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

|  | Š |                     |
|--|---|---------------------|
| SOVEREIGN PEAK VENTURES, LLC,          | § |                     |
|  | § |                     |
| Plaintiff,                             | § |                     |
|  | § | JURY TRIAL DEMANDED |
| V.                                     | § |                     |
|  | § |                     |
| TCL TECHNOLOGY GROUP CORPORATION,      | § | C.A. NO             |
| TCL INDUSTRIES HOLDINGS CO., LTD.,     | § |                     |
| TCL ELECTRONICS HOLDINGS LTD.,         | § |                     |
| SHENZEN TCL NEW TECHNOLOGIES CO. LTD., | § |                     |
| TCL KING ELECTRICAL APPLIANCES         | § |                     |
| (HUIZHOU) CO. LTD.,                    | § |                     |
| TCL MOKA INTERNATIONAL LTD., and       | § |                     |
| TCL MOKA MANUFACTURING S.A. DE C.V.    | § |                     |
|  | § |                     |
| Defendants.                            | § |                     |
|  | § |                     |

## PLAINTIFF'S COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Sovereign Peak Ventures, LLC ("SPV") files this Complaint against Defendants TCL Technology Group Corporation ("TCL Corp."), TCL Industries Holdings Co., Ltd. ("TCL Industries"), TCL Electronics Holdings Ltd. ("TCL Electronics"), Shenzhen TCL New Technologies Co. Ltd. ("TCL Technology"), TCL King Electrical Appliances (Huizhou) Co. Ltd. ("TCL King"), TCL Moka International Ltd. ("TCL Moka Int'l"), and TCL Moka Manufacturing S.A. de C.V. ("TCL Moka Mfg.") (collectively TCL, TCL Industries, TCL Electronics, TCL Technology, TCL King, TCL Moka Int'l, and TCL Moka Mfg. are referred to as "Defendants," "TCL Group," or "TCL") for infringement of U.S. Patent No. 9,431,017 (the "017 patent"), U.S. Patent No. 9,747,903 (the "038 patent"), collectively, the "Asserted Patents."

#### THE PARTIES

1. Sovereign Peak Ventures, LLC is a Texas limited liability company, with a principal place of business in Plano, TX. SPV resides in this District.

2. On information and belief, TCL Technology Group Corporation, formerly known as TCL Corporation, is a corporation organized under the laws of the People's Republic of China with a principal place of business in Huizhou City, Guangdong, P.R. China. TCL Corp. with TCL Group induces its subsidiaries, affiliates, retail partners, and customers in the making, using, selling, offering for sale, and/or importing throughout the United States, including within this District, products, such as televisions, accused of infringement. TCL Corp. in agency with the TCL Group provides a distribution channel of infringing products within this District and the U.S. nationally.

3. On information and belief, TCL Industries Holdings Co., Ltd. is a corporation organized under the laws of the People's Republic of China with a principal place of business located at 22/F, TCL Technology Building, 17 Huifeng 3rd Road, Huizhou, Guangdong, 516000 P.R. China. TCL Corp. holds a controlling interest in TCL Industries. TCL Industries with TCL Group induces its subsidiaries, affiliates, retail partners, and customers in the making, using, selling, offering for sale, and/or importing throughout the United States, including within this District, products, such as televisions, accused of infringement. TCL Industries in agency with the TCL Group provides a distribution channel of infringing products within this District and the U.S. nationally.

4. On information and belief, TCL Electronics Holdings Ltd., formerly known as TCL Multimedia Technology Holdings Ltd., is a corporation organized under the laws of the Cayman Islands with a registered address at P.O. Box 309, Ugland House, Grand Cayman, KY1-1104,

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 3 of 40 PageID #: 3

Cayman Islands. TCL Electronics has a principal place of business at 9 Floor, TCL Electronics Holdings Limited Building, TCL International E City, #1001 Zhongshan Park Road, Nanshan District, Shenzhen, Guangdong, 518067 P.R. China. TCL Electronics also has a location located at 7/F, TCL Building, 22 Science Park E, Hong Kong Science Park, Hong Kong. TCL has a controlling interest in TCL Electronics. TCL Electronics is a subsidiary of TCL Industries Holdings (Hong Kong) Co. Ltd., which is wholly-owned by TCL Industries. TCL Electronics operates in agency as part of the TCL Group. TCL Electronics operates its subsidiaries along with itself as the TCL Group. TCL Electronics with TCL Group, either itself and/or through the activities of its subsidiaries, makes, uses, sells, offers for sale, and/or imports throughout the United States, including within this District, products, such as televisions, accused of infringement.

5. On information and belief, Shenzhen TCL New Technologies Co. is a company organized and existing under the laws of the People's Republic of China with a principal place of business at 5 Shekou Industrial Avenue Shenzhen, 518067 P.R. China. TCL Technology is a subsidiary of TCL Electronics. TCL Technology performs research and development in connection with the televisions accused of infringement in this Complaint and operates in concert with other members of the TCL Group to manufacture and import televisions accused of infringement in this Complaint within this District.

6. On information and belief, TCL King Electrical Appliances (Huizhou) Co. Ltd. is a company organized and existing under the laws of the People's Republic of China with a principal place of business at 78 Zhongkai Development Zone Huizhou, 516006, China. TCL King is a subsidiary of TCL Electronics. TCL King regularly imports and inserts into the stream of commerce televisions and related goods, such that infringing televisions will be offered for sale and sold in this District. TCL King operates in agency as part of the TCL Group.

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 4 of 40 PageID #: 4

7. On information and belief, TCL Moka International Ltd. is a company organized and existing under the laws of the People's Republic of China with a principal place of business at 13/F, TCL Tower, 8 Tai Chung Road, Tsuen Wan, New Territories Hong Kong. TCL Moka Int'l is wholly-owned by TCL Electronics. TCL Moka Int'l regularly imports and inserts into the stream of commerce televisions and components of televisions, such that infringing televisions will be offered for sale and sold in this District. TCL Moka Int'l operates in agency as part of the TCL Group.

8. On information and belief, TCL Moka Manufacturing S.A. de C.V. is a company organized under the laws of Mexico with a principal place of business at Calle 4ta. No. 55, Cd. Industrial Otay, Tijuana 22500, Mexico. TCL Moka Mfg. is wholly-owned by TCL Electronics. TCL Moka Mfg. regularly imports and inserts into the stream of commerce televisions and components of televisions, such that infringing televisions will be offered for sale and sold in this District. TCL Moka Mfg. operates in agency as part of the TCL Group.

9. On information and belief, Defendants are an interrelated group of companies which collectively compromise one of the largest electronics manufacturers in the United States.

