

3. Upon information and belief, TCL Electronics Holdings Limited (“TCL Electronics”) is a limited liability company incorporated in the Cayman Islands. The registered address of the Company is P.O. Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands. The principal place of business of the Company is located at 7th Floor, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, New Territories, Hong Kong. *See* TCL Electronics Holdings Limited Annual Report 2018 (*available at* <http://electronics.tcl.com/UserFiles/File/IR/Annual%20Report/2018%20AR-E.pdf>) at p. 135 of 285. TCL Electronics does business in the State of Texas and in the Eastern District of Texas.

4. Upon information and belief, TCL Corp. was founded in 1981. TCL Corp. is “one of China’s largest business groups of consumer electronics operating in a global scale.” *See* About TCL Page (*available at* http://electronics.tcl.com/en/aboutus/main.do?method=listing&mappingName=AboutUs_CompanyProfile). TCL Corp. owns at least three other companies: TCL Electronics (publicly listed as 01070.HK and co-defendant in this action), China Display Optoelectronics (publicly listed as 00334.HK) and Tonly Electronics (publicly listed 01249.HK). *Id.*

5. Upon information and belief, TCL Corp. holds a controlling interest in TCL Electronics. *See* TCL Electronics Holdings Limited Annual Report 2018, at p. 113 of 285 (stating that TCL Corporation is the “ultimate controlling shareholder of the company”). TCL Electronics is “mainly involved in the manufacture and sale of colour television sets, Smart audio-visual (‘Smart AV’) and Smart home products.” *Id.* In May of 2018, TCL Electronics changed its name from “TCL Multimedia Technology Holdings Limited” to “TCL Electronics Holdings Limited.” *Id.* *See* TCL Electronics Holdings Limited Annual Report 2018, at p. 8 of 285.

6. Upon information and belief, TCL Electronics is a part of a related “Group” of companies under the umbrella of TCL Corp., which includes TCL Electronics and its subsidiaries, and that brands itself as the “world’s leading consumer electronics company” that “is engaged in the research and development, manufacturing and sale of consumer electronics products,” which “are sold all over the world.” *See* TCL Electronics Holdings Limited Annual Report 2018, at p. 7 of 285. In 2018, ninety-eight percent (98%) of TCL Electronics’ worldwide gross sales were from the sale of television products. *See id.* at p. 12 of 285. Furthermore, TCL Electronics asserts that “[t]he Group’s major customers are all from consumer television products industry.” *Id.* at p. 94 of 285.

7. Upon information and belief, TCL Electronics, as part of the Group, and TCL Corp., along with its own subsidiaries and associates (separately referred to as the “TCL Group”), have operated as agents of one another and vicariously as two arms of the same business group to work in concert together and enter into agreements that are nearer than arm’s length to 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 (C.A.5 (Tex.), 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.”).

8. Upon information and belief, TCL Corp. and TCL Electronics engaged in a concerted effort to sell, offer to sell, and import infringing products. For example in 2018, TCL Electronics carried out a series of “connected transactions” with TCL Corp. in furtherance of its

mutual business interests and goals, including, but not limited to, 1) renewing its “Master TCL Trademark License,” which was exclusive and royalty-free, to use the TCL trademark for “the manufacture, production, sale and distribution of electronic products including televisions, audio-visual products and commercial use display products”; 2) entering into a “Master Sale and Purchase (2017) Agreement” for the purchase of “goods produced or manufactured in the PRC from TCL Group amounting to HK\$12,892,395,000; and... sold goods to TCL Group”; and 3) entering into a “Master Sourcing (2017 Renewal) Agreement” wherein the Group “sold overseas materials to TCL Group amounting to HK\$1,049,403,000; and...purchased overseas materials from TCL Group amounting to HK\$840,166,000 during the year amounting to HK\$5,566,381,000 during the year.” *See* TCL Electronics Holdings Limited Annual Report 2018, at pp. 109-113 of 285.

JURISDICTION AND VENUE

9. This action arises under the patent laws of the United States, namely 35 U.S.C. §§ 271, 281, and 284-285, among others.

10. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

11. Upon information and belief, TCL Corp. 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 judicial district, including: (A) at least part of its own infringing activities alleged herein; and (B) regularly doing or soliciting business, engaging in other persistent conduct, and/or deriving substantial revenue from infringing goods offered for sale, sold, and imported and services provided to Texas residents vicariously through and/or in concert with its subsidiaries, intermediaries, and/or agents.

12. This Court has personal jurisdiction over TCL Corp., directly or through intermediaries, such as TCL Electronics and TCL Electronics' wholly-owned U.S.-based subsidiary TTE Technology Inc. ("TTE"), because TCL Corp. 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 such that personal jurisdiction over TCL would not offend traditional notions of fair play and substantial justice. For example, TCL Corp. has placed and continues to place into the stream of commerce using established distribution channels infringing products with the knowledge and understanding that such products are, will be, and continue to be sold, offered for sale, and/or imported into this judicial district and the State of Texas. For example, TCL Corp. touts that it has "employees through Asia, the Americas, Europe and Oceania" and has a "Sales Network" that spans "Regional Business Centers" in North America. TCL products, including for example TCL TFT-LCD model nos. LVW320ND1L CJ9W23 and LVF430ND1L CJ9W04, are or have been widely sold in retail stores, both brick and mortar and online, within this judicial district and in Texas. *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)).

13. Upon information and belief, TCL Corp. controls its subsidiaries and intermediaries, including, but not limited to TCL Electronics and TTE. These subsidiaries give

TCL Corp. substantially the business advantages that it would have enjoyed if it conducted its business through its own offices or paid agents in the state of Texas.

14. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391 because, among other things, TCL Corp. 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.).

15. Upon information and belief, TCL Electronics is also 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 judicial district, including: (A) at least part of its own infringing activities alleged herein; and (B) regularly doing or soliciting business, engaging in other persistent conduct, and/or deriving substantial revenue from infringing goods offered for sale, sold, and imported and services provided to Texas residents vicariously through and/or in concert with its subsidiaries, intermediaries, and/or agents.

16. This Court has personal jurisdiction over TCL Electronics, directly or through intermediaries and subsidiaries including, but not limited to, its U.S.-based subsidiary TTE, because TCL Electronics has committed acts within Texas giving rise to this action and/or has established minimum contacts with Texas such that personal jurisdiction over TCL would not offend traditional notions of fair play and substantial justice. For example, via its wholly-owned subsidiary TTE, TCL Electronics asserts the following:

We are America’s Fastest-Growing TV Brand. As a globally trusted leader, TCL sold more than 20 million TVs worldwide last year [in 2017] which ranks us among the largest TV brands in the world.

See Our Story (available at <https://www.tclusa.com/about-us/our-story>). These TCL products include for example TCL TFT-LCD model nos. LVW320ND1L CJ9W23 and LVF430ND1L CJ9W04, which are or have been widely sold in retail stores, both brick and mortar and online, within this judicial district and in Texas. Through the websites electronics.tcl.com and www.tclusa.com, TCL Electronics and its subsidiary TTE have jointly maintained a web presence that consumers would perceive as jointly and vicariously being engaged in acts of infringement. Indeed, there is no meaningful way for a customer to separate TCL Corp., TCL Electronics, and TTE in a meaningful way, which would make the exercise of specific jurisdiction fair and reasonable. *See, e.g., Godo Kaisha IP Bridge 1 v. Broadcom Limited*, 2017 WL 970383, at *7 (E.D. Tex. 2017) (finding that it would not be improper to exercise specific jurisdiction over a foreign holding corporation based on the “web presence ... in which there is no meaningful way for a customer to determine if Defendants are truly separate and apart from their domestic subsidiaries (partly because they identified and advertised themselves interchangeably or as related entities on their websites)”).

