

**In the United States District Court  
For the Eastern District of Texas  
Texarkana Division**

MONUMENT PEAK VENTURES, LLC,

*Plaintiff*

v.

TCL ELECTRONICS HOLDINGS LTD.,  
TCL TECHNOLOGY GROUP  
CORPORATION, TCL INDUSTRIES  
HOLDINGS CO., LTD., TCL  
COMMUNICATION TECHNOLOGY  
HOLDINGS LIMITED, TCT MOBILE  
WORLDWIDE LTD., TCT MOBILE  
INTERNATIONAL LTD., HUIZHOU TCL  
MOBILE COMMUNICATION CO. LTD.,  
AND TCL COMMUNICATION LTD.

*Defendants*

Case No. \_\_\_\_\_

**Plaintiff’s Original Complaint**

Plaintiff Monument Peak Ventures, LLC, by and for its Complaint against Defendants TCL Electronics Holdings Ltd.; TCL Technology Group Corporation; TCL Industries Holdings Co., Ltd.; TCL Communication Technology Holdings Limited; TCT Mobile Worldwide Ltd.; TCT Mobile International Ltd.; Huizhou TCL Mobile Communication Co. Ltd.; and TCL Communication Ltd. (the “TCL Defendants”) alleges to the Court as follows:

**PARTIES**

1. Monument Peak Ventures, LLC (“MPV”) is a Texas limited liability company, with its principal place of business in Allen, Texas.

2. The TCL Defendants in this action (collectively referred to as “TCL”) are foreign-based corporations who, along with their own subsidiaries and associates, operate as agents of

one another and work in concert together as a business group to make, use, offer to sell, or sell any patented invention within the United States, or import into the United States infringing products, including smartphones, in the United States, including in Texas and this judicial district.

3. On information and belief, Defendant TCL Electronics Holdings Ltd. (f/k/a TCL Multimedia Technology Holdings, Ltd.) is a corporation organized and existing under the laws of the Cayman Islands, with its principal place of business at 7th Floor, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, New Territories, Hong Kong. TCL Electronics Holdings Ltd. operates in agency as part of the TCL Group (discussed below).

4. On information and belief, Defendant TCL Technology Group Corporation is a China-based global electronics company and has a regular and established place of business at No. 17, Huifeng Third Road, Zhongkai High-tech Zone, Huizhou, Guangdong, 516001, China. TCL Technology Group Corporation operates in agency as part of the TCL Group.

5. On information and belief, Defendant TCL Industries Holdings Co., Ltd. is a corporation organized and existing under the laws of China with its principal place of business at 22nd Floor, TCL Technical Tower, Huifeng 3 Road, Zhongkai Development Zone Huizhou, China. TCL Industries Holdings Co., Ltd. operates in agency as part of the TCL Group.

6. On information and belief, Defendant TCL Communication Technology Holdings Limited, is a company organized and existing under the laws of the Cayman Islands or China with its principal place of business at Block F4, TCL Communication Technology Building, TCL International E City, Zhong Shan Yuan Road, Nanshan District, Shenzhen, Guangdong, P.R. China, 518052. TCL Communication Technology Holdings Limited operates in agency as part of the TCL Group.

7. On information and belief, TCT Mobile Worldwide Ltd. is a corporation organized under the laws of Hong Kong with a principal place of business at 5/F HK Science Park Bldg., Shatin, NT, Hong Kong. TCT Mobile Worldwide Ltd. regularly imports and inserts into the stream of commerce mobile phones and components of mobile phones, such that infringing mobile phones will be offered for sale and sold in this District. TCT Mobile Worldwide Ltd. operates in agency as part of the TCL Group.

8. On information and belief, TCT Mobile International Ltd. is a corporation organized and existing under the laws of Hong Kong, with a principal place of business located at 1910-12A Tower 3, China Hong Kong City, 33 Canton Road, Tsim Sha Tsui, 31802888 Hong Kong. TCT Mobile International Ltd. regularly imports and inserts into the stream of commerce mobile phones and components of mobile phones, such that infringing mobile phones will be offered for sale and sold in this District. TCT Mobile International Ltd. operates in agency as part of the TCL Group.