10. The Asserted Patents were invented by employees of Panasonic Corporation ("Panasonic"). Founded in 1918, Panasonic has been at the forefront of the electronics industry for over a century. Panasonic made numerous innovations in the home appliance, battery, mobile phone, and television industries. Indeed, Panasonic's invention of the "Paper Battery" in 1979 is widely credited as enabling the compact electronics of today. In 1991, Panasonic released the Mova P, the smallest and lightest mobile phone on the market, which revolutionized the industry by showing the demand for a compact, lightweight device. Panasonic also produced the first wide-format plasma display and developed the first digital television for the U.S. market. Panasonic's

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 5 of 40 PageID #: 5

history of innovation is also borne out by its intellectual property. Indeed, a search of the USPTO database where the patent assignee is "Panasonic" yields over 27,000 matches.

11. TCL was founded in the People's Republic of China in the early 1980s and continues as a partially state-owned enterprise of the Chinese government. TCL launched in North America in 2014 and portrays itself as "America's Fastest-Growing TV Brand." *See, e.g.*, https://tcl.com/eu/en/aboutTCL/the-group.html; https://www.tclusa.com/aboutus/our-story.

12. Prior to the filing of the Complaint, SPV repeatedly attempted to engage TCL and/or its agents in licensing discussions related to the Asserted Patents, including but not limited to providing a non-discriminatory offer to license the portfolio on a worldwide basis, including both implementation and any standards-essential patents in the portfolio, that was reasonable for a license taken in the absence of litigation. TCL's past and continuing sales of its devices i) willfully infringe the Asserted Patents and ii) impermissibly take the significant benefits of SPV's patented technologies without fair compensation to SPV.

13. On information and belief, Defendants operate in agency with each other as a group. *See, e.g.*, https://tcl.com/eu/en/aboutTCL/thegroup.html ("The group has 75,000 employees, 28 Research and Development laboratories and 22 production sites."). TCL induces its subsidiaries, affiliates, retail partners, and customers in the making, using, selling, offering for sale, and/or importing throughout the United States, including within this District, products, such as televisions, accused of infringement. Defendants provide a distribution channel of infringing products within this District and the U.S. nationally. Defendants, between and amongst themselves, purposefully direct the Accused Products into established distribution channels within this District and the U.S. nationally.

## Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 6 of 40 PageID #: 6

14. On information and belief, Defendants maintain a corporate presence in the United States via at least its, U.S.-based sales subsidiaries including, TTE Technology, Inc. TTE Technology, Inc. is a Delaware corporation with a principal place of business at 1860 Compton Avenue, Corona, California 92881. TTE Technology, Inc. provides sales, distribution, research, and development support in North America as part of the TCL Group and for its parents, e.g., TCL Corp. TTE Technology, Inc. is an agent of Defendants. At the direction and control of Defendants, U.S.-based sales subsidiaries including, TTE Technology, Inc., import infringing products, such as televisions, into the United States and this District.

15. On information and belief, TCL and its U.S.-based sales subsidiaries (which act as part of a global network of overseas sales and manufacturing subsidiaries on behalf of TCL) have operated as agents of one another and vicariously as parts of the same business group to work in concert together and enter into agreements that are nearer than arm's length. For example, TCL Industries, alone and via at least the activities of its U.S.-based sales subsidiaries (e.g., TTE Technology, Inc.), conducts business in the United States, including importing, distributing, and selling televisions that incorporate devices, systems, and processes that infringe the Asserted Patents in Texas and this judicial district. *See Trois v. Apple Tree Auction Center, Inc.*, 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.").

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 7 of 40 PageID #: 7

16. Through offers to sell, sales, imports, distributions, and other related agreements to transfer ownership of Defendants' electronics, such as televisions, with distributors and customers operating in and maintaining a significant business presence in the U.S. and/or its U.S. subsidiaries, TTE Technology Inc., Defendants do business in the U.S., the state of Texas, and in the Eastern District of Texas.

## JURISDICTION AND VENUE

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

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

19. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(c). Each Defendant is a foreign entity and may be sued in any judicial district under 28 U.S.C. § 1391(c)(3).

20. This Court has general and specific personal jurisdiction over Defendants pursuant to due process and/or the Texas Long Arm Statute because, inter alia, (i) Defendants have done and continue to do business in Texas and (ii) Defendants have, directly and through intermediaries, committed and continue to commit acts of patent infringement in the State of Texas, including making, using, offering to sell, and/or selling accused products in Texas, and/or importing accused products into Texas, including by Internet sales and sales via retail and wholesale stores, inducing others to commit acts of patent infringement in Texas, and/or committing a least a portion of any other infringements alleged herein. Defendants have placed, and are continuing to place, infringing products into the stream of commerce, via an established distribution channel, with the knowledge and/or understanding that such products are sold in Texas, including in this District. Defendants have derived substantial revenues from its infringing acts occurring within Texas and within this

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 8 of 40 PageID #: 8

District. Defendants have substantial business in this State and judicial district, including: (A) at least part of its 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 alter egos, intermediaries, agents, distributors, importers, customers, subsidiaries, and/or consumers.

21. This Court has personal jurisdiction over Defendants, directly or through intermediaries, distributors, importers, customers, subsidiaries, and/or consumers including its U.S.-based sales subsidiaries, e.g., TTE Technology, Inc. Through direction and control of such subsidiaries, Defendants have 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 Defendants would not offend traditional notions of fair play and substantial justice. TTE Technology, Inc. are wholly-owned subsidiaries of TCL. The primary business of TTE Technology, Inc. is the marketing and sale of electronic products in the United States. TCL has a 100% controlling ownership interest in TTE Technology, Inc. and maintains more than half of the voting rights for such subsidiaries as its basis for control. *Id.* On information and belief, TCL compensates TTE Technology, Inc. for its sales support services in the United States. As such, TCL has a direct financial interest in its U.S.-based subsidiaries, and vice versa.

22. Personal jurisdiction is proper because Defendants have committed acts of infringement in this District. This Court has personal jurisdiction over Defendants because, *inter alia*, this action arises from activities Defendants purposefully directed towards the State of Texas and this District.

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 9 of 40 PageID #: 9

23. Exercising personal jurisdiction over Defendants in this District would not be unreasonable given Defendants' contacts in this District, the interest in this District of resolving disputes related to products sold herein, and the harm that would occur to SPV.

24. In addition, Defendants have knowingly induced and continue to knowingly induce infringement within this District by advertising, marketing, offering for sale and/or selling devices pre-loaded with infringing functionality within this District, to consumers, customers, manufacturers, distributors, resellers, partners, and/or end users, and providing instructions, user manuals, advertising, and/or marketing materials which facilitate, direct or encourage the use of infringing functionality with knowledge thereof.

25. Personal jurisdiction also exists specifically over each of the Defendants because each, directly or through affiliates, subsidiaries, agents, or intermediaries, transacts business in this State or purposefully directed at this State (including, without limitation, retail stores including Best Buy and Walmart) by making, importing, offering to sell, selling, and/or having sold infringing products within this State and District or purposefully directed at this State or District.

26. Personal jurisdiction also exists specifically over each of the Defendants because Defendants have overlapping executives, interlocking corporate structures, and close relationships as manufacturer, importer, and distributor of the products accused of infringement.

