

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION**

PICTOS TECHNOLOGIES INC.

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD.,
SAMSUNG ELECTRONICS AMERICA, INC.,
SAMSUNG SEMICONDUCTOR, INC.,
SAMSUNG AUSTIN SEMICONDUCTOR, LLC

Defendants.

Case No. 21-cv-00376

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Pictos Technologies Inc. (“Pictos”) files this Complaint for Patent Infringement against Defendants Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., Samsung Semiconductor, Inc., and Samsung Austin Semiconductor, LLC (collectively, “Defendants”), and asserts as follows:

The Parties

1. Pictos is an intellectual property company that holds more than 70 patents on core technologies relating to image sensors and other features used in consumer electronic products such as cell phones, digital cameras, tablet computers, and laptops. Years ago, at the request of the United States Government, a team of engineers at Pictos’s predecessor-in-interest developed image sensor technologies for use in military applications, and subsequently developed those technologies for commercial uses as well. At a high level, an image sensor is a device that converts an optical image into electronic signals, such as those used by digital cameras and cell phones. Pictos’s predecessors to this imaging technology went on to include a publicly traded

U.S. corporation that also designed and manufactured products in the field of DVDs and other audiovisual equipment. Ultimately, as the owner of a broad array of patent rights directed to image sensors, Pictos has licensed its patents including the patents-in-suit. Pictos has a place of business at 109 Bonaventura Blvd., San Jose, CA 95134, and is incorporated in the state of Delaware.

2. On information and belief, Defendant Samsung Electronics Co., Ltd. (“SEC”) is a corporation organized and existing under the laws of the Republic of Korea, with its principal place of business at 416, Maetan 3-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742, Korea.

3. On information and belief, Samsung Electronics America, Inc. (“SEA”) is a subsidiary of Defendant Samsung Electronics, and is organized and existing under the laws of New York with its principal place of business at 85 Challenger Rd., Ridgefield Park, NJ 07660. Upon information and belief, SEA has corporate offices in the Eastern District of Texas at 1303 East Lookout Drive, Richardson, Texas 75082 and 2800 Technology Drive, Suite 200, Plano, Texas 75074, and also maintains a 216,000 square-foot campus at 6625 Excellence Way, Plano, Texas 75023.

4. On information and belief, Samsung Semiconductor, Inc. (“SSI”) is a corporation organized and existing under the laws of the State of California, with its principal place of business located at 3655 North First Street, San Jose, California 95134, and is a subsidiary of SEA.

5. On information and belief, Samsung Austin Semiconductor, LLC (“SAS”) is a limited liability company organized and existing under the laws of Delaware, with its principal place of business at 12100 Samsung Boulevard, Austin, Texas 78754.

6. On information and belief, SAS is a subsidiary of SSI, which is a subsidiary of SEA, which is a subsidiary of SEC.

Jurisdiction and Venue

7. This is a complaint for patent infringement that arises under the laws of the United States, Title 35 of the United States Code.

8. This Court has subject-matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338.

9. This Court has personal jurisdiction over Defendant SEC in this action because SEC has committed acts within the Eastern District of Texas giving rise to this action and has established minimum contacts with this forum such that the exercise of jurisdiction over SEC would not offend traditional notions of fair play and substantial justice. Defendant SEC, directly and through subsidiaries or intermediaries (including distributors, retailers, and others), has committed and continues to commit acts of infringement in this District by among other things offering to sell and selling products that infringe the asserted patents.

10. This Court has personal jurisdiction over Defendant SEA in this action because SEA has committed acts within the Eastern District of Texas giving rise to this action and has established minimum contacts with this forum such that the exercise of jurisdiction over SEA would not offend traditional notions of fair play and substantial justice. Defendant SEA, directly and through subsidiaries or intermediaries (including distributors, retailers, and others), has committed and continues to commit acts of infringement in this District by among other things offering to sell and selling products that infringe the asserted patents. SEA has also been authorized to do business in the State of Texas by the Texas Secretary of State. Further, SEA designated C T Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201, as its registered agent.

