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

VISTA PEAK VENTURES, LLC,	§	
	§	
Plaintiff,	§	
	§	
v.	§ J	URY TRIAL DEMANDED
	§	
TRULY INTERNATIONAL HOLDINGS	§	
LIMITED and TRULY	§ (CIVIL ACTION NO
SEMICONDUCTORS LIMITED,	§	
	§	
Defendants.	§	

PLAINTIFF'S COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Vista Peak Ventures, LLC ("VPV") files this Complaint against Defendants Truly International Holdings Limited ("Truly Int'l") and Truly Semiconductors Limited ("Truly Semiconductors") for infringement of U.S. Patent No. 5,929,947 ("the '947 patent"), U.S. Patent No. 7,088,401 ("the '401 patent"), U.S. Patent No. 6,579,749 ("the '749 patent"), U.S. Patent No. 6,674,093 ("the '093 patent"), U.S. Patent No. 6,891,196 ("the '196 patent"), and U.S. Patent No. 7,499,119 ("the '119 patent"), collectively, the "Asserted Patents." Truly Int'l and Truly Semiconductors are collectively referred to as "Defendants."

THE PARTIES AND RELATED BACKGROUND

- 1. Vista Peak Ventures, LLC is a Texas limited liability company, located at 1400 Preston Rd, Suite 472, Plano, TX 75093.
- 2. Upon information and belief, Defendant Truly International Holdings Limited ("Truly Int'l") is a multinational limited liability company organized under the laws of the Cayman Islands, with its principal place of business located at 2/F Chung Shun Knitting Centre 1–3 Wing Yip Street Kwai Chung, N.T. Hong Kong, People's Republic of China (PRC).

- 3. Upon information and belief, Truly Int'l was founded in July 1991. Truly Int'l and its subsidiaries (identified by Truly Int'l as the "Truly Group"), including Defendant Truly Semiconductors, are "principally engaged in the manufacture and sale of liquid crystal display products including touch panel products and electronic consumer products including compact camera module, fingerprint identification modules, personal health care products and electrical devices." *See 2019 Annual Report*, TRULY INTERNATIONAL HOLDINGS LIMITED (Apr. 27, 2020), at 11, 64, https://www.truly.com.hk/Upload/trulyhk/Chinese/FinancialStatement/ 2019/CW00732AR-16504687568.PDF [hereinafter *Truly Int'l 2019 Annual Report*]. Truly Int'l is listed on the Stock Exchange of Hong Kong Limited. *See id*.
- 4. Upon information and belief, Defendant Truly Semiconductors Limited ("Truly Semiconductors") is a wholly-owned subsidiary of Truly Int'l and is a limited liability company formed under the laws of Hong Kong in 1991. *See Truly Int'l 2019 Annual Report, supra*, at 11, 64. Truly Semiconductors' principal place of business is located at 2/F Chung Shun Knitting Centre 1–3 Wing Yip Street Kwai Chung, N.T. Hong Kong, PRC.
- 5. Upon information and belief, Truly Semiconductors develops and manufactures See display products. **Product** Information, **TRULY** SEMICONDUCTORS LIMITED. http://www.trulysemi.com/index.php/News/index/nav_id/4/col_id/82/type_id/1.html (last visited July 24, 2020). Truly Semiconductors has branches and distributors overseas, such as in the European, America and Asia Pacific area, including "USA Distributer[s]." See Global Network, **TRULY** SEMICONDUCTORS LIMITED, http://www.trulysemi.com/index.php/News/index/nav_id/2/col_id/75/type_id/1.html (last visited July 24, 2020).

- 6. Upon information and belief, Defendants Truly Int'l and Truly Semiconductors maintain a corporate presence in the U.S. via "a service and sales network" referred to by Defendants as "Truly Americas." *See Truly Americas*, https://www.trulyamerica.com/truly-americas/ (last visited July 24, 2020). Truly Americas provides a "dedicated direct marketing and sales team (Truly employees), Three major US Electronic Distributors, and Manufacturer Sales Representatives positioned throughout the US for on-site assistance." *Id*.
- 7. Upon information and belief, Defendants Truly Int'l and Truly Semiconductors also maintain a corporate presence in the U.S. via Truly Int'l's wholly and directly owned U.S.-based subsidiary Truly (U.S.A.) Inc. ("Truly USA"), which is organized under the laws of California. *See Truly Int'l 2019 Annual Report, supra*, at 172. Truly USA has its principal place of business located at 2620 Concord Ave, Suite 106, Alhambra, CA 91803, USA, and may be served via its agent: Max K. Wong at 2620 Concord Ave, Suite 106, Alhambra, CA 91803.
- 8. Upon information and belief, Defendants with their subsidiary Truly USA, distributors, sales representatives, and employees, as part of a global and domestic network of overseas branches, including those in the U.S., have operated as agents of one another and vicariously as arms of the same business group to work in concert together and enter into agreements that are nearer than arm's length. For example, Defendants Truly Int'l and Truly Semiconductors operate in the U.S. "a service and sales network" referred to by Defendants as "Truly Americas," which includes operation of a website of the same name that provides a contact form and catalog for soliciting U.S. customers. See Where To Buy,https://www.trulyamerica.com/where-to-buy/ (last visited July 24, 2020). Truly Americas provides a "dedicated direct marketing and sales team (Truly employees), Three major US Electronic Distributors, and Manufacturer Sales Representatives positioned throughout the US for

on-site assistance." *See Truly Americas*, https://www.trulyamerica.com/truly-americas/ (last visited July 24, 2020). Defendants, via at least their subsidiary Truly USA and their Truly Americas network, conduct business in the United States, including in Texas and this judicial district. *See Trois v. Apple Tree Auction Center, Incorporated*, 882 F.3d 485, 490 (5th Cir. 2018) ("A defendant may be subject to personal jurisdiction because of the activities of its agent within the forum state...."); *see also Cephalon, Inc. v. Watson Pharmaceuticals, Inc.*, 629 F.Supp.2d 338, 348 (D. Del. 2009) ("The agency theory may be applied not only to parents and subsidiaries, but also to companies that are 'two arms of the same business group,' operate in concert with each other, and enter into agreements with each other that are nearer than arm's length.").

9. Upon information and belief, Defendants are engaged in research and development, manufacturing, importation, distribution, sales, and related technical services for thin-film transistor liquid-crystal display ("TFT-LCD") panels (the "Truly Products") in and for the U.S. consumer market. The Truly Products are incorporated into consumer electronic devices, including, but not limited to, GPS devices manufactured by Garmin Ltd. or its subsidiaries (referred to as "Garmin"). Through offers to sell, distribution, sales, imports, and agreements to transfer ownership of Defendants' TFT-LCD panels by or with distributors, sales representatives, customers, and employees operating in the U.S., including in the Truly Americas network, and/or its U.S. subsidiary, Truly USA, Defendants do business in the U.S., the state of Texas and in the Eastern District of Texas.

JURISDICTION AND VENUE

- 10. This action arises under the patent laws of the United States, namely 35 U.S.C. §§ 271, 281, and 284-285, among others.
- 11. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

- 12. Upon information and belief, Defendant Truly Int'l is subject to this Court's specific and general personal jurisdiction pursuant to due process and/or the Texas Long Arm Statute, due at least to its substantial business in this State and this judicial district, including: (A) at least part of its infringing activities alleged herein which purposefully avail Defendant of the privilege of conducting those activities in this state and this judicial district and, thus, submits itself to the jurisdiction of this court; and (B) regularly doing or soliciting business, engaging in other persistent conduct targeting residents of Texas and this judicial district, and/or deriving substantial revenue from infringing goods offered for sale, sold, and imported and services provided to and targeting Texas residents and residents of this judicial district vicariously through and/or in concert with its alter egos, intermediaries, agents, distributors, importers, customers, subsidiaries, and/or consumers. For example, Truly Int'l and its subsidiaries manufacture and supply the Truly Products for Garmin-branded GPS devices, for import, distribution, and sale in the U.S. market, including in the Eastern District of Texas.
- 13. This Court has personal jurisdiction over Truly Int'l, directly and/or through intermediaries, agents, distributors, importers, customers, subsidiaries, sales representatives, and/or consumers including co-defendant subsidiary Truly Semiconductors and its U.S.-based, wholly-owned subsidiary Truly USA. Through direction and control of these subsidiaries and the Truly Americas sales and service network, as agents of Truly Int'l, Truly Int'l has committed acts of direct and/or indirect patent infringement within Texas, and elsewhere within the United States, giving rise to this action and/or has established minimum contacts with Texas. For example, Truly Int'l confirms, via its website, that it, with its subsidiary Defendant Truly Semiconductors, owns and operates "a service and sales network" that is a "dedicated direct marketing and sales team" composed of Truly employees, major U.S. electronic distributors, and manufacturer sales

representatives "positioned throughout the US for on-site assistance." *See Truly Americas*, https://www.trulyamerica.com/truly-americas/ (last visited July 24, 2020). Therefore, personal jurisdiction over Truly Int'l would not offend traditional notions of fair play and substantial justice.

- 14. Upon information and belief, Truly Int'l controls or otherwise directs and authorizes all activities of its subsidiaries and intermediaries, including, but not limited to Defendant Truly Semiconductor, subsidiary Truly USA, and members of its Truly Americas sales and service network. Via at least these subsidiaries and intermediaries, Truly Int'l has placed and continues to place infringing TFT-LCD panels into the U.S. stream of commerce via established distribution channels, by distributing, marketing, offering for sale, selling, servicing Truly Products, including such products incorporated into Garmin-branded GPS products.
- 15. In the alternative, the Court has personal jurisdiction over Truly Int'l under Federal Rule of Civil Procedure 4(k)(2), because the claims for patent infringement in this action arise under federal law, Truly Int'l is not subject to the jurisdiction of the courts of general jurisdiction of any state, and exercising jurisdiction over Truly Int'l is consistent with the U.S. Constitution.
- 16. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391 because, among other things, Truly Int'l is not a resident in the United States, and thus may be sued in any judicial district, including this one, pursuant to 28 U.S.C. § 1391(c)(3). *See also In re HTC Corporation*, 889 F.3d 1349, 1357 (Fed. Cir. 2018) ("The Court's recent decision in TC Heartland does not alter" the alien-venue rule.).
- 17. Upon information and belief, Truly Int'l has significant ties to, and presence in, the State of Texas and the Eastern District of Texas, making venue in this judicial district both proper and convenient for this action.