27. To the extent any foreign Defendant is not subject to jurisdiction in any state's court of general jurisdiction, exercising jurisdiction over such Defendant in this State and this District would be consistent with due process and this State's long-arm statute and under national contacts in light of facts alleged in this Complaint.

28. In addition, each of the Defendants, directly or through affiliates, subsidiaries, agents, or intermediaries, places infringing products into the stream of commerce knowing they

## Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 10 of 40 PageID #: 10

will be sold and used in Texas, and economically benefits from the retail sale of infringing products in this State. For example, Defendants' products have been sold and are available for sale in this District at Best Buy and Walmart retail stores, and are also available for sale and offered for sale in this District through online retailers such as Best Buy, Walmart, and Amazon. TCL also advertises its infringing products to consumers in Texas and this District through its agent's websites. *See, e.g.*, https://www.tclusa.com/products/home-theater.

29. With respect to the '017 patent, '903 patent, and '861 patent, the Accused Products comprise televisions that include digital assistant software (such as Google Assistant) that provides natural language processing and household automation functionality (e.g., the ability to issue voice commands thorough the TV remote control to control smart home devices). Example of such devices include TCL 75S535, 75S434, 65S434, 55S434, 50S434, 43S434, 40S330, 32S330. On information and belief, televisions with TCL's "Android TV" branding include such features. With respect to the '038 patent, the Accused Products comprise TCL televisions and displays that are preloaded with one or more streaming applications that utilizes a TCP protocol and automatically adjusts resolution rates during playback, such as Netflix. Example of such devices include TCL 75\$535, 75\$434, 65\$434, 55\$434, 50\$434, 43\$434, 40\$330, 32\$330, 49\$303, 49\$325, 49\$305, 43S325, 43S305, 43S303, 40S303, 40S325, 40S305, 32S321, 32S331, 32S305, 32S327, 32S325, 328301, 328335, 288305, 758425, 758423, 758421, 758435, 758431, 658401, 658403, 658425, 658423, 658405, 658421, 658435, 558403, 558401, 558425, 558423, 558405, 558421, 558435, 508423, 508421, 508425, 508435, 498425, 498403, 498405, 438425, 438403, 438423, 438421, 438405, 438435, 758535, 658517, 658515, 658525, 658535, 558515, 558517, 558525, 558535, 50S525, 50S535, 49S515, 49S517, 43S515, 43S525, 43S517, 75R617, 75R615, 75R635, 65R625, 65R617, 65R615, 65R635, 55R617, 55R615, 55R613, 55R625, 55R635, 75Q825, 65Q825, 55S20,

55P607, 55P605, 75C803, 75C807, 65C807, 65US5800, 55C803, 55UP120, 50UP120, 43UP120, 55UP130, 50UP130, 43UP130, 55US5800, 43FP110, 49FP110, 55FSS3700, 32S3700, 48FS3700, 55FS3750, 48FS3750, 40FS3750, 28S3750, 32S3750, 55FS3800, 40FS3800, 32S3800, 50FS3850, 55S3850, 40FS3850, 32S3850, 48FS4610, 32S4610R, 40FS4610R, 48FS4610R, 55FS4610R, LE50UHDE5691. On information and belief, televisions with TCL's "Android TV" branding include such applications. The On information and belief, TCL controls or otherwise directs and authorizes all activities of its U.S.-based sales subsidiaries, including TTE Technology Inc. Such directed and authorized activities include, the U.S. Subsidiaries' using, offering for sale, selling, and/or importing the Accused Products, their components, and/or products containing the same that incorporate the fundamental technologies covered by the Asserted Patents. The Defendants' U.S.-based sales subsidiaries (e.g., TTE Technology Inc.) are authorized to import, distribute, sell, or offer for sale the Accused Products on behalf of Defendants. For example, TCL researches, designs, develops, and manufactures televisions and then directs its U.S.-based sales subsidiaries to import, distribute, offer for sale, and sell the Accused Products in the United States. See, e.g., United States v. Hui Hsiung, 778 F.3d 738, 743 (9th Cir. 2015) (finding that the sale of infringing products to third parties rather than for direct import into the U.S. did not "place [defendants'] conduct beyond the reach of United States law [or] escape culpability under the rubric of extraterritoriality"). Furthermore, Defendants' U.S.-based sales subsidiaries also administer, on behalf of Defendants, requests for service under and any disputes arising from Defendants' limited warranty of the Accused Products sold in the U.S., including in Texas and this judicial district. See. e.g., http://support.tclusa.com/tcl-tv-warranty-information. Thus. Defendants' U.S.-based sales subsidiaries conduct infringing activities on behalf of Defendants.

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 12 of 40 PageID #: 12

30. On information and belief, Defendants' U.S.-based sales subsidiaries corporate presence in the United States gives TCL substantially the business advantages that it would have enjoyed if it conducted its business through its own offices or paid agents in the state. Defendants' U.S.-based sales subsidiaries are authorized to import, distribute, sell, and offer for sale Defendants' products, including televisions incorporating infringing devices and processes, on behalf of Defendants. For example, Defendants' U.S.-based sales subsidiaries operate within Defendants' global network of sales subsidiaries in North and South America, Europe, Asia, Africa, and the Middle East. In the U.S., including within the Eastern District of Texas, Defendants' televisions, which incorporate infringing devices and processes, are imported, distributed, offered for sale, and sold.

31. Via Defendants' alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers maintaining a business presence, operating in, and/or residing in the U.S., Defendants' products, including products and processes accused of infringing the Asserted Patents, are or have been widely distributed and sold in retail stores, both brick and mortar and online, in Texas including 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 Corp.*, 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)). For example, Defendants' phones are sold to end users by the U.S.-based subsidiaries, distributors, and customers, including, but not limited to, TTE Technology Inc., online and at retail stores located throughout the Eastern District of Texas.

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 13 of 40 PageID #: 13

32. On information and belief, TCL has placed and continues to place infringing products and/or products that practice infringing processes into the stream of commerce via established distribution channels comprising at least subsidiaries and distributors, such as TTE Technology Inc., and customers such as AT&T and Verizon, with the knowledge and/or intent that those products are and/or will be imported, used, offered for sale, sold, and continue to be sold in the United States and Texas, including in this judicial district. For example, in 2019 TCL reported 10,973 billion HK\$ (about 13.42 billion USD) in North American sales of its television products. *See 2019 Annual Report*, TCL ELECTRONICS (March 2020), at p. 189, *available at* https://doc.irasia.com/listco/hk/tclelectronics/annual/2019/ar2019.pdf. As a result, TCL has, vicariously through and/or in concert with its alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers, placed the Accused Products into the stream of commerce via established distribution channels 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.