11. This Court has personal jurisdiction over Defendant SSI in this action because SSI has committed acts within the Eastern District of Texas giving rise to this action and has established minimum contacts with this forum such that the exercise of jurisdiction over SSI would not offend traditional notions of fair play and substantial justice. Defendant SSI, directly and through subsidiaries or intermediaries (including distributors, retailers, and others), has committed and continues to commit acts of infringement in by among other things offering to sell and selling products that infringe the asserted patents. Defendant SSI is also authorized by the Texas Secretary of State to do business in the State of Texas and designated C T Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201, as its registered agent.

12. This Court has personal jurisdiction over Defendant SAS in this action because SAS has committed acts within the Eastern District of Texas giving rise to this action and has established minimum contacts with this forum such that the exercise of jurisdiction over SAS would not offend traditional notions of fair play and substantial justice. Defendant SAS, directly and through subsidiaries or intermediaries (including distributors, retailers, and others), has committed and continues to commit acts of infringement in by among other things offering to sell and selling products that infringe the asserted patents. Defendant SAS is also authorized by the Texas Secretary of State to do business in the State of Texas and designated C T Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201, as its registered agent.

13. Venue is proper in the Eastern District of Texas under 28 U.S.C. §§ 1391(b)-(c) and 1400 because Defendants have committed acts of direct and indirect infringement in the Eastern District of Texas and have transacted business in the Eastern District of Texas. Defendants have authorized sellers and sales representatives throughout Texas that offer and sell

infringing products pertinent to this Complaint, including in this District and to consumers throughout this District

14. Each Defendant, through its own acts and/or through the acts of each other Defendant acting as its agent, representative, or alter ego, makes, uses, sells, and/or offers to sell infringing products within this District, has a continuing presence within the District, and has the requisite minimum contacts with the District such that this is a fair and reasonable venue. Upon information and belief, each Defendant has transacted and continues to transact business within this District.

15. As more fully set forth below, the patents owned and asserted by Pictos in this case include United States Patent No. 6,838,651. That patent was the subject of a prior litigation recently handled by this District, thus making this action a “related” case under this District’s Local Patent Rule 2-6. *See Imperium (IP) Holdings, Inc. v. Apple Inc., et al.*, Case No. 4:11-CV-163-RC-ALM (E.D. Tex.). Additionally, Pictos¹, SEC, SEA, and SSI were previously before this court related to other patents owned and asserted by Pictos. *See Imperium IP Holdings (Cayman), Ltd. v. Samsung Electronics Co., Ltd. et al.*, Case. No. 4:14-cv-00371-ALM (E.D. Tex.).

Background Facts

16. This case involves innovative technology developed in the 1980s by Rockwell International while working for the United States Department of Defense on satellite imaging, including important contributions to the CMOS imaging sensors that power all of our mobile phone and laptop cameras today.

¹ Pictos was formerly known as Imperium (IP) Holdings, Inc.

17. In June 2003, ESS Technology, Inc. (“ESS”) acquired Pictos Technologies, Inc., a California company, from Conexant Systems, Rockwell’s successor. This acquisition included Pictos’s digital imaging patent portfolio. At the time, Pictos developed and supplied image processors, CMOS image sensors, camera modules and embedded software throughout the U.S. marketplace. Pictos’s consumer products included one of the world’s smallest VGA color sensors, CMOS imaging sensors and modules, as well as the fastest click-to-click, high performance low power image processors that supported multiple digital output formats.

18. As part of its research and development, ESS continued to develop patents and trade secrets that enabled the practice of ESS’s technology. In particular, ESS developed testing methodologies, methods, and equipment that allowed practitioners of the technology to fine tune their digital cameras so that colors, exposure, white balance, and other imaging criteria could be set to exact standards. But ESS’s core strength lay in marketing and getting products to market.

