IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MINNESOTA

In re Chien-Min Sung Subpoena Upon 3M Company	Case No. 23-mc-104 **MOTION TO QUASH OR MODIFY SUBPOENA**

Pursuant to Federal Rule of Civil Procedure 45, 3M Company hereby moves to quash or modify the subpoena issued upon it by Plaintiff Chien-Min Sung in the case of *Chien-Min Sung v. Texas Instruments Incorporated*, Case No. 4:23-cv-00753-SDJ, E.D. Tex. This motion is based upon the accompanying memorandum of law and all other filings and proceedings herein.

Dated: November 16, 2023

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s/ Mark L. Johnson

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EXHIBIT 1

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

CHIEN-MIN SUNG, Plaintiff, v. TEXAS INSTRUMENTS INCORPORATED, Defendant.	Civil Action No. 4:23-cv-753 **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Chien-Min Sung, Ph.D. ("Dr. Sung" or "Plaintiff"), for his Complaint against Defendant Texas Instruments Incorporated ("TI"), alleges the following:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq*.

THE PARTIES

2. Plaintiff Dr. Sung is an individual residing at No. 4, Lane 32, Chung Cheng Road, Tansui, Taipei, Taiwan.

3. On information and belief, Defendant TI is a corporation organized and existing under the laws of Delaware, with its principal place of business at 12500 TI Boulevard, Dallas, Texas 75243. TI is registered with the State of Texas and may be served with process through its registered agent, CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, TX 75201. On information and belief, TI has a regular and established place of business in this District, including at least 6412 US-75, Sherman, Texas 75090.

4. Upon information and belief, TI sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services into the stream of commerce and that incorporate infringing technology knowing that they would be sold in this judicial district and elsewhere in the United States.

5. Defendant TI owns, operates, or controls semiconductor fabrication plants ("fabs") within and/or outside of the United States, including in Sherman (Texas), Richardson (Texas), Dallas (Texas), Lehi (Utah), South Portland (Maine), Miho (Japan), Aizu (Japan), Chengdu (China), and Freising (Germany) to produce the accused products. *See, e.g.*, TI's "Worldwide Manufacturing," *available at* https://www.ti.com/about-ti/company/ti-at-a-glance/manufacturing.html.

6. On information and belief, Defendant TI, directly or indirectly, has a contractual relationship with certain pad conditioner manufacturers that design, develop, or manufacture chemical mechanical polishing/planarization ("CMP") pad conditioners implicated in this Action to TI, including at least one of EHWA Diamond Industrial Co Ltd. ("EHWA"), Minnesota Mining and Manufacturing Company (or "3M"), Seasol Diamond Ind. Co., Ltd. ("Seasol"), Shinhan Diamond Ind. Co., Ltd. ("Shinhan"), and/or Abrasive Technology, LLC ("AT"). For example, TI purchases and uses certain pad conditioners manufactured by EHWA. (*See* "Reduced Cost of Ownership Oxide CMP Process using 300mm Consumables for 200mm Processing," *available at* https://nccavs-usergroups.avs.org/wp-content/uploads/CMPUG2018/CMP418-6-Brannon.pdf (last accessed Jul. 17, 2022); *see also* https://nccavs-usergroups.avs.org/wp-content/uploads/CMPUG2011/cmp2011_5brannon-1.pdf ("To improve the tool's performance, EWHA™ conditioners were pivotal in adding additional functionality to the process thru end of life evaluations. (see figure 6)") (last accessed Jul. 17,

2023); *see also* https://nccavs-usergroups.avs.org/wp-content/uploads/CMPUG2018/CMP418-6-Brannon.pdf ("To improve the tool's performance, EHWA™ conditioners were pivotal in adding additional functionality to the process thru end of life evaluations") (last accessed Jul. 17, 2023).) TI also has as a "decade-long" relationship with 3M on the design, development, and manufacture of the accused products manufactured using the infringing CMP pad conditioners. (*See, e.g.*, https://www.electronicproducts.com/texas-instruments-and-3ms-decade-long-relationship-delivers-rfid-innovation-to-libraries-worldwide/?utm_source=eetimes&utm_medium=relatedcontent; *see also* https://news.3m.com/2005-06-14-3M-and-Texas-Instruments-Implement-Authenticated-RFID-to-Combat-Counterfeit-Drugs-Authenticated-RFID-Platform-Boosts-Pharmaceutical-Supply-Chain-Security-to-Help-Protect-the-Nations-Drug-Supply.) Similarly, Saesol identifies TI as one of its customers. (*See, e.g.*, http://www.saesoldia.com/bbs/content.php?co_id=exporting (map showing TI as a customer to which Saesol exports its products)).

7. Upon information and belief, Defendant TI uses certain pad conditioners manufactured by third-party pad conditioner manufacturers at its manufacturing facilities for manufacturing or fabricating the accused products, including at least one of 3M's Trizact and Diamond pad conditioners; Saesol's Standard and Hive pad conditioners; Shinhan's Diamond pad conditioners; AT's Infinity II pad conditioners; or EHWA's pad conditioners.

8. On information and belief, Defendant TI uses or employs these third-party pad conditioners to design, develop, or manufacture one or more of the accused products either domestically or for importation into the United States for use, sale, and/or offer for sale in this district and throughout the United States, including, but not limited to, semiconductor products and devices, such as amplifiers (e.g., current sense amplifiers, difference amplifiers, fully

differential amplifiers, instrumentation amplifiers, operational amplifiers, programmable & Variable gain amplifiers, and special function amplifiers), audio solutions (e.g., audio amplifiers, audio converters, audio interface ICs, and specialty audio ICs), clock & timing (e.g., clock buffers, clock generators, clock jitter cleaners & synchronizers, oscillators, real-time clocks (RTCs) & timers, RF PLLs & synthesizers), dies and wafers (e.g., amplifiers, data converters, interfaces, switches, voltage regulators, microcontrollers, x-ray detectors, controllers, comparators, processors, transceivers, receivers, temperature sensors, diodes, and current sources), data converters (e.g., analog-to-digital converters, digital potentiometers, digital-to-analog converters, and integrated/special function data converters), DLP products (imaging products such as near-infrared, near-UV, UV, and visible products, scan & machine vision products, automotive products including display, exterior lighting and projection products, and array products such as array pico and array products, and spectroscopy & optical networking products), interface solutions (e.g., CAN & LIN transceivers & SBCs, circuit protection ICs, ethernet ICs, HDMI/DisplayPort/MIPI ICs, high-speed SerDes, I2 ICs, IO-Link & digital I/Os, LVDS/M-LVDS/PECL ICs, multu0switch detection interface ICs, optical networking ICs, PCIe, SAS & SATA ICs, RS-232 transceivers, RS-485 & RS-422 transceivers, SDI ICs, UARTs, and USB ICs), isolation (e.g., digital isolators, isolated ADCs, isolated amplifiers, isolated comparators, isolated gate drivers, isolated interface ICs, signal isolators, and solid-state relays), logic & voltage translation (e.g., buffers, drivers, & transceivers, flip-flops, latches, registers, logic gates, specialty logic ICs, and voltage translators and level shifters), microcontrollers & processors (e.g., ARM-based microcontrollers, C2000 real-time microcontrollers, MSP 430 microcontrollers, digital signal processors, and ARM-based processors), motor drivers (e.g., actuator drivers, brushed DC motor drivers, brushless D motor drivers, half-bridge drivers,

isolated gate drivers, low-side drivers, optical-disk drivers, solenoid drivers, stepper motor drivers), power management (AC/DC and isolated DC/DC switch regulators, battery management ICs, DC/DC switching regulators, DDR memory power ICs, digital power ICs, LED drivers, Linear & low-dropout regulators, MOSFETS, multi-channel ICs, power-over ethernet ICs, power switches, sequencers, supervisor & reset ICs, USB power witches & charging port controllers, USB-type C & USB power delivery ICs, and voltage reference products), RF & microwave products (e.g., mixers, modulators, mmWave radar sensors, RF amplifiers, RF PLLs & synthesizers, RF power detectors, and wideband transceivers, receivers, and transmitters), sensors (humidity sensors, magnetic sensors, mmWave radar sensors, specialty sensors, and temperature sensors), switches & multiplexers (analog switches & mux, digital demux and decoders, digital mux and encoders, power switches, and protocol-specific switches & muxes), and wireless connectivity products (e.g., Bluetooth products, multi-protocol products, sub-1 GHz products, thread products, Wi-Fi products, Wi-SUN products, and Zigbee products), and similar systems, products, devices, and integrated circuits ("Accused Products").

9. For example, on information and belief, Defendant TI uses or employs at least one of 3M's Trizact or Diamond pad conditioners, Saesol's Standard or Hive pad conditioners, Shinhan's Diamond pad conditioners, AT's Infinity II pad conditioners, and/or EHWA's CVD CMP pad conditioners to manufacture or fabricate the Accused Products (or integrated circuits contained therein) either domestically or for importation into the United States for use, sale, and/or offer for sale in this district and throughout the United States. TI also assists third parties, directly or through others, to import third-party systems, products, and/or devices that incorporate the Accused Products into the United States and offer to sell, and sell, such third-party products in the United States.