9. On information and belief, Defendant Huizhou TCL Mobile Communication Co. Ltd. is a company organized and existing under the laws of China with a principal place of business at No. 86 Hechang Qi Lu Xi, Zhongkai Gaoxin District, Huizhou City, Guandong Province, P.R. China. Huizhou TCL Mobile Communication Co. Ltd. regularly imports and inserts into the stream of commerce mobile phones and related goods, such that infringing mobile phones will be offered for sale and sold in this District. Huizhou TCL Mobile Communication Co. Ltd. operates in agency as part of the TCL Group.

10. On information and belief, Defendant TCL Communication Ltd. is a company organized and existing under the laws of China with its principal place of business at 7/F, Block F4,

TCL International E City Zhong Shan Yuan Road, Nanshan District, Shenzhen, P.R. China. TCL Communication Ltd. operates in agency as part of the TCL Group.

11. On information and belief, the TCL Defendants are part of a related TCL Group of companies under the umbrella of TCL Electronics Holdings Limited., which includes the various TCL subsidiaries, including those wholly owned subsidiaries listed above as defendants in this action. Using its network of subsidiaries, associates, intermediaries, and distributors, TCL 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.

12. On information and belief, TCL manufactures, imports into the United States, sells for importation, markets, offers for sale, sells, and distributes products within the United States after importation, including TCL's smartphones, that directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the Asserted Patents in violation of 35 U.S.C. § 271(a).

13. TCL produces smartphones (e.g., the TCL 20 Pro 5G) that perform methods for processing digital images that enhance digital features in those images according to particularly programmed algorithms (e.g., a "beauty" mode) included with the smartphones. TCL additionally produces smartphones (e.g., the TCL 20 Pro 5G) that perform methods for processing digital images with different angles of view and that use imaging stages for outputting an image and a distance map of a scene from a captured image signal. The TCL smartphones with similar functionality are collectively referred to as the "Accused Products."

14. TCL has agents, for example authorized sellers and sales representatives, that

offer and sell products pertinent to this Complaint through the State of Texas, including in this Judicial District, and to consumers throughout this Judicial District, such as Amazon.com; Sam's Club, 3310 N. 4<sup>th</sup> St., Longview, Texas 75605; and Sam's Club, 2025 S. S.W. Loop 323, Tyler, Texas 75701.

## JURISDICTION

15. This action arises under the patent laws of the United States Patent Act, namely 35 U.S.C. §§ 271, 281, and 284–85, among others.

16. This Court has federal subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a) because the action arises under the patent laws of the United States, 35 U.S.C. §§ 271 *et seq.*

17. This Court has general and specific personal jurisdiction over TCL under the Texas Long Arm Statute because, among other things, (i) TCL has done and continues to do business in Texas and (ii) TCL has, directly and through intermediaries, committed and continues 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 regular acts of patent infringement in Texas, and/or committing at least a portion of any other infringements alleged.

18. TCL has placed, and is 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. TCL has derived substantial revenues from its infringing acts occurring within Texas and within this District. TCL has 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, dealer agents, Mobile Virtual Network Operators (MVNOs), retailers, and/or end users, and/or consumers.

19. Personal jurisdiction is proper because TCL has committed acts of infringement in this District. This Court has personal jurisdiction over TCL because, among other things, this action arises from activities TCL purposefully directed towards the State of Texas and this District.

20. Exercising personal jurisdiction over TCL in this District would not be unreasonable given TCL's contacts in this District, the interest in this District of resolving disputes related to products sold herein, and the harm that would otherwise occur to MPV.

21. Additionally, as of at least the date of this Complaint, TCL knowingly induces infringement within this District by advertising, marketing, offering for sale and/or selling devices including 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 that facilitate, direct or encourage the use of infringing functionality with knowledge thereof.

