").

85. On information and belief, during the term of the 224 Patent, HP employees also used Accused HP 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 HP Products to actual and potential customers of Accused HP Products at trade shows, during product demonstrations, and – generally – as part of HP's marketing and sales operations. By way of example and not limitation, HP attends and exhibits its products at the annual Consumer Electronics Show (CES) trade show.

See, e.g., https://www.hp.com/us-en/ces.html ("CES 2024 New innovations from HP personalized to the way you live and play"). HP 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://www.hp.com/us-en/newsroom/press-releases/2018/hp_at_ces_2019.html ("HP Opens CES 2019 with Stunning Displays, PCs, and Security Innovations").

86. On information and belief, during the term of the 224 Patent, HP employees also used Accused HP 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 HP's actual and potential customers. By way of example and not limitation, and on information and belief, HP employees used Accused HP Monitors when troubleshooting and resolving technical issues for HP's actual and potential customers. In this regard, HP offered during the term of the 224 Patent, and currently offers, robust technical support services, which services include telephone support, online support (including but not limited to the "HP Virtual Repair Center"), and online support libraries and video libraries that feature articles, tutorials, and videos to assist in troubleshooting and maintaining Accused HP Products. *See, e.g.*, https://www.youtube.com/channel/UCHranSHHa1qo6Pg4JStkL7Q; *see also* https://support.hp.com/us-en.

87. By way of further example and not limitation, and on information and belief, during the term of the 224 Patent, HP employees and/or HP's automated server-based customer support systems used and controlled HP customers' Accused HP 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 HP Products during such customers' use of, by way of example and not

limitation, the "HP Support Assistant" program, https://h10032.www1.hp.com/ctg/Manual/c06593496.pdf, "an AI-powered chatbot that provides product information and troubleshooting to HP customers," https://lkc.hp.com/blog/hp-support-assistant-and-virtual-agent#:~:text=The%20Virtual%20Agent%20is%20an%20AI-powered%20chatbot%20that,provides%20product%20information%20and%20troubleshooting%20to%20HP%20customers.

88. On information and belief, during the term of the 224 Patent, HP employees also used Accused HP 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 HP 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, HP 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/.

89. Further, and on information and belief, with knowledge of the General Video Patents as described in paragraphs 59 to 62 above, HP 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 HP Products directly infringed at least claims 3 and 5 of the 224 Patent when they used the Accused HP Products for such products' ordinary, customary, and intended use, and, in particular, used Accused HP 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, HP's affirmative acts of inducement included, without limitation and with specific

intent to encourage the infringement, having knowingly induced consumers to use the Accused HP 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 HP Products to customers within the United States and having instructed and encouraged such customers how to use the Accused HP 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 HP knew or should have known infringed at least claims 3 and 5 of the 224 Patent. HP'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 HP 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 HP Products and DisplayPort functionality thereof (*see, e.g.,* links in the paragraphs above to product and support pages and videos from HP's website) during the term of the 224 Patent.

90. Further and in the alternative, on information and belief, with knowledge of the General Video Patents as described in paragraphs 59 to 62 above, HP 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 HP Products directly infringed at least claims 3 and 5 of the 224 Patent when they used the Accused HP 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. HP's contributory infringement included, without limitation, HP's sale and provision of Accused HP 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, HP sold the Accused HP 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 HP 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.

91. On information and belief, as of December 1, 2018, HP knew of the 224 Patent and MPEG LA's assertion that HP was an infringer as a "company that offers products with DisplayPort technology[,] need[ed] to be licensed under the[] essential patents" (Ex. 7 hereto, March 18, 2015, notice letter from MPEG LA to HP predecessor Hewlett-Packard), including the 224 Patent (Ex. 11 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)).

92. To the extent HP was unaware of the 224 Patent and MPEG LA's assertion that the 224 Patent is essential to the 224 Infringing DP Standards and HP, 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 HP 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, HP's infringement of the 224 Patent was willful and deliberate.

COUNT III: THE 282 PATENT

93. 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
- 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

- DP v2.1, introduced October 17, 2022

(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").

94. On information and belief, HP directly infringes at least claim 1 of the 282 Patent by using Accused HP 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.