JURISDICTION AND VENUE

10. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.

11. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

12. Defendant TI is subject to this Court's general personal jurisdiction at least because TI is a resident of Texas as defined by Texas law. On information and belief, TI is headquartered in Texas.

13. Defendant TI is additionally subject to this Court's general and specific personal jurisdiction because TI has sufficient minimum contacts within the State of Texas and this District, pursuant to due process and/or the Texas Long Arm Statute, Tex. Civ. Prac. & Rem. Code § 17.042. On information and belief, Defendant TI contracted with one or more Texas residents in this District and one or both parties performed the contract at least in part in the State of Texas and this District; TI committed the tort of patent infringement in State of Texas and this District; TI purposefully availed itself of the privileges of conducting business in the State of Texas and in this District; TI regularly conducts and solicits business within the State of Texas and within this District; TI recruits residents of the State of Texas and this District for employment inside or outside the State of Texas; Plaintiff's causes of action arise directly from TI's business contacts and other activities in the State of Texas and this District; and TI distributes, makes available, imports, sells and offers to sell products and services throughout the United States, including in this judicial District, and introduces infringing products and services that into the stream of commerce knowing that they would be used and sold in this judicial district and elsewhere in the United States.

14. On information and belief, Defendant TI designs, develops, manufactures, sells, offers to sell, and/or imports products, devices, systems, and/or components of systems,

including the Accused Products, that either infringe or support the infringement of the patents asserted in this action.

15. On information and belief, TI sells and offers to sell products and services throughout the United States and in Texas, including in this District, through major electronics retailers in the United States, and in concert and partnership with third parties.

16. Furthermore, personal jurisdiction over TI in this action comports with due process. TI has conducted and regularly conducts business within the United States and this District. TI has purposefully availed itself of the privileges of conducting business in the United States, and more specifically in the State of Texas and this District. TI has sought protection and benefit from the laws of the State of Texas by making available products and services, including websites and associated web pages, that infringe the Asserted Patents with the awareness and/or intent that they will be used (or visited) by consumers in this District. Having purposefully availed itself of the privilege of conducting business within this District, TI should reasonably and fairly anticipate being brought into court here.

17. Venue is proper in this judicial district under 28 U.S.C. § 1391 and 28 U.S.C. §1400(b). On information and belief, TI has a regular and established place of business in this District, including at least at 6412 US-75, Sherman, TX 75090. On information and belief, TI's acts of infringement have taken place within this District. On information and belief, TI's presence in this District is substantial, including at least at 6412 US-75, Sherman, TX 75090. TI's presence in this District includes an 80,000 square foot, 150 mm fabrication facility that produces over 4,500 device types, including at least semiconductors and integrated circuits for use in multiple automotive, commercial, military, and space applications.

18. Additionally, TI—directly or through intermediaries (including distributors, retailers, and others), subsidiaries, alter egos, and/or agents—ships, distributes, offers for sale, and/or sells its products and services in the United States and this District. TI has purposefully and voluntarily placed one or more of its products into the stream of commerce through the accused instrumentalities that infringe the patents asserted in this action with the awareness and/or intent that they will be purchased by consumers in this District. TI knowingly and purposefully ships infringing products into, and within, this District. These infringing products have been, and continue to be, purchased by consumers and businesses in this District.

THE ASSERTED PATENTS

19. On September 22, 2015, U.S. Patent No. 9,138,862 ("the '862 patent"), entitled "CMP Pad Dresser Having Leveled Tips and Associated Methods" was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the '862 patent is attached as Exhibit 1.

20. Plaintiff is the assignee and owner of the right, title and interest in and to the '862 patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.

21. On August 8, 2017, U.S. Patent No. 9,724,802 ("the '802 patent"), entitled "CMP Pad Dressers Having Leveled Tips and Associated Methods" was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the '802 patent is attached as Exhibit 2.

22. Plaintiff is the assignee and owner of the right, title and interest in and to the '802 patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.

23. On March 10, 2015, U.S. Patent No. 8,974,270 ("the '270 patent"), entitled "CMP Pad Dresser Having Leveled Tips and Associated Methods" was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the '270 patent is attached as Exhibit 3.

24. Plaintiff is the assignee and owner of the right, title and interest in and to the '270 patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.

25. The '862, '802, and '270 patents (collectively, "Asserted Patents") generally relate to chemical mechanical polishing/planarization ("CMP") pad dressers and dressing and conditioning methods associated with pad conditioning (e.g., smoothing, polishing, and dressing), and the CMP polishing of a work piece such as an integrated circuit or semiconductor wafer.

26. In manufacturing semiconductor wafers, one important physical trait is their surface flatness and smoothness. To achieve these important physical characteristics, CMP techniques, which involve pad polishing and conditioning, are generally used to planarize the wafer surface through both chemical and mechanical reactions, whereby protrusions and residues existing on the surface of a wafer chemically react with a slurry supplied to the wafer at the same time when they are planarized mechanically by rotation of a polishing pad. In CMP, the quality of the polishing pad dictates the removal rate, planarization, and uniformity, and thus plays a key role in the overall performance of the polishing process.

27. To optimize the condition and minimize deformation of the pad, a pad dresser is used to dress the pad so as to remove debris and by-products in the pad (e.g., deglazing the pad)

and to regenerate new pad surface sufficient to open up asperities in the pad surface to capture and hold chemical slurry for cleaning the semiconductor wafer.

28. As discussed above, the pad dresser is used to create and form pad asperities in the pad, which in turn polish the semiconductor wafer. In polishing, the dresser's tips profile generally dictates the pad asperities profile. Due to the miniaturization of transistors and advancement of manufacturing technologies, these tips must be stringently coordinated (e.g., in terms of count, configuration, spacing, and cutting depth) to avoid any possibility of damaging the semiconductor wafer (e.g., via scratches on wafer surface or underlying metal-interconnect). The Asserted Patents are generally directed to providing a pad dresser with optimized tips for performing CMP polishing and conditioning using the same.

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 9,138,862

29. Plaintiff incorporates and realleges the preceding paragraphs as if fully set forth herein.

30. At least as of December 8, 2021, Dr. Sung placed TI on actual notice of the '862 patent and actual notice that its actions constituted and continued to constitute infringement of the '862 patent. TI has had actual knowledge of the '862 patent and its own infringement of the '862 patent since at least that time.

31. On information and belief, Defendant TI has directly infringed and continues to infringe at least claim 1 of the '862 patent literally or under the doctrine of equivalents, by importing into the United States, and/or making, using, and/or selling, and/or offering for sale in the United States, without authority or license, semiconductor devices and/or integrated circuits designed, developed, fabricated and/or manufactured using certain infringing CMP pad conditioners, including 3M's pad conditioners, Saesol's CMP pad conditioners, Shinhan's CMP pad conditioners, AT's CMP pad conditioners, EHWA's pad conditioners, and/or similar pad

conditioners (e.g., pad conditioners with the same claimed structural characteristics and manufactured by other pad conditioner manufacturers) ("'862 Accused Instrumentalities"), and systems, products, and/or devices containing these semiconductor devices and/or integrated circuits including at least the Accused Products in violation of 35 U.S.C. § 271(a). The Accused Products are/were manufactured and/or fabricated using pad conditioners with the claimed structural characteristics. Each such product includes an integrated circuit fabricated or manufactured using, for example, at least one of 3M's Trizact or Diamond pad conditioners, Seasol's Standard or Hive pad conditioners, Shinhan's Diamond pad conditioners, AT's Infinity II pad conditioners; and/or EHWA's CVD CMP pad conditioners.

32. On information and belief, TI sells and/or offers for sale the Accused Products in the United States. For example, TI provides direct sales through its own sales channels and/or its distributors and sells the Accused Products to businesses including original equipment manufacturers and electronic manufacturing service providers. On information and belief, these direct sales include sales of the Accused Products in the United States. For example, TI engages in sales, marketing, and contracting activity in the United States and/or with United States offices of its customers.

33. Discovery is expected to uncover the full extent of TI's infringement of the '862 patent beyond the Accused Products already identified herein.

34. Additionally, on information and belief, TI has directly infringed and continues to infringe at least claim 1 of the '862 patent literally or under the doctrine of equivalents, by importing into the United States, and/or making, using, and/or selling, and/or offering for sale in the United States, without authority or license, the Accused Products, in violation of 35 U.S.C. § 271(g). On information and belief, Defendant TI imports the Accused Products into the United

States for sales and distribution to customers located in and outside the United States. On information and belief, Defendant TI sells and/or offers for sale the Accused Products in the United States. For example, Defendant TI provides direct sales through its own sales channels and/or its distributors or contract manufacturers and sells the Accused Products to businesses including original equipment manufacturers and electronic manufacturing service providers. On information and belief, these direct sales include sales of the Accused Products in the United States. For example, Defendant TI engages in sales, marketing, and contracting activity in the United States and/or with United States offices of its customers.