22. This Court has personal jurisdiction over TCL because it has continuous and systematic business contacts with the State of Texas. TCL, directly and through subsidiaries or intermediaries (including distributors, retailers, and licensing partners, dealer agents, and MVNOs),

conduct business extensively throughout Texas, by shipping distributing, making, using, offering for sale, selling, licensing, transmitting (including through its mobile applications and networks) its infringing products in the state of Texas and the Eastern District of Texas. Furthermore, TCL has purposefully placed its products into the stream of commerce with the intention and expectation that they will be purchased and used by consumers in this state and this District. TCL has sold and offered to sell, and continues to sell and offer to sell, its infringing products within this district and has committed regular acts of direct and indirect infringement in this district. Defendant's contacts with the State of Texas and this District are so pervasive that this Court's exercise of jurisdiction would not offend traditional notions of fair play and substantial justice.

23. Further, the TCL entities listed above, as part of 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 (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.”).

24. TCL products, including, for example the TCL 20 Pro 5G, 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 pleaded 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)).

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

## **VENUE**

26. Venue is proper in this Judicial District pursuant to 28 U.S.C. §§ 1391(c) and 1400(b). TCL does business in this judicial district, selling in and delivering mobile phone products into this judicial district, advertising products for sale to potential customers in this district, and instructing end users how to use TCL’s infringing products in this judicial district. TCL has committed acts of infringement in this judicial district and has purposely transacted business in this judicial district involving the Accused Products.

## **BACKGROUND**

27. MPV is a technology licensing company.

28. The Asserted Patents (United States Patent Nos. 7,092,573 and 7,683,692) originate from the iconic Kodak patent portfolio.



29. The Asserted Patents claim inventions born from the ingenuity of the Eastman Kodak Company (“Kodak”), an iconic American imaging technology company that dates to the late 1800s. The first model of a Kodak camera was released in 1888.

30. In 1935, Kodak introduced “Kodachrome,” a color reversal stock for movie and slide film. In 1963, Kodak introduced the Instamatic camera; an easy-to-load point-and-shoot camera. By 1976, Kodak was responsible for 90% of the photographic film and 85% of the cameras sold in the United States. At the peak of its domination of the camera industry, Kodak invented the first self-contained digital camera in 1975.

31. By 1986, Kodak had created the first megapixel sensor that was capable of recording 1,400,000 pixels. While innovating in the digital imaging space, Kodak developed an immense patent portfolio and extensively licensed its technology. For example, in 2010, Kodak received \$838,000,000 in patent licensing royalties. As part of a reorganization of its business, Kodak sold many of its patents to some of the biggest names in technology that included Google, Facebook, Amazon, Microsoft, Samsung, Adobe Systems, HTC, and others for \$525,000,000. While numerous digital imaging companies license the use of the Kodak patent portfolio owned by MPV, TCL persists on infringing the Asserted Patents and using MPV’s technology without a license and with knowledge of their ongoing infringement.

32. **U.S. Patent No. 7,092,573.** The ’573 Patent is titled “Method and System for Selectively Applying Enhancement to an Image.” The inventions claimed in the ’573 Patent generally relate to digital image processing and, more particularly, to a method for determining the amount of enhancement applied to an image based on subject matter in the image.” The ’573 Patent is attached as Exhibit A.

33. The '573 Patent lawfully issued on August 15, 2006, and stems from United States Application No. 10/016,601 filed December 10, 2001.

34. The claims of the '573 Patent are directed to a technical solution for a technical problem and possess specific limitations for specific technological improvements. For example, the specification of the '573 Patent discloses shortcomings in the prior art and then explains the technical way the inventions claimed in the '573 Patent resolve or overcome those shortcomings. *See, e.g., '573 Patent, 1:13-2:38.*

35. For instance, the '573 Patent specification states that, at the time of the invention, conventional methods for enhancing images (e.g., sharpening an image) “may result in undesirable removal of details in grass lawn, textured fabric, or animal hair” and that in conventional systems “the amount of sharpening, or any other type of enhancement, needs to be adjusted individually for each scene by a human operator, an expensive process” and that a further “drawback of the conventional approach is that the amount of sharpening cannot be adjusted easily on a region-by-region basis within the same image, resulting in having to apply an amount of enhancement that is a trade-off between different amounts required by different subject matters or objects in the scene.” '573 Patent, 1:21-42. This led to a need for an improved system “for determining the types and amounts of enhancement for a particular image, whereby the local quality (e.g., sharpness and color) of the image can be improved.” '573 Patent, 2:33-37.