- 18. Upon information and belief, Defendant Truly Semiconductors is subject to this Court's specific and general personal jurisdiction pursuant to due process and/or the Texas Long Arm Statute, due at least to its substantial business in this State and this judicial district, including:

 (A) at least part of its infringing activities alleged herein which purposefully avail Defendant of the privilege of conducting those activities in this state and this judicial district and, thus, submits itself to the jurisdiction of this court; and (B) regularly doing or soliciting business, engaging in other persistent conduct targeting residents of Texas and this judicial district, and/or deriving substantial revenue from infringing goods offered for sale, sold, and imported and services provided to and targeting Texas residents and residents of this judicial district vicariously through and/or in concert with its alter egos, intermediaries, agents, distributors, importers, customers, subsidiaries, and/or consumers. For example, Truly Semiconductors, its parent Truly Int'l, and its subsidiaries manufacture and supply the Truly Products for Garmin-branded GPS devices, for import, distribution, and sale in the U.S. market.
- 19. This Court has personal jurisdiction over Truly Semiconductors, directly and/or through intermediaries, agents, distributors, importers, customers, subsidiaries, sales representatives, and/or consumers including co-defendant parent Truly Int'l, its U.S.-based, wholly-owned subsidiary Truly USA, and the Truly Americas sales and service network. Through direction and control of this subsidiary and the Truly Americas sales and service network, as agents of Truly Semiconductors, Truly Semiconductors has committed acts of direct and/or indirect patent infringement within Texas, and elsewhere within the United States, giving rise to this action and/or has established minimum contacts with Texas. For example, Truly Semiconductors confirms, via its website, that it, with its parent Defendant Truly Int'l, owns and operates "a service and sales network" that is a "dedicated direct marketing and sales team" composed of Truly employees,

major US electronic distributors, and manufacturer sales representatives "positioned throughout the US for on-site assistance." *See Truly Americas*, https://www.trulyamerica.com/truly-americas/ (last visited July 24, 2020). Therefore, personal jurisdiction over Truly Semiconductors would not offend traditional notions of fair play and substantial justice.

- 20. Upon information and belief, Truly Semiconductors controls or otherwise directs and authorizes all activities of its subsidiaries and intermediaries, including, but not limited to Truly Int'l's U.S.-based subsidiary Truly USA, and members of the Truly Americas sales and service network. Via at least these subsidiaries and intermediaries, Truly Semiconductors has placed and continues to place infringing TFT-LCD panels into the U.S. stream of commerce via established distribution channels, by distributing, marketing, offering for sale, selling, servicing Truly Products, including such products incorporated into Garmin-branded GPS products.
- 21. In the alternative, the Court has personal jurisdiction over Truly Semiconductors under Federal Rule of Civil Procedure 4(k)(2), because the claims for patent infringement in this action arise under federal law, Truly Semiconductors is not subject to the jurisdiction of the courts of general jurisdiction of any state, and exercising jurisdiction over Truly Int'l is consistent with the U.S. Constitution.
- 22. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391 because, among other things, Truly Semiconductors is not a resident in the United States, and thus may be sued in any judicial district, including this one, pursuant to 28 U.S.C. § 1391(c)(3).
- 23. Upon information and belief, Truly Semiconductors has significant ties to, and presence in, the State of Texas and the Eastern District of Texas, making venue in this judicial district both proper and convenient for this action.

- 24. Upon information and belief, Defendants along with their parents, subsidiaries, and other related companies (i.e., associates, business partners, distributors and customers which have a significant business presence in the U.S.) engaged and continue to engage in a concerted effort to import, distribute, sell, offer to sell, and use infringing products in the United States, including GPS devices marketed and sold under at least the Garmin brand that incorporate Truly Products. For example, Defendants own and operate a website www.trulyamericas.com specifically targeting U.S. customers. In its Truly Americas network, Defendants identify U.S. distribution partners Arrow Electronics, Inc., Avnet, and Future Electronics. Defendants also identify sales representative firms "throughout North America." Defendants further provide a catalog of at least some of their TFT-LCD products available for sale and distribution in the U.S. See TFT & Touch Modules, TRULY AMERICAS, http://www.trulyamerica.com/products/tft-modules/ (last visited July 24, 2020). This catalog provides specifications and features for the Truly Products. And, on the Truly Americas website, Defendants provide a contact form to solicit potential U.S. customers and put them into contact with distributors and sales representatives with a significant U.S. business presence. Id. Import records further show that at least Defendant Truly Semiconductors imports "Liquid Crystal Display" products manufactured by Defendants directly to Defendants' U.S.based customers, such as Methode Electronics, Keytronics EMS, and Future Electronics. See, e.g., Supply Chain Intelligence about: Truly Semiconductor Ltd., PANJIVA, https://panjiva.com/Truly-Semiconductor-Ltd/59937775 (last visited July 24, 2020). Thus, Defendants, directly and vicariously with its agents, have worked together to manufacture, import, distribute, offer for sale, and sell Truly Products in the U.S., in Texas, and in this judicial district.
- 25. Defendants further have placed and continue to place into the stream of commerce using established distribution channels infringing products with the intent, purpose, knowledge

and understanding that such products are, will be, and continue to be sold, offered for sale, and/or imported into the State of Texas and this judicial district. For example, Defendants and its subsidiaries have, via at least the Truly Americas sales and service network, imported, offered for sale, advertised, and sold Truly Products incorporated into at least Garmin-branded GPS Products including Truly TDA-WQVGA0500B61630-V2 (incorporated into the Garmin Drive52). Such Truly Products have been and are distributed and sold in retail stores, both brick and mortar and online, in Texas and within this judicial district. *See Litecubes, LLC v. Northern Light Products, Inc.*, 523 F.3d 1353, 1369-70 (Fed. Cir. 2008) ("[T]he sale [for purposes of § 271] occurred at the location of the buyer."); *see also Semcon IP Inc. v. Kyocera Corporation*, No. 2:18-cv-00197-JRG, 2019 WL 1979930, at *3 (E.D. Tex. May 3, 2019) (denying accused infringer's motion to dismiss because plaintiff sufficiently plead that purchases of infringing products outside of the United States for importation into and sales to end users in the U.S. may constitute an offer to sell under § 271(a)).

THE ASSERTED PATENTS AND TECHNOLOGY

26. Upon information and belief, a significant portion of the operating revenue of Defendants is derived from the "manufacture and sale of liquid crystal display products including touch panel products," which are imported into the United States, distributed, and ultimately sold to U.S. consumers. *See Truly Int'l 2019 Annual Report, supra*, at p. 172. The Truly Group's "fifth generation TFT-LCD production plant in Shanwei has been entered into mass production period in the first quarter of 2020" and "this TFT-LCD production plant can contribute to the Group by reducing the cost of TFT-LCD panels for production of LCD modules and touch modules since mass production." *See Truly Int'l 2019 Annual Report, supra*, at 9. In its 2019 Annual Report, Defendant Truly Int'l states that it and its subsidiaries have "made the record high revenue of the Group in 2019, and recorded a double digits revenue growth in 2019 when compared to 2018."

See Truly Int'l 2019 Annual Report, supra, at 8. Truly Int'l reported over 22.5 billion HK\$ (about 2.9 billion US\$) in sales revenue in 2019 of which 65% derived from its LCD products business segment. See Truly Int'l 2019 Annual Report, supra, at p. 13. The Truly Group expects its LCD business to "continue to be the core business of the Group in coming few years." See Truly Int'l 2019 Annual Report, supra, at p. 12. Defendants' subsidiaries, selling agents, customers, and distributors having a significant U.S. business presence, receive Truly Products incorporated into electronic devices, and distribute and sell those products to consumers in the U.S.

27. The Asserted Patents cover TFT-LCD panels, their components, including infringing TFT-LCD panels made by Defendants and incorporated into at least Garmin-branded products, and processes related to the same (referred to as the "Accused Panels") for importation, distribution, and sale in the U.S. One example of Defendants' Accused Panels is Truly TDA-WQVGA0500B61630-V2 (incorporated into the Garmin Drive52). The labels for this product are shown below:



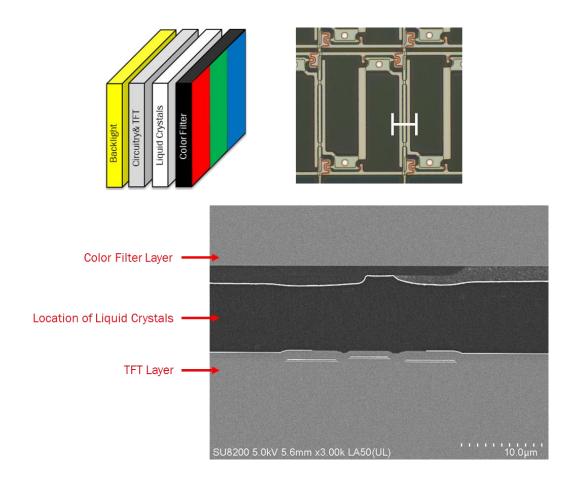




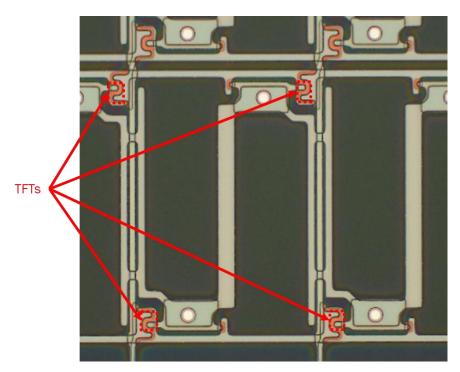




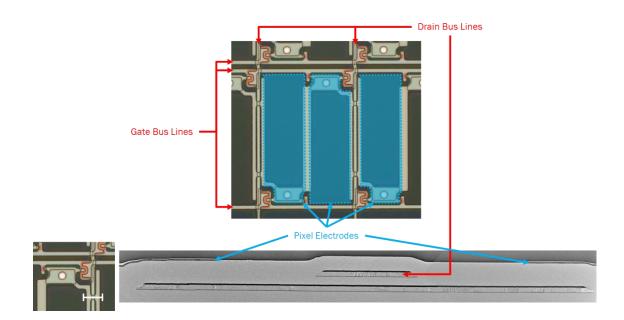
28. Typically, a TFT-LCD has the following structure shown below for the Truly TDA-WQVGA0500B61630-V2, comprising of a backlight, a TFT/circuitry layer, a liquid crystal layer, and a color filter:



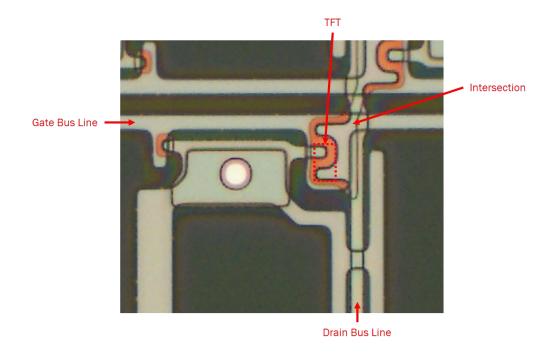
29. As shown above, the TFT-LCD panel contains a TFT array substrate and many TFTs. A teardown image below from the Truly TDA-WQVGA0500B61630-V2 shows a sampling of TFTs.