19. ESS was incredibly successful in gaining acceptance of its new digital imaging technology by manufacturers. By the fourth quarter of 2003, driven by tripled revenues in camera phones, Pictos had increased revenues more than 75% over the prior year.

20. ESS’s technology caught Samsung’s attention and by March 2005 Samsung had selected ESS’s 1.3 megapixel ES2260M chip for inclusion in its A890 handset, Samsung’s first mobile phone designed for Verizon’s EVDO broadband network. ESS’s engineers spent considerable time directly assisting Samsung’s engineers in the United States and in Korea.

21. ESS and Samsung signed non-disclosure agreements under which ESS gave Samsung access to ESS’s engineers, laboratories, source code, and expertise.

22. Samsung took advantage of this access. Samsung’s engineers photographed, measured, and analyzed every aspect of ESS’s testing and calibration laboratory in the United

States. Samsung then reproduced an exact replica – down to the lines on the floor – of ESS’s laboratory in Korea. ESS’s laboratory specifications were the result of decades of development, investment, and research, to create the necessary machines, software, and methodologies to test and tune digital imaging components.

23. Samsung entered into contracts with ESS to purchase ESS’s digital imaging components, such as the cutting edge ES2260M chip, and then used the resulting access to ESS’s technology to copy that technology. Samsung then ceased doing business with Pictos. But Samsung had catapulted itself from a minor player in the CMOS industry to eventually become the second largest CMOS manufacturer in the world.

24. As is not surprising when a behemoth in the mobile industry steals technology and then stops doing business with a small digital imaging semiconductor company, ESS’s camera business quickly plummeted. By early 2007, ESS was forced to officially close its phone camera operations and instead attempted to salvage what it could by licensing its technology.

25. In 2008, as a part of the separation of its operating businesses and its licensing businesses, ESS rolled its licensing efforts into Imperium IP Holdings (Cayman), Ltd. (“Imperium”). Through mergers and related agreements ESS assigned all of its patents and trade secrets to Imperium.

26. After three years of unsuccessful attempts to license its technology without litigation, Imperium brought a patent infringement suit against Apple, Kyocera, LG, Motorola, Nokia, Research in Motion, and Sony Ericsson in the Eastern District of Texas alleging infringement of the ’651 Patent and other patents not at issue here (the “Apple Litigation”).

27. As part of its effort to license its technology, Imperium entered into discussions with a patent broker. Allegedly working on behalf of a major player in the industry, the patent

broker negotiated with Imperium for the license or purchase of Imperium's patent portfolio starting in May 2011. In fact, that broker was retained by Samsung. Samsung twice evaluated Imperium's 70-plus patent portfolio between 2011 and 2014 and said "thanks but no thanks." Samsung was therefore on notice of its infringement at least as early as its analysis and has continued to infringe since that date.

28. In the Apple Litigation, after extensive motions practice, each of the seven defendants separately settled with Imperium.

29. Despite the foregoing pre-suit negotiations, and notice of its infringement, Samsung refused to settle, continued to infringe, and Imperium was forced to bring suit against Samsung in 2014.

30. In 2016, after significant motions practice and a six-day trial, the jury found that Samsung infringed Imperium's patents, *Imperium IP Holdings (Cayman) Ltd. v. Samsung Electronics Co., et. al.*, Civil Action No. 4:14-CV-371, Dkt. 253 (E.D. Tex. Feb. 8, 2016) (reversed on other grounds), and, unsurprisingly, the Court found that Samsung had willfully done so, *Imperium IP Holdings (Cayman), Ltd. v. Samsung Electronics Co., Ltd.*, Case No. 4:14-CV-371, 2017 WL 4038883 (E.D. Tex. Sept. 13, 2017) (reversed on other grounds).