95. By way of example and not limitation, and on information and belief, HP employees use the Accused HP Products in such a directly infringing manner when transmitting data, such as video and audio data, from Accused HP Laptops, Accused HP Desktops, and any desktop computers with installed Accused HP Graphics Cards[13] via a DisplayPort connection to Accused HP Monitors. On its website, HP explains that "DisplayPort adds audio signal as well, which means fewer cables," "is capable of supporting 2 monitors at a resolution of 2560 x 1600 or 4 monitors at 1920 x 1200," and that "[t]here's even the possibility of daisy-chaining up to six displays at once if your GPU allows several DisplayPort interfaces." https://www.hp.com/hk-

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

en/shop/tech-takes/post/displayport-vs-hdmi (last visited August 24, 2024). HP further explains, "Developed in 2006, the DisplayPort was intended to update the old VGA and DVI standard connectors." *Id.* As explained in paragraphs 29 to 58 above, HP advertises all the Accused HP Laptops, Desktops, Graphics Cards, and Monitors as supporting DisplayPort media connectivity. By way of further example and not limitation, and on information and belief, HP employees and HP customers also use Accused HP Laptops in a directly infringing manner during any operation of an Accused HP 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 HP Laptop's iGPU/dGPU and such Accused HP 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 HP Laptop described in the preceding sentence applies in addition to, and irrespective of, the several examples of direct infringement by HP employees and HP customers described in paragraphs 96 to 103 below.

96. By way of example and not limitation, and on information and belief, HP employees have used, and continue to use, Accused HP 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 HP Laptops, Accused HP Desktops, and Accused HP Graphics Cards connected to Accused HP Monitors via a DisplayPort connection at, between, and/or among HP's offices in the United States. *See, e.g.,* https://www.hp.com/us-en/contact-hp/office-locations.html (identifying four HP offices in the United States). On information and belief, one of numerous

examples of such directly infringing uses is when HP employees participate in video conferences or Voice over Internet Protocol (VoIP) calls using an Accused HP Laptop, Accused HP Desktop, or Accused HP Graphics Card connected to an Accused HP Monitor as described above.

97. On information and belief, another example of HP employees having used, and continuing to use, Accused HP Products in a manner that directly infringes claim 1 of the 282 Patent is when HP employees stream or play recorded or real-time video content using an Accused HP Laptop, Accused HP Desktop, or Accused HP Graphics Card connected to an Accused HP Monitor via a DisplayPort connection as described above. On information and belief, one of numerous examples of such directly infringing uses is when HP employees play on an Accused HP Laptop, Accused HP Desktop, or Accused HP Graphics Card connected to an Accused HP Monitor as described above any of the thousands of videos with audio content that HP itself makes available for streaming on its HP Support YouTube Channel. *See* https://www.youtube.com/channel/UCHranSHHa1qo6Pg4JStkL7Q ("Welcome to HP Support on YouTube! Within our channel you'll find over 20,000 videos designed to help you find solutions to everyday tech issues.").

98. On information and belief, HP employees have also used, and continue to use, Accused HP 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 HP Products to actual and potential customers of Accused HP Products at trade shows, during product demonstrations, and – generally – as part of HP's marketing and sales operations. By way of example and not limitation, HP attends and exhibits its products at the annual Consumer Electronics Show (CES) trade show. *See, e.g.*, https://www.hp.com/us-en/ces.html ("CES 2024

New innovations from HP personalized to the way you live and play"). HP has attended and exhibited its products annually at CES for several years. *See, e.g.*, https://www.hp.com/us-en/newsroom/press-releases/2018/hp_at_ces_2019.html ("HP Opens CES 2019 with Stunning Displays, PCs, and Security Innovations").

99. On information and belief, HP employees have also used, and continue to use, Accused HP 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 HP's actual and potential customers. By way of example and not limitation, and on information and belief, HP employees have used, and continue to use, Accused HP Products when troubleshooting and resolving technical issues for HP's actual and potential customers. In this regard, HP has in the past offered, and currently offers, robust technical support services, which services include telephone support, online support (including but not limited to the "HP Virtual Repair Center"), and online support libraries and video libraries that feature articles, tutorials, and videos to assist in troubleshooting and maintaining Accused HP Products. *See, e.g.*, https://www.youtube.com/channel/UCHranSHHa1qo6Pg4JStkL7Q; *see also* https://support.hp.com/us-en.