30. The Accused Panel has circuitry lines accompanying the TFTs, with larger rectangular areas associated with pixel electrodes. As shown below, the plurality of drain lines is arranged perpendicularly to the plurality of gate bus lines. A pixel electrode is arranged in a region surrounded by the gate and drain bus lines and made of transparent conductive film.

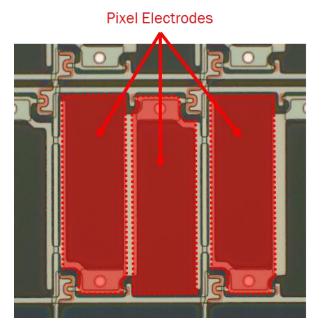


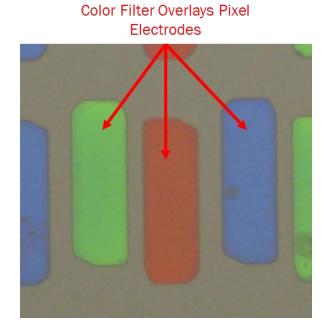
31. As shown below, each TFT is arranged near an intersection of gate and drain bus lines.



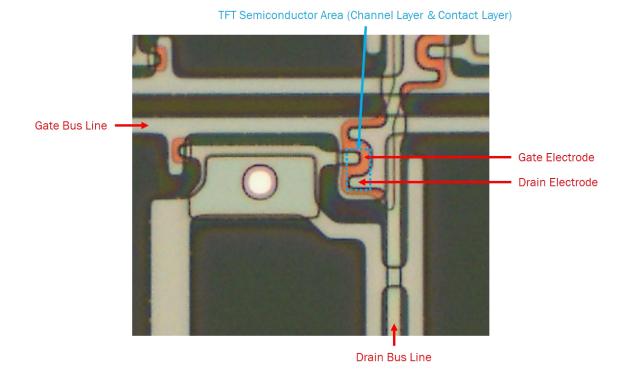
32. Each TFT acts as a switch that operates its respective individual pixel using the circuity lines. In that way, the pixels can be turned on and off to create an image on an LCD by allowing or preventing light to pass through. The individual pixels are more apparent when a color

filter layer overlays the circuits as shown in the image below for the Truly LCD Model No. TDA-WQVGA0500B61630-V2.

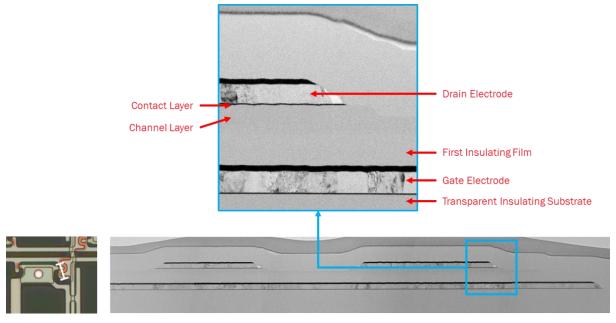




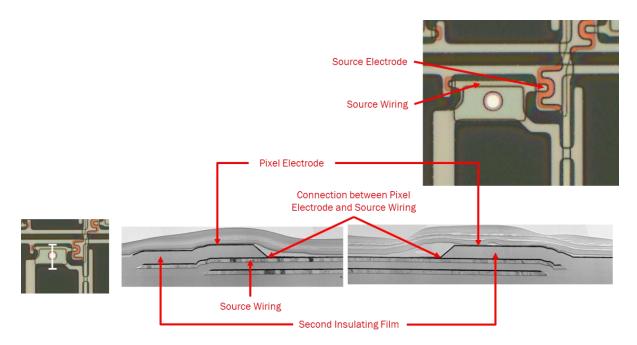
33. As shown below, each TFT in the array comprises a 1) gate electrode formed on a transparent insulating substrate and electrically connected to the gate bus line, 2) a drain electrode, 3) a channel layer, and 4) a contact layer, and is electrically connected to the drain bus line.



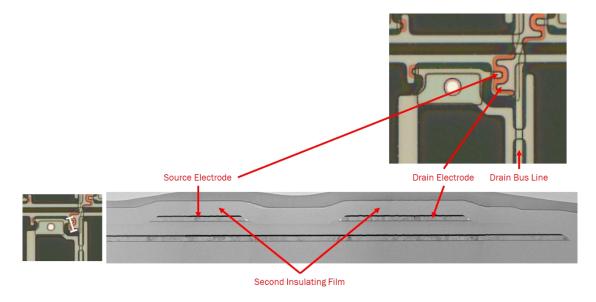
34. The plurality of drain lines are arranged perpendicularly to the gate bus lines and electrically isolated via a first insulating film.



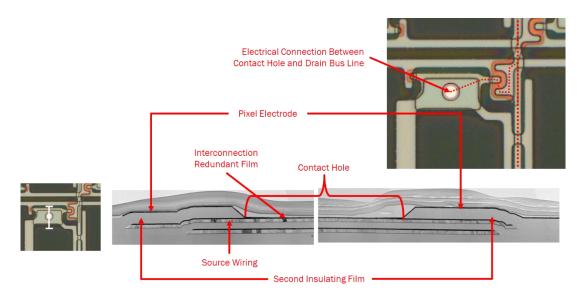
35. In the Accused Panel shown below, a source electrode is connected to a pixel electrode.



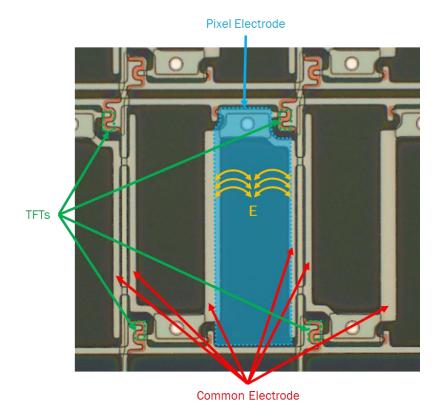
36. As shown below, a source electrode is electrically isolated from the drain electrode and drain bus lines by a second insulating film.



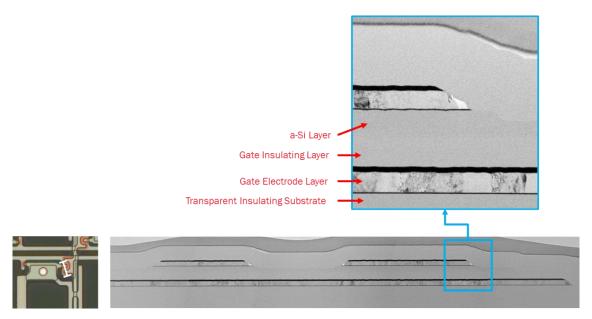
37. The Accused Panel includes an interconnection redundant film located in a contact hole formed in the second insulating film is electrically connected to the drain bus line via source wiring.



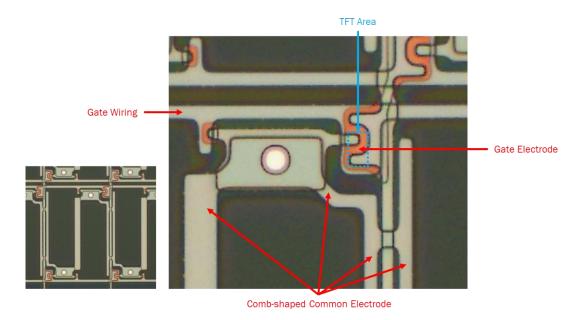
38. As shown below, the active matrix substrate of the Truly LCD model no. TDA-WQVGA0500B61630-V2 has a lateral electrical field type active matrix substrate comprised of thin-film transistors (TFTs), pixel electrodes, and common electrodes.



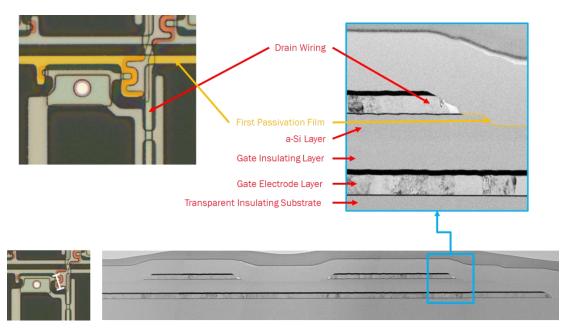
39. The active matrix substrate of the Accused Panel has a gate electrode layer, a gate insulating layer, and an amorphous silicon (a-Si) layer stacked on a transparent insulating substrate.



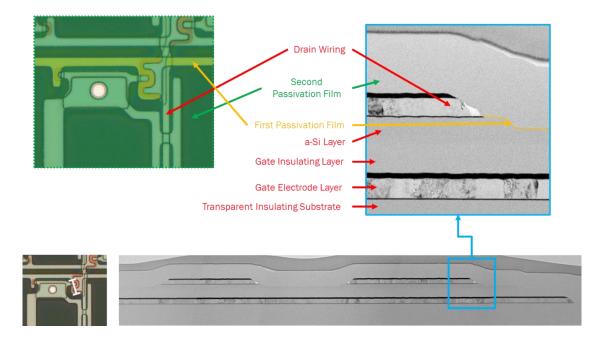
40. As shown below, the layered structure of the active matrix substrate includes a gate electrode, a gate wiring, a comb-shaped common electrode, and a TFT area.



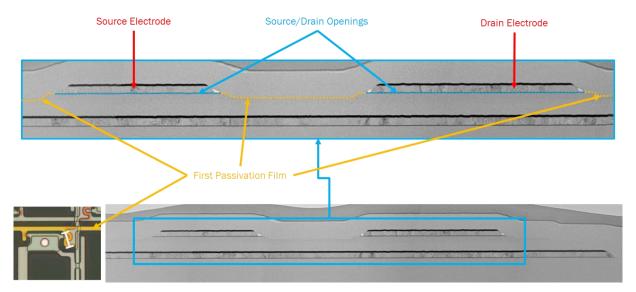
41. Drain wiring is present and formed on a passivation film shown below, which covers the layered structure.