31. Through a merger, Imperium IP Holdings became a Delaware corporation named Pictos Technologies Inc. in late 2019.

32. In October 2020, at Pictos's request, the International Trade Commission initiated an investigation into Samsung's unfair trade practices, including its infringement of the patents at issue here. That investigation is ongoing.

COUNT ONE
Infringement of U.S. Patent No. 6,838,651

33. Pictos re-alleges and incorporates by reference paragraphs 1-32 above.

34. On January 4, 2005, the United States Patent and Trademark Office (“USPTO”) duly and legally issued United States Patent No. 6,838,651 (the “’651 Patent”), entitled “High Sensitivity Snap Shot CMOS Image Sensor.” Pictos is the owner of the ’651 Patent, a true and correct copy of which is attached as Exhibit A to this Complaint.

35. The ’651 Patent describes a device and method to create high-sensitivity image sensors that allow images to be taken in low light and with high sensitivity. The Patent teaches using four pixels, a red pixel, a blue pixel, and two green pixels, to represent a single pixel, or a plurality of four pixels to represent a plurality of pixels, two or more analog-to-digital converters and a color interpolation circuit. The analog-to-digital converters convert the output of the pixels into digital signals and the color interpolation circuit combines the digital signals to determine the color of the single pixel or plurality of pixels.

36. Defendants infringe, and continue to infringe, one or more claims of the ’651 Patent in violation of 35 U.S.C. § 271(a) by manufacturing, using, selling, offering for sale, and/or importing devices with image sensors, including, but not limited to the S5K2X7, S5K2E1, S5K2L2, S5K2L3, S5K2L4, S5KGH1, S5K2LA, S5K2LD, S5K2M8, S5K2P2, S5K2P6, S5K2X5, S5K3H1, S5K3J1, S5K3L2, S5K3L6, S5K3M3, S5K3M5, S5K3P8, S5K3P9, S5K4E6, S5K4EC, and S5K4H5 (collectively the “’651 Accused Devices”) throughout the United States, including in this judicial district.

37. By way of example, the ’651 Accused Devices are designed to have two analog to digital converters (ADCs), one of which converts the red and blue signals and one of which converts the green signals. The ’651 Accused Devices include at least Conventional Full or Conventional Binning modes that practice the claims of the ’651 Patent. The ’651 Accused

Devices infringe at least claim 1 of the '651 patent, as described in the exemplary claim chart attached as Exhibit D.

38. Defendants also indirectly infringe the '651 Patent by inducing infringement by others, such as manufacturers, resellers, and/or end-users of the '651 Accused Devices, of one or more claims of the '651 Patent in violation of 35 U.S.C. § 271. On information and belief, Defendants knew of the '651 Patent and knew of its infringement, including by way of this lawsuit and, earlier, by way of an investigation filed in October 2020 and currently pending before the International Trade Commission, third-party subpoenas served on Samsung Semiconductor, Inc. in March 2012 that identified Pictos's '651 Patent, and through review and analysis conducted by one or more Defendants in 2011 through a patent broker.

39. Defendants' affirmative acts in this District of selling the '651 Accused Devices and products containing the '651 Accused Devices, causing the '651 Accused Devices and products containing the '651 Accused Devices to be manufactured and distributed, and providing instruction manuals for the '651 Accused Devices and products containing the '651 Accused Devices have induced and continue to induce Defendants' manufacturers, resellers, and/or end-users to make or use the '651 Accused Devices in their normal and customary way to infringe the '651 Patent. Defendants specifically intended and were aware that these normal and customary activities would infringe the '651 Patent. Defendants performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '651 Patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement.

40. Defendants also indirectly infringe the '651 Patent by manufacturing, using, selling, offering for sale, and/or importing the '651 Accused Devices with knowledge that the

'651 Accused Devices were and are especially manufactured and/or especially adapted for use in an infringement of the '651 Patent, and are not a staple article or commodity of commerce suitable for substantial non-infringing use.