100. By way of further example and not limitation, and on information and belief, HP employees and/or HP's automated server-based customer support systems have used and controlled, and continue to use and control, HP customers' Accused HP 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 HP Products during such customers' use of, by way of example and not limitation, the "HP Support Assistant" program, https://h10032.www1.hp.com/ctg/Manua

l/c06593496.pdf, "an AI-powered chatbot that provides product information and troubleshooting to HP customers," https://lkc.hp.com/blog/hp-support-assistant-and-virtual-agent#:~:text=The%20Virtual%20Agent%20is%20an%20AI-powered%20chatbot%20that,provides%20product%20information%20and%20troubleshooting%20to%20HP%20customers.

101. On information and belief, HP employees have also used, and continued to use, Accused HP 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 HP 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, HP 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/.

102. Further, and on information and belief, with knowledge of the General Video Patents as described in paragraphs 59 to 62 above, HP 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 HP Products have directly infringed and continue to directly infringe at least claim 1 of the 282 Patent when they use the Accused HP 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 HP Laptops, as described in paragraph 95 above. HP'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 HP Products within the United States in the ordinary, customary, and intended way by, directly or through intermediaries, supplying such Accused HP Products to customers within the United States and instructing and encouraging such customers how to use the Accused HP Products in the ordinary, customary, and intended way, which HP knows or should know infringes at least claim 1 of the 282 Patent. HP'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 HP 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 HP Products and DisplayPort functionality thereof (*see, e.g.*, links in the paragraphs above to product and support pages and videos from HP's website).

103. Further and in the alternative, on information and belief, with knowledge of the General Video Patents as described in paragraphs 59 to 62 above, HP 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 HP Products have directly infringed and continue to directly infringe at least claim 1 of the 282 Patent when they use the Accused HP 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, as described in the corresponding portions of the other 282 Infringing DP Standards, and, with respect to the standalone use of Accused HP Laptops, as described in paragraph 95 above. HP's contributory infringement has included and continues to include, without limitation, HP's sale and provision of

Accused HP 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, HP has sold, and continues to sell, the Accused HP 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, as described in the corresponding portions of the other 282 Infringing DP Standards, and, with respect to the standalone use of Accused HP Laptops, as described in paragraph 95 above. The Accused HP 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 HP Laptops, as described in paragraph 95 above, and have no substantial non-infringing use.

104. On information and belief, as of December 1, 2018, HP knew of the 282 Patent and MPEG LA's assertion that HP was an infringer as a "company that offers products with DisplayPort technology[,] need[ed] to be licensed under the[] essential patents" (Ex. 7 hereto, March 18, 2015, notice letter from MPEG LA to HP predecessor Hewlett-Packard), including the 224 Patent (Ex. 11 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)).

105. To the extent HP was unaware of the 282 Patent and MPEG LA's assertion that the 282 Patent is essential to the 282 Infringing DP Standards and HP, 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 HP 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, HP's infringement of the 282 Patent has been, and continues to be, willful and deliberate.

106. By the time of the trial of this case, HP 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, HP's infringement of the 282 Patent has been, and continues to be, willful and deliberate.

COUNT IV: THE 437 PATENT

107. 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").

108. On information and belief, HP directly infringes claim 41 of the 437 Patent by using Accused HP 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.