17. Upon information and belief, the U.S.-based entity TTE is “an entity...directly or indirectly, controlled by” TCL Electronics, as well as other subsidiaries. *See* TCL Electronics Holdings Limited Annual Report 2018, at p. 139 of 285. According to TCL Electronics, such control over TTE means that the “Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee (i.e. existing rights that give the Group the current ability to direct the relevant activities of the investee).” *Id.* The business TTE, among other subsidiaries or intermediaries, conducts in the U.S. gives TCL Electronics substantially the business advantages that it would have enjoyed if it conducted its business through its own offices or paid agents in this judicial district and in the

state of Texas. Through their statements on their websites and through the conduct of TTE in the United States, TCL Corp. and TCL Electronics have each demonstrated an intent to serve the U.S. market, including the Texas market in this judicial district. *See, e.g., 3G Licensing, S.A. v. HTC Corporation*, 2017 WL 6442101, at *3 (D. Del. 2017). (finding that the preconditions for personal jurisdiction were met based on certain statements made by a foreign defendant in its Annual Report that it “maintains a presence in all key markets, including the United States” and its “products are distributed across ... America[] ... through major carriers and local retail channels”).

18. Upon information and belief, TCL Electronics has placed and continues to place infringing thin-film transistor – liquid crystal display (“TFT-LCD”) panels into the stream of commerce via an established distribution channel with the knowledge and/or intent that those products were sold and continue to be sold in the United States and Texas, including in this judicial district. In 2018, TCL Electronics reported 45,582 HK\$ Million (approx. 5.8 billion U.S. dollars) in global gross sales. *See TCL Electronics Holdings Limited Annual Report 2018* at p. 12 of 285. Gross sales in the North America were reported at 10,232,343,000 (approx. 1.3 billion U.S. dollars).

19. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391 because, among other things, TCL Electronics 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).

20. Upon information and belief, TCL 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.

THE ASSERTED PATENTS AND TECHNOLOGY

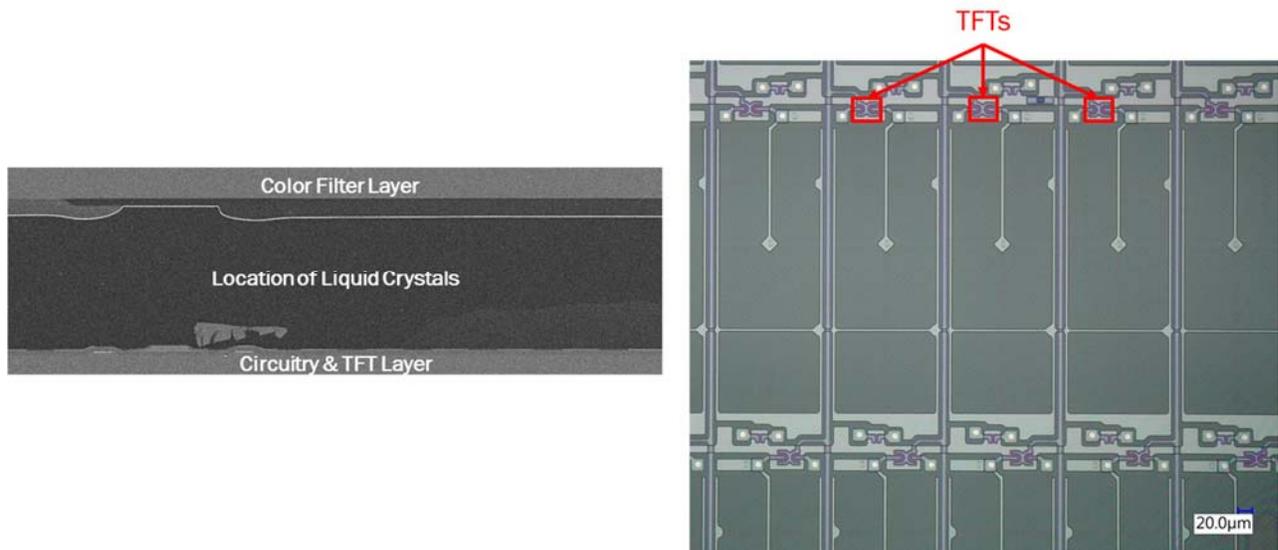
21. Upon information and belief, a significant portion of operating revenue of TCL is derived from the manufacture and sale of TFT-LCD flat panel displays, and TCL's main commodities include medium-to-large-sized TFT-LCD related products. *See* Home Theater Page (*available at* <https://www.tclusa.com/catalog/home-theater>). In a 2019 press release, TCL asserts that its LCD TV sales “[m]aintained strong growth momentum, with sales volume rocketed by 112.0% year-on-year... in the first quarter of 2019, TCL was among the top two in North American markets by sales volume for six consecutive weeks, during which climbing up to No. 1 for three weeks.” 2019 1st Quarter Press Release, April 23, 2019 (*available at* http://electronics.tcl.com/UserFiles/File/IR/Press%20Releases/2019/ENG_TCL_2019Q1_Press%20Release_20190423_Final_Clean.pdf).