41. On information and belief, including the allegations above showing knowledge and intent, Defendants' infringement has been and continues to be deliberate, willful, and in reckless disregard of Pictos's patent rights.

42. Pictos has been, and continues to be, damaged by Defendants' infringement of the '651 Patent.

COUNT TWO
Infringement of U.S. Patent No. 7,323,671

43. Pictos re-alleges and incorporates by reference paragraphs 1-32 above.

44. On January 29, 2008, the United States Patent and Trademark Office ("USPTO") duly and legally issued United States Patent No. 7,323,671 (the "'671 Patent"), entitled "Method and apparatus for varying a CMOS sensor control voltage." Pictos is the owner of the '671 Patent, a true and correct copy of which is attached as Exhibit B to this Complaint.

45. The '671 Patent describes a device and method for creating that device that combines the advantages of a CCD and CMOS sensor with regard to low noise, low cost, and high performance through a robust design that anticipates variations in the manufacturing process and thus minimizes defective products by using variable voltage circuitry.

46. Defendants infringe, and continue to infringe, one or more claims of the '671 Patent in violation of 35 U.S.C. § 271(a) by manufacturing, using, selling, offering for sale, and/or importing devices with image sensors, including, but not limited to the S5K2X7, S5K2E1, S5K2L2, S5K2L3, S5K2L4, S5K2L5, S5K2L6, S5K2L7, S5K2L8, S5K2L9, S5K2LA, S5K2LB, S5K2LC, S5K2LD, S5K2LE, S5K2LF, S5K2LG, S5K2LH, S5K2LI, S5K2LJ, S5K2LK, S5K2LM, S5K2LN, S5K2LO, S5K2LP, S5K2LQ, S5K2LR, S5K2LS, S5K2LT, S5K2LU, S5K2LV, S5K2LW, S5K2LX, S5K2LY, S5K2LZ, S5K2MA, S5K2MB, S5K2MC, S5K2MD, S5K2ME, S5K2MF, S5K2MG, S5K2MH, S5K2MI, S5K2MJ, S5K2MK, S5K2ML, S5K2MN, S5K2MO, S5K2MP, S5K2MQ, S5K2MR, S5K2MS, S5K2MT, S5K2MU, S5K2MV, S5K2MW, S5K2MX, S5K2MY, S5K2MZ, S5K2NA, S5K2NB, S5K2NC, S5K2ND, S5K2NE, S5K2NF, S5K2NG, S5K2NH, S5K2NI, S5K2NJ, S5K2NK, S5K2NL, S5K2NN, S5K2NO, S5K2NP, S5K2NQ, S5K2NR, S5K2NS, S5K2NT, S5K2NU, S5K2NV, S5K2NWX, S5K2NY, S5K2NZ, S5K2OA, S5K2OB, S5K2OC, S5K2OD, S5K2OE, S5K2OF, S5K2OG, S5K2OH, S5K2OI, S5K2OJ, S5K2OK, S5K2OL, S5K2ON, S5K2OO, S5K2OP, S5K2OQ, S5K2OR, S5K2OS, S5K2OT, S5K2OU, S5