36. Each claim of the '573 Patent is presumed valid and is directed to patent eligible subject matter under 35 U.S.C. § 101, and the technologies claimed in the '573 Patent disclose improvements based on controlling image enhancement, which are improvements in the computer-related technology of digital image enhancement. *See McRO, Inc. v. Bandai Namco Games*

*Am. Inc.*, 837 F.3d 1299, 1316 (Fed. Cir. 2016).

37. For example, claim 1 of the '573 Patent is directed to a specific method for processing a digital image. The method requires (1) “applying a subject matter detector to the digital image to produce a belief map of values indicating the degree of belief that pixels in the digital image belong to target subject matter, said values defining a plurality of belief regions;” (2) “determining the sizes of each of said belief regions in said belief map;” and (3) “enhancing the digital image, said enhancing varying pixel by pixel in accordance with both the degree of belief and the size of the respective said belief region.” Based on these limitations, the claims provide limiting detail that confines the claim to a concrete solution to an identified problem. These claim elements as an ordered combination were not well-understood, routine, and conventional at the time of the invention.

38. The specification of the '573 Patent also evinces that the technologies claimed in the '573 Patent comprise features and functions that were not, alone or in combination, considered well-understood by nor routine, generic, and conventional to skilled artisans in the industry at the time of invention stating that conventional methods for enhancing images were unpredictable, where “the quality of the resulting image often varies depending on the image content” such as “removal of details” like “texture.” '573 Patent, 1:21-42. This led to a need satisfied by the claimed method, for example “determining the types and amounts of enhancement for a particular image, whereby the local quality (e.g., sharpness and color) of the image can be improved depending on detecting different objects or subject matters contained within the image.” *Id.* at 2:33-37.

39. **U.S. Patent No. 7,683,962.** The '962 Patent is titled “Camera Using Multiple Lenses and Image Sensors in a Rangefinder Configuration to Provide a Range Map” and is attached

as Exhibit B. The inventions claimed in the '962 Patent generally relate to digital cameras providing a novel and inventive method that uses multiple lenses and image sensors to provide an improved and extended range-finding capability by utilizing both images to support a range mapping function.

40. The '962 Patent lawfully issued on May 12, 2009, and stems from United States Application No. 11/684,036 filed March 23, 2010.

41. The claims of the '962 Patent are directed to a technical solution for a technical problem and possess specific limitations for a specific improvement. For example, the specification of the '962 Patent discloses shortcomings in the prior art and then explains the technical way the inventions claimed in the '962 Patent resolve or overcome those shortcomings. *See, e.g.*, '962 Patent, 1:15-7:25.

42. Each claim of the '962 Patent is presumed valid and is directed to patent eligible subject matter under 35 U.S.C. § 101, and the technologies claimed in the '962 Patent disclose a specific manner of using a range map to modify an image providing “an improved capability in a multi-lens digital camera for measuring the distance to portions of the scene being photographed.” '962 Patent, 7:29-35. Thus, the technologies claimed in the '962 Patent disclose improvements in the computer-related technology of digital image enhancement. *See McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1316 (Fed. Cir. 2016).

43. For example, claim 9 of the '962 Patent is directed to a specific method and system to enable dynamic depth of field images by blurring of portions of the output image that correspond to areas of the scene that lie outside of a desired depth of field. *See, e.g.*, '962 Patent, 21:15-55.

**COUNT 1**

**(Infringement of U.S. Patent No. 7,092,573)**

44. MPV incorporates the preceding paragraphs by reference.

45. This cause of action arises under the patent laws of the United States, including 35 U.S.C. §§ 271, *et seq.*

46. MPV is the owner of the '573 Patent, with all substantial rights to the '573 Patent including the exclusive right to enforce, sue, and recover damages for past infringement.

47. The '573 Patent is valid, enforceable, and was duly issued in compliance with Title 35 of the United States Code.

48. TCL has infringed one or more claims of the '573 Patent in this District and elsewhere in Texas and the United States.