22. The Asserted Patents cover TCL's TFT-LCDs, their components, and processes related to the same. An example of a TCL TFT-LCD is model no. LVF430ND1L CJ9W04, which is used in end-user products such as TCL Class 3-Series FHD LED Roku Smart TV – 43S305. Another example of a TCL TFT-LCD is model no. LVW320ND1L CJ9W23LVW320ND1L CJ9W23, which is used in end-user products such as the TCL Class 3-Series HD LED Roku Smart TV – 32S305. Model no. LVF430ND1L CJ9W04 and the label for the TCL TFT-LCD panel are shown below:

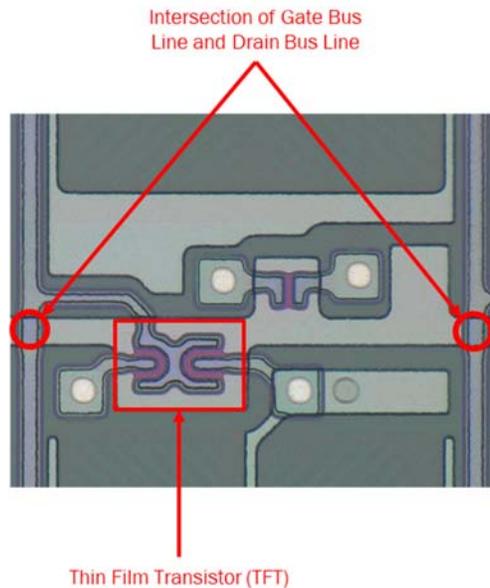
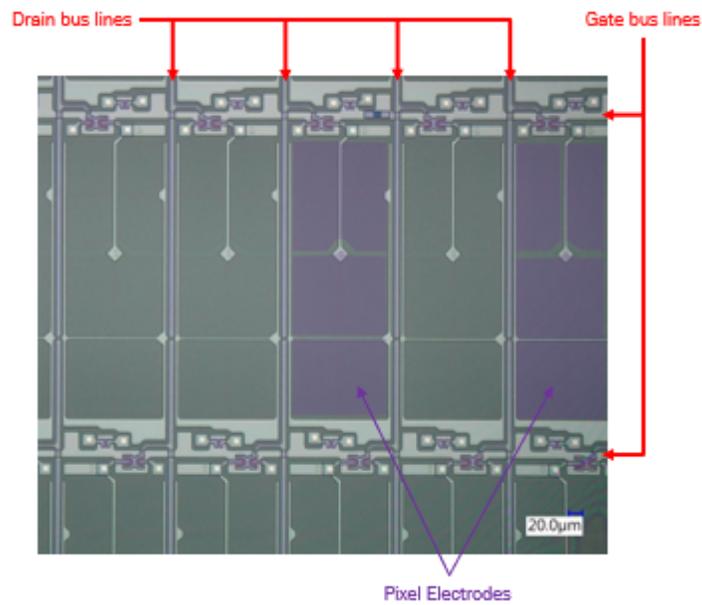




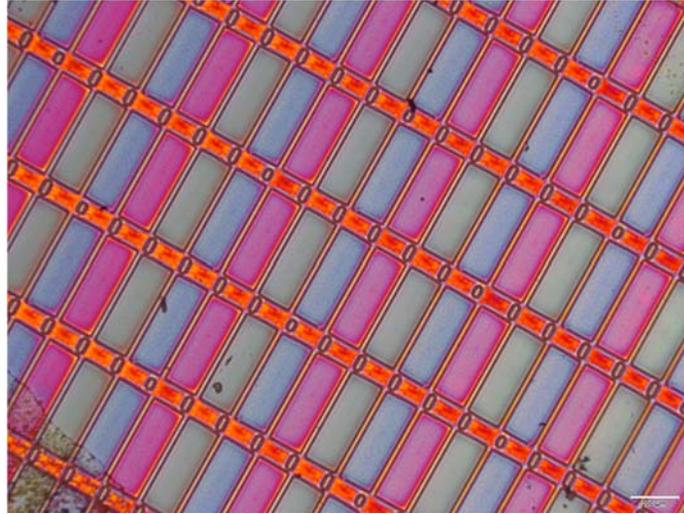
23. Typically, a TFT-LCD has the following structure shown below, comprising of a backlight, a TFT/circuitry layer, a liquid crystal layer, and a color filter:



24. As shown above, the TFT-LCD panel contains a TFT array substrate and many TFTs. A teardown image below from the TCL TFT-LCD model no. LVF430ND1L CJ9W04 shows a sampling of TFTs and their accompanying circuitry lines, with larger rectangular areas associated with the pixels.

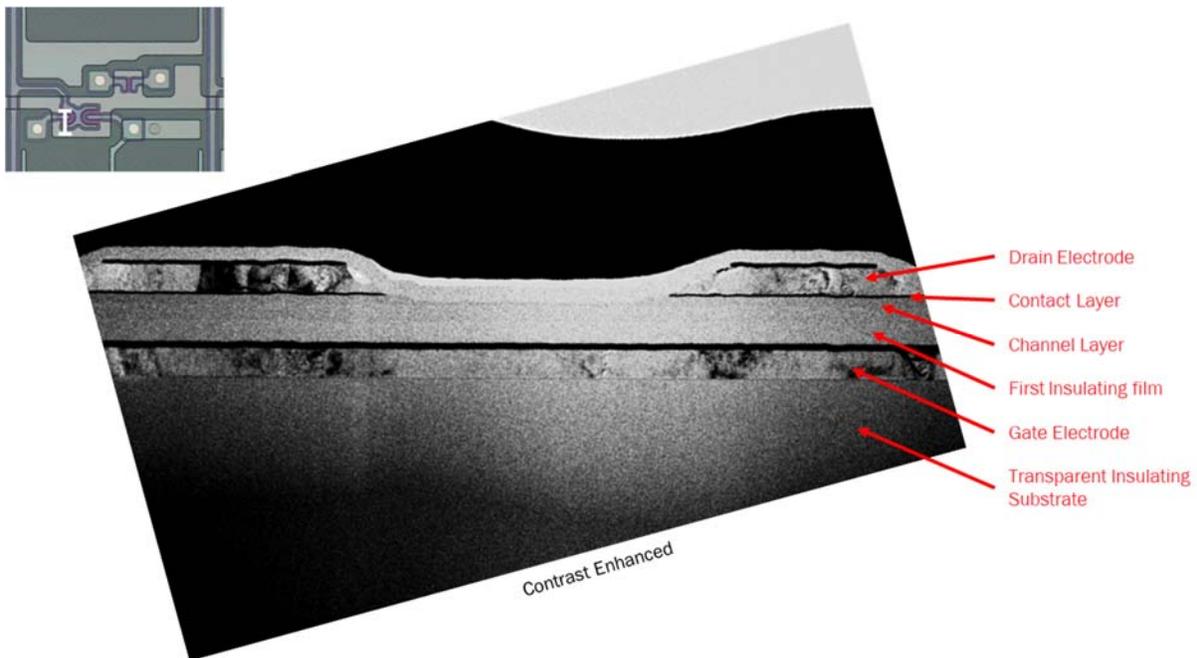


25. A TFT acts as a switch that operates its respective individual pixels using the circuitry lines. In that way, the pixels can be turned on and off to create an image on an LCD by allowing or preventing light to pass through. The individual pixels are more apparent when a color filter layer overlays the circuits as shown in the image below for the LVF430ND1L CJ9W04.



Color Filter Layer

26. The Asserted Patents also cover TCL's processes for making TFT LCDs. The microscopic cross-sectional view of a TFT in model no. LVF430ND1L CJ9W04 shows a TFT made using TCL's processes and identifies the components of that TFT.



COUNT I

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

27. Plaintiff incorporates paragraphs 1 through 26 herein by reference.

28. 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.