109. By way of example and not limitation, and on information and belief, HP employees have used, and continue to use, the Accused HP Products in such a directly infringing manner when transmitting data from Accused HP Laptops, Accused HP Desktops, and any desktop computers with installed Accused HP Graphics Cards[14] via a DisplayPort connection to Accused HP Monitors or other non-HP monitors. On its website, HP explains that "DisplayPort adds audio signal as well, which means fewer cables," "is capable of supporting 2 monitors at a resolution of 2560 x 1600 or 4 monitors at 1920 x 1200," and that "[t]here's even the possibility of daisy-chaining up to six displays at once if your GPU allows several DisplayPort interfaces." https://www.hp.com/hk-en/shop/tech-takes/post/displayport-vs-hdmi (last visited August 24, 2024). HP further explains, "Developed in 2006, the DisplayPort was intended to update the old VGA and DVI standard connectors." *Id.* As explained in paragraphs 29 to 58 above, HP advertises all the Accused HP Laptops, Desktops, Graphics Cards, and Monitors as supporting DisplayPort media connectivity. By way of further example and not limitation, and on information and belief, HP employees and HP customers also use Accused HP Laptops in a directly infringing manner during any operation of an Accused HP 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 HP Laptop's iGPU/dGPU and such Accused HP 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 HP Laptop

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

described in the preceding sentence applies in addition to, and irrespective of, the several examples of direct infringement by HP employees and HP customers described in paragraphs 110 to 117 below.

110. By way of example and not limitation, and on information and belief, HP employees have used, and continue to use, Accused HP 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 HP Laptops, Accused HP Desktops, and Accused HP Graphics Cards connected to Accused HP Monitors via a DisplayPort connection at, between, and/or among HP's offices in the United States. *See, e.g.*, https://www.hp.com/us-en/contact-hp/office-locations.html (identifying four HP offices in the United States). On information and belief, one of numerous examples of such directly infringing uses is when HP employees participate in video conferences or Voice over Internet Protocol (VoIP) calls using an Accused HP Laptop, Accused HP Desktop, or Accused HP Graphics Card connected to an Accused HP Monitor as described above.

111. On information and belief, another example of HP employees having used, and continuing to use, Accused HP Products in a manner that directly infringes claim 41 of the 437 Patent is when HP employees stream or play recorded or real-time video content using an Accused HP Laptop, Accused HP Desktop, or Accused HP Graphics Card connected to an Accused HP Monitor via a DisplayPort connection as described above. On information and belief, one of numerous examples of such directly infringing uses is when HP employees play on an Accused HP Laptop, Accused HP Desktop, or Accused HP Graphics Card connected to an Accused HP Monitor as described above any of the thousands of videos with audio content that HP itself makes available for streaming on its HP Support YouTube Channel. *See* https://www.youtube.com/

channel/UCHranSHHa1qo6Pg4JStkL7Q ("Welcome to HP Support on YouTube! Within our channel you'll find over 20,000 videos designed to help you find solutions to everyday tech issues.").

112. On information and belief, HP employees have also used, and continue to use, Accused HP 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 HP Products to actual and potential customers of Accused HP Products at trade shows, during product demonstrations, and – generally – as part of HP's marketing and sales operations. By way of example and not limitation, HP attends and exhibits its products at the annual Consumer Electronics Show (CES) trade show. *See, e.g.*, https://www.hp.com/us-en/ces.html ("CES 2024 New innovations from HP personalized to the way you live and play"). HP has attended and exhibited its products annually at CES for several years. *See, e.g.*, https://www.hp.com/us-en/newsroom/press-releases/2018/hp_at_ces_2019.html ("HP Opens CES 2019 with Stunning Displays, PCs, and Security Innovations").

113. On information and belief, HP employees have also used, and continue to use, Accused HP 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 HP's actual and potential customers. By way of example and not limitation, and on information and belief, HP employees have used, and continue to use, Accused HP Products when troubleshooting and resolving technical issues for HP's actual and potential customers. In this regard, HP has in the past offered, and currently offers, robust technical support services, which

services include telephone support, online support (including but not limited to the "HP Virtual Repair Center"), and online support libraries and video libraries that feature articles, tutorials, and videos to assist in troubleshooting and maintaining Accused HP Products. *See, e.g.*, https://www.youtube.com/channel/UCHranSHHa1qo6Pg4JStkL7Q; *see also* https://support.hp.com/us-en.