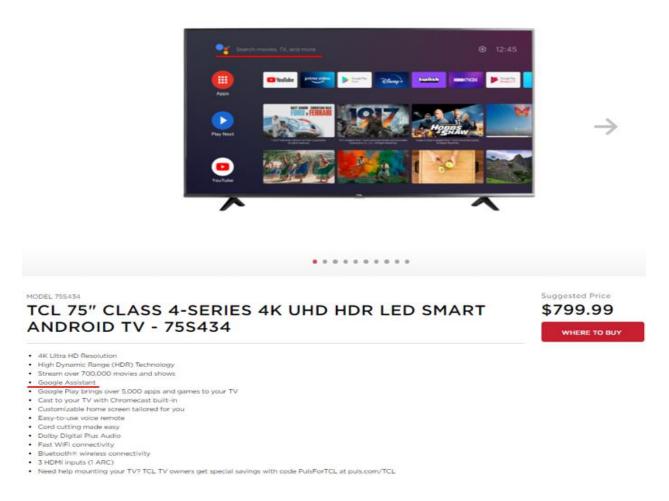
33. In the alternative, the Court has personal jurisdiction over Defendants under Federal Rule of Civil Procedure 4(k)(2), because the claims for patent infringement in this action arise under federal law, Defendants are not subject to the jurisdiction of the courts of general jurisdiction of any state, and exercising jurisdiction over Defendants is consistent with the U.S. Constitution.

34. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391 because, among other things, Defendant 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 In re HTC Corp.*, 889 F.3d 1349, 1357 (Fed. Cir. 2018) ("The Court's recent decision in *TC Heartland* does not alter" the alien-venue rule.).

## THE ASSERTED PATENTS AND TECHNOLOGY

35. The Accused Products support built-in assistant technology. For example, Accused Products marketed under TCL's "Android TV" branding have built-in Google Assistant functionality. *See, e.g., Everything you need to know about TCL Android TV*, https://www.tcl.com/android-tv/en/tips/everything-you-need-to-know-about-tcl-android-tv.html (last visited December 27, 2020). For example, on information and belief, the TCL 75S434 is sold in the United States, and has Google Assistant built-in:

← 4-SERIES > TCL 75° CLASS 4-SERIES 4K UHD HDR LED SMART ANDROID TV - 755434



36. The TCL 75S434, having Google Assistant built-in is a device management system

connected to a plurality of target devices for managing the plurality of target devices.

## Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 15 of 40 PageID #: 15

37. The TCL 75S434 receives instruction information from the device's voice input apparatus, which is associated with a first target device among the plurality of target devices. As shown below, the TCL Remote, which is associated and compatible with the TCL 75S434, receives instruction information that includes first voice information indicating an operation instruction for any target device among the plurality of target devices.

#### TCL Android TV brings you what you want, when you want it

· Enjoy entertainment tailored just for you

Whatever you're into, from blockbuster movies to steaming apps, there is unlimited content tailored for you, available anytime. Android TV brings you great content, so you can spend less time browsing and more time watching. You can pick from the personalized recommendations from the Google Play store, YouTube, Hulu Plus, and other apps that appear automatically on your home screen.

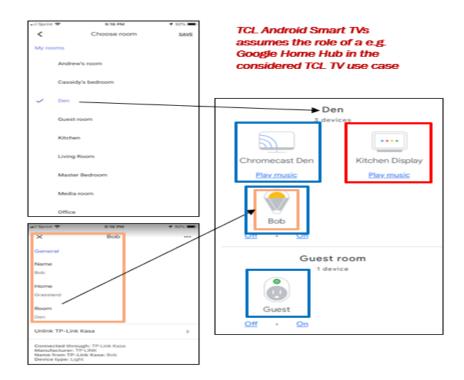
· Google Assistant is ready to help

With Google Assistant built in to all TCL Android TVs, you can quickly access your own personal Google and discover the latest entertainment, get answers to those tricky questions, find out what the weather will be like tomorrow or control your smart devices around your home. You only need to press the mic button on your remote to get started and say, 'OK Google' or 'Hey Google!'. Please note that Voice Search remote control is included with the X series and sold separately for the C and P series. Some questions you can ask include:

"Play some rock music"

- "Play," "pause," "stop," and "resume" while watching anything on screen
- "Louder," and "softer" to turn the volume up or down
- "Open [app name]" to open any app that you have installed
- "Show me the cast of Stanger Things"
- "What is the weather going to be like tomorrow?"

38. For example, when the user is in a room (for example, the "Den" as in the example below) and voices the command "OK Google, turn on the lights," the TCL 75S434 with Google Assistant built-in turns on only the lights in the Den, e.g., the light named "Bob," in the example below.



39. The voice input apparatus determines whether or not second information indicating a second target device is included in the instruction information. For example, as shown below, the TCL 75S434 with Google Assistant determines that second voice information, e.g., the word "Master" indicating a second target device, is or is not included in the instruction information.



#### COUNT I

## (INFRINGEMENT OF U.S. PATENT NO. 9,431,017)

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

41. SPV is the assignee of the '017 patent, entitled "Device Control Method, Device Management System, and Voice Input Apparatus," with ownership of all substantial rights in the '017 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringements.

42. The '017 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code. The '017 patent issued from U.S. Patent Application No. 14/667,661.

43. TCL has and continues to directly and/or indirectly infringe (by inducing infringement) one or more claims of the '017 patent in this judicial district and elsewhere in Texas and the United States.

44. On information and belief, TCL designs, develops, manufactures, assembles, and markets TVs that have built-in Google Assistant functionality. *See, e.g., Everything you need to know about TCL Android TV*, https://www.tcl.com/android-tv/en/tips/everything-you-need-to-know-about-tcl-android-tv.html (last visited December 27, 2020). TCL refers to its TVs utilizing this functionality as Android TVs.

45. TCL directly infringes the '017 patent via 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Accused Products, their components and processes, and/or products containing the same that incorporate the fundamental technologies covered by the '017 patent to, for example, its alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers. Furthermore, upon information and belief, TCL sells and makes the Accused Products outside of the United States, delivers those products to its

### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 18 of 40 PageID #: 18

customers, distributors, and/or subsidiaries in the United States, or in the case that it delivers the Accused Products outside of the United States it does so intending and/or knowing that those products are destined for the United States and/or designing those products for sale in the United States, thereby directly infringing the '017 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, TCL directly infringes the '017 patent through its direct involvement in the activities of its subsidiaries, including TTE Technology, Inc., including by selling and offering for sale the Accused Products directly to TTE Technology, Inc. and importing the Accused Products into the United States for TTE Technology, Inc. On information and belief, TTE Technology, Inc. conducts activities that constitute direct infringement of the '017 patent under 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Accused Products. For example, and upon information and belief, TCL offers for sale, sells, and imports the Accused Products within the U.S. to, for example, its distributors, customers, subsidiaries, importers, and/or consumers. Further, TCL is vicariously liable for this infringing conduct of TTE Technology, Inc. (under both the alter ego and agency theories) because, as an example and upon information and belief, TCL and TTE Technology, Inc. are essentially the same company, and TCL has the right and ability to control TTE Technology, Inc.'s infringing acts and receives a direct financial benefit from TTE Technology, Inc.'s infringement.