49. TCL has infringed (and via its agent(s)) claims of the '573 Patent (including for example, and as illustrated below, claim 1) by, among other things, making, using, testing (including its own use and testing), selling, offering for sale, importing, and/or licensing in the United States without authority, the methods claimed by the '573 Patent, namely through its TCL-branded smartphones ("TCL Accused Smartphones").


50. Upon information and belief, and as one illustration without limitation, TCL infringes claim 1 of the '573 Patent in the exemplary manner described below.

51. TCL Accused Smartphones perform a method for processing a digital image using the phone's cameras. As an example, the TCL 20 Pro 5G has a "48 MP quad camera system" that "empowers [users] to create high-definition photos and videos anytime, anywhere . . . ."<sup>1</sup>

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<sup>1</sup> See, e.g., <https://www.tcl.com/us/en/products/mobile/20-series/20-pro-5g-grey-moondust->

52. TCL Accused Smartphones, for example, apply a beauty mode subject matter belief detector to the digital image to identify the pixels containing target subject matter, such as eyes or skin. The process of identifying target subject matter includes identifying pixels that are likely to belong to the subject matter, resulting in a map of belief values. Thus, TCL Accused Smartphones apply a subject matter detector to the digital image to produce a belief map of saliency values indicating the degree of the belief that they belong to a main subject (i.e., “target subject matter”), said values defining a plurality of belief regions:<sup>2</sup>

- **Face Beauty:** Touch to turn on/off. When activated, touch  to adjust skin smoothing and enhance coloring effects in portraits.

53. TCL Accused Smartphones also apply a subject matter detector (e.g., AI detection technology) to produce a belief map of values indicating the degree of belief that pixels in the image belong to a face (“target subject matter”):<sup>3</sup>

- **AI scene detection:** Once turned on, the camera will automatically identify the image content of a scene and categorize it accordingly. Many different scene categories are supported. This only works when using the main camera.

- **Smart guideline<sup>(1)</sup>:** Touch to turn on/off. This feature provides AI-powered facial detection and composition guides for portrait shots. It only works when using the main camera.

54. TCL Accused Smartphones determine the sizes of each belief region and enhance

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[gray](#) (last visited January 4, 2024).

<sup>2</sup> See TCL 20 Pro 5G User Guide at 24.

<sup>3</sup> See *id.* at 23.

the image pixel by pixel in accordance with the identification of target subject matter (i.e., threshold degree of belief) and the size of the respective belief region. If skin smoothing is selected, the pixels comprising skin are enhanced pixel by pixel in accordance with the belief that the pixels comprise skin and the size of the region identified as skin.

55. Thus, TCL Accused Smartphones determine the sizes of each of the belief regions in the belief map and enhance the digital image (enhancing varying pixel by pixel in accordance with both the degree of belief and the size of the respective belief region).

56. TCL's other smartphones—including the TCL 40 Series,<sup>4</sup> 30 Series,<sup>5</sup> the remaining 20 Series,<sup>6</sup> 10 Series,<sup>7</sup> and Stylus smartphones—infringe the '573 Patent in the same way as the TCL 20 Pro 5G.

57. TCL is liable for its infringements of the '573 Patent under 35 U.S.C. § 271.

58. MPV has been damaged because of TCL's unlicensed infringing conduct described in this Count. TCL is thus liable to MPV in an amount that adequately compensates MPV for TCL's infringement, 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.

59. MPV has satisfied the requirements of 35 U.S.C. § 287 and is entitled to recover damages for infringement occurring before the filing of this lawsuit.

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<sup>4</sup> The TCL 40 Series comprise the TCL 40 X 5G, TCL 40 XE 5G, TCL 40 XL, TCL 40 T models.

<sup>5</sup> The TCL 30 Series comprise the TCL 30 5G, TCL 30 V 5G, TCL 30 XE 5G, TCL 30 XL, and TCL 30 SE models.

<sup>6</sup> The TCL 20 Series comprise the TCL 20 Pro 5G, TCL 20 5G (A and AX), TCL 20S, TCL 20 SE, and TCL 20 XE models.