114. By way of further example and not limitation, and on information and belief, HP employees and/or HP's automated server-based customer support systems have used and controlled, and continue to use and control, HP customers' Accused HP 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 HP Products during such customers' use of, by way of example and not limitation, the "HP Support Assistant" program, https://h10032.www1.hp.com/ctg/Manual/c06593496.pdf, "an AI-powered chatbot that provides product information and troubleshooting to HP customers," https://lkc.hp.com/blog/hp-support-assistant-and-virtual-agent#:~:text=The%20Virtual%20Agent%20is%20an%20AI-powered%20chatbot%20that,provides%20product%20information%20and%20troubleshooting%20to%20HP%20customers.

115. On information and belief, HP employees have also used, and continued to use, Accused HP Products in the directly infringing manner 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 HP 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, HP 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/.

116. Further, and on information and belief, with knowledge of the General Video Patents as described in paragraphs 59 to 62 above, HP 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 HP Products have directly infringed and continue to directly infringe at least claim 41 of the 437 Patent when they use the Accused HP 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 HP Laptops, as described in paragraph 109 above. HP'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 HP Products within the United States in the ordinary, customary, and intended way by, directly or through intermediaries, supplying such Accused HP Products to customers within the United States and instructing and encouraging such customers how to use the Accused HP Products in the ordinary, customary, and intended way, which HP knows or should know infringes at least claim 41 of the 437 Patent. HP'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 HP 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 HP Products and DisplayPort functionality thereof (*see, e.g.*, links in the paragraphs above to product and support pages and videos from HP's website).

117. Further and in the alternative, on information and belief, with knowledge of the General Video Patents as described in paragraphs 59 to 62 above, HP 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 HP Products have directly infringed and continue to directly infringe at least claim 41 of the 437 Patent when they use the Accused HP 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 HP Laptops, as described in paragraph 109 above. HP's contributory infringement has included and continues to include, without limitation, HP's sale and provision of Accused HP 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, HP sold the Accused HP 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 HP Laptops, as described in paragraph 109 above.. The Accused HP 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 HP Laptops, as described in paragraph 109 above, and have no substantial non-infringing use.

118. On information and belief, as of June 1, 2021, HP knew of the 437 Patent and MPEG LA's assertion that HP was an infringer as a "company that offers products with DisplayPort technology[,] need[ed] to be licensed under the[] essential patents" (Ex. 7 hereto, March 18, 2015, notice letter from MPEG LA to HP predecessor Hewlett-Packard), including the 437 Patent (Ex. 12 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)).

119. To the extent HP was unaware of the 437 Patent and MPEG LA's assertion that the 437 Patent is essential to the 437 Infringing DP Standards and HP, 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 HP 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, HP's infringement of the 437 Patent has been, and continues to be, willful and deliberate.

120. By the time of the trial of this case, HP 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, HP's infringement of the 437 Patent has been, and continues to be, willful and deliberate.

COUNT V: THE 010 PATENT

121. 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").

122. HP 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 HP 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.

123. By way of example and not limitation, and on information and belief, HP directly infringes at least claims 1 and 12 of the 010 Patent by selling and offering to sell Accused HP Products such as Accused HP Laptops, Accused HP Desktops, and Accused HP Graphics Cards that include a digital display interface part that supports a digital display interface between source devices, such as Accused HP Laptops, Accused HP Desktops, and Accused HP 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)).

124. Further, and on information and belief, with knowledge of the General Video Patents as described in paragraphs 59 to 62 above, HP 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 HP Products have directly infringed and

continue to directly infringe at least claims 1 and 12 of the 010 Patent when they use the Accused HP 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. HP'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 HP Products within the United States in the ordinary, customary, and intended way by, directly or through intermediaries, supplying such Accused HP Products to customers within the United States and instructing and encouraging such customers how to use the Accused HP Products in the ordinary, customary, and intended way, which HP knows or should know infringes at least claims 1 and 12 of the 010 Patent. HP'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 HP 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 HP Products and DisplayPort functionality thereof (*see, e.g.*, links in the paragraphs above to product and support pages and videos from HP's website).

125. Further and in the alternative, on information and belief, with knowledge of the General Video Patents as described in paragraphs 59 to 62 above, HP 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 HP Products have directly

infringed and continue to directly infringe at least claims 1 and 12 of the 010 Patent when they use the Accused HP 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. HP's contributory infringement has included and continues to include, without limitation, HP's sale and provision of Accused HP 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, HP sold the Accused HP 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 HP 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.