K2OV, S5K2OW, S5K2OX, S5K2OY, S5K2OZ, S5K2PA, S5K2PB, S5K2PC, S5K2PD, S5K2PE, S5K2PF, S5K2PG, S5K2PH, S5K2PI, S5K2PJ, S5K2PK, S5K2PL, S5K2PN, S5K2PO, S5K2PP, S5K2PQ, S5K2PR, S5K2PS, S5K2PT, S5K2PU, S5K2PV, S5K2PW, S5K2PX, S5K2PY, S5K2PZ, S5K2QA, S5K2QB, S5K2QC, S5K2QD, S5K2QE, S5K2QF, S5K2QG, S5K2QH, S5K2QI, S5K2QJ, S5K2QK, S5K2QL, S5K2QN, S5K2QO, S5K2QP, S5K2QQ, S5K2QR, S5K2QS, S5K2QT, S5K2QU, S5K2QV, S5K2QW, S5K2QX, S5K2QY, S5K2QZ, S5K2RA, S5K2RB, S5K2RC, S5K2RD, S5K2RE, S5K2RF, S5K2RG, S5K2RH, S5K2RI, S5K2RJ, S5K2RK, S5K2RL, S5K2RN, S5K2RO, S5K2RP, S5K2RQ, S5K2RR, S5K2RS, S5K2RT, S5K2RU, S5K2RV, S5K2RW, S5K2RX, S5K2RY, S5K2RZ, S5K2SA, S5K2SB, S5K2SC, S5K2SD, S5K2SE, S5K2SF, S5K2SG, S5K2SH, S5K2SI, S5K2SJ, S5K2SK, S5K2SL, S5K2SN, S5K2SO, S5K2SP, S5K2SQ, S5K2SR, S5K2SS, S5K2ST, S5K2SU, S5K2SV, S5K2SW, S5K2SX, S5K2SY, S5K2SZ, S5K2TA, S5K2TB, S5K2TC, S5K2TD, S5K2TE, S5K2TF, S5K2TG, S5K2TH, S5K2TI, S5K2TJ, S5K2TK, S5K2TL, S5K2TN, S5K2TO, S5K2TP, S5K2TQ, S5K2TR, S5K2TS, S5K2TT, S5K2TU, S5K2TV, S5K2TW, S5K2TX, S5K2TY, S5K2TZ, S5K2UA, S5K2UB, S5K2UC, S5K2UD, S5K2UE, S5K2UF, S5K2UG, S5K2UH, S5K2UI, S5K2UJ, S5K2UK, S5K2UL, S5K2UN, S5K2UO, S5K2UP, S5K2UQ, S5K2UR, S5K2US, S5K2UT, S5K2UU, S5K2UV, S5K2UW, S5K2UX, S5K2UY, S5K2UZ, S5K2VA, S5K2VB, S5K2VC, S5K2VD, S5K2VE, S5K2VF, S5K2VG, S5K2VH, S5K2VI, S5K2VJ, S5K2VK, S5K2VL, S5K2VN, S5K2VO, S5K2VP, S5K2VQ, S5K2VR, S5K2VS, S5K2VT, S5K2VU, S5K2VV, S5K2VW, S5K2VX, S5K2VY, S5K2VZ, S5K2WA, S5K2WB, S5K2WC, S5K2WD, S5K2WE, S5K2WF, S5K2WG, S5K2WH, S5K2WI, S5K2WJ, S5K2WK, S5K2WL, S5K2WN, S5K2WO, S5K2WP, S5K2WQ, S5K2WR, S5K2WS, S5K2WT, S5K2WU, S5K2WV, S5K2WW, S5K2WX, S5K2WY, S5K2WZ, S5K2XA, S5K2XB, S5K2XC, S5K2XD, S5K2XE, S5K2XF, S5K2XG, S5K2XH, S5K2XI, S5K2XJ, S5K2XK, S5K2XL, S5K2XN, S5K2XO, S5K2XP, S5K2XQ, S5K2XR, S5K2XS, S5K2XT, S5K2XU, S5K2XV, S5K2XW, S5K2XX, S5K2XY, S5K2XZ, S5K2YA, S5K2YB, S5K2YC, S5K2YD, S5K2YE, S5K2YF, S5K2YG, S5K2YH, S5K2YI, S5K2YJ, S5K2YK, S5K2YL, S5K2YN, S5K2YO, S5K2YP, S5K2YQ, S5K2YR, S5K2YS, S5K2YT, S5K2YU, S5K2YV, S5K2YW, S5K2YX, S5K2YY, S5K2YZ, S5K2ZA, S5K2ZB, S5K2ZC, S5K2ZD, S5K2ZE, S5K2ZF, S5K2ZG, S5K2ZH, S5K2ZI, S5K2ZJ, S5K2ZK, S5K2ZL, S5K2ZN, S5K2ZO, S5K2ZP, S5K2ZQ, S5K2ZR, S5K2ZS, S5K2ZT, S5K2ZU, S5K2ZV, S5K2ZW, S5K2ZX, S5K2ZY, S5K2ZZ.