<sup>7</sup> The TCL 10 Series comprise the TCL 10 Pro, TCL 10 5G UW, and TCL 10L models.

**COUNT 2**

**(Infringement of U.S. Patent No. 7,683,962)**

60. MPV incorporates the preceding paragraphs by reference.

61. This cause of action arises under the patent laws of the United States, including 35 U.S.C. §§ 271, *et seq.*

62. MPV is the owner of the '962 Patent with all substantial rights to the '962 Patent, including the exclusive right to enforce, sue, and recover damages for past and future infringement.

63. The '962 Patent is valid, enforceable and was duly issued in compliance with Title 35 of the United States Code.

64. **Direct Infringement.** TCL has, and continues to, infringe one or more claims of the '962 Patent in this District and elsewhere in Texas and the United States.

65. On information and belief, TCL has, and continues to, via an agent or agents, infringe claims of the '962 Patent (including for example, and as illustrated below, claim 9) by, among other things, making, using, testing (including its own use and testing), selling, offering for sale, importing and/or licensing in the United States without authority systems, products, and methods claimed by the '962 Patent, namely through the TCL Accused Smartphones.

66. Upon information and belief, and as one illustration without limitation, Defendant infringes claim 9 of the '962 Patent in the exemplary manners described below.

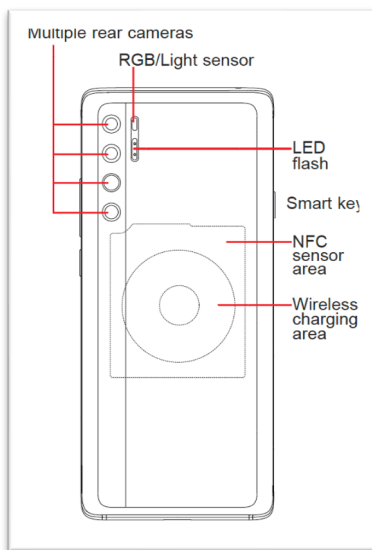
67. TCL Accused Smartphones have multiple cameras that perform a method for using those cameras, having two image stages for producing an output image and a range map of a scene from a captured image signal.

68. The TCL Accused Smartphones include a digital camera with two imaging stages for outputting an image (“producing an output image”) and a distance map (a “range map”) of a



scene from a captured image signal.

69. For example, TCL 20 Pro 5G smartphones form a 48 MP image (“first image”) of the scene from a sensor output of the 48 MP image sensor (“first image sensor”) located in the 48 MP image stage (“first imaging stage”) and forms a 2 MP image (“second image”) of the scene from a sensor output of the 2 MP image depth sensor (“second image sensor”) in the 2 MP image stage (“second imaging stage”):<sup>8</sup>



<b>MAIN CAMERA</b>	<b>Quad</b>	48 MP, f/1.8, 26mm (wide), 1/2.0", 0.8µm, PDAF, OIS 16 MP, f/2.4, 16mm, 123° (ultrawide), 1/3.0", 1.12µm 2 MP, f/2.2, (macro)/ 5 MP (USA only) 2 MP, f/2.4, (depth)
	<b>Features</b>	Dual LED flash, HDR, panorama
	<b>Video</b>	4K@30fps, 1080p@30/60fps, gyro-EIS

70. For the TCL 20 Pro 5G, the 48 MP and 2 MP cameras have different angles of

<sup>8</sup> See TCL 20 Pro 5G User Guide at 5; see also [https://www.gsmarena.com/tcl\\_20\\_pro\\_5g-10855.php](https://www.gsmarena.com/tcl_20_pro_5g-10855.php) (last retrieved January 4, 2024).

view.

71. Thus, the TCL Accused Smartphones perform “forming a first image of the scene from a sensor output of a first image sensor located in a first imaging stage” and “forming a second image of the scene from a sensor output of a second image sensor located in a second imaging stage, wherein the first and second images have different angles of view.”

72. The TCL 20 Pro 5G, for example, performs “selecting the sensor output from one of the imaging stages as the captured image signal” where it selects the sensor output from the 48 MP imaging stages as the primary captured image signal.