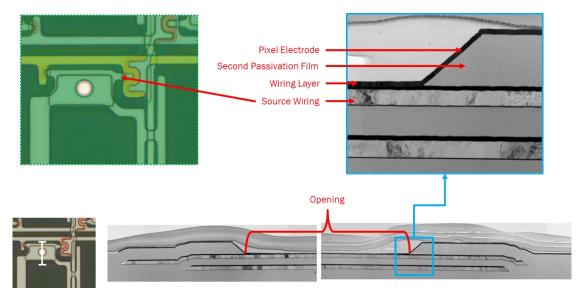
42. A second passivation film, shown below, is present and overlays the drain wire and first passivation film.



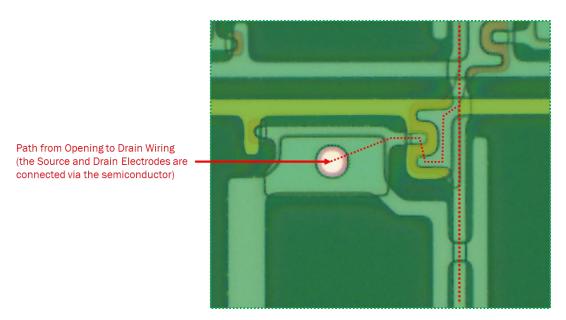
43. As shown below, openings are present that pass through the passivation films to reach the amorphous silicon semiconductor layer.



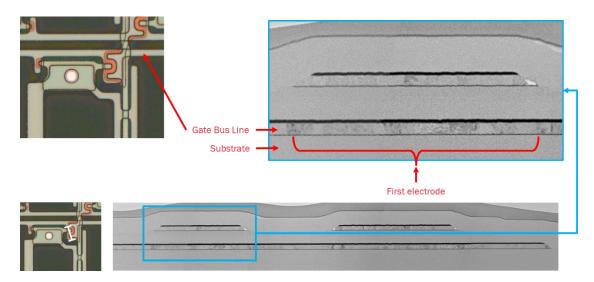
44. An opening, shown below, is present in the second passivation film with a wiring layer formed of ITO extending though it that connects with the drain wiring.



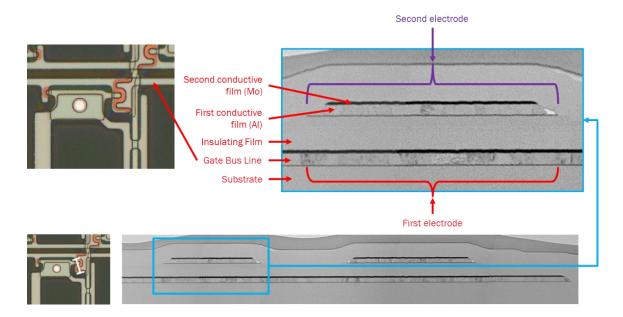
45. As shown below, the wiring layer extends through the opening and openings for connection.



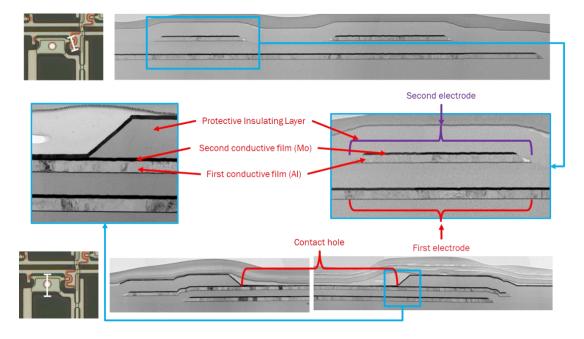
46. The Accused Panels such as Truly LCD Model No. TDA-WQVGA0500B61630-V2 also comprise a first electrode on a substrate that forms one of two electrodes of an accumulation capacitor. A first insulating film covers the first electrode.



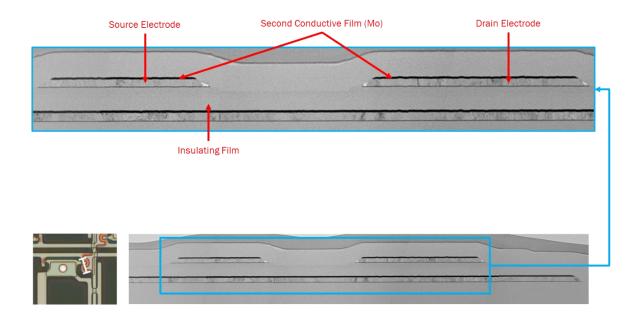
47. As shown below, each TFT has a second electrode with conductive films (e.g., Al and Mo) that completes the accumulation capacitor with the first electrode.



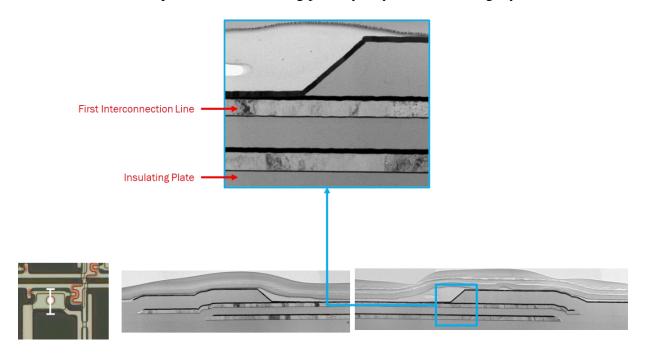
48. The Accused Panel, shown below, has a protective insulating layer which has a contact hole in a layer above the first and second electrodes with the second conductive film (e.g., Mo) at the bottom.



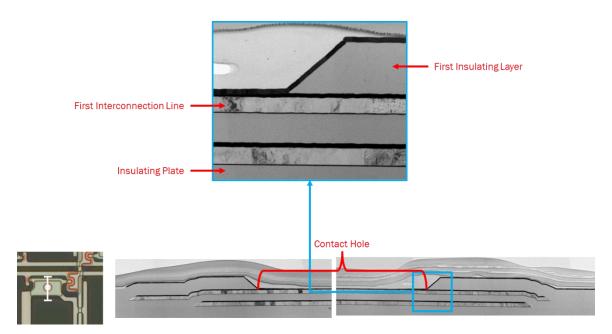
49. The Accused Panel, as shown below, has a TFT with source and drain electrodes comprising the second conductive film formed on the insulating film.



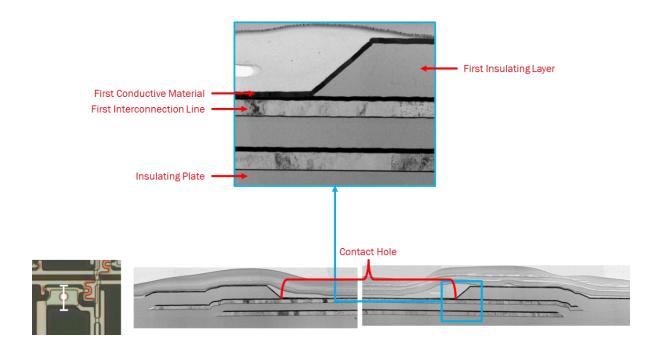
50. The Accused Panels, such as Truly LCD model no. TDA-WQVGA0500B61630-V2, further comprise an LCD device, as shown below, having a patterned Al or Al alloy interconnection line disposed on an insulating plate by way of an insulating layer.



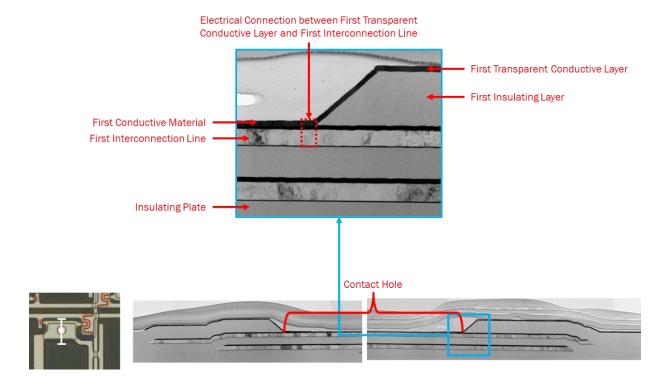
51. As shown below, the Accused Panel has an insulating layer that covers the interconnection line and a contact hole that exposes part of the interconnection line.



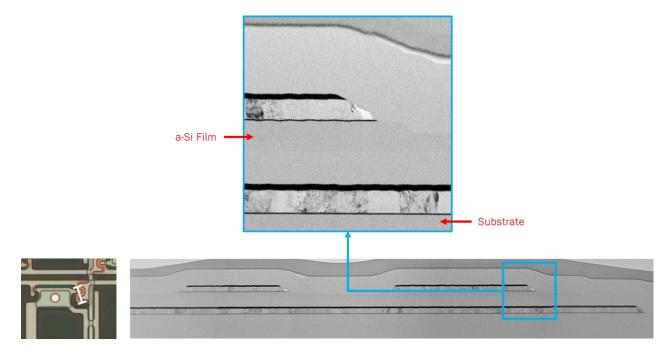
52. A first conductive material made of molybdenum is in contact with the exposed part of the interconnection line and covers the whole exposed part, as shown below.



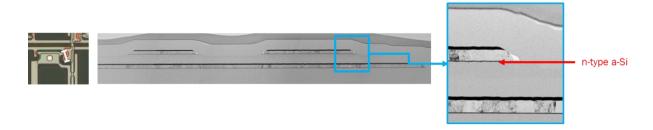
53. The Accused Panel shown below also has a transparent conductive layer (e.g., ITO) in contact with the first conductive material and thereby electrically connected to the first interconnection line.



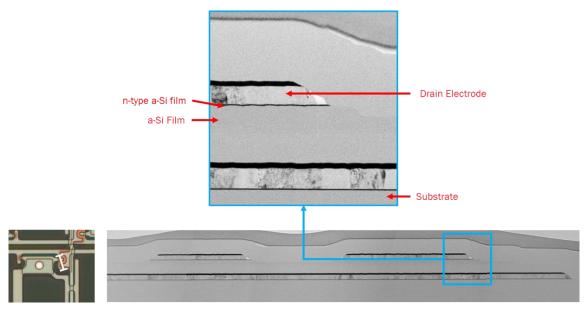
54. The Asserted Patents also cover Defendants' processes for making TFT-LCD panels. Below is a schematic cross-sectional view of a TFT from Truly LCD model no. TDA-WQVGA0500B61630-V2. The images show an amorphous silicon film formed on a substrate with an n-type region in the top surface of the amorphous silicon film.



55. As shown below, a metal film is formed on the amorphous silicon film to form an n-type amorphous silicon film.



56. Aluminum source and drain electrodes are formed on the amorphous silicon with the n-type amorphous silicon film there between, as shown below.