29. 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.

30. TCL has and continues 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.

31. Upon information and belief, TCL "is engaged in the research and development, manufacturing and distribution of consumer electronic products," which includes "Smart TVs" incorporating TFT-LCD technology. *See* 2019 1st Quarter Press Release, April 23, 2019.

32. TCL directly infringes the '947 patent via 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those TFT-LCD panels, their components, and/or products containing same that incorporate the fundamental technologies covered by the '947 patent, or by having its controlled subsidiaries, intermediaries, and/or agents do the same. Furthermore, upon information and belief, TCL sells and makes TFT-LCD panels outside of the United States,

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.

33. For example, TCL infringes claim 1 of the '947 patent via at least its LCD panel model nos. LVW320ND1L CJ9W23 and LVF430ND1L CJ9W04. Those products each 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 TFT-LCD panels (model nos. LVW320ND1L CJ9W23 and LVF430ND1L CJ9W04) provide context for Plaintiff’s allegations that each of those limitations are met. For example, model nos. LVW320ND1L CJ9W23 and LVF430ND1L CJ9W04 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.

34. TCL further infringes 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.

35. At a minimum, TCL has known of the '947 patent at least as early as the filing date of the complaint.

36. Upon information and belief, since at least the above-mentioned date when TCL was on notice of its infringement, TCL has actively induced, under U.S.C. § 271(b), distributors, importers and/or consumers that purchase or sell TFT-LCD 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 TFT-LCD panels. Since at least the notice provided on the above-mentioned date, TCL does so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '947 patent. Upon information and belief, TCL intends to cause, and has taken affirmative steps to induce, infringement by the distributors, importers, and/or consumers by, *inter alia*, creating advertisements that promote the infringing use of the TFT-LCD panels, creating established distribution channels for the TFT-LCD panels into and within the United States, manufacturing the TFT-LCD 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. *See, e.g.*, TCL Electronics Holdings Limited Annual Report 2018, at p.16 of 285 (“The Group’s sales volume in overseas markets for the year of 2018 reached 18.21 million sets, a year-on-year increase of 29.5%, of which the North American market made significant breakthrough.”).

37. 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, TCL has nevertheless continued its infringing conduct and disregarded an objectively high likelihood of infringement. TCL’s 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.

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

COUNT II

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

39. Plaintiff incorporates paragraphs 1 through 38 herein by reference.

40. 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.

41. 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.

42. TCL has and continues to directly and/or indirectly infringe (by inducing infringement) one or more claims of the '749 patent in this judicial district and elsewhere in Texas and the United States.

43. Upon information and belief, TCL "is engaged in the research and development, manufacturing and distribution of consumer electronic products," which includes "Smart TVs" incorporating TFT-LCD technology. *See* 2019 1st Quarter Press Release, April 23, 2019.

44. TCL directly infringes the '749 patent via 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those TFT-LCD panels, their components, and/or products containing same that incorporate the fundamental technologies covered by the '749 patent, or by having its controlled subsidiaries, intermediaries, and/or agents do the same. Furthermore, upon information and belief, TCL sells and makes TFT-LCD panels outside of the United States, 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.

45. For example, TCL infringes claim 13 of the '749 patent via its LCD panel model nos. LVW320ND1L CJ9W23 and LVF430ND1L CJ9W04. Those products are made by TCL pursuant to a "method for fabricating a semiconductor device, comprising the steps of" each of the limitations of claim 13. The technology discussion above and the example accused TFT-LCD panels (model nos. LVW320ND1L CJ9W23 and LVF430ND1L CJ9W04) provide context for

Plaintiff's allegations that each of those limitations are met. For example, model nos. LVW320ND1L CJ9W23 and LVF430ND1L CJ9W04 each includes 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 a periodic table to provide an n-type region in the top surface of the amorphous silicon film; and then directly a third step of forming a metal film on said amorphous silicon film to form an n-type amorphous silicon film therebetween.