73. The TCL 20 Pro 5G, for example, performs “using the images from both imaging stages to generate a range map identifying the distances to different portions of the scene” where it compares the image content from the 48 MP image and the 2 MP image (i.e., “uses the images from both imaging sensors”) to generate a depth map (i.e., “range map”).<sup>9</sup>

74. The TCL 20 Pro 5G, for example, compares the image content from the 48 MP image stage and the 2 MP image stage (“uses the images from both imaging stages”) to generate a distance map identifying the distances to objects in the foreground and the background (“different portions”) of the scene.

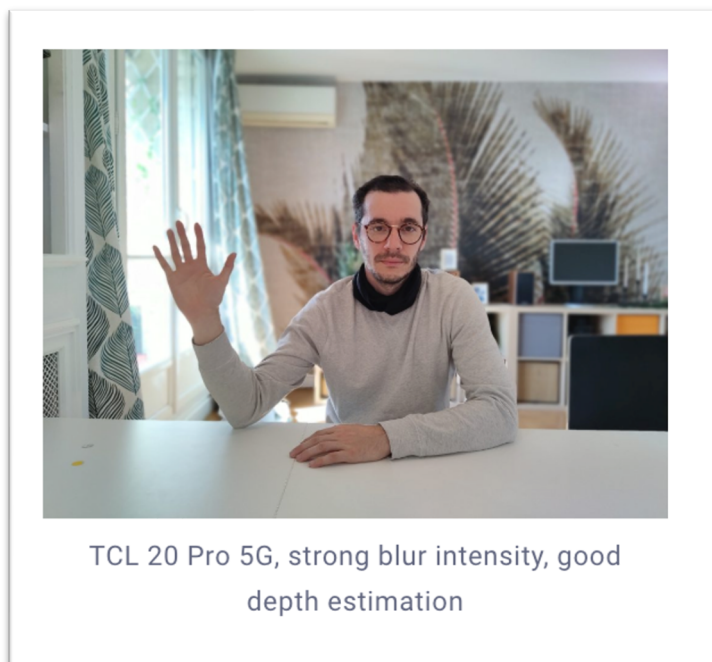
75. TCL Accused Smartphones’ portrait mode measures the distance to the main subject in the foreground, focuses on the main subject, and blurs the background.

76. The distance map is used to enable dynamic depth of field images by blurring the

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<sup>9</sup> See, e.g., <https://d86o2zu8ugzlg.cloudfront.net/mediatek-craft/documents/Dual-Camera-White-Paper.pdf> (“By comparing image content from two vantage points, depth information can be extracted by the examination of the relative positions of objects in the two panels, known as stereopsis.”).

background (“portions”) of the output image that correspond to areas of the scene that lie outside of an object in the foreground (“desired depth of field”). This is used to create blur (or “bokeh”) in the image.<sup>10</sup>



- **PORTRAIT:** Touch to create a depth of field effect. You can compose an image that highlights your subject while producing a gorgeously blurred background.

**3** Touch to show and turn on/off Video Bokeh, Flash or Mute.

77. TCL’s other multiple-rear-camera smartphones—including the TCL 40 Series, 30 Series, the remaining 20 Series, 10 Series, and Stylus smartphones—infringe the ’962 Patent in

<sup>10</sup> See <https://www.dxomark.com/tcl-20-pro-5g-camera-review-excellent-high-end-option/> (Last retrieved January 4, 2024) (“These samples shows the TCL 20 Pro 5G’s bokeh simulation under indoor conditions compared to the competition.”); TCL 20 Pro 5G User Guide at 23; *id.* at 21.

the same way as the TCL 20 Pro 5G.

78. TCL is liable for its infringement of the '962 Patent under 35 U.S.C. § 271.

79. **Indirect Infringement** (35 U.S.C. § 271(b)). Based on the information presently available to MPV, absent discovery, in addition to direct infringement, TCL indirectly infringes one or more claims of the '962 Patent by inducing direct infringement of the TCL Accused Smartphones by others, including but not limited to subsidiaries, dealer agents, MVNOs, retailers, and/or end users, as of at least the filing of this Complaint.