COUNT I

(INFRINGEMENT OF U.S. PATENT NO. 5,929,947)

- 57. Plaintiff incorporates paragraphs 1 through 56 herein by reference.
- 58. VPV is the assignee of the '947 patent, entitled "Liquid crystal display thin film transistor array with redundant film formed over a contact hole and method of fabricating the same," with ownership of all substantial rights in the '947 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringements.
- 59. The '947 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code. The '947 patent issued from U.S. Patent Application No. 09/168,085.
- 60. Defendants have and continue to directly and/or indirectly infringe (by inducing infringement) one or more claims of the '947 patent in this judicial district and elsewhere in Texas and the United States.
- 61. Upon information and belief, Defendants design, manufacture, import, distribute, offer to sell, and sell the Accused Panels in the U.S., including via Defendants' subsidiaries,

distributors, and customers and via its Truly Americas sales and service network. These panels are incorporated into electronic devices such as GPS devices, including such devices distributed and sold in the U.S. under at least the Garmin brand.

62. Defendants directly infringe the '947 patent via 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing Accused Panels, their components, and/or products containing same that incorporate the fundamental technologies covered by the '947 patent to, for example, alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers. Furthermore, upon information and belief, Defendants sell and make Accused Panels outside of the United States, deliver those products to its alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers in the United States, or in the case that Defendants deliver the Accused Panels outside of the United States, Defendants do so intending and/or knowing that those panels are destined for the United States and/or designing those products for sale in the United States, thereby directly infringing the '947 patent. See, e.g., Lake Cherokee Hard Drive Techs., L.L.C. v. Marvell Semiconductor, Inc., 964 F. Supp. 2d 653, 658 (E.D. Tex. 2013). Furthermore, Defendants directly infringe the '947 patent through its direct involvement in the activities of Defendants' subsidiaries, partners, and customers on behalf of and for the benefit of Defendants. Such direct infringement includes selling and offering for sale the Accused Panels directly to its U.S. distributors and customers, such as Garmin, and importing the Accused Panels into the United States for its distributors and customers. Upon information and belief, Defendants' U.S.-based subsidiary Truly USA and members of its Truly Americas sales and service network conduct activities that constitute direct infringement of the '947 patent under 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Accused Panels. Defendants are vicariously liable for this infringing conduct of Defendants' U.S.-based subsidiary

Truly USA and members of the Truly Americas network (under both the alter ego and agency theories) because, as an example and, upon information and belief, Defendants and its U.S.-based subsidiary and members of the Truly Americas network operate as agents of one another and vicariously as arms of the same business group to work in concert together, including as business partners or in a joint venture, entering into agreements that are nearer than arm's length to conduct business in the United States. Defendants further receive a direct financial benefit from its U.S.-based subsidiary Truly USA's and Truly Americas network members' infringement.

63. For example, Defendants infringe claim 1 of the '947 patent via the Accused Panels such as Truly LCD model no. TDA-WQVGA0500B61630-V2 (incorporated into Garmin 52M). Those Accused Panels include "[a] liquid crystal display thin film transistor array comprising" each of the limitations of claim 1. The technology discussion above and the example Accused Panels provide context for Plaintiff's allegations that each of those limitations are met. For example, those Accused Panels include a plurality of parallel gate bus lines arranged on a transparent insulating substrate; a plurality of drain bus lines arranged perpendicularly to said gate bus lines and electrically isolated from said gate bus lines by a first insulating film; a thin film transistor arranged near an intersection of said gate bus line and said drain bus line; and a pixel electrode arranged in a region surrounded by said gate bus lines and said drain bus lines and made of a transparent conductive film, said thin film transistor comprising a gate electrode formed on said transparent insulating substrate and electrically connected to said gate bus line, a drain electrode formed via said first insulating film, a channel layer, and a contact layer and electrically connected to said drain bus line, and a source electrode formed via said first insulating film, said channel layer, and said contact layer and electrically connected to said pixel electrode, and said pixel electrode being electrically isolated from said drain electrode and said drain bus line by a second insulating film, wherein a contact hole which is to be electrically connected to said drain bus line is formed in said second insulating film stacked on said drain bus line in a region including the intersection of said gate bus line and said drain bus line, and an interconnection redundant film made of the same transparent conductive film as said pixel electrode is formed on said second insulating film so as to cover said contact hole.

- 64. Defendants further infringe the '947 patent via 35 U.S.C. § 271(g) by selling, offering to sell, and/or importing TFT-LCD panels, their components, and/or products containing same, that are made by a process covered by the '947 patent. Upon information and belief, the infringing TFT-LCD panels, their components, and/or products containing same are not materially changed by subsequent processes, and they are neither trivial nor nonessential components of another product.
- 65. At a minimum, Defendants have known of the '947 patent at least as early as the filing date of the complaint. In addition, Defendants have known of the '947 patent since April 9, 2020 when Defendants were provided access to a data room containing claim charts, including for the '947 patent.
- Defendants were on notice of its infringement, Defendants have actively induced, under U.S.C. § 271(b), distributors, customers, subsidiaries, importers, and/or consumers that import, purchase, or sell the Accused Panels that include or are made using all of the limitations of one or more claims of the '947 patent to directly infringe one or more claims of the '947 patent by using, offering for sale, selling, and/or importing the Accused Panels. Since at least the notice provided on the above-mentioned date, Defendants do so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '947 patent. Defendants intend to cause,

and have taken affirmative steps to induce infringement by distributors, importers (including inducement to import in violation of § 271(g)), customers, subsidiaries, and/or consumers by, inter alia, creating advertisements that promote the infringing use of the Accused Panels, creating established distribution channels for the Accused Panels into and within the United States, manufacturing the Accused Panels in conformity with U.S. laws and regulations, distributing or making available instructions or manuals for these products to purchasers and prospective buyers, and/or providing technical support, replacement parts, or services for these products to these purchasers in the United States. For example, Defendants Truly Int'l and Truly Semiconductors operate in the U.S. "a service and sales network" referred to by Defendants as "Truly Americas," which includes operation of a website of the same name that provides a contact form and catalog for soliciting U.S. customers. *See Truly Americas*, https://www.trulyamerica.com/truly-americas/ (last visited July 24, 2020). Truly Americas provides a "dedicated direct marketing and sales team (Truly employees), Three major US Electronic Distributors, and Manufacturer Sales Representatives positioned throughout the US for on-site assistance." *Id.*

- 67. Upon information and belief, despite having knowledge of the '947 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '947 patent, Defendants have nevertheless continued their infringing conduct and disregarded an objectively high likelihood of infringement. Defendants' infringing activities relative to the '947 patent have been, and continue to be, willful, wanton, malicious, in bad-faith, deliberate, consciously wrongful, flagrant, characteristic of a pirate, and an egregious case of misconduct beyond typical infringement such that Plaintiff is entitled under 35 U.S.C. § 284 to enhanced damages up to three times the amount found or assessed.
 - 68. VPV has been damaged as a result of Defendants' infringing conduct described

in this Count. Defendants are, thus, liable to VPV in an amount that adequately compensates VPV for Defendants' infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT II

(INFRINGEMENT OF U.S. PATENT NO. 7,088,401)

- 69. Plaintiff incorporates paragraphs 1 through 68 herein by reference.
- 70. VPV is the assignee of the '401 patent, entitled "Liquid crystal display device with less pixel error and method of manufacturing the same," with ownership of all substantial rights in the '401 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringements.
- 71. The '401 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code. The '401 patent issued from U.S. Patent Application No. 09/609,169.
- 72. Defendants have and continue to directly and/or indirectly infringe (by inducing infringement) one or more claims of the '401 patent in this judicial district and elsewhere in Texas and the United States.
- 73. Upon information and belief, Defendants design, manufacture, import, distribute, offer to sell, and sell the Accused Panels in the U.S., including via Defendants' subsidiaries, distributors, and customers and via its Truly Americas sales and service network. These panels are incorporated into electronic devices such as GPS devices, including such devices distributed and sold in the U.S. under at least the Garmin brand.
- 74. Defendants directly infringe the '401 patent via 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing Accused Panels, their components, and/or products containing same that incorporate the fundamental technologies covered by the '401 patent to, for

example, alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers. Furthermore, upon information and belief, Defendants sell and make Accused Panels outside of the United States, deliver those products to its alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers in the United States, or in the case that Defendants deliver the Accused Panels outside of the United States, Defendants do so intending and/or knowing that those panels are destined for the United States and/or designing those products for sale in the United States, thereby directly infringing the '401 patent. See, e.g., Lake Cherokee Hard Drive Techs., L.L.C. v. Marvell Semiconductor, Inc., 964 F. Supp. 2d 653, 658 (E.D. Tex. 2013). Furthermore, Defendants directly infringe the '401 patent through its direct involvement in the activities of Defendants' subsidiaries, partners, and customers on behalf of and for the benefit of Defendants. Such direct infringement includes selling and offering for sale the Accused Panels directly to its U.S. distributors and customers, such as Garmin and importing the Accused Panels into the United States for its distributors and customers. Upon information and belief, Defendants' U.S.-based subsidiary Truly USA and members of its Truly Americas sales and service network conduct activities that constitute direct infringement of the '401 patent under 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Accused Panels. Defendants are vicariously liable for this infringing conduct of Defendants' U.S.-based subsidiary Truly USA and members of the Truly Americas network (under both the alter ego and agency theories) because, as an example and, upon information and belief, Defendants and its U.S.-based subsidiary and members of the Truly Americas network operate as agents of one another and vicariously as arms of the same business group to work in concert together, including as business partners or in a joint venture, entering into agreements that are nearer than arm's length to conduct business in the United States. Defendants further receive a direct financial benefit from its U.S.-based subsidiary Truly USA's and Truly Americas network members' infringement.