35. The Accused Products are/were manufactured by a process including all of the limitations of at least claim 1 of the ’862 patent. The Accused Products are/were made by the claimed methods. Each of the Accused Products, for example, is or contains an integrated circuit fabricated or manufactured using, for example, at least one of the ’862 Accused Instrumentalities, such as 3M’s pad conditioners (e.g., Trizact or Diamond), Saesol’s pad conditioners (Standard or Hive), Shinhan’s pad conditioners (e.g., Diamond), AT’s pad conditioners (e.g., Infinity II), or EHWA’s pad conditioners (e.g., CVD CMP).

36. For example, during the manufacture of the Accused Products, Defendant TI uses the ’862 Accused Instrumentalities to perform the steps of: pressing a CMP pad dresser (e.g., any of 3M’s Trizact or Diamond pad conditioner, Saesol’s Standard or Hive pad conditioner, Shinhan’s Diamond pad conditioner, AT’s Infinity II pad conditioner, or EHWA’s CVD CMP pad conditioner) against a CMP pad, the dresser including a monolayer of a plurality of superabrasive particles protruding from a matrix layer, wherein the difference in protrusion distance between the highest protruding tip and the second highest protruding tip of the monolayer of superabrasive particles is less than or equal to about 10 microns and the difference

in protrusion distance between the highest 10 protruding tips of the monolayer of superabrasive particles are within about 20 microns or less; and rotating the dresser against the CMP pad such that asperities are cut into the CMP pad having a maximum cutting depth of about 60 microns. On information and belief, TI contracted and continues to contract with at least one of 3M, Seasol, Shinhan, AT and/or EWHA to purchase and use the ’862 Accused Instrumentalities with the claimed structural characteristics for the manufacture or fabrication of the Accused Products by or on behalf of TI.

37. Attached hereto as Exhibits 4-8, and incorporated by reference herein, are claim charts detailing how the ’862 Accused Instrumentalities are used to manufacture or fabricate the Accused Products and satisfy each element of at least claim 1 of the ’862 patent, literally or under the doctrine of equivalents. For example, each chart illustrates a representative pad conditioner from 3M, Saesol, Shinhan, AT, and EHWA (e.g., 3M’s Trizact pad conditioner, Saesol’s Standard or Hive pad conditioner, Shinhan’s Diamond pad conditioner, AT’s Infinity II pad conditioner, and EHWA’s CVD CMP pad conditioner), which is representative of the remaining ’862 Accused Instrumentalities (including any pad conditioners that remain unknown to Plaintiff) because the representative pad conditioner has the same claimed structural characteristics as these remaining ’862 Accused Instrumentalities.

38. On information and belief, at least as of December 8, 2021, TI has induced and continues to induce others, including third-party pad conditioner manufacturers, to infringe one or more claims of the ’862 patent, including, but not limited to, claim 1, pursuant to 35 U.S.C. § 271(b), by actively encouraging or inducing them to make, use, sell and/or offer to sell in the United States, the ’862 Accused Instrumentalities with the claimed characteristics for the

manufacture of the Accused Products, through TI's commitment to purchase the '862 Accused Instrumentalities and actual order placement for the '862 Accused Instrumentalities.

39. On information and belief, at least as of December 8, 2021, TI also has induced and continues to induce others actively, knowingly, and intentionally, including its suppliers and contract manufacturers, to infringe one or more claims of the '862 patent, including, but not limited to, claim 1, pursuant to 35 U.S.C. § 271(b), by actively encouraging others to import into the United States, and/or make, use, sell, and/or offer to sell in the United States, the Accused Products or systems, devices, or products containing the Accused Products, by actively inducing others to infringe the '862 patent by making, using, selling, offering for sale, marketing, advertising, and/or importing the Accused Products to their customers for use in downstream products that infringe, or were manufactured using processes that infringe, the '862 patent, and by instructing others to infringe the '862 patent.

40. For example, TI actively promotes the sale and importation of the Accused Products in marketing materials, technical specifications, data sheets, web pages on its website (e.g., https://www.ti.com), press releases, training tutorials, development and design tools, user manuals, and developer forums as well as at trade shows (e.g., the Consumer Technology Association's Consumer Electronics Show ("CES")) and through its sales and distribution channels that encourage infringing sales, offers to sell, and importation of the Accused Products. As another example, TI's representatives travel to customer sites in and outside the United States for sales, support, and/or importation activities that include working with customers to facilitate these customers' infringing testing, marketing, importation, and sales activity. On information and belief, TI supplies customers with Accused Products so that they may be imported, sold, or offered for sale by those customers, and/or incorporated into third-party products (more below).

For example, TI provides direct sales to original equipment manufacturers and electronic manufacturing service providers. On information and belief, these direct sales include sales to customers in and outside the United States. TI also promotes, publicly on its website, uses of the Accused Products by customers in the United States. TI additionally provides a wide range of technical support to its customers and businesses in connection with the Accused Products made using the '862 Accused Instrumentalities by or on behalf of TI, including product-specific solutions (*see, e.g.*, https://education.ti.com/en/customer-support; https://ticsc.service-now.com/csm; https://www.ti.com/info/contact-us.html) and community forums (e.g., https://e2e.ti.com/).

41. On information and belief, TI also actively encourages third-party pad conditioner manufacturers so that the '862 Accused Instrumentalities may be designed, developed, used, imported, sold, or offered for sale to TI with the claimed structural characteristics. On information and belief, TI assisted and continues to assist these third-party manufacturers, directly and/or through intermediaries, in the design, development or manufacture of the '862 Accused Instrumentalities, and provides technical support or supports the sales and importation of the '862 Accused Instrumentalities (as well as the Accused Products that are/were manufactured using the '862 Accused Instrumentalities).

42. In addition, on information and belief, TI sells or offers for sale the Accused Products to third parties that incorporate the Accused Products into third party products ("the '862 Third Party Products").

43. On information and belief, TI assists third parties, directly and/or through intermediaries, in the development and manufacture of the '862 Third Party Products and

provides technical support and supports the sales and importation of the ’862 Third Party Products.

44. On information and belief, the ’862 Third Party Products are imported into the United States for use, sale, and/or offer for sale in this District and throughout the United States (“Imported ’862 Third Party Products”).

45. On information and belief, to the extent any entity other than TI, including but not limited to any of TI’s third-party importers, imports the Accused Products and/or ’862 Third-Party Products into the United States for or on behalf of TI (“Third Party Importer”), TI is liable for inducement of infringement by the Third Party Importer. TI has encouraged the Third Party Importer to infringe the ’862 patent and intended that it do so. This encouragement includes at least ordering or instructing the Third Party Importer to import the Accused Products and/or ’862 Third-Party Products into the United States, providing directions and other materials to the Third Party Importer to enable such importation, and/or conditioning the receipt of benefits (included but not limited to payment) to the Third Party Importer on such importation. On information and belief, this behavior has continued since TI first became aware of the ’862 patent and the infringement thereof.

46. On information and belief, to the extent any entity other than TI, including but not limited to any foundry contracted or engaged by TI, uses the patented method to fabricate or manufacture the Accused Products and/or Imported ’862 Third-Party Products in the United States for or on behalf of TI (“Third Party Manufacturer”), TI is liable for inducement of infringement by the Third Party Manufacturer. TI has encouraged the Third Party Manufacturer to infringe the ’862 patent and intended that it do so. This encouragement includes, without limitation, ordering or seeking the importation of the Accused Products from the Third Party

Manufacturer since TI first became aware of the ’862 patent, or instructing the Third Party Manufacturer to use the ’862 Accused Instrumentalities for the manufacture or fabrication of the Accused Products.

47. For example, by providing technical specification and development criteria of the Accused Products to the Third Party Manufacturer for manufacturing such products (and/or third party pad conditioner manufacturers), including instructing such Third Party Manufacturer to use any of the ’862 Accused Instrumentalities in order to accomplish or achieve such criteria, TI has induced, and continues to induce, third parties to infringe using the claimed methods and the ’862 Accused Instrumentalities. Specifically, by providing technical specification and/or design/development criteria of the Accused Products to the Third Party Manufacturer for manufacturing such products using the claimed methods and the ’862 Accused Instrumentalities, TI has induced, and continues to induce, third parties to infringe the ’862 patent (e.g., to ensure that the Accused Products are/were manufactured without errors or flaws or that the Accused Products meet TI’s stringent technical/design/development criteria).

48. Despite having notice of the ’862 patent prior to the filing of this Complaint, TI has made a decision to continue the alleged inducement post-service of the Complaint. Indeed, following the filing of this Complaint, on information and belief, TI—acting with knowledge of the ’862 patent—used and continues to use the ’862 Accused Instrumentalities in the manufacture or fabrication of the Accused Products, and/or submitted and continues to submit purchase orders for the ’862 Accused Instrumentalities to third-party pad conditioner manufacturers with the intent of using the ’862 Accused Instrumentalities for manufacturing or fabricating the Accused Products.

49. TI has benefitted and continues to benefit from the importation into the United States of the Accused Products, ’862 Third Party Products, and Imported ’862 Third Party Products.