46. For example, TCL infringes claim 6 of the '017 patent via the Accused Products such as at least TCL TVs that have built-in Google Assistant functionality, for example the TCL 75S434. The Accused Products include the "device management system that is connected to a plurality of target devices arranged in the same household and that manages the plurality of target devices" of claim 6. For example, TCL TVs with built-in Google Assistant are each a device

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 19 of 40 PageID #: 19

management system. The plurality of target devices that are controlled by TCL TVs with built-in Google Assistant are arranged in groups (e.g., rooms) in the same household. The target devices may include, for example, IOT devices, such as smart lights, smart plugs, smart locks, and smart thermostats.

47. The Accused Products comprise a device management apparatus. For example, the Accused Products comprise TCL Android TVs which function as a device management apparatus.

48. The Accused Products comprise a voice input apparatus. For example, TCL's Remote, which is designed and intended to be used with the Accused Products, receives voice input that is sent to the TV via the remote-to-TV pairing.

49. The Accused Products include the device management apparatus which, in operation, receives, from the voice input apparatus associated with a first target device among the plurality of target devices, instruction information that includes first voice information indicating an operation instruction for any target device among the plurality of target devices. For example, the Accused Products (e.g., TCL TVs with built-in Google Assistant) receive instruction information that includes first voice information from the voice input apparatus (e.g., TCL's Remote as paired with the TV) indicating an operation instruction for any target devices.

50. In the Accused Products, the device management apparatus recognizes the operation instruction from the first voice information included in the received instruction information. For example, the Accused Products (e.g., TCL TVs with built-in Google Assistant) are configured to use a processor to recognize the operation instruction to control the intended smart home device.

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 20 of 40 PageID #: 20

51. In the Accused Products, the device management apparatus specifies the first target device by referencing a first database in which the identification information and a device ID of the first target device are associated. For example, the Accused Products (e.g., TCL TVs with built-in Google Assistant) interface with target devices added to a user's Google Home app, which comprises a database. The Home app allows the target device to be assigned to a room and is accordingly associated with the devices of that room.

52. In the Accused Products, the device management apparatus determines whether or not second voice information indicating a second target device among the plurality of target devices is included in the instruction information. For example, the Accused Products are configured to use a processor to determine whether or not a second voice information is included in the instruction information for purposes of what is known as "room relevancy" (e.g. to trigger a target device in the same room as an Accused Product even if the name of the target device is not included in the instruction information).

53. In the Accused Products, the device management apparatus transmits, (i) when the second voice information is not included in the instruction information, a control command for executing the recognized operation instruction to the first target device, and (ii) when the second voice information is included in the instruction information, the control command to the second target device. For example, if a specific target device or group (e.g., second voice information) is not included in the instruction information, then a first control command for executing the recognized operation instruction is transmitted by the Accused Products (e.g., a TCL TV with built-in Google Assistant) to the first target device. When a TCL TV with built-in Google Assistant determines that second voice information (e.g. a specific device name) is included in the instruction information (e.g. a specific device name) is included in the instruction information (e.g. a specific device name) is included in the instruction information (e.g. a specific device name) is included in the instruction information (e.g. a specific device name) is included in the instruction information (e.g. a specific device name) is included in the instruction information (e.g. a specific device name) is included in the instruction information (e.g. a specific device name) is included in the instruction information (e.g. a specific device name) is included in the instruction information (e.g. a specific device name) is included in the instruction information (e.g. a specific device name) is included in the instruction information (e.g. a specific device name) is included in the instruction information (e.g. a specific device name) is included in the instruction information, then the first control command is transmitted to the second target device.

## Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 21 of 40 PageID #: 21

54. In the Accused Products, the voice input apparatus transmits the instruction information to the device management apparatus. For example, the remote control transmits instruction information to the accused TCL TV.

55. In the alternative, TCL and virtual assistant providers, such as Google, jointly infringe the method claims of the '017 patent. TCL contracted virtual assistant providers to provide software that performs certain steps of the method claims of the '017 patent.

56. The technology discussion above and the exemplary Accused Products provide context for Plaintiff's infringement allegations.

57. At a minimum, TCL has known of the '017 patent at least as early as the filing date of the complaint. In addition, TCL has known about the '017 patent since at least September 11, 2020, when TCL was given access to a data room providing notice of its infringement.

58. On 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), its distributors, customers, subsidiaries, importers, and/or consumers that import, purchase, or sell the Accused Products that include or are made using all of the limitations of one or more claims of the '017 patent to directly infringe one or more claims of the '017 patent by using, offering for sale, selling, and/or importing the Accused Products. 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 '017 patent. Upon information and belief, TCL intends to cause, and has taken affirmative steps to induce infringement by its distributors, importers, customers, subsidiaries, and/or consumers by at least, *inter alia*, creating advertisements that promote the infringing use of the Accused Products, creating and/or maintaining established distribution channels for the Accused Products into and within the United States, manufacturing the Accused

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 22 of 40 PageID #: 22

Products in conformity with U.S. laws and regulations, distributing or making available instructions or manuals for these products to purchasers and prospective buyers, designing and testing digital assistant features in the Accused Products, and/or providing technical support, replacement parts, or services for these products to these purchasers in the United States.

59. Upon information and belief, despite having knowledge of the '017 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '017 patent, TCL has nevertheless continued its infringing conduct and disregarded an objectively high likelihood of infringement. TCL's infringing activities relative to the '017 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.

60. SPV has been damaged as a result of TCL's infringing conduct described in this Count. TCL is, thus, liable to SPV in an amount that adequately compensates SPV 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. 9,747,903)

61. Plaintiff incorporates paragraphs 1 through 60 herein by reference.

62. SPV is the assignee of the '903 patent, entitled "Device Control Method, Device Management System, and Voice Input Apparatus," with ownership of all substantial rights in the '903 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringements.

### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 23 of 40 PageID #: 23

63. The '903 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code. The '903 patent issued from U.S. Patent Application No. 15/217,116.

64. TCL has and continues to directly and/or indirectly infringe (by inducing infringement) one or more claims of the '903 patent in this judicial district and elsewhere in Texas and the United States.

65. On information and belief, TCL designs, develops, manufactures, assembles, and markets TVs that have built-in Google Assistant functionality. *See, e.g., Everything you need to know about TCL Android TV*, https://www.tcl.com/android-tv/en/tips/everything-you-need-to-know-about-tcl-android-tv.html (last visited December 27, 2020). TCL refers to its TVs utilizing this functionality as Android TVs.