- For example, Defendants infringe claim 1 of the '401 patent via the Accused Panels 75. such as Truly LCD model no. TDA-WQVGA0500B61630-V2 (incorporated into Garmin 52M). Those Accused Panels include a "liquid crystal display device, comprising" each of the limitations of claim 1. The technology discussion above and the example Accused Panels provide context for Plaintiff's allegations that each of those limitations are met. For example, the Accused Panels include a first electrode formed on a substrate as one of two electrodes of an accumulation capacitor, said first electrode comprising a portion of a gate bus line pattern of said liquid crystal display device; an insulating film formed on said first electrode to cover said first electrode; a second electrode formed on said first electrode via said insulating film as the other electrode of said accumulation capacitor and including a first conductive film and a second conductive film formed on said first conductive film; a protective insulating layer formed on said second electrode and having a contact hole which is formed over said first and second electrodes, a bottom of said contact hole being defined by said second conductive film; and a thin film transistor comprising source and drain electrodes which are formed on said insulating film and comprise said second conductive film, wherein one of said first conductive film and said second conductive film comprises a layer formed of a material selected from the group consisting of Al (Aluminum), W (Tungsten), Cu (Copper), Ta (Tantalum) and TaN (Tantalum Nitride).
- 76. Defendants further infringe the '401 patent via 35 U.S.C. § 271(g) by selling, offering to sell, and/or importing TFT-LCD panels, their components, and/or products containing same, that are made by a process covered by the '401 patent. Upon information and belief, the infringing TFT-LCD panels, their components, and/or products containing same are not materially

changed by subsequent processes, and they are neither trivial nor nonessential components of another product.

- 77. At a minimum, Defendants have known of the '401 patent at least as early as the filing date of the complaint. In addition, Defendants have known of the '401 patent since April 9, 2020 when Defendants were provided access to a data room containing claim charts, including for the '401 patent.
- 78. Upon information and belief, since at least the above-mentioned date when Defendants were on notice of its infringement, Defendants have actively induced, under U.S.C. § 271(b), distributors, customers, subsidiaries, importers, and/or consumers that import, purchase, or sell the Accused Panels that include or are made using all of the limitations of one or more claims of the '401 patent to directly infringe one or more claims of the '401 patent by using, offering for sale, selling, and/or importing the Accused Panels. Since at least the notice provided on the above-mentioned date, Defendants do so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '401 patent. Defendants intend to cause, and have taken affirmative steps to induce infringement by distributors, importers (including inducement to import in violation of § 271(g)), customers, subsidiaries, and/or consumers by, inter alia, creating advertisements that promote the infringing use of the Accused Panels, creating established distribution channels for the Accused Panels into and within the United States, manufacturing the Accused Panels in conformity with U.S. laws and regulations, distributing or making available instructions or manuals for these products to purchasers and prospective buyers, and/or providing technical support, replacement parts, or services for these products to these purchasers in the United States. For example, Defendants Truly Int'l and Truly Semiconductors operate in the U.S. "a service and sales network" referred to by Defendants as "Truly Americas,"

which includes operation of a website of the same name that provides a contact form and catalog for soliciting U.S. customers. *See Truly Americas*, https://www.trulyamerica.com/truly-americas/ (last visited July 24, 2020). Truly Americas provides a "dedicated direct marketing and sales team (Truly employees), Three major US Electronic Distributors, and Manufacturer Sales Representatives positioned throughout the US for on-site assistance." *Id*.

- 79. Upon information and belief, despite having knowledge of the '401 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '401 patent, Defendants have nevertheless continued their infringing conduct and disregarded an objectively high likelihood of infringement. Defendants' infringing activities relative to the '401 patent have been, and continue to be, willful, wanton, malicious, in bad-faith, deliberate, consciously wrongful, flagrant, characteristic of a pirate, and an egregious case of misconduct beyond typical infringement such that Plaintiff is entitled under 35 U.S.C. § 284 to enhanced damages up to three times the amount found or assessed.
- 80. VPV has been damaged as a result of Defendants' infringing conduct described in this Count. Defendants are, thus, liable to VPV in an amount that adequately compensates VPV for Defendants' infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT III

(INFRINGEMENT OF U.S. PATENT NO. 6,579,749)

- 81. Plaintiff incorporates paragraphs 1 through 80 herein by reference.
- 82. VPV is the assignee of the '749 patent, entitled "Fabrication method and fabrication apparatus for thin film transistor," with ownership of all substantial rights in the '749 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringements.

- 83. The '749 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code. The '749 patent issued from U.S. Patent Application No. 09/440,615.
- 84. Upon information and belief, Defendants design, manufacture, import, distribute, offer to sell, and sell the Accused Panels in the U.S., including via Defendants' subsidiaries, distributors, and customers and via its Truly Americas sales and service network. These panels are incorporated into electronic devices such as GPS devices, including such devices distributed and sold in the U.S. under at least the Garmin brand.
- 85. Defendants directly infringe the '749 patent via 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing Accused Panels, their components, and/or products containing same that incorporate the fundamental technologies covered by the '749 patent to, for example, alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers. Furthermore, upon information and belief, Defendants sell and make Accused Panels outside of the United States, deliver those products to its alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers in the United States, or in the case that Defendants deliver the Accused Panels outside of the United States, Defendants do so intending and/or knowing that those panels are destined for the United States and/or designing those products for sale in the United States, thereby directly infringing the '749 patent. See, e.g., Lake Cherokee Hard Drive Techs., 964 F. Supp. 2d at 658. Furthermore, Defendants directly infringe the '749 patent through its direct involvement in the activities of Defendants' subsidiaries, partners, and customers on behalf of and for the benefit of Defendants. Such direct infringement includes selling and offering for sale the Accused Panels directly to its U.S. distributors and customers, such as Garmin and importing the Accused Panels into the United States for its

distributors and customers. Upon information and belief, Defendants' U.S.-based subsidiary Truly USA and members of its Truly Americas sales and service network conduct activities that constitute direct infringement of the '749 patent under 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Accused Panels. Defendants are vicariously liable for this infringing conduct of Defendants' U.S.-based subsidiary Truly USA and members of the Truly Americas network (under both the alter ego and agency theories) because, as an example and, upon information and belief, Defendants and its U.S.-based subsidiary and members of the Truly Americas network operate as agents of one another and vicariously as arms of the same business group to work in concert together, including as business partners or in a joint venture, entering into agreements that are nearer than arm's length to conduct business in the United States. Defendants further receive a direct financial benefit from its U.S.-based subsidiary Truly USA's and Truly Americas network members' infringement.

86. For example, Defendants infringe claim 13 of the '749 patent via the Accused Panels such as Truly LCD model no. TDA-WQVGA0500B61630-V2 (incorporated into Garmin 52M). The technology discussion above and the example accused TFT-LCD panels provide context for Plaintiff's allegations that each of those limitations are met. Those Accused Panels are made pursuant to a "method for fabricating a semiconductor device, comprising each of the steps of claim 13. For example, the Accused Panels include semiconductor devices made pursuant to a first step of forming an amorphous silicon film on a substrate; and a second step of performing plasma processing with respect to said substrate having said amorphous silicon film formed thereon, said plasma containing an n-type impurity element selected from a group V of the periodic table to provide an n-type region in the top surface of the amorphous silicon film; and a third step of forming a metal film on said amorphous silicon film wherein at least one of said second arid

third steps are performed successively after the previous step and without exposing said substrate to an oxidizing atmosphere in the successive steps.

- 87. Defendants further infringe the '749 patent via 35 U.S.C. § 271(g) by selling, offering to sell, and/or importing TFT-LCD panels, their components, and/or products containing same, that are made by a process covered by the '749 patent. Upon information and belief, the infringing TFT-LCD panels, their components, and/or products containing same are not materially changed by subsequent processes, and they are neither trivial nor nonessential components of another product.
- 88. At a minimum, Defendants have known of the '749 patent at least as early as the filing date of the complaint. In addition, Defendants have known of the '749 patent since April 9, 2020 when Defendants were provided access to a data room containing claim charts, including for the '749 patent.
- Defendants were on notice of its infringement, Defendants have actively induced, under U.S.C. § 271(b), distributors, customers, subsidiaries, importers, and/or consumers that import, purchase, or sell the Accused Panels that include or are made using all of the limitations of one or more claims of the '749 patent to directly infringe one or more claims of the '749 patent by using, offering for sale, selling, and/or importing the Accused Panels. Since at least the notice provided on the above-mentioned date, Defendants do so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '749 patent. Defendants intend to cause, and have taken affirmative steps to induce infringement by distributors, importers (including inducement to import in violation of § 271(g)), customers, subsidiaries, and/or consumers by, inter alia, creating advertisements that promote the infringing use of the Accused Panels, creating

established distribution channels for the Accused Panels into and within the United States, manufacturing the Accused Panels in conformity with U.S. laws and regulations, distributing or making available instructions or manuals for these products to purchasers and prospective buyers, and/or providing technical support, replacement parts, or services for these products to these purchasers in the United States. For example, Defendants Truly Int'l and Truly Semiconductors operate in the U.S. "a service and sales network" referred to by Defendants as "Truly Americas," which includes operation of a website of the same name that provides a contact form and catalog for soliciting U.S. customers. *See Truly Americas*, https://www.trulyamerica.com/truly-americas/ (last visited July 24, 2020). Truly Americas provides a "dedicated direct marketing and sales team (Truly employees), Three major US Electronic Distributors, and Manufacturer Sales Representatives positioned throughout the US for on-site assistance." *Id*.

- 90. Upon information and belief, despite having knowledge of the '749 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '749 patent, Defendants have nevertheless continued their infringing conduct and disregarded an objectively high likelihood of infringement. Defendants' infringing activities relative to the '749 patent have been, and continue to be, willful, wanton, malicious, in bad-faith, deliberate, consciously wrongful, flagrant, characteristic of a pirate, and an egregious case of misconduct beyond typical infringement such that Plaintiff is entitled under 35 U.S.C. § 284 to enhanced damages up to three times the amount found or assessed.
- 91. VPV has been damaged as a result of Defendants' infringing conduct described in this Count. Defendants are, thus, liable to VPV in an amount that adequately compensates VPV for Defendants' infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT IV

(INFRINGEMENT OF U.S. PATENT NO. 6,674,093)

- 92. Plaintiff incorporates paragraphs 1 through 91 herein by reference.
- 93. VPV is the assignee of the '093 patent, entitled "Active matrix substrate and manufacturing method therefor," with ownership of all substantial rights in the '093 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringements.
- 94. The '093 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code. The '093 patent issued from U.S. Patent Application No. 09/695,321.
- 95. Upon information and belief, Defendants design, manufacture, import, distribute, offer to sell, and sell the Accused Panels in the U.S., including via Defendants' subsidiaries, distributors, and customers and via its Truly Americas sales and service network. These panels are incorporated into electronic devices such as GPS devices, including such devices distributed and sold in the U.S. under at least the Garmin brand.
- 96. Defendants directly infringe the '093 patent via 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing Accused Panels, their components, and/or products containing same that incorporate the fundamental technologies covered by the '093 patent to, for example, alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers. Furthermore, upon information and belief, Defendants sell and make Accused Panels outside of the United States, deliver those products to its alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers in the United States, or in the case that Defendants deliver the Accused Panels outside of the United States, Defendants do so

intending and/or knowing that those panels are destined for the United States and/or designing those products for sale in the United States, thereby directly infringing the '093 patent. See, e.g., Lake Cherokee Hard Drive Techs., 964 F. Supp. 2d at 658. Furthermore, Defendants directly infringe the '093 patent through its direct involvement in the activities of Defendants' subsidiaries, partners, and customers on behalf of and for the benefit of Defendants. Such direct infringement includes selling and offering for sale the Accused Panels directly to its U.S. distributors and customers, such as Garmin and importing the Accused Panels into the United States for its distributors and customers. Upon information and belief, Defendants' U.S.-based subsidiary Truly USA and members of its Truly Americas sales and service network conduct activities that constitute direct infringement of the '093 patent under 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Accused Panels. Defendants are vicariously liable for this infringing conduct of Defendants' U.S.-based subsidiary Truly USA and members of the Truly Americas network (under both the alter ego and agency theories) because, as an example and, upon information and belief, Defendants and its U.S.-based subsidiary and members of the Truly Americas network operate as agents of one another and vicariously as arms of the same business group to work in concert together, including as business partners or in a joint venture, entering into agreements that are nearer than arm's length to conduct business in the United States. Defendants further receive a direct financial benefit from its U.S.-based subsidiary Truly USA's and Truly Americas network members' infringement.