50. Dr. Sung has suffered, and continues to suffer, damages as a result of TI’s infringement of the ’862 patent.

51. TI has continued to infringe the ’862 patent since at least December 8, 2021, despite being on notice of the ’862 patent and its infringement. TI has therefore infringed the ’862 patent knowingly, willfully, deliberately, and in disregard of Dr. Sung’s patent rights since at least December 8, 2021, at least by performing acts of infringement with actual knowledge of its direct and indirect infringement or while remaining willfully blind to the fact of its direct and indirect infringement. As a result of at least this conduct, Plaintiff is entitled to enhanced damages under 35 U.S.C. § 284 and to attorneys’ fees and costs under 35 U.S.C. § 285.

52. Dr. Sung reserves the right to modify its infringement theories as discovery progresses in this case. Dr. Sung shall not be estopped or otherwise limited or restricted for purposes of its infringement contentions or its claim constructions by the claim charts that it provides with this Complaint. Dr. Sung intends the claim charts for the ’862 patent to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure. The claim chart is not Dr. Sung’s preliminary or final infringement contentions or preliminary or final claim construction positions.

COUNT II – INFRINGEMENT OF U.S. PATENT NO. 9,724,802

53. Plaintiff incorporates and realleges the preceding paragraphs as if fully set forth herein.

54. At least as of December 8, 2021, Dr. Sung placed TI on actual notice of the ’802 patent and actual notice that its actions constituted and continued to constitute infringement of

the ’802 patent. TI has had actual knowledge of the ’802 patent and its own infringement of the ’802 patent since at least that time.

55. On information and belief, Defendant TI has directly infringed and continues to infringe at least claim 1 of the ’802 patent literally or under the doctrine of equivalents, by using in the United States, or importing into the United States, without authority or license, certain CMP pad conditioners, including 3M’s pad conditioners, Saesol’s CMP pad conditioners, Shinhan’s CMP pad conditioners, AT’s CMP pad conditioners, EHWA’s pad conditioners, and/or similar pad conditioners (e.g., pad conditioners with the same claimed structural characteristics and manufactured by other pad conditioner manufacturers) (“’802 Accused Instrumentalities”) to design, develop, manufacture or fabricate semiconductor devices and/or integrated circuits, and systems, products, and/or devices containing these semiconductor devices and/or integrated circuits, including at least the Accused Products, in violation of 35 U.S.C. § 271(a).

56. On information and belief, TI also sells and/or offers for sale the Accused Products in the United States. For example, TI provides direct sales through its own sales channels and/or its distributors and sells the Accused Products to businesses including original equipment manufacturers and electronic manufacturing service providers. On information and belief, these direct sales include sales of the Accused Products in the United States. For example, TI engages in sales, marketing, and contracting activity in the United States and/or with United States offices of its customers.

57. Discovery is expected to uncover the full extent of TI’s infringement of the ’802 patent beyond the Accused Products already identified herein.

58. The Accused Products are/were manufactured by using a pad conditioner that includes all of the limitations of at least claim 1 of the ’802 patent. For example, each of the Accused Products is/was fabricated or manufactured using, for example, at least one of the ’802 Accused Instrumentalities, such as 3M’s pad conditioners (e.g., Trizact or Diamond), Saesol’s pad conditioners (Standard or Hive), Shinhan’s pad conditioners (e.g., Diamond), AT’s pad conditioners (e.g., Infinity II), or EHWA’s pad conditioners (e.g., CVD CMP).

59. For example, during the manufacture of the Accused Products, Defendant TI uses a CMP pad dresser (e.g., any of 3M’s Trizact or Diamond pad conditioner, Saesol’s Standard or Hive pad conditioner, Shinhan’s Diamond pad conditioner, AT’s Infinity II pad conditioner, or EHWA’s CVD CMP pad conditioner) that includes a rigid support substrate; and a monolayer of a plurality of superabrasive particles coupled to the support substrate, wherein each superabrasive particle in the monolayer extends away from the support substrate to a protrusion distance, wherein a tip of each of the plurality of superabrasive particles aligns along a designated profile with a tip variation of from about 5 microns to about 100 microns, and wherein the difference in protrusion distance between the highest protruding tip and the second highest protruding tip of the monolayer of superabrasive particles is less than or equal to about 50 microns, and the difference in protrusion distance between the highest 1% of the protruding tips of the monolayer of superabrasive particles are within about 80 microns or less. On information and belief, TI contracted and continues to contract with at least one of 3M, Seasol, Shinhan, AT and/or EWHA to purchase and use the ’802 Accused Instrumentalities with the claimed structural characteristics for the manufacture or fabrication of the Accused Products by or on behalf of TI.

60. Attached hereto as Exhibits 9-13, and incorporated by reference herein, are claim

charts detailing how the ’802 Accused Instrumentalities used by or on behalf of TI to manufacture or fabricate the Accused Products satisfy each element of at least claim 1 of the ’802 patent, literally or under the doctrine of equivalents. Each chart illustrates a representative pad conditioner from each of the pad conditioner manufacturers, including 3M, Saesol, Shinhan, AT, and EHWA (e.g., 3M’s Trizact pad conditioner, Saesol’s Standard or Hive pad conditioner, Shinhan’s Diamond pad conditioner, AT’s Infinity II pad conditioner, and EHWA’s CVD CMP pad conditioner), which is representative of the remaining ’802 Accused Instrumentalities (including any pad conditioners that remain unknown to Plaintiff) because it has the same claimed structural characteristics as these remaining ’802 Accused Instrumentalities.

61. On information and belief, at least as of December 8, 2021, TI has induced and continues to induce others, including third-party pad conditioner manufacturers, to infringe one or more claims of the ’802 patent, including, but not limited to, claim 1, pursuant to 35 U.S.C. § 271(b), by actively encouraging or inducing them to make, use, sell and/or offer to sell in the United States, the ’802 Accused Instrumentalities with the claimed characteristics for the manufacture of the Accused Products, through TI’s commitment to purchase the ’802 Accused Instrumentalities and actual order placement for the ’802 Accused Instrumentalities.

62. On information and belief, at least as of December 8, 2021, TI also has induced and continues to induce others actively, knowingly, and intentionally, including its suppliers and contract manufacturers, to infringe one or more claims of the ’802 patent, including, but not limited to, claim 1, pursuant to 35 U.S.C. § 271(b), by actively encouraging others to import into the United States, and/or make, use, sell, and/or offer to sell in the United States, the Accused Products or systems, devices, or products containing the Accused Products, by actively inducing others to infringe the ’802 patent by making, using, selling, offering for sale, marketing,

advertising, and/or importing the Accused Products to their customers for use in downstream products that infringe, or were manufactured using processes that infringe, the ’802 patent, and by instructing others to infringe the ’802 patent.

63. For example, TI actively promotes the sale and importation of the Accused Products in marketing materials, technical specifications, data sheets, web pages on its website (e.g., https://www.ti.com), press releases, training tutorials, development and design tools, user manuals, and developer forums as well as at trade shows (e.g., the Consumer Technology Association’s Consumer Electronics Show (“CES”)) and through its sales and distribution channels that encourage infringing sales, offers to sell, and importation of the Accused Products. As another example, TI’s representatives travel to customer sites in and outside the United States for sales, support, and/or importation activities that include working with customers to facilitate these customers’ infringing testing, marketing, importation, and sales activity. On information and belief, TI supplies customers with Accused Products so that they may be imported, sold, or offered for sale by those customers, and/or incorporated into third-party products (more below). For example, TI provides direct sales to original equipment manufacturers and electronic manufacturing service providers. On information and belief, these direct sales include sales to customers in and outside the United States. TI also promotes, publicly on its website, uses of the Accused Products by customers in the United States. TI additionally provides a wide range of technical support to its customers and businesses in connection with the Accused Products made using the ’802 Accused Instrumentalities by or on behalf of TI, including product-specific solutions (*see, e.g.*, https://education.ti.com/en/customer-support; https://ticsc.service-now.com/csm; https://www.ti.com/info/contact-us.html) and community forums (e.g., https://e2e.ti.com/).

64. On information and belief, TI also actively encourages third-party pad conditioner manufacturers so that the ’802 Accused Instrumentalities may be designed, developed, used, imported, sold, or offered for sale to TI with the claimed structural characteristics. On information and belief, TI assisted and continues to assist these third-party manufacturers, directly and/or through intermediaries, in the design, development or manufacture of the ’802 Accused Instrumentalities and provides technical support or supports the sales and importation of the ’802 Accused Instrumentalities (as well as the Accused Products that are/were manufactured using the ’802 Accused Instrumentalities).

65. Additionally, on information and belief, TI sells or offers for sale the Accused Products to third parties that incorporate the Accused Products into third party products (“the ’802 Third Party Products”).

66. On information and belief, TI assists third parties, directly and/or through intermediaries, in the development and manufacture of the ’802 Third Party Products and provides technical support and supports the sales and importation of the ’802 Third Party Products.

67. On information and belief, the ’802 Third Party Products are imported into the United States for use, sale, and/or offer for sale in this District and throughout the United States (“Imported ’802 Third Party Products”).