126. On information and belief, as of March 1, 2016, HP knew of the 010 Patent and MPEG LA's assertion that HP was an infringer as a "company that offers products with DisplayPort technology[,] need[ed] to be licensed under the[] essential patents" (Ex. 7 hereto, March 18, 2015, notice letter from MPEG LA to HP predecessor Hewlett-Packard), including the

010 Patent (Ex. 10 hereto, DisplayPort Attachment 1, revised 3/1/2016 (including 010 Patent on list of patents essential to DisplayPort standards)).

127. To the extent HP was unaware of the 010 Patent and MPEG LA's assertion that the 010 Patent is essential to the 010 Infringing DP Standards and HP, 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 March 1, 2016, then HP 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, HP's infringement of the 010 Patent has been, and continues to be, willful and deliberate.

128. By the time of the trial of this case, HP 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, HP's infringement of the 010 Patent has been, and continues to be, willful and deliberate.

COUNT VI: THE 786 PATENT

129. 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").

130. HP 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 HP 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.

131. By way of example and not limitation, and on information and belief, HP directly infringes at least claim 1 of the 786 Patent by selling and offering to sell Accused HP Products

such as Accused HP Laptops, Accused HP Desktops, and Accused HP Graphics Cards that include a digital display interface part that supports a digital display interface between source devices, such as Accused HP Laptops, Accused HP Desktops, and Accused HP 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)).

132. Further, and on information and belief, with knowledge of the General Video Patents as described in paragraphs 59 to 62 above, HP 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 HP Products have directly infringed and continue to directly infringe at least claim 1 of the 786 Patent when they use the Accused HP 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. HP'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 HP Products within the United States in the ordinary, customary, and intended way by, directly or through intermediaries, supplying such Accused HP Products to customers within the United States and instructing and encouraging such customers how to use the Accused HP Products in the ordinary,

customary, and intended way, which HP knows or should know infringes at least claim 1 of the 786 Patent. HP'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 HP 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 HP Products and DisplayPort functionality thereof (*see*, *e.g.*, links in the paragraphs above to product and support pages and videos from HP's website).

133. Further and in the alternative, on information and belief, with knowledge of the General Video Patents as described in paragraphs 59 to 62 above, HP 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 HP Products have directly infringed and continue to directly infringe at least claim 1 of the 786 Patent when they use the Accused HP 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. HP's contributory infringement has included and continues to include, without limitation, HP's sale and provision of Accused HP 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, HP sold the

Accused HP 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 HP 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.

134. On information and belief, as of June 1, 2024, HP knew of the 786 Patent and MPEG LA's assertion that HP was an infringer as a "company that offers products with DisplayPort technology[,] need[ed] to be licensed under the[] essential patents" (Ex. 7 hereto, March 18, 2015, notice letter from MPEG LA to HP predecessor Hewlett-Packard), including the 786 Patent (Ex. 13 hereto, DisplayPort Attachment 1, revised 6/1/2024 (providing notice of addition of the 786 Patent to DP License)).

135. To the extent HP was unaware of the 786 Patent and MPEG LA's assertion that the 786 Patent is essential to the 786 Infringing DP Standards and HP, 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 HP 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, HP's infringement of the 786 Patent has been, and continues to be, willful and deliberate.

136. By the time of the trial of this case, HP 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, HP'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 HP 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 HP 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 HP 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

Peter J. McAndrews
pmcandrews@mcandrews-ip.com
Matthew G. McAndrews
mmcandrews@mcandrews-ip.com
McANDREWS, HELD & MALLOY, LTD.
500 West Madison St., 34th Floor
Chicago, IL 60661
Telephone: (312) 775-8000
Facsimile: (312) 775-8100

Geoff Culbertson
gpc@texarkanalaw.com
Kelly Tidwell
kbt@texarkanalaw.com
PATTON, TIDWELL & CULBERTSON, LLP
2800 Texas Boulevard (75503)
Post Office Box 5398
Texarkana, TX 75505-5398
Telephone: (903) 792-7080
Facsimile: (903) 792-8233

Attorneys for Plaintiff,
GENERAL VIDEO, LLC