66. TCL directly infringes the '903 patent via 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Accused Products, their components and processes, and/or products containing the same that incorporate the fundamental technologies covered by the '903 patent to, for example, its alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers. Furthermore, upon information and belief, TCL sells and makes the Accused Products outside of the United States, delivers those products to its customers, distributors, and/or subsidiaries in the United States, or in the case that it delivers the Accused Products outside of the United States it does so intending and/or knowing that those products are destined for the United States and/or designing those products for sale in the United States, thereby directly infringing the '903 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, TCL directly infringes the '903 patent through its direct involvement in the activities of its

### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 24 of 40 PageID #: 24

subsidiaries, including TTE Technology, Inc., including by selling and offering for sale the Accused Products directly to TTE Technology, Inc. and importing the Accused Products into the United States for TTE Technology, Inc. On information and belief, TTE Technology, Inc. conducts activities that constitute direct infringement of the '903 patent under 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Accused Products. For example, and upon information and belief, TCL offers for sale, sells, and imports the Accused Products within the U.S. to, for example, its distributors, customers, subsidiaries, importers, and/or consumers. Further, TCL is vicariously liable for this infringing conduct of TTE Technology, Inc. (under both the alter ego and agency theories) because, as an example and upon information and belief, TCL and TTE Technology, Inc. are essentially the same company, and TCL has the right and ability to control TTE Technology, Inc.'s infringing acts and receives a direct financial benefit from TTE Technology, Inc.'s infringement.

67. For example, TCL infringes claim 2 of the '903 patent via the Accused Products such as at least TCL TVs that have built-in Google Assistant functionality, for example the TCL 75S434. The Accused Products include the "device management system" of claim 2. For example, TCL TVs with built-in Google Assistant are each a device management system. The plurality of target devices that are controlled by TCL TVs with built-in Google Assistant are arranged in groups (e.g., rooms) in the same household. The target devices may include, for example, IOT devices, such as smart lights, smart plugs, smart locks, and smart thermostats.

68. The Accused Products comprise a device management apparatus. For example, the Accused Products comprise TCL Android TVs which function as a device management apparatus.

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 25 of 40 PageID #: 25

69. The Accused Products comprise a voice input apparatus. For example, TCL's Remote, which is designed and intended to be used with the Accused Products, receives voice input that is sent to the TV via the remote-to-TV pairing.

70. The Accused Products include the device management apparatus which, in operation, receives, from the voice input apparatus associated with a first target device among a plurality of target devices, instruction information that includes first voice information indicating an operation instruction for any target device among the plurality of target devices, the plurality of target devices being arranged in a same household. For example, the Accused Products (e.g., TCL TVs with built-in Google Assistant) receive instruction information that includes first voice information from the voice input apparatus (e.g., TCL's Remote) indicating an operation instruction for any target device among the plurality of target devices that are arranged in the same household.

71. In the Accused Products, the device management apparatus recognizes the operation instruction from the first voice information included in the received instruction information, wherein the instruction information includes identification information that identifies the voice input apparatus. For example, the Accused Products (e.g., TCL TVs with built-in Google Assistant) configured to use a processor to recognize the operation instruction from the first voice information included in the received instruction information. The instruction information, e.g., voice information received by the Accused Product via the TV remote, includes identification information that identifies the voice input apparatus (e.g., the TV that is paired to the remote).

72. In the Accused Products, the device management apparatus specifies the first target device by referencing a first database in which the identification information and a device ID of the first target device are associated. For example, the Accused Products, e.g., TCL TVs with built-

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 26 of 40 PageID #: 26

in Google Assistant, interface with target devices added to a user's Google Home app, which comprises a database. The Home app allows the target device to be assigned to a room and is accordingly associated with the devices of that room.

73. In the Accused Products, the device management apparatus determines whether second voice information indicating a second target device among the plurality of target devices is included in the instruction information; and transmits, (i) when the second voice information is not included in the instruction information, a control command for executing the recognized operation instruction to the first target device, and (ii) when the second voice information is included in the instruction information, the control command to the second target device. For example, if a specific target device or group (e.g., second voice information) is not included in the instruction information command for executing the recognized operation instruction information, then a first control command for executing the recognized operation instruction is transmitted by the Accused Products (e.g., an TCL TV with built-in Google Assistant) to the first target device. When a TCL TV with built-in Google Assistant determines that second voice information (e.g., a specific device name) is included in the instruction information (e.g., a specific device name) is included in the instruction information (e.g., a specific device name) is included in the instruction information, then the first control command is transmitted to the second target device.

74. In the Accused Products, the voice input apparatus transmits the instruction information to the device management apparatus. For example, the remote control transmits instruction information to the accused TCL TV.

75. The technology discussion above and the exemplary Accused Products provide context for Plaintiff's infringement allegations.

76. In the alternative, TCL and virtual assistant providers, such as Google, jointly infringe the method claims of the '903 patent. TCL contracted virtual assistant providers to provide software that performs certain steps of the method claims of the '903 patent.

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 27 of 40 PageID #: 27

77. At a minimum, TCL has known of the '903 patent at least as early as the filing date of the complaint. In addition, TCL has known about the '903 patent since at least September 11, 2020, when TCL was given access to a data room providing notice of its infringement.

78. On 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), its distributors, customers, subsidiaries, importers, and/or consumers that import, purchase, or sell the Accused Products that include or are made using all of the limitations of one or more claims of the '903 patent to directly infringe one or more claims of the '903 patent by using, offering for sale, selling, and/or importing the Accused Products. 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 '903 patent. Upon information and belief, TCL intends to cause, and has taken affirmative steps to induce infringement by its distributors, importers, customers, subsidiaries, and/or consumers by at least, inter alia, creating advertisements that promote the infringing use of the Accused Products, creating and/or maintaining established distribution channels for the Accused Products into and within the United States, manufacturing the Accused Products in conformity with U.S. laws and regulations, distributing or making available instructions or manuals for these products to purchasers and prospective buyers, designing and testing digital assistant features in the Accused Products, and/or providing technical support, replacement parts, or services for these products to these purchasers in the United States.

79. On information and belief, despite having knowledge of the '903 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '903 patent, TCL has nevertheless continued its infringing conduct and disregarded an objectively high likelihood of infringement. TCL's infringing activities relative to the '903 patent have been, and

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 28 of 40 PageID #: 28

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. SPV has been damaged as a result of TCL's infringing conduct described in this Count. TCL is, thus, liable to SPV in an amount that adequately compensates SPV 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. 10,102,861)

81. Plaintiff incorporates paragraphs 1 through 80 herein by reference.

82. SPV is the assignee of the '861 patent, entitled "Device Control Method, Device Management System, and Voice Input Apparatus" with ownership of all substantial rights in the '861 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringements.

83. The '861 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code. The '861 patent issued from U.S. Patent Application No. 15/656,426.

84. TCL has and continues to directly and/or indirectly infringe (by inducing infringement) one or more claims of the '861 patent in this judicial district and elsewhere in Texas and the United States.

85. On information and belief, TCL designs, develops, manufactures, assembles, and markets TVs that have built-in Google Assistant functionality. *See, e.g., Everything you need to know about TCL Android TV*, https://www.tcl.com/android-tv/en/tips/everything-you-need-to-

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 29 of 40 PageID #: 29

know-about-tcl-android-tv.html (last visited December 27, 2020). TCL refers to its TVs utilizing this functionality as Android TVs.