S5K3P9, S5K4E6, S5K4EC, and S5K4H5 (collectively the “’671 Accused Devices”) throughout the United States, including in this judicial district.

47. By way of example, the ’671 Accused Devices have variable voltage circuitry that can change the voltage applied to the transfer gates in pixel circuits. The ’671 Accused Devices infringe at least claim 1 of the ’671 patent, as described in the exemplary claim chart attached as Exhibit E.

48. Defendants also indirectly infringe the ’671 Patent by inducing infringement by others, such as manufacturers, resellers, and/or end-users of the ’671 Accused Devices, of one or more claims of the ’671 Patent in violation of 35 U.S.C. § 271. On information and belief, Defendants knew of the ’671 Patent and knew of its infringement, including by way of this lawsuit and, earlier, by way of an investigation filed in October 2020 and currently pending before the International Trade Commission and through review and analysis conducted by one or more Defendants in 2011 through a patent broker.

49. Defendants’ affirmative acts in this District of selling the ’671 Accused Devices and products containing the ’671 Accused Devices, causing the ’671 Accused Devices and products containing the ’671 Accused Devices to be manufactured and distributed, and providing instruction manuals for the ’671 Accused Devices and products containing the ’671 Accused Devices have induced and continue to induce Defendants’ manufacturers, resellers, and/or end-users to make or use the ’671 Accused Devices in their normal and customary way to infringe the ’671 Patent. Defendants specifically intended and were aware that these normal and customary activities would infringe the ’671 Patent. Defendants performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of

the '671 Patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement.

50. Defendants also indirectly infringe the '671 Patent by manufacturing, using, selling, offering for sale, and/or importing the '671 Accused Devices with knowledge that the '671 Accused Devices were and are especially manufactured and/or especially adapted for use in an infringement of the '671 Patent, and are not a staple article or commodity of commerce suitable for substantial non-infringing use.

51. On information and belief, including the allegations above showing knowledge and intent, Defendants' infringement has been and continues to be deliberate, willful, and in reckless disregard of Pictos's patent rights.

52. Pictos has been, and continues to be, damaged by Defendants' infringement of the '671 Patent.

COUNT THREE
Infringement of U.S. Patent No. 7,800,145

53. Pictos re-alleges and incorporates by reference paragraphs 1-32 above.

54. On September 21, 2010, the USPTO duly and legally issued United States Patent No. 7,800,145 (the "'145 Patent"), entitled "Method and apparatus for controlling charge transfer in CMOS sensors with a transfer gate work function" Pictos is the owner of the '145 Patent, a true and correct copy of which is attached as Exhibit C to this Complaint.

55. The '145 Patent describes a device and method to create image sensors that allow images to be taken in low light and with high sensitivity. The '145 Patent teaches a device and method whereby pixels are made more highly sensitive to light and less sensitive to light "noise" at lower cost by controlling and specifically placing concentrations of dopants when fabricating image sensors. The '145 Patent describes using doping regions around photodiodes, control

terminals, transfer gates, and reset devices to allow more efficient control of the flow of electrons from photodiodes through transfer transistors to floating diffusion nodes while limiting the flow of electrons between the rows and columns that make up an image sensor.