46. TCL further infringes 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.

47. At a minimum, TCL has known of the '749 patent at least as early as the filing date of the complaint.

48. Upon information and belief, since at least the above-mentioned date when TCL was on notice of its infringement, TCL has actively induced, under U.S.C. § 271(b), distributors, importers and/or consumers that purchase or sell TFT-LCD 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 TFT-LCD panels. Since at least the notice provided on the above-mentioned date, TCL does so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of

the '749 patent. Upon information and belief, TCL intends to cause, and has taken affirmative steps to induce, infringement by the distributors, importers, and/or consumers by, *inter alia*, creating advertisements that promote the infringing use of the TFT-LCD panels, creating established distribution channels for the TFT-LCD panels into and within the United States, manufacturing the TFT-LCD 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. *See, e.g.* TCL Electronics Holdings Limited Annual Report 2018, at p.16 of 285 (“The Group’s sales volume in overseas markets for the year of 2018 reached 18.21 million sets, a year-on-year increase of 29.5%, of which the North American market made significant breakthrough.”).

49. 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, TCL has nevertheless continued its infringing conduct and disregarded an objectively high likelihood of infringement. TCL’s 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.

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

COUNT III

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

51. Plaintiff incorporates paragraphs 1 through 50 herein by reference.

52. 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.

53. 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.

54. TCL has and continues to directly and/or indirectly infringe (by inducing infringement) one or more claims of the '093 patent in this judicial district and elsewhere in Texas and the United States.

55. Upon information and belief, TCL is engaged "in the research and development, manufacturing and distribution of consumer electronic products," which includes "Smart TVs" incorporating TFT-LCD technology. *See* 2019 1st Quarter Press Release, April 23, 2019.

56. TCL directly infringes the '093 patent via 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those TFT-LCD panels, their components, and/or products containing same that incorporate the fundamental technologies covered by the '093 patent, or by having its controlled subsidiaries, intermediaries, and/or agents do the same. Furthermore, upon information and belief, TCL sells and makes TFT-LCD panels outside of the United States, 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.

57. For example, TCL infringes claim 1 of the '093 patent via its LCD panel model nos. LVW320ND1L CJ9W23 and LVF430ND1L CJ9W04. Those products each include an “active matrix substrate comprising” each of the limitations of claim 1. The technology discussion above and the example accused TFT-LCD panel (model nos. LVW320ND1L CJ9W23 and LVF430ND1L CJ9W04) provide context for Plaintiff’s allegations that each of those limitations are met. For example, model nos. LVW320ND1L CJ9W23 and LVF430ND1L CJ9W04 each 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.

58. At a minimum, TCL has known of the '093 patent at least as early as the filing date of the complaint. In addition, TCL has known of the '093 patent since at least February 17, 2018, when TCL was provided notice that it was required to take a license to a number of patents, including the '093 patent.

59. Upon information and belief, since at least the above-mentioned date when TCL was on notice of its infringement, TCL has actively induced, under U.S.C. § 271(b), distributors,

importers and/or consumers that purchase or sell TFT-LCD panels that include 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 TFT-LCD panels. Since at least the notice provided on the above-mentioned date, TCL does so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '093 patent. Upon information and belief, TCL intends to cause, and has taken affirmative steps to induce, infringement by the distributors, importers, and/or consumers by, *inter alia*, creating advertisements that promote the infringing use of the TFT-LCD panels, creating established distribution channels for the TFT-LCD panels into and within the United States, manufacturing the TFT-LCD 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. *See, e.g.* TCL Electronics Holdings Limited Annual Report 2018, at p.16 of 285 (“The Group’s sales volume in overseas markets for the year of 2018 reached 18.21 million sets, a year-on-year increase of 29.5%, of which the North American market made significant breakthrough.”).

60. 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, TCL has nevertheless continued its infringing conduct and disregarded an objectively high likelihood of infringement. TCL’s 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.

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

COUNT IV

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

62. Plaintiff incorporates paragraphs 1 through 61 herein by reference.

63. 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.

64. 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.

65. TCL has and continues to directly and/or indirectly infringe (by inducing infringement) one or more claims of the '196 patent in this judicial district and elsewhere in Texas and the United States.

66. Upon information and belief, TCL "is engaged in the research and development, manufacturing and distribution of consumer electronic products," which includes "Smart TVs" incorporating TFT-LCD technology. *See* 2019 1st Quarter Press Release, April 23, 2019.