86. TCL directly infringes the '861 patent via 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Accused Products, their components and processes, and/or products containing the same that incorporate the fundamental technologies covered by the '861 patent to, for example, its alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers. Furthermore, upon information and belief, TCL sells and makes the Accused Products outside of the United States, delivers those products to its customers, distributors, and/or subsidiaries in the United States, or in the case that it delivers the Accused Products outside of the United States it does so intending and/or knowing that those products are destined for the United States and/or designing those products for sale in the United States, thereby directly infringing the '861 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, TCL directly infringes the '861 patent through its direct involvement in the activities of its subsidiaries, including TTE Technology, Inc., including by selling and offering for sale the Accused Products directly to TTE Technology, Inc. and importing the Accused Products into the United States for TTE Technology, Inc.. Upon information and belief, TTE Technology, Inc. conducts activities that constitutes direct infringement of the '861 patent under 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Accused Products. For example, and upon information and belief, TCL offers for sale, sells, and imports the Accused Products within the U.S. to, for example, its distributors, customers, subsidiaries, importers, and/or consumers. Further, TCL is vicariously liable for this infringing conduct of TTE Technology, Inc. (under both the alter ego and agency theories) because, as an example and upon information and

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 30 of 40 PageID #: 30

belief, TCL and TTE Technology, Inc. are essentially the same company, and TCL has the right and ability to control TTE Technology, Inc.'s infringing acts and receives a direct financial benefit from TTE Technology, Inc.'s infringement.

87. TCL infringes claim 9 of the '861 patent via the Accused Products such as at least TCL TVs that have built-in Google Assistant functionality, for example the TCL 75S434. Those Accused Products include the "system for managing a plurality of target devices, the plurality of target devices being arranged in a same household" of claim 9. For example, the TCL 75S434 TV with Google Assistant built-in is connected to a plurality of target devices for managing the plurality of target devices. The target devices may include, for example, IOT devices, such as smart lights, smart plugs, smart locks, and smart thermostats.

88. The Accused Products comprise at least one processor. For example, the TCL75S434 TV utilizes a processor to execute the source code associated with the Google Assistant.

89. The Accused Products comprise at least one memory including at least one set of instructions that, when executed by the at least one processor, cause the at least one processor to perform operations. For example, the processor utilizes at least one memory module that includes instructions (e.g., executable code) that are executed by the process to cause the processor to perform operations.

90. The Accused Products include a processor that performs the operation of receiving, by an input associated with a first target device among the plurality of target devices, a voice command that includes first voice information, the voice command indicating an operation instruction for one of the plurality of target devices, the first voice information including identification information that identifies the first target device. For example, the Accused Products (e.g., TCL TVs with built-in Google Assistant) receive by an input (e.g., a user presses a button

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 31 of 40 PageID #: 31

on the remote that is paired with the TV) a voice command; the voice command includes first voice information (e.g., the user speaks a command) indicating an operation instruction for any target device among the plurality of target devices. The first voice information identifies the first target device (a device type name or the name of a light or a room name with a light). The Accused Product (e.g., the TCL TV with built-in Google Assistant) is added as a device to the Google Home app to receive commands and control devices. The Accused Product is associated with specific target devices through the groups/room configuration via the Google Home app.

91. The Accused Products include a processor that performs the operation of specifying the first target device by referencing a database in which the identification information and a device ID of the first target device are associated. For example, to control other devices, Accused Products such as the TCL 75S434 use Google's HomeGraphApiService (which supports storing and querying devices, rooms, structures and their relationships), to reference the Google Home database (where said relationships are stored) to specify the first target device. Such relationships include a relationship between the received identification information and a device ID of the first target device (e.g., a first light).

92. The Accused Products are configured to use a processor to perform the operation of recognizing the operation instruction from the voice command. For example, Accused Products, such as the TCL 75S434, are configured to use a processor to recognize the operation instruction from the voice command.

93. The Accused Products are configured to use a processor to perform the operation of determining whether or not the voice command includes second voice information that identifies a second target device among the plurality of target devices as an operation object for the operation instruction. For example, Accused Products, such as the TCL 75S434, are configured to use a

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 32 of 40 PageID #: 32

processor to determine whether or not second voice information is included in the voice command that identifies a second target device (e.g., a second light).

94. The Accused Products are configured to use a processor to perform the following operation: when the second voice information is not included in the voice command, causing the first target device to execute the operation instruction. For example, when second voice information is not included (e.g., the user does not specify a second target device, such as a second light, by name), the Accused Products, such as the TCL 75S434, use a processor to cause the operation instruction for just the first target device (e.g., the first light).

95. The Accused Products are configured to use a processor to perform the following operation: when the second voice information is included in the voice command, transmitting a control command to the second target device identified as the operation object for causing the second target device to execute the operation instruction. For example, when second voice information is included (e.g., the user does specify a second target device, such as a second light, by name), the Accused Products, such as the TCL 75S434, use a processor to cause the operation instruction for the second target device.

96. In the alternative, TCL and virtual assistant providers, such as Google, jointly infringe the method claims of the '861 patent. TCL contracted virtual assistant providers to provide software that performs certain steps of the method claims of the '861 patent.

97. The technology discussion above and the exemplary Accused Products provide context for Plaintiff's infringement allegations.

98. At a minimum, TCL has known of the '861 patent at least as early as the filing date of the complaint. In addition, TCL has known about the '861 patent since at least September 11, 2020, when TCL was given access to a data room providing notice of its infringement.

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 33 of 40 PageID #: 33

99. 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), its distributors, customers, subsidiaries, importers, and/or consumers that import, purchase, or sell the Accused Products that include or are made using all of the limitations of one or more claims of the '861 patent to directly infringe one or more claims of the '861 patent by using, offering for sale, selling, and/or importing the Accused Products. 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 '861 patent. Upon information and belief, TCL intends to cause, and has taken affirmative steps to induce infringement by its distributors, importers, customers, subsidiaries, and/or consumers by at least, *inter alia*, creating advertisements that promote the infringing use of the Accused Products, creating and/or maintaining established distribution channels for the Accused Products into and within the United States, manufacturing the Accused Products in conformity with U.S. laws and regulations, distributing or making available instructions or manuals for these products to purchasers and prospective buyers, designing and testing digital assistant features in the Accused Products, and/or providing technical support, replacement parts, or services for these products to these purchasers in the United States.

100. Upon information and belief, despite having knowledge of the '861 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '861 patent, TCL has nevertheless continued its infringing conduct and disregarded an objectively high likelihood of infringement. TCL's infringing activities relative to the '861 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

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 34 of 40 PageID #: 34

that Plaintiff is entitled under 35 U.S.C. § 284 to enhanced damages up to three times the amount found or assessed.

101. SPV has been damaged as a result of TCL's infringing conduct described in this Count. TCL is, thus, liable to SPV in an amount that adequately compensates SPV 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. 6,877,038)

102. Plaintiff incorporates paragraphs 1 through 101 herein by reference.

103. SPV is the assignee of the '038 patent, entitled "Data Transmission Method and Apparatus" with ownership of all substantial rights in the '038 patent, including the right to exclude others and to enforce, sue, and recover damages for past and future infringements.