56. Defendants infringe, and continue to infringe, one or more claims of the '145 Patent in violation of 35 U.S.C. § 271(a) by manufacturing, using, selling, offering for sale, and/or importing devices with image sensors, including, but not limited to the S5K2X7, S5K2E1, S5K2L2, S5K2L3, S5K2L4, S5K2L5, S5K2L6, S5K2L7, S5K2L8, S5K2L9, S5K2LA, S5K2LD, S5K2M8, S5K2P2, S5K2P6, S5K2X5, S5K3H1, S5K3J1, S5K3L2, S5K3L6, S5K3M3, S5K3M5, S5K3P8, S5K3P9, S5K4E6, S5K4EC, and S5K4H5 (collectively the "'145 Accused Devices") throughout the United States, including in this judicial district.

57. By way of example, the '145 Accused Devices include doping regions placed around photodiodes, control terminals, transfer gates, and reset devices to control the flow of electrons from the photodiodes through the transfer gates. The '145 Accused Devices infringe at least claim 1 of the '145 patent, as described in the exemplary claim chart attached as Exhibit F.

58. Defendants also indirectly infringe the '145 Patent by inducing infringement by others, such as manufacturers, resellers, and/or end-users of the '145 Accused Devices, of one or more claims of the '145 Patent in violation of 35 U.S.C. § 271. On information and belief, Defendants knew of the '145 Patent and knew of its infringement, including by way of this lawsuit and, earlier, by way of an investigation filed in October 2020 and currently pending before the International Trade Commission and through review and analysis conducted by one or more Defendants in 2011 through a patent broker.

59. Defendants' affirmative acts in this District of selling the '145 Accused Devices and products containing the '145 Accused Devices, causing the '145 Accused Devices and

products containing the '145 Accused Devices to be manufactured and distributed, and providing instruction manuals for the '145 Accused Devices and products containing the '145 Accused Devices have induced and continue to induce Defendants' manufacturers, resellers, and/or end-users to make or use the '145 Accused Devices in their normal and customary way to infringe the '145 Patent. Defendants specifically intended and were aware that these normal and customary activities would infringe the '145 Patent. Defendants performed the acts that constitute induced infringement, and would induce actual infringement, with the knowledge of the '145 Patent and with the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement.

60. Defendants also indirectly infringe the '145 Patent by manufacturing, using, selling, offering for sale, and/or importing the '145 Accused Devices with knowledge that the '145 Accused Devices were and are especially manufactured and/or especially adapted for use in an infringement of the '145 Patent, and are not a staple article or commodity of commerce suitable for substantial non-infringing use.

61. On information and belief, including the allegations above showing knowledge and intent, Defendants' infringement has been and continues to be deliberate, willful, and in reckless disregard of Pictos's patent rights.

62. Pictos has been, and continues to be, damaged by Defendants' infringement of the '145 Patent.

PRAYER FOR RELIEF

63. WHEREFORE, Plaintiff Pictos demands judgment against Defendants, including their affiliates, officers, agents, servants, employees, and all persons in active concert or participation with them, as follows:

A. An award to Plaintiff Pictos of such damages under 35 U.S.C. § 284 as proven against Defendants for infringement of the '651 Patent, '671 Patent, and '145 Patent, together with pre-judgment and post-judgment interest;

B. A permanent injunction prohibiting Defendants from further acts of infringement of the '651 Patent, '671 Patent, and '145 Patent;

C. A declaration that Defendants have willfully infringed the '651 Patent, '671 Patent, and '145 Patent;

D. An increase in the award of damages to Plaintiff Pictos up to three times the amount of its actual damages for Defendant's willful infringement, as authorized by 35 U.S.C. § 284;

E. An award to Plaintiff Pictos of the costs of this action and its reasonable attorneys' fees pursuant to 35 U.S.C. § 285; and

F. Such other and further relief as this Court may deem just and appropriate.

Dated: May 14, 2021

Respectfully submitted,

/s/ Michael J. Lennon

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JURY DEMAND

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiff Pictos demands a trial by jury.

Dated: May 14, 2021

Respectfully submitted,

/s/ Michael J. Lennon

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