97. For example, Defendants infringe claim 1 of the '093 patent via the Accused Panels such as Truly LCD model no. TDA-WQVGA0500B61630-V2 (incorporated into Garmin 52M). Those Accused Panels includes an "active matrix substrate comprising" each of the limitations of claim 1. The technology discussion above and the Accused Panels provide context for Plaintiff's

allegations that each of those limitations are met. For example, the Accused Panels include (a) a gate electrode layer, a gate insulating layer and an amorphous silicon semiconductor layer deposited in a substantially stacked fashion on a transparent insulating substrate, viewed from a direction normal to said transparent insulating substrate, to form a layered structure including a gate electrode, a gate wiring and a thin-film transistor area; (b) a drain wiring formed on a first passivation film disposed on said substrate so as to cover said layered structure; (c) a second passivation film formed as a layer overlying said drain wiring and said first passivation film; (d) source/drain openings passing through said first passivation film and said second passivation film to reach said amorphous silicon semiconductor layer; (e) an opening passing through said second passivation film to reach said drain wiring; and (f) a wiring layer formed by a pixel electrode film disposed on said second passivation film, said wiring layer extending through said opening and openings for connection.

- 98. Defendants further infringe the '093 patent via 35 U.S.C. § 271(g) by selling, offering to sell, and/or importing TFT-LCD panels, their components, and/or products containing same, that are made by a process covered by the '093 patent. Upon information and belief, the infringing TFT-LCD panels, their components, and/or products containing same are not materially changed by subsequent processes, and they are neither trivial nor nonessential components of another product.
- 99. At a minimum, Defendants have known of the '093 patent at least as early as the filing date of the complaint. In addition, Defendants have known of the '093 patent since April 9, 2020 when Defendants were provided access to a data room containing claim charts, including for the '093 patent.

100. Upon information and belief, since at least the above-mentioned date when Defendants were on notice of its infringement, Defendants have actively induced, under U.S.C. § 271(b), distributors, customers, subsidiaries, importers, and/or consumers that import, purchase, or sell the Accused Panels that include or are made using all of the limitations of one or more claims of the '093 patent to directly infringe one or more claims of the '093 patent by using, offering for sale, selling, and/or importing the Accused Panels. Since at least the notice provided on the above-mentioned date, Defendants do so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '093 patent. Defendants intend to cause, and have taken affirmative steps to induce infringement by distributors, importers (including inducement to import in violation of § 271(g)), customers, subsidiaries, and/or consumers by, inter alia, creating advertisements that promote the infringing use of the Accused Panels, creating established distribution channels for the Accused Panels into and within the United States, manufacturing the Accused Panels in conformity with U.S. laws and regulations, distributing or making available instructions or manuals for these products to purchasers and prospective buyers, and/or providing technical support, replacement parts, or services for these products to these purchasers in the United States. For example, Defendants Truly Int'l and Truly Semiconductors operate in the U.S. "a service and sales network" referred to by Defendants as "Truly Americas," which includes operation of a website of the same name that provides a contact form and catalog for soliciting U.S. customers. See Truly Americas, https://www.trulyamerica.com/truly-americas/ (last visited July 24, 2020). Truly Americas provides a "dedicated direct marketing and sales team (Truly employees), Three major US Electronic Distributors, and Manufacturer Sales Representatives positioned throughout the US for on-site assistance." *Id.*

- 101. Upon information and belief, despite having knowledge of the '093 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '093 patent, Defendants have nevertheless continued their infringing conduct and disregarded an objectively high likelihood of infringement. Defendants' infringing activities relative to the '093 patent have been, and continue to be, willful, wanton, malicious, in bad-faith, deliberate, consciously wrongful, flagrant, characteristic of a pirate, and an egregious case of misconduct beyond typical infringement such that Plaintiff is entitled under 35 U.S.C. § 284 to enhanced damages up to three times the amount found or assessed.
- 102. VPV has been damaged as a result of Defendants' infringing conduct described in this Count. Defendants are, thus, liable to VPV in an amount that adequately compensates VPV for Defendants' infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT V

(INFRINGEMENT OF U.S. PATENT NO. 6,891,196)

- 103. Plaintiff incorporates paragraphs 1 through 102 herein by reference.
- 104. VPV is the assignee of the '196 patent, entitled "Active matrix substrate and manufacturing method therefor," with ownership of all substantial rights in the '196 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringements.
- 105. The '196 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code. The '196 patent issued from U.S. Patent Application No. 10/617,035.

106. Upon information and belief, Defendants design, manufacture, import, distribute, offer to sell, and sell the Accused Panels in the U.S., including via Defendants' subsidiaries, distributors, and customers and via its Truly Americas sales and service network. These panels are incorporated into electronic devices such as GPS devices, including such devices distributed and sold in the U.S. under at least the Garmin brand.

107. Defendants directly infringe the '196 patent via 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing Accused Panels, their components, and/or products containing same that incorporate the fundamental technologies covered by the '196 patent to, for example, alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers. Furthermore, upon information and belief, Defendants sell and make Accused Panels outside of the United States, deliver those products to its alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers in the United States, or in the case that Defendants deliver the Accused Panels outside of the United States, Defendants do so intending and/or knowing that those panels are destined for the United States and/or designing those products for sale in the United States, thereby directly infringing the '196 patent. See, e.g., Lake Cherokee Hard Drive Techs., 964 F. Supp. 2d at 658. Furthermore, Defendants directly infringe the '196 patent through its direct involvement in the activities of Defendants' subsidiaries, partners, and customers on behalf of and for the benefit of Defendants. Such direct infringement includes selling and offering for sale the Accused Panels directly to its U.S. distributors and customers, such as Garmin and importing the Accused Panels into the United States for its distributors and customers. Upon information and belief, Defendants' U.S.-based subsidiary Truly USA and members of its Truly Americas sales and service network conduct activities that constitute direct infringement of the '196 patent under 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Accused Panels. Defendants are vicariously liable for this infringing conduct of Defendants' U.S.-based subsidiary Truly USA and members of the Truly Americas network (under both the alter ego and agency theories) because, as an example and, upon information and belief, Defendants and its U.S.-based subsidiary and members of the Truly Americas network operate as agents of one another and vicariously as arms of the same business group to work in concert together, including as business partners or in a joint venture, entering into agreements that are nearer than arm's length to conduct business in the United States. Defendants further receive a direct financial benefit from its U.S.-based subsidiary Truly USA's and Truly Americas network members' infringement.

108. For example, Defendants infringe claim 1 of the '196 patent via the Accused Panels such as Truly LCD model no. TDA-WQVGA0500B61630-V2 (incorporated into Garmin 52M). Those Accused Panels includes a "lateral electrical field type active matrix substrate comprising" each of the limitations of claim 1. The technology discussion above and the example Accused Panels provide context for Plaintiff's allegations that each of those limitations are met. For example, the Accused Panels include (a) a gate electrode layer, a gate insulating layer and an amorphous silicon semiconductor layer deposited in a substantially stacked fashion on a transparent insulating substrate, viewed from a direction normal to said transparent insulating substrate, to form a layered structure, including a gate electrode, a gate wiring, a comb-shaped common electrode and a thin-film transistor area; (b) a drain wiring formed on a first passivation film disposed on said substrate so as to cover said layered structure; and (c) a second passivation film formed as a layer overlying said drain wiring and said first passivation film; (d) source/drain openings passing through said first passivation film and said second passivation film to reach said amorphous silicon semiconductor layer, and (e) an opening passing through said second

passivation film to reach said drain wiring; wherein (f) a wiring layer extending through said drain opening to said drain wiring and a pixel electrode connected to said source opening are formed by a pixel electrode film disposed on said second passivation film.

- 109. Defendants further infringe the '196 patent via 35 U.S.C. § 271(g) by selling, offering to sell, and/or importing TFT-LCD panels, their components, and/or products containing same, that are made by a process covered by the '196 patent. Upon information and belief, the infringing TFT-LCD panels, their components, and/or products containing same are not materially changed by subsequent processes, and they are neither trivial nor nonessential components of another product.
- 110. At a minimum, Defendants have known of the '196 patent at least as early as the filing date of the complaint. In addition, Defendants have known of the '196 patent since April 9, 2020 when Defendants were provided access to a data room containing claim charts, including for the '196 patent.
- 111. Upon information and belief, since at least the above-mentioned date when Defendants were on notice of its infringement, Defendants have actively induced, under U.S.C. § 271(b), distributors, customers, subsidiaries, importers, and/or consumers that import, purchase, or sell the Accused Panels that include or are made using all of the limitations of one or more claims of the '196 patent to directly infringe one or more claims of the '196 patent by using, offering for sale, selling, and/or importing the Accused Panels. Since at least the notice provided on the above-mentioned date, Defendants do so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '196 patent. Defendants intend to cause, and have taken affirmative steps to induce infringement by distributors, importers (including inducement to import in violation of § 271(g)), customers, subsidiaries, and/or consumers by, inter

alia, creating advertisements that promote the infringing use of the Accused Panels, creating established distribution channels for the Accused Panels into and within the United States, manufacturing the Accused Panels in conformity with U.S. laws and regulations, distributing or making available instructions or manuals for these products to purchasers and prospective buyers, and/or providing technical support, replacement parts, or services for these products to these purchasers in the United States. For example, Defendants Truly Int'l and Truly Semiconductors operate in the U.S. "a service and sales network" referred to by Defendants as "Truly Americas," which includes operation of a website of the same name that provides a contact form and catalog for soliciting U.S. customers. *See Truly Americas*, https://www.trulyamerica.com/truly-americas/ (last visited July 24, 2020). Truly Americas provides a "dedicated direct marketing and sales team (Truly employees), Three major US Electronic Distributors, and Manufacturer Sales Representatives positioned throughout the US for on-site assistance." *Id*.