104. The '038 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code. The '038 patent issued from U.S. Patent Application No. 10/633,574.

105. TCL has and continues to directly and/or indirectly infringe (by inducing infringement) one or more claims of the '038 patent in this judicial district and elsewhere in Texas and the United States.

106. Upon information and belief, TCL designs, develops, manufactures, assembles and markets TVs that are preloaded with one or more streaming applications that utilizes a TCP protocol and automatically adjusts resolution rates during playback, such as Netflix. TCL's TVs are preloaded with Netflix.

107. TCL directly infringes the '038 patent via 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Accused Products, their components and processes, and/or

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 35 of 40 PageID #: 35

products containing the same that incorporate the fundamental technologies covered by the '038 patent to, for example, its alter egos, agents, intermediaries, distributors, importers, customers, subsidiaries, and/or consumers. Furthermore, upon information and belief, TCL sells and makes the Accused Products outside of the United States, delivers those products to its customers, distributors, and/or subsidiaries in the United States, or in the case that it delivers the Accused Products outside of the United States it does so intending and/or knowing that those products are destined for the United States and/or designing those products for sale in the United States, thereby directly infringing the '038 patent. See, e.g., Lake Cherokee Hard Drive Techs., LLC v. Marvell Semiconductor, Inc., 964 F. Supp. 2d 653, 658 (E.D. Tex. 2013). Furthermore, TCL directly infringes the '038 patent through its direct involvement in the activities of its subsidiaries, including TTE Technology, Inc., including by selling and offering for sale the Accused Products directly to TTE Technology, Inc. and importing the Accused Products into the United States for TTE Technology, Inc. Upon information and belief, TTE Technology, Inc. conducts activities that constitute direct infringement of the '038 patent under 35 U.S.C. § 271(a) by making, offering for sale, selling, and/or importing those Accused Products. For example, and upon information and belief, TCL offers for sale, sells, and imports the Accused Products within the U.S. to, for example, its distributors, customers, subsidiaries, importers, and/or consumers. Further, TCL is vicariously liable for this infringing conduct of TTE Technology, Inc. (under both the alter ego and agency theories) because, as an example and upon information and belief, TCL and TTE Technology, Inc. are essentially the same company, and TCL has the right and ability to control TTE Technology, Inc.'s infringing acts and receives a direct financial benefit from TTE Technology, Inc.'s infringement.

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 36 of 40 PageID #: 36

108. The Accused Products infringe the '038 patent including, at least, claim 1. For example, the Accused Products include TVs that are preloaded with the Netflix application, including, but not limited to, the TCL 75S434. The Accused Products perform a method for receiving data packets from a transmitter. For example, on information and belief, the TCL 75S434 receives data packets (e.g., streaming content) from a transmitter (e.g., Netflix servers).

109. The Accused Products are programmed to decide that a data packet is missing. For example, on information and belief, the TCL 75S434 is configured to use HTTP Live Streaming (HLS) when streaming content. HLS utilizes the TCP protocol, which is designed to do error checking, meaning that it can detect missing data packets. Further, the Accused Products, including the TCL 75S434, are programmed to recognize TCP errors, which, in some instances, correspond to missing data packets.

110. The Accused Products make a retransmission decision, based on channel conditions, importance of the missing data packet and bit rates of previously received data packets, as to whether a retransmission request for the missing data packet is to be sent. For example, on information and belief, when running Netflix, the TCL 75S434 utilizes a "Quality of Experience" or "QoE" metric in making viewing decisions, including retransmission decisions. The QoE metric is a function of the factors affecting quality of experience. Among other things, the QoE metric considers re-buffering count, bit rate, and startup time. The QoE metric informs the Accused Products' retransmission decision.

111. The Accused Products send the retransmission request to the transmitter if the retransmission decision is affirmative. For example, on information and belief, the TCL 75S434 will send a retransmission request to the Netflix servers if it detects a packet loss corresponding to its buffer and the QoE does not necessitate downgrading the content resolution.

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 37 of 40 PageID #: 37

112. The Accused Products receive a packet retransmitted by the transmitter in response to the retransmission request. For example, on information and belief, the Accused Products utilize a TCP protocol. In response to a retransmission request, the TCL 75S434 receives a packet (e.g., video content) retransmitted by the transmitter (e.g., Netflix servers).

113. The technology discussion above and the exemplary Accused Products provide context for Plaintiff's infringement allegations.

114. At a minimum, TCL has known of the '038 patent at least as early as the filing date of the complaint. In addition, TCL has known about the '038 patent since at least September 11, 2020, when TCL was given access to a data room providing notice of its infringement.

115. 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), its distributors, customers, subsidiaries, importers, and/or consumers that import, purchase, or sell the Accused Products that include or are made using all of the limitations of one or more claims of the '038 patent to directly infringe one or more claims of the '038 patent by using, offering for sale, selling, and/or importing the Accused Products. 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 '038 patent. Upon information and belief, TCL intends to cause, and has taken affirmative steps to induce infringement by its distributors, importers, customers, subsidiaries, and/or consumers by at least, *inter alia*, creating advertisements that promote the infringing use of the Accused Products, creating and/or maintaining established distribution channels for the Accused Products into and within the United States, manufacturing the Accused Products in conformity with U.S. laws and regulations, distributing or making available instructions or manuals for these products to purchasers and prospective buyers, testing wireless

#### Case 2:21-cv-00008 Document 1 Filed 01/13/21 Page 38 of 40 PageID #: 38

charging features in the Accused Products, and/or providing technical support, replacement parts, or services for these products to these purchasers in the United States.

116. Upon information and belief, despite having knowledge of the '038 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '038 patent, TCL has nevertheless continued its infringing conduct and disregarded an objectively high likelihood of infringement. TCL's infringing activities relative to the '038 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.

117. SPV has been damaged as a result of TCL's infringing conduct described in this Count. TCL is, thus, liable to SPV in an amount that adequately compensates SPV 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.

#### **CONCLUSION**

118. Plaintiff SPV is entitled to recover from TCL the damages sustained by Plaintiff as a result of TCL's wrongful acts, and willful infringement, 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.

119. 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

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

## PRAYER FOR RELIEF

121. Plaintiff 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;
- A judgment for an accounting of all damages sustained by Plaintiff as a result of the acts of infringement by TCL;
- 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;
- 4. A judgment and order requiring TCL to pay Plaintiff pre-judgment and post-judgment interest on the damages awarded;
- 5. 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
- 6. Such other and further relief as the Court deems just and equitable.

Dated: January 13, 2021

Respectfully submitted,

# /s/ Patrick J. Conroy

Patrick J. Conroy Texas Bar No. 24012448 T. William Kennedy Jr. Texas Bar No. 24055771 Jonathan H. Rastegar Texas Bar No. 24064043 Jerry D. Tice, II Texas Bar No. 24093263

# **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 jrastegar@bcpc-law.com

Attorneys for Plaintiff Sovereign Peak Ventures, LLC