68. On information and belief, to the extent any entity other than TI, including but not limited to any of TI’s third-party importers, imports the ’802 Accused Instrumentalities, the Accused Products and/or ’802 Third-Party Products into the United States for or on behalf of TI (“Third Party Importer”), TI is liable for inducement of infringement by the Third Party Importer. TI has encouraged the Third Party Importer to infringe the ’802 patent and intended

that it do so. This encouragement includes at least ordering or instructing the Third Party Importer to import the ’802 Accused Instrumentalities, Accused Products and/or ’802 Third-Party Products into the United States, providing directions and other materials to the Third Party Importer to enable such importation, and/or conditioning the receipt of benefits (included but not limited to payment) to the Third Party Importer on such importation. On information and belief, this behavior has continued since TI first became aware of the ’802 patent and the infringement thereof.

69. On information and belief, to the extent any entity other than TI, including but not limited to any foundry contracted or engaged by TI, uses the ’802 Accused Instrumentalities to fabricate or manufacture the Accused Products and/or Imported ’802 Third-Party Products in the United States for or on behalf of TI (“Third Party Manufacturer”), TI is liable for inducement of infringement by the Third Party Manufacturer. TI has encouraged the Third Party Manufacturer to infringe the ’802 patent and intended that it do so. This encouragement includes, without limitation, ordering or seeking the importation of the Accused Products from the Third Party Manufacturer since TI first became aware of the ’802 patent, or instructing the Third Party Manufacturer to use the ’802 Accused Instrumentalities for the manufacture or fabrication of the Accused Products.

70. For example, by providing technical specification and development criteria of the Accused Products to the Third Party Manufacturer for manufacturing such products (and/or third party pad conditioner manufacturers), TI has induced, and continues to induce, third parties to infringe using the ’802 Accused Instrumentalities. Specifically, by providing technical specification and/or design/development criteria of the Accused Products to the Third Party Manufacturer for manufacturing such products or to third-party pad conditioner manufacturers

for designing, developing and/or configuring the ’802 Accused Instrumentalities for manufacturing such products, TI has induced, and continues to induce, third parties to infringe the ’802 patent (e.g., to ensure that the Accused Products are/were manufactured without errors or flaws or that the Accused Products meet TI’s stringent technical/design/development criteria).

71. Despite having notice of the ’802 patent prior to the filing of this Complaint, TI has made a decision to continue the alleged inducement post-service of the Complaint. Indeed, following the filing of this Complaint, on information and belief, TI—acting with knowledge of the ’802 patent—used and continues to use the ’802 Accused Instrumentalities in the manufacture or fabrication of the Accused Products, and/or submitted and continues to submit purchase orders for the ’802 Accused Instrumentalities to third-party pad conditioner manufacturers with the intent of using the ’802 Accused Instrumentalities for manufacturing or fabricating the Accused Products.

72. Through active inducement, TI has benefitted and continues to benefit from using the ’802 Accused Instrumentalities in the United States, or importing them into the United States, for the manufacture and fabrication of the Accused Products and third-party products that incorporate the Accused Products.

73. Dr. Sung has suffered, and continues to suffer, damages as a result of TI’s infringement of the ’802 patent.

74. TI has continued to infringe the ’802 patent since at least December 8, 2021, despite being on notice of the ’802 patent and its infringement. TI has therefore infringed the ’802 patent knowingly, willfully, deliberately, and in disregard of Dr. Sung’s patent rights since at least December 8, 2021, at least by performing acts of infringement with actual knowledge of its direct and indirect infringement or while remaining willfully blind to the fact of its direct and

indirect infringement. As a result of at least this conduct, Plaintiff is entitled to enhanced damages under 35 U.S.C. § 284 and to attorneys' fees and costs under 35 U.S.C. § 285.

75. Dr. Sung reserves the right to modify its infringement theories as discovery progresses in this case. Dr. Sung shall not be estopped or otherwise limited or restricted for purposes of its infringement contentions or its claim constructions by the claim charts that it provides with this Complaint. Dr. Sung intends the claim charts for the '802 patent to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure. The claim chart is not Dr. Sung's preliminary or final infringement contentions or preliminary or final claim construction positions.

COUNT III – INFRINGEMENT OF U.S. PATENT NO. 8,974,270

76. Plaintiff incorporates and realleges the preceding paragraphs as if fully set forth herein.

77. At least as of December 8, 2021, Dr. Sung placed TI on actual notice of the '270 patent and actual notice that its actions constituted and continued to constitute infringement of the '270 patent. TI has had actual knowledge of the '270 patent and its own infringement of the '270 patent since at least that time.

78. On information and belief, Defendant TI has directly infringed and continues to infringe at least claim 1 of the '270 patent literally or under the doctrine of equivalents, by using in the United States, or importing into the United States, without authority or license, certain CMP pad conditioners, including 3M's pad conditioners and/or similar pad conditioners (e.g., pad conditioners with the same claimed structural characteristics and manufactured by other pad conditioner manufacturers not presently known) ("'270 Accused Instrumentalities") to design, develop, manufacture or fabricate semiconductor devices and/or integrated circuits, and systems,

products, and/or devices containing these semiconductor devices and/or integrated circuits, including at least the Accused Products, in violation of 35 U.S.C. § 271(a).

79. Additionally, on information and belief, TI sells and/or offers for sale the Accused Products in the United States. For example, TI provides direct sales through its own sales channels and/or its distributors and sells the Accused Products to businesses including original equipment manufacturers and electronic manufacturing service providers. On information and belief, these direct sales include sales of the Accused Products in the United States. For example, TI engages in sales, marketing, and contracting activity in the United States and/or with United States offices of its customers.

80. Discovery is expected to uncover the full extent of TI's infringement of the '270 patent beyond the Accused Products already identified herein.

81. The Accused Products are/were manufactured by a process including all of the limitations of at least claim 1 of the '270 patent. The Accused Products are/were made by the claimed methods. Each of the Accused Products, for example, is or contains an integrated circuit fabricated or manufactured using, for example, at least one of the '270 Accused Instrumentalities, such as 3M's Trizact and Diamond pad conditioners.

82. For example, during the manufacture of the Accused Products, Defendant TI uses a CMP pad dresser (e.g., 3M's Trizact pad conditioner) that includes a first monolayer of superabrasive particles disposed on and protruding from one side of a metal support layer, wherein the difference in protrusion distance between the highest protruding tip and the second highest protruding tip of the monolayer of superabrasive particles is less than or equal to about 50 microns; a second monolayer of superabrasive particles disposed on the metal support layer on an opposite side from the first monolayer, wherein the superabrasive particles of the second

monolayer are positioned to have substantially the same distribution as the superabrasive particles of the first monolayer; and a rigid support coupled to the second monolayer of superabrasive particles opposite the first monolayer. On information and belief, TI contracted and continues to contract with 3M and/or other pad conditioner vendors to purchase and use the ’270 Accused Instrumentalities with the claimed structural characteristics for the manufacture or fabrication of the Accused Products by or on behalf of TI.

83. Attached hereto as Exhibit 14, and incorporated by reference herein, are claim charts detailing how the ’270 Accused Instrumentalities used to manufacture or fabricate the Accused Products satisfy each element of at least claim 1 of the ’270 patent, literally or under the doctrine of equivalents. The chart illustrates a representative pad conditioner from 3M, which is representative of the remaining ’270 Accused Instrumentalities (including any pad conditioners that remain unknown to Plaintiff) because it has the same claimed structural characteristics as these remaining ’270 Accused Instrumentalities.

84. On information and belief, at least as of December 8, 2021, TI has induced and continues to induce others, including third-party pad conditioner manufacturers, to infringe one or more claims of the ’270 patent, including, but not limited to, claim 1, pursuant to 35 U.S.C. § 271(b), by actively encouraging or inducing them to make, use, sell and/or offer to sell in the United States, the ’270 Accused Instrumentalities with the claimed characteristics for the manufacture of the Accused Products, through TI’s commitment to purchase the ’270 Accused Instrumentalities and actual order placement for the ’270 Accused Instrumentalities.

85. On information and belief, at least as of December 8, 2021, TI also has induced and continues to induce others actively, knowingly, and intentionally, including its suppliers and contract manufacturers, to infringe one or more claims of the ’270 patent, including, but not

limited to, claim 1, pursuant to 35 U.S.C. § 271(b), by actively encouraging others to import into the United States, and/or make, use, sell, and/or offer to sell in the United States, the Accused Products or systems, devices, or products containing the Accused Products, by actively inducing others to infringe the ’270 patent by making, using, selling, offering for sale, marketing, advertising, and/or importing the Accused Products to their customers for use in downstream products that infringe, or were manufactured using processes that infringe, the ’270 patent, and by instructing others to infringe the ’270 patent.

86. For example, TI actively promotes the sale and importation of the Accused Products in marketing materials, technical specifications, data sheets, web pages on its website (e.g., https://www.ti.com), press releases, training tutorials, development and design tools, user manuals, and developer forums as well as at trade shows (e.g., the Consumer Technology Association’s Consumer Electronics Show (“CES”)) and through its sales and distribution channels that encourage infringing sales, offers to sell, and importation of the Accused Products. As another example, TI’s representatives travel to customer sites in and outside the United States for sales, support, and/or importation activities that include working with customers to facilitate these customers’ infringing testing, marketing, importation, and sales activity. On information and belief, TI supplies customers with Accused Products so that they may be imported, sold, or offered for sale by those customers, and/or incorporated into third-party products (more below). For example, TI provides direct sales to original equipment manufacturers and electronic manufacturing service providers. On information and belief, these direct sales include sales to customers in and outside the United States. TI also promotes, publicly on its website, uses of the Accused Products by customers in the United States. TI additionally provides a wide range of technical support to its customers and businesses in connection with the Accused Products made

using the ’802 Accused Instrumentalities by or on behalf of TI, including product-specific solutions (*see, e.g.*, https://education.ti.com/en/customer-support; https://ticsc.service-now.com/csm; https://www.ti.com/info/contact-us.html) and community forums (e.g., https://e2e.ti.com/).