67. TCL directly infringes the '196 patent via 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those TFT-LCD panels, their components, and/or products containing same that incorporate the fundamental technologies covered by the '196 patent, or by having its controlled subsidiaries, intermediaries, and/or agents do the same. Furthermore, upon information and belief, TCL sells and makes TFT-LCD panels outside of the United States, 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.

68. For example, TCL infringes claim 1 of the '196 patent via its LCD panel model nos. LVF430ND1L CJ9W04. Those products each include a “lateral electrical field type active matrix substrate comprising” each of the limitations of claim 1. The technology discussion above and the example accused TFT-LCD panel (model no. LVF430ND1L CJ9W04) provide context for Plaintiff’s allegations that each of those limitations are met. For example, the model no. LVF430ND1L CJ9W04 includes (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.

69. TCL further infringes 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.

70. At a minimum, TCL has known of the '196 patent at least as early as the filing date of the complaint.

71. Upon information and belief, since at least the above-mentioned date when TCL was on notice of its infringement, TCL has actively induced, under U.S.C. § 271(b), distributors, importers and/or consumers that purchase or sell TFT-LCD 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 TFT-LCD panels. Since at least the notice provided on the above-mentioned date, TCL does so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '196 patent. Upon information and belief, TCL intends to cause, and has taken affirmative steps to induce, infringement by the distributors, importers, and/or consumers by, inter alia, creating advertisements that promote the infringing use of the TFT-LCD panels, creating established distribution channels for the TFT-LCD panels into and within the United States, manufacturing the TFT-LCD 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. *See, e.g.*, TCL Electronics Holdings Limited Annual Report 2018, at p.16 of 285 (“The Group’s sales volume in overseas markets for the year of 2018 reached 18.21 million sets, a year-on-year increase of 29.5%, of which the North American market made significant breakthrough.”).

72. 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, TCL has nevertheless continued its infringing conduct and disregarded an objectively high likelihood of infringement. TCL’s 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.

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

INJUNCTIVE RELIEF

74. Plaintiff seeks preliminary and permanent injunctions as a result of TCL’s infringement of the Asserted Patents. Plaintiff is likely to succeed in showing that TCL infringes 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 TCL in China, Hong Kong, and/or

the Cayman Islands, Plaintiff will face a historically challenging burden in persuading courts in these jurisdictions to enforce a judgment from a U.S. court, likely preventing Plaintiff from obtaining any monetary damages from TCL. Considering the balance of hardships between the Plaintiff and TCL, a remedy in equity is warranted; and the public interest would not be disserved by a permanent or preliminary injunction.

CONCLUSION

75. Plaintiff VPV is entitled to recover from TCL the damages sustained by Plaintiff as a result of TCL's 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.

76. 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

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

PRAYER FOR RELIEF

78. Plaintiff VPV respectfully requests that the Court find in its favor and against TCL, and that the Court grant Plaintiff the following relief:

1. A judgment that TCL has infringed the Asserted Patents as alleged herein, directly and/or indirectly by way of inducing infringement of such patents;
2. A judgment for an accounting of all damages sustained by Plaintiff as a result of the acts of infringement by TCL;

3. A preliminary and permanent injunction against TCL, its 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;
4. A judgment and order requiring TCL 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;
5. A judgment and order requiring TCL to pay Plaintiff pre-judgment and post-judgment interest on the damages awarded;
6. A judgment and order finding this to be an exceptional case and requiring TCL to pay the costs of this action (including all disbursements) and attorneys' fees as provided by 35 U.S.C. § 285; and
7. Such other and further relief as the Court deems just and equitable.

Dated: May 23, 2019

Respectfully submitted,

/s/Patrick J. Conroy w/permission Claire A.
Henry

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

Of Counsel:

T. John Ward, Jr.
Texas State Bar No. 00794818
Email: jw@wsfirm.com
Claire Abernathy Henry
Texas State Bar No. 24053063
Email: Claire@wsfirm.com

WARD, SMITH, & HILL, PLLC

P.O. Box 1231
Longview, TX 75606
Telephone: (903) 757-6400
Facsimile: (903) 757-2323