- 112. Upon information and belief, despite having knowledge of the '196 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '196 patent, Defendants have nevertheless continued their infringing conduct and disregarded an objectively high likelihood of infringement. Defendants' infringing activities relative to the '196 patent have been, and continue to be, willful, wanton, malicious, in bad-faith, deliberate, consciously wrongful, flagrant, characteristic of a pirate, and an egregious case of misconduct beyond typical infringement such that Plaintiff is entitled under 35 U.S.C. § 284 to enhanced damages up to three times the amount found or assessed.
- 113. VPV has been damaged as a result of Defendants' infringing conduct described in this Count. Defendants are, thus, liable to VPV in an amount that adequately compensates VPV for Defendants' infringements, which, by law, cannot be less than a reasonable royalty, together

with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT VI

(INFRINGEMENT OF U.S. PATENT NO. 7,499,119)

- 114. Plaintiff incorporates paragraphs 1 through 113 herein by reference.
- 115. VPV is the assignee of the '119 patent, entitled "Liquid crystal display device with thin-film transistors and method of fabricating the same," with ownership of all substantial rights in the '119 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringements.
- 116. The '119 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code. The '119 patent issued from U.S. Patent Application No. 11/582,315.
- 117. Upon information and belief, Defendants design, manufacture, import, distribute, offer to sell, and sell the Accused Panels in the U.S., including via Defendants' subsidiaries, distributors, and customers and via its Truly Americas sales and service network. These panels are incorporated into electronic devices such as GPS devices, including such devices distributed and sold in the U.S. under at least the Garmin brand.
- 118. Defendants directly infringe the '119 patent via 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing Accused Panels, their components, and/or products containing same that incorporate the fundamental technologies covered by the '119 patent to, for example, alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers. Furthermore, upon information and belief, Defendants sell and make Accused Panels outside of the United States, deliver those products to its alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers in the United States, or in the

case that Defendants deliver the Accused Panels outside of the United States, Defendants do so intending and/or knowing that those panels are destined for the United States and/or designing those products for sale in the United States, thereby directly infringing the '119 patent. See, e.g., Lake Cherokee Hard Drive Techs., 964 F. Supp. 2d at 658. Furthermore, Defendants directly infringe the '119 patent through its direct involvement in the activities of Defendants' subsidiaries, partners, and customers on behalf of and for the benefit of Defendants. Such direct infringement includes selling and offering for sale the Accused Panels directly to its U.S. distributors and customers, such as Garmin and importing the Accused Panels into the United States for its distributors and customers. Upon information and belief, Defendants' U.S.-based subsidiary Truly USA and members of its Truly Americas sales and service network conduct activities that constitute direct infringement of the '119 patent under 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Accused Panels. Defendants are vicariously liable for this infringing conduct of Defendants' U.S.-based subsidiary Truly USA and members of the Truly Americas network (under both the alter ego and agency theories) because, as an example and, upon information and belief, Defendants and its U.S.-based subsidiary and members of the Truly Americas network operate as agents of one another and vicariously as arms of the same business group to work in concert together, including as business partners or in a joint venture, entering into agreements that are nearer than arm's length to conduct business in the United States. Defendants further receive a direct financial benefit from its U.S.-based subsidiary Truly USA's and Truly Americas network members' infringement.

119. For example, Defendants infringe claim 1 of the '119 patent via the Accused Panels such as Truly LCD model no. TDA-WQVGA0500B61630-V2 (incorporated into Garmin 52M). That Accused Panel includes a "liquid-crystal display device comprising" each of the limitations

of claim 1. The technology discussion above and the example Accused Panels provide context for Plaintiff's allegations that each of those limitations are met. For example, the Accused Panel includes a first interconnection line comprising a patterned Al or Al alloy layer, disposed directly on an insulating plate or over the plate by way of an underlying insulating layer: a first insulating layer formed on the plate to cover the first interconnection line, the first insulating layer having a contact hole that exposes a part of the first interconnection line; a first conductive material made of a plated metal, the first conductive material being in contact with the exposed part of the first interconnection line in the contact hole in such a way as to cover the whole exposed part thereof; and a first transparent conductive layer in contact with the first conductive material; wherein the first transparent conductive layer is electrically connected to the first interconnection line by way of the first conductive material.

- 120. Defendants further infringe the '119 patent via 35 U.S.C. § 271(g) by selling, offering to sell, and/or importing TFT-LCD panels, their components, and/or products containing same, that are made by a process covered by the '119 patent. Upon information and belief, the infringing TFT-LCD panels, their components, and/or products containing same are not materially changed by subsequent processes, and they are neither trivial nor nonessential components of another product.
- 121. At a minimum, Defendants have known of the '119 patent at least as early as the filing date of the complaint. In addition, Defendants have known of the '119 patent since April 9, 2020 when Defendants were provided access to a data room containing claim charts, including for the '119 patent.
- 122. Upon information and belief, since at least the above-mentioned date when Defendants were on notice of its infringement, Defendants have actively induced, under U.S.C. §

271(b), distributors, customers, subsidiaries, importers, and/or consumers that import, purchase, or sell the Accused Panels that include or are made using all of the limitations of one or more claims of the '119 patent to directly infringe one or more claims of the '119 patent by using, offering for sale, selling, and/or importing the Accused Panels. Since at least the notice provided on the above-mentioned date, Defendants do so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '119 patent. Defendants intend to cause, and have taken affirmative steps to induce infringement by distributors, importers (including inducement to import in violation of § 271(g)), customers, subsidiaries, and/or consumers by, inter alia, creating advertisements that promote the infringing use of the Accused Panels, creating established distribution channels for the Accused Panels into and within the United States, manufacturing the Accused Panels in conformity with U.S. laws and regulations, distributing or making available instructions or manuals for these products to purchasers and prospective buyers, and/or providing technical support, replacement parts, or services for these products to these purchasers in the United States. For example, Defendants Truly Int'l and Truly Semiconductors operate in the U.S. "a service and sales network" referred to by Defendants as "Truly Americas," which includes operation of a website of the same name that provides a contact form and catalog for soliciting U.S. customers. See Truly Americas, https://www.trulyamerica.com/truly-americas/ (last visited July 24, 2020). Truly Americas provides a "dedicated direct marketing and sales team (Truly employees), Three major US Electronic Distributors, and Manufacturer Sales Representatives positioned throughout the US for on-site assistance." *Id*.

123. Upon information and belief, despite having knowledge of the '119 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '119 patent, Defendants have nevertheless continued their infringing conduct and disregarded an objectively

high likelihood of infringement. Defendants' infringing activities relative to the '119 patent have been, and continue to be, willful, wanton, malicious, in bad-faith, deliberate, consciously wrongful, flagrant, characteristic of a pirate, and an egregious case of misconduct beyond typical infringement such that Plaintiff is entitled under 35 U.S.C. § 284 to enhanced damages up to three times the amount found or assessed.

124. VPV has been damaged as a result of Defendants' infringing conduct described in this Count. Defendants are, thus, liable to VPV in an amount that adequately compensates VPV for Defendants' infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

INJUNCTIVE RELIEF

125. Plaintiff seeks preliminary and permanent injunctions as a result of Defendants' infringement of the Asserted Patents. Plaintiff is likely to succeed in showing that Defendants infringe the Asserted Patents. Because of that infringement, Plaintiff has suffered an irreparable injury, and the remedies available at law, such as monetary damages, are inadequate to compensate for that injury. For example, if Plaintiff must enforce a judgment against Defendants in China, Plaintiff will face a historically challenging burden in persuading a Chinese court to enforce a judgment from a U.S. court, likely preventing Plaintiff from obtaining any monetary damages from Defendants. Considering the balance of hardships between the Plaintiff and Defendants, a remedy in equity is warranted; and the public interest would not be disserved by a permanent or preliminary injunction.

CONCLUSION

126. Plaintiff VPV is entitled to recover from Defendants the damages sustained by Plaintiff as a result of Defendants' wrongful acts in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court.

127. Plaintiff has incurred and will incur attorneys' fees, costs, and expenses in the prosecution of this action. The circumstances of this dispute may give rise to an exceptional case within the meaning of 35 U.S.C. § 285, and Plaintiff is entitled to recover its reasonable and necessary attorneys' fees, costs, and expenses.

JURY DEMAND

128. Plaintiff hereby requests a trial by jury pursuant to Rule 38 of the Federal Rules of Civil Procedure.

PRAYER FOR RELIEF

- 129. Plaintiff VPV respectfully requests that the Court find in its favor and against Defendants, and that the Court grant Plaintiff the following relief:
 - A. A judgment that Defendants have infringed the Asserted Patents as alleged herein, directly and/or indirectly by way of inducing infringement of such patents;
 - B. A judgment for an accounting of all damages sustained by Plaintiff as a result of the acts of infringement by Defendants;
 - C. A preliminary and permanent injunction against Defendants, their subsidiaries, or anyone acting on its behalf from making, using, selling, offering to sell, or importing any products that infringe the Asserted Patents, and any other injunctive relief the Court deems just and equitable;
 - D. A judgment and order requiring Defendants to pay Plaintiff damages under 35
 U.S.C. § 284, including up to treble damages as provided by 35 U.S.C. § 284, and any royalties determined to be appropriate;
 - E. A judgment and order requiring Defendants to pay Plaintiff pre-judgment and post-judgment interest on the damages awarded;

- F. A judgment and order finding this to be an exceptional case and requiring Defendants to pay the costs of this action (including all disbursements) and attorneys' fees as provided by 35 U.S.C. § 285; and
- G. Such other and further relief as the Court deems just and equitable.

Dated: August 5, 2020 Respectfully submitted,

/s/Patrick J. Conroy
Patrick J. Conroy
Texas Bar No. 24012448
T. William Kennedy Jr.
Texas Bar No. 24055771
Terry A. Saad
Texas Bar No. 24066015

Bragalone Conroy PC

2200 Ross Avenue Suite 4500W Dallas, TX 75201 Tel: (214) 785-6670

Fax: (214) 785-6680 pconroy@bcpc-law.com bkennedy@bcpc-law.com tsaad@bcpc-law.com