87. On information and belief, TI also actively encourages third-party pad conditioner manufacturers so that the ’270 Accused Instrumentalities may be designed, developed, used, imported, sold, or offered for sale to TI with the claimed structural characteristics. On information and belief, TI assisted and continues to assist these third-party manufacturers, directly and/or through intermediaries, in the design, development or manufacture of the ’270 Accused Instrumentalities and provides technical support or supports the sales and importation of the ’270 Accused Instrumentalities (as well as the Accused Products that are/were manufactured using the ’270 Accused Instrumentalities).

88. Additionally, on information and belief, TI sells or offers for sale the Accused Products to third parties that incorporate the Accused Products into third party products (“the ’270 Third Party Products”).

89. On information and belief, TI assists third parties, directly and/or through intermediaries, in the development and manufacture of the ’270 Third Party Products and provides technical support and supports the sales and importation of the ’270 Third Party Products.

90. On information and belief, the ’270 Third Party Products are imported into the United States for use, sale, and/or offer for sale in this District and throughout the United States (“Imported ’270 Third Party Products”).

91. On information and belief, to the extent any entity other than TI, including but not limited to any of TI's third-party importers, imports the '270 Accused Instrumentalities, the Accused Products and/or '270 Third-Party Products into the United States for or on behalf of TI ("Third Party Importer"), TI is liable for inducement of infringement by the Third Party Importer. TI has encouraged the Third Party Importer to infringe the '270 patent and intended that it do so. This encouragement includes at least ordering or instructing the Third Party Importer to import the '270 Accused Instrumentalities, Accused Products and/or '270 Third-Party Products into the United States, providing directions and other materials to the Third Party Importer to enable such importation, and/or conditioning the receipt of benefits (included but not limited to payment) to the Third Party Importer on such importation. On information and belief, this behavior has continued since TI first became aware of the '270 patent and the infringement thereof.

92. On information and belief, to the extent any entity other than TI, including but not limited to any foundry contracted or engaged by TI, uses the '270 Accused Instrumentalities to fabricate or manufacture the Accused Products and/or Imported '270 Third-Party Products in the United States for or on behalf of TI ("Third Party Manufacturer"), TI is liable for inducement of infringement by the Third Party Manufacturer. TI has encouraged the Third Party Manufacturer to infringe the '270 patent and intended that it do so. This encouragement includes, without limitation, ordering or seeking the importation of the Accused Products from the Third Party Manufacturer since TI first became aware of the '270 patent, or instructing the Third Party Manufacturer to use the '270 Accused Instrumentalities for the manufacture or fabrication of the Accused Products.

93. For example, by providing technical specification and development criteria of the

Accused Products to the Third Party Manufacturer for manufacturing such products (and/or third party pad conditioner manufacturers), TI has induced, and continues to induce, third parties to infringe using the ’270 Accused Instrumentalities. Specifically, by providing technical specification and/or design/development criteria of the Accused Products to the Third Party Manufacturer for manufacturing such products or to third-party pad conditioner manufacturers for designing, developing and/or configuring the ’270 Accused Instrumentalities for manufacturing such products, TI has induced, and continues to induce, third parties to infringe the ’270 patent (e.g., to ensure that the Accused Products are/were manufactured without errors or flaws or that the Accused Products meet TI’s stringent technical/design/development criteria).

94. Despite having notice of the ’270 patent prior to the filing of this Complaint, TI has made a decision to continue the alleged inducement post-service of the Complaint. Indeed, following the filing of this Complaint, on information and belief, TI—acting with knowledge of the ’270 patent—used and continues to use the ’270 Accused Instrumentalities in the manufacture or fabrication of the Accused Products, and/or submitted and continues to submit purchase orders for the ’270 Accused Instrumentalities to third-party pad conditioner manufacturers with the intent of using the ’270 Accused Instrumentalities for manufacturing or fabricating the Accused Products.

95. Through active inducement, TI has benefitted and continues to benefit from using the ’270 Accused Instrumentalities for the manufacture and fabrication of the Accused Products and third-party products that incorporate the Accused Products.

96. Dr. Sung has suffered, and continues to suffer, damages as a result of TI’s infringement of the ’270 patent.

97. TI has continued to infringe the ’270 patent since at least December 8, 2021, despite being on notice of the ’270 patent and its infringement. TI has therefore infringed the ’270 patent knowingly, willfully, deliberately, and in disregard of Dr. Sung’s patent rights since at least December 8, 2021, at least by performing acts of infringement with actual knowledge of its direct and indirect infringement or while remaining willfully blind to the fact of its direct and indirect infringement. As a result of at least this conduct, Plaintiff is entitled to enhanced damages under 35 U.S.C. § 284 and to attorneys’ fees and costs under 35 U.S.C. § 285.

98. Dr. Sung reserves the right to modify its infringement theories as discovery progresses in this case. Dr. Sung shall not be estopped or otherwise limited or restricted for purposes of its infringement contentions or its claim constructions by the claim charts that it provides with this Complaint. Dr. Sung intends the claim charts for the ’270 patent to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure. The claim chart is not Dr. Sung’s preliminary or final infringement contentions or preliminary or final claim construction positions.

JURY DEMAND

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiff demands a trial by jury on all issues triable as such.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff Dr. Sung demands judgment for itself and against Defendant TI as follows:

A. A judgment that Defendant TI has directly infringed, and continues to infringe, one or more claims of each of the Asserted Patents;

B. A judgment that Defendant TI has induced infringement, and continues to induce infringement, of one or more claims of the Asserted Patents;

C. A judgment awarding Plaintiff damages to be paid by Defendant TI in an amount to be proven at trial adequate to compensate Plaintiff for TI's past infringement and any continuing or future infringement through the date such judgment is entered, but in no event less than a reasonable royalty for TI's infringement;

D. A judgment awarding Plaintiff treble damages pursuant to 35 U.S.C. § 284 as a result of Defendant TI's willfulness;

E. A judgment and order finding that this case is exceptional and awarding Plaintiff its reasonable attorneys' fees to be paid by Defendant TI as provided by 35 U.S.C. § 285;

F. A judgment awarding expenses, costs, and disbursements in this action against Defendant TI, including pre-judgment and post-judgment interest; and

G. A judgment awarding Plaintiff such other relief as the Court may deem just and equitable.

Dated: August 21, 2023

DEVLIN LAW FIRM LLC

/s/ Alex Chan
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Attorney for Plaintiff
Dr. Chien-Min Sung

EXHIBIT 2

JURY,PATENT/TRADEMARK,SDJ1

U.S. District Court
Eastern District of TEXAS [LIVE] (Sherman)
CIVIL DOCKET FOR CASE #: 4:23-cv-00753-SDJ

Sung v. Texas Instruments Incorporated
Assigned to: District Judge Sean D. Jordan
Cause: 35:145 Patent Infringement

Date Filed: 08/21/2023
Jury Demand: Both
Nature of Suit: 830 Patent
Jurisdiction: Federal Question

Plaintiff

Ph.D. Chien-Min Sung represented by **Alex H Chan**
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ATTORNEY TO BE NOTICED

V.

Defendant

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ATTORNEY TO BE NOTICED

Counter Claimant

Texas Instruments Incorporated represented by **Amanda Aline Abraham**
(See above for address)
ATTORNEY TO BE NOTICED

V.