80. TCL has knowledge of the '962 Patent and its indirect infringement since at least the filing of this lawsuit when TCL was notified of the Asserted Patents and its infringement.

81. As of at least the filing of this Complaint, TCL specifically intends and encourages one or more of its subsidiaries, dealer agents, MVNOs, retailers, and/or end users to make, offer for sale, or sell in the United States and/or import the TCL Accused Smartphones into the United States, which (as illustrated above) infringes claims of the '962 Patent. TCL's acts result in direct infringement by such subsidiaries, dealer agents, MVNOs, retailers, and/or end users for making, using, offering for sale, selling, and/or importing the TCL Accused Smartphones.

82. As of at least the filing of this Complaint, TCL also specifically intends and encourages individuals in this District and elsewhere in the United States to directly infringe claims of the '962 Patent (e.g., claim 9 as described above) by acquiring and using the TCL Accused Smartphones. TCL instructs and encourages end users of the TCL Accused Smartphones in a manner that infringes the '962 Patent.

83. MPV has been damaged because of TCL's unlicensed infringing conduct described in this Count. TCL is thus liable to MPV in an amount that adequately compensates

Plaintiff for Defendant's infringement, 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.

84. MPV has satisfied the requirements of 35 U.S.C. § 287 and is entitled to recover damages for infringement occurring before the filing of this lawsuit.

85. **Willful infringement.** As of at least the filing of this Complaint, TCL has been aware that it infringes the '962 Patent, and TCL has failed to cease its infringing activities. TCL undertook and continues its infringing actions despite knowing its actions constituted an unjustifiably high risk that its activities infringed the '962 Patent, which was duly issued by the USPTO and is presumed valid. Since at least the filing of this action, TCL has been aware of the unjustifiably high risk that its actions constituted and continue to constitute infringement of the '962 Patent and that the '962 Patent is valid. On information and belief, TCL could not reasonably, subjectively believe that its actions do not constitute infringement of the '962 Patent, and it could not reasonably, subjectively believe that the '962 Patent is invalid. Despite this knowledge and subjective belief, and the unjustifiably high risk that its actions constitute infringement, TCL has continued its infringing activities. Thus, TCL willfully infringes the '962 Patent.

86. TCL's infringement of the '962 Patent continues to be deliberate and willful, and therefore, this is an exceptional case warranting an award of enhanced damages up to three times the actual damages awarded and attorneys' fees to MPV under 35 U.S.C. §§ 284–285. TCL has knowledge of the '962 Patent, at least as of the filing of this Complaint, and is willfully blind to its infringement, and yet has deliberately continued to infringe in a wanton, malicious, and egregious manner, with reckless disregard for TCL's patent rights. Thus, TCL's infringing actions have been and continue to be consciously wrongful.

### **PRAYER FOR RELIEF**

WHEREFORE, Monument Peak Ventures, LLC respectfully requests that this Court enter an Order and Judgment against TCL as follows:

- judgment that TCL has directly infringed one or more claims of the Asserted Patents, either literally and/or under the doctrine of equivalents;
- judgment that TCL has indirectly infringed one or more claims of the Asserted Patents, either literally and/or under the doctrine of equivalents;
- judgment that TCL account for and pay to MPV all damages and costs incurred by MPV as a result of TCL's infringing activities, and in no event less than a reasonable royalty;
- judgment that TCL pay to MPV a reasonable, ongoing, post judgment royalty to the unexpired patent so long as TCL continues its infringing activities;
- judgment that TCL's infringement is willful and that the damages awarded to MPV should be enhanced up to three times the actual damages awarded;
- pre-judgment and post judgment interest;
- judgment that this case be found as exceptional under 35 U.S.C. § 285 and an award of reasonable attorney fees;
- that MPV be granted such other and further relief as the Court may deem just and proper under the circumstances.

### **JURY DEMAND**

Plaintiff Monument Peak Ventures, LLC, requests a jury trial on all issues so triable.

January 22, 2024

Respectfully submitted,

**Griffith Barbee PLLC**

*/s/ Casey Griffith*

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