Counter Defendant

Ph.D. Chien-Min Sung represented by **Alex H Chan**
(See above for address)
ATTORNEY TO BE NOTICED

Date Filed	#	Docket Text
08/21/2023	1	COMPLAINT *for Patent Infringement* against Texas Instruments Incorporated (Filing fee $ 402 receipt number ATXEDC-9661821.), filed by Chien-Min Sung. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3, # 4 Exhibit 4, # 5 Exhibit 5, # 6 Exhibit 6, # 7 Exhibit 7, # 8 Exhibit 8, # 9 Exhibit 9, # 10 Exhibit 10, # 11 Exhibit 11, # 12 Exhibit 12, # 13 Exhibit 13, # 14 Exhibit 14, # 15 Civil Cover Sheet)(Chan, Alex) (Entered: 08/21/2023)
08/21/2023	2	Notice of Filing of Patent/Trademark Form (AO 120). AO 120 mailed to the Director of the U.S. Patent and Trademark Office. (Chan, Alex) (Entered: 08/21/2023)
08/21/2023		Case assigned to District Judge Sean D. Jordan. (jmb) (Entered: 08/21/2023)
08/21/2023		In accordance with the provisions of 28 USC Section 636(c), you are hereby notified that a U.S. Magistrate Judge of this district court is available to conduct any or all proceedings in this case including a jury or non-jury trial and to order the entry of a final judgment. The form Consent to Proceed Before Magistrate Judge is available on our website. All signed consent forms, excluding pro se parties, should be filed electronically using the event *Notice Regarding Consent to Proceed Before Magistrate Judge*. (jmb) (Entered: 08/21/2023)
08/21/2023	3	SUMMONS Issued as to Texas Instruments Incorporated. (jmb) (Entered: 08/21/2023)
08/25/2023	4	Defendant's Unopposed First Application for Extension of Time to Answer Complaint re Texas Instruments Incorporated.(Hill, Jack Wesley) (Main Document 4 replaced on 8/25/2023) (jmb,). (Entered: 08/25/2023)
08/25/2023		Defendant's Unopposed First Application for Extension of Time to Answer Complaint is granted pursuant to Local Rule CV-12 for Texas Instruments Incorporated to 10/16/2023. 30 Days Granted for Deadline Extension. (jmb) (Entered: 08/25/2023)
08/29/2023	5	SUMMONS Returned Executed by Chien-Min Sung. Texas Instruments Incorporated served on 8/23/2023, answer due 10/16/2023. (Chan, Alex) (Entered: 08/29/2023)
10/16/2023	6	ANSWER to 1 Complaint, , COUNTERCLAIM against Chien-Min Sung by Texas Instruments Incorporated.(Abraham, Amanda) (Entered: 10/16/2023)
10/16/2023	7	Fed. R. Civ. P. 7.1(a)(1) Disclosure Statement filed by Texas Instruments Incorporated (Abraham, Amanda) (Entered: 10/16/2023)
10/25/2023	8	ORDER GOVERNING PROCEEDINGS: Rule 26 Meeting Report due by 12/8/2023. Rule 16 Management Conference SET for 1/3/2024 at 02:00 PM in Ctrm 105 (Plano) before

		District Judge Sean D. Jordan. Signed by District Judge Sean D. Jordan on 10/25/2023. (jmb,) (Entered: 10/25/2023)
11/01/2023	9	ANSWER to 6 Answer to Complaint, Counterclaim by Chien-Min Sung.(Chan, Alex) (Entered: 11/01/2023)
11/02/2023	10	NOTICE of Attorney Appearance by Andrea Leigh Fair on behalf of Texas Instruments Incorporated (Fair, Andrea) (Entered: 11/02/2023)

PACER Service Center			
Transaction Receipt			
11/16/2023 13:28:12			
PACER Login:	MarkLJohnson	**Client Code:**	
Description:	Docket Report	**Search Criteria:**	4:23-cv-00753-SDJ
Billable Pages:	2	**Cost:**	0.20

EXHIBIT 3

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

CHIEN-MIN SUNG,	§	
	§	
Plaintiff,	§	
	§	
v.	§	Civil Action No.: 4:23-cv-00753
	§	
TEXAS INSTRUMENTS INCORPORATED	§	JURY TRIAL DEMANDED
	§	
	§	
Defendant.	§	

DEFENDANT TEXAS INSTRUMENTS INCORPORATED'S ANSWER AND COUNTERCLAIMS TO PLAINTIFF'S COMPLAINT FOR PATENT INFRINGEMENT

Defendant Texas Instruments Incorporated ("Defendant" or "TI") submits its answer, defenses, and counterclaims to the Original Complaint ("Complaint") of Plaintiff Chien-Min Sung, Ph.D. ("Plaintiff" or "Dr. Sung"). The answers herein are based on a reasonable investigation to date. TI reserves the right to amend its answer if it subsequently gains additional information.

TI's reproduction below of the headings and paragraphs set forth in the Complaint is solely for the purpose of convenience and is not, and should not be construed as, an admission by TI that any allegation or other statements in the headings or the paragraphs of the Complaint, whether explicit or implied, are true, correct, or admitted by TI. All allegations in Dr. Sung's Complaint, including those in the headings, that TI does not expressly admit or deny in this Answer are denied by TI.

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 et seq.

TI's Response: TI admits that the Complaint purports to be an action for patent infringement. TI denies all allegations of patent infringement in this District or elsewhere and denies any remaining allegations contained in this paragraph.

THE PARTIES

2. Plaintiff Dr. Dr. Sung is an individual residing at No. 4, Lane 32, Chung Cheng Road, Tansui, Taipei, Taiwan.

TI's Response: TI lacks sufficient knowledge and information to admit or deny the allegations contained in this paragraph and therefore denies them.

3. On information and belief, Defendant TI is a corporation organized and existing under the laws of Delaware, with its principal place of business at 12500 TI Boulevard, Dallas, Texas 75243. TI is registered with the State of Texas and may be served with process through its registered agent, CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, TX 75201. On information and belief, TI has a regular and established place of business in this District, including at least 6412 US-75, Sherman, Texas 75090.

TI's Response: The question of a regular and established place of business is a conclusion of law, rather than a statement of fact, to which no response is required. To the extent a response is required, TI admits that it has facilities and employees located in this District. TI admits the remaining allegations contained in this paragraph.

4. Upon information and belief, TI sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services into the stream of commerce and that incorporate infringing technology knowing that they would be sold in this judicial district and elsewhere in the United States.

TI's Response: Denied.

5. Defendant TI owns, operates, or controls semiconductor fabrication plants ("fabs") within and/or outside of the United States, including in Sherman (Texas), Richardson (Texas), Dallas (Texas), Lehi (Utah), South Portland (Maine), Miho (Japan), Aizu (Japan), Chengdu (China), and Freising (Germany) to produce the accused products. See, e.g., TI's "Worldwide Manufacturing," available at https://www.ti.com/about-ti/company/ti-at-a-glance/manufacturing.html.

TI's Response: TI admits that it owns or operates semiconductor fabrication plants within and/or outside of the United States, including in Sherman (Texas), Richardson (Texas), Dallas (Texas), Lehi (Utah), South Portland (Maine), Miho (Japan), Aizu (Japan), Chengdu (China), and Freising (Germany) to manufacture semiconductor products. TI denies all allegations of patent infringement in this District or elsewhere and denies any remaining allegations contained in this paragraph.

6. On information and belief, Defendant TI, directly or indirectly, has a contractual relationship with certain pad conditioner manufacturers that design, develop, or manufacture chemical mechanical polishing/planarization ("CMP") pad conditioners implicated in this Action to TI, including at least one of EHWA Diamond Industrial Co Ltd. ("EHWA"), Minnesota Mining and Manufacturing Company (or "3M"), Seasol Diamond Ind. Co., Ltd. ("Seasol"), Shinhan Diamond Ind. Co., Ltd. ("Shinhan"), and/or Abrasive Technology, LLC ("AT"). For example, TI purchases and uses certain pad conditioners manufactured by EHWA. (See "Reduced Cost of Ownership Oxide CMP Process using 300mm Consumables for 200mm Processing," available at https://nccavs-usergroups.avs.org/wp- content/uploads/CMPUG2018/CMP418-6-Brannon.pdf (last accessed Jul. 17, 2022); see also https://nccavs-usergroups.avs.org/wp-content/uploads/CMPUG2011/cmp2011_5brannon-1.pdf ("To improve the tool's performance,

EWHA™ conditioners were pivotal in adding additional functionality to the process thru end of life evaluations. (see figure 6)") (last accessed Jul. 17, 2023); see also https://nccavs-usergroups.avs.org/wp-content/uploads/CMPUG2018/CMP418-6- Brannon.pdf ("To improve the tool's performance, EHWA™ conditioners were pivotal in adding additional functionality to the process thru end of life evaluations") (last accessed Jul. 17, 2023).) TI also has as a "decade-long" relationship with 3M on the design, development, and manufacture of the accused products manufactured using the infringing CMP pad conditioners. (*See, e.g,* https://www.electronicproducts.com/texas-instruments-and-3ms-decade-long-relationship-delivers-rfid-innovation-to-libraries-worldwide/?utm_source=eetimes&utm_medium=relatedcontent; *see also* https://news.3m.com/2005-06-14-3M-and-Texas-Instruments-Implement-Authenticated-RFID-to-Combat-Counterfeit-Drugs-Authenticated-RFID-Platform-Boosts-Pharmaceutical-Supply-Chain-Security-to-Help-Protect-the-Nations-Drug-Supply.) Similarly, Saesol identifies TI as one of its customers. (See, e.g., http://www.saesoldia.com/bbs/content.php?co_id=exporting (map showing TI as a customer to which Saesol exports its products)).

TI's Response: TI admits that it purchases and uses CMP pad conditioners from third-party manufacturers, including EHWA, 3M and Saesol. TI denies that it designs, develops or manufacturers CMP pad conditioners. TI denies all allegations of patent infringement and denies any remaining allegations contained in this paragraph.

7. Upon information and belief, Defendant TI uses certain pad conditioners manufactured by third-party pad conditioner manufacturers at its manufacturing facilities for manufacturing or fabricating the accused products, including at least one of 3M's Trizact and

Diamond pad conditioners; Saesol's Standard and Hive pad conditioners; Shinhan's Diamond pad conditioners; AT's Infinity II pad conditioners; or EHWA's pad conditioners.

TI's Response: TI admits that it purchases CMP pad conditioners from third-party manufacturers, including EHWA, 3M and Saesol, and admits that it uses CMP pad conditioners during the manufacture of semiconductor products. TI denies all allegations of patent infringement and denies any remaining allegations contained in this paragraph.

8. On information and belief, Defendant TI uses or employs these third-party pad conditioners to design, develop, or manufacture one or more of the accused products either domestically or for importation into the United States for use, sale, and/or offer for sale in this district and throughout the United States, including, but not limited to, semiconductor products and devices, such as amplifiers (e.g., current sense amplifiers, difference amplifiers, fully differential amplifiers, instrumentation amplifiers, operational amplifiers, programmable & Variable gain amplifiers, and special function amplifiers), audio solutions (e.g., audio amplifiers, audio converters, audio interface ICs, and specialty audio ICs), clock & timing (e.g., clock buffers, clock generators, clock jitter cleaners & synchronizers, oscillators, real-time clocks (RTCs) & timers, RF PLLs & synthesizers), dies and wafers (e.g., amplifiers, data converters, interfaces, switches, voltage regulators, microcontrollers, x-ray detectors, controllers, comparators, processors, transceivers, receivers, temperature sensors, diodes, and current sources), data converters (e.g., analog-to-digital converters, digital potentiometers, digital-to- analog converters, and integrated/special function data converters), DLP products (imaging products such as near-infrared, near-UV, UV, and visible products, scan & machine vision products, automotive products including display, exterior lighting and projection products, and array products such as array pico and array products, and spectroscopy & optical networking products), interface solutions (e.g.,

CAN & LIN transceivers & SBCs, circuit protection ICs, ethernet ICs, HDMI/DisplayPort/MIPI ICs, high-speed SerDes, I2 ICs, IO-Link & digital I/Os, LVDS/M-LVDS/PECL ICs, multu0switch detection interface ICs, optical networking ICs, PCIe, SAS & SATA ICs, RS-232 transceivers, RS-485 & RS-422 transceivers, SDI ICs, UARTs, and USB ICs), isolation (e.g., digital isolators, isolated ADCs, isolated amplifiers, isolated comparators, isolated gate drivers, isolated interface ICs, signal isolators, and solid-state relays), logic & voltage translation (e.g., buffers, drivers, & transceivers, flip-flops, latches, registers, logic gates, specialty logic ICs, and voltage translators and level shifters), microcontrollers & processors (e.g., ARM-based microcontrollers, C2000 real-time microcontrollers, MSP 430 microcontrollers, digital signal processors, and ARM-based processors), motor drivers (e.g., actuator drivers, brushed DC motor drivers, brushless D motor drivers, half-bridge drivers, isolated gate drivers, low-side drivers, optical-disk drivers, solenoid drivers, stepper motor drivers), power management (AC/DC and isolated DC/DC switch regulators, battery management ICs, DC/DC switching regulators, DDR memory power ICs, digital power ICs, LED drivers, Linear & low-dropout regulators, MOSFETS, multi-channel ICs, power-over ethernet ICs, power switches, sequencers, supervisor & reset ICs, USB power witches & charging port controllers, USB-type C & USB power delivery ICs, and voltage reference products), RF & microwave products (e.g., mixers, modulators, mmWave radar sensors, RF amplifiers, RF PLLs & synthesizers, RF power detectors, and wideband transceivers, receivers, and transmitters), sensors (humidity sensors, magnetic sensors, mmWave radar sensors, specialty sensors, and temperature sensors), switches & multiplexers (analog switches & mux, digital demux and decoders, digital mux and encoders, power switches, and protocol-specific switches & muxes), and wireless connectivity products (e.g., Bluetooth products, multi-protocol products, sub-1 GHz

products, thread products, Wi-Fi products, Wi-SUN products, and Zigbee products), and similar systems, products, devices, and integrated circuits ("Accused Products").

TI's Response: TI admits that it uses third-party CMP pad conditioners during the manufacture of semiconductor products. TI denies all allegations of patent infringement and denies any remaining allegations contained in this paragraph.

9. For example, on information and belief, Defendant TI uses or employs at least one of 3M's Trizact or Diamond pad conditioners, Saesol's Standard or Hive pad conditioners, Shinhan's Diamond pad conditioners, AT's Infinity II pad conditioners, and/or EHWA's CVD CMP pad conditioners to manufacture or fabricate the Accused Products (or integrated circuits contained therein) either domestically or for importation into the United States for use, sale, and/or offer for sale in this district and throughout the United States. TI also assists third parties, directly or through others, to import third-party systems, products, and/or devices that incorporate the Accused Products into the United States and offer to sell, and sell, such third- party products in the United States.

TI's Response: TI admits that it uses CMP pad conditioners from third-party manufacturers, including EHWA, 3M and Saesol, during the manufacture of semiconductor products. TI denies all allegations of patent infringement and denies any remaining allegations contained in this paragraph.

JURISDICTION AND VENUE

10. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.

TI's Response: TI admits that the Complaint purports to be an action for patent infringement arising under Title 35 of the United States Code. TI denies all allegations of patent infringement in this District or elsewhere.

11. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

TI's Response: Plaintiff's statement about subject matter jurisdiction is a conclusion of law, rather than a statement of fact, to which no response is required. To the extent a response is required, TI does not contest that this Court has subject matter jurisdiction over patent disputes arising under the patent laws of the United States. TI denies all allegations of patent infringement in this District or elsewhere.

12. Defendant TI is subject to this Court's general personal jurisdiction at least because TI is a resident of Texas as defined by Texas law. On information and belief, TI is headquartered in Texas.

TI's Response: The statement that "TI is a resident of Texas as defined by Texas law" is a conclusion of law, rather than a statement of fact, to which no response is required. To the extent a response is required, TI does not contest that this Court has personal jurisdiction. TI admits that it is headquartered in Texas.

13. Defendant TI is additionally subject to this Court's general and specific personal jurisdiction because TI has sufficient minimum contacts within the State of Texas and this District, pursuant to due process and/or the Texas Long Arm Statute, Tex. Civ. Prac. & Rem. Code § 17.042. On information and belief, Defendant TI contracted with one or more Texas residents in this District and one or both parties performed the contract at least in part in the State of Texas and this District; TI committed the tort of patent infringement in State of Texas and this District; TI purposefully availed itself of the privileges of conducting business in the State of Texas and in this

District; TI regularly conducts and solicits business within the State of Texas and within this District; TI recruits residents of the State of Texas and this District for employment inside or outside the State of Texas; Plaintiff's causes of action arise directly from TI's business contacts and other activities in the State of Texas and this District; and TI distributes, makes available, imports, sells and offers to sell products and services throughout the United States, including in this judicial District, and introduces infringing products and services that into the stream of commerce knowing that they would be used and sold in this judicial district and elsewhere in the United States.

TI's Response: Plaintiff's statements about sufficient minimum contacts reflect conclusions of law, rather than statements of fact, to which no response is required. To the extent a response is required, TI does not contest that this Court has personal jurisdiction. TI denies all allegations of patent infringement in this District or elsewhere. TI denies that any of TI's contacts with Texas, business conducted by TI in Texas or elsewhere, or other activity performed by TI in Texas or elsewhere gives rise to Plaintiff's causes of action for patent infringement. TI denies that any of the activities alleged by Plaintiff constitute patent infringement if performed by TI in Texas or elsewhere. TI denies that any services it has offered or any products it has made, imported, sold, offered for sale, or introduced into commerce in Texas or elsewhere embody or otherwise give rise to or constitute infringement of any claim of Plaintiff's patents. TI denies all remaining allegations contained in this paragraph.

14. On information and belief, Defendant TI designs, develops, manufactures, sells, offers to sell, and/or imports products, devices, systems, and/or components of systems, including the Accused Products, that either infringe or support the infringement of the patents asserted in this action.

TI's Response: Denied.

15. On information and belief, TI sells and offers to sell products and services throughout the United States and in Texas, including in this District, through major electronics retailers in the United States, and in concert and partnership with third parties.

TI's Response: TI admits that it sells and/or offers for sell its semiconductor products throughout the United States and in Texas, including this District, through TI's website and/or through TI-authorized third-party distributors. TI denies the remaining allegations contained in this paragraph.

16. Furthermore, personal jurisdiction over TI in this action comports with due process. TI has conducted and regularly conducts business within the United States and this District. TI has purposefully availed itself of the privileges of conducting business in the United States, and more specifically in the State of Texas and this District. TI has sought protection and benefit from the laws of the State of Texas by making available products and services, including websites and associated web pages, that infringe the Asserted Patents with the awareness and/or intent that they will be used (or visited) by consumers in this District. Having purposefully availed itself of the privilege of conducting business within this District, TI should reasonably and fairly anticipate being brought into court here.

TI's Response: Plaintiff's statements about personal jurisdiction reflect conclusions of law, rather than statements of fact, to which no response is required. To the extent a response is required, TI does not contest that this Court has personal jurisdiction. TI denies that it makes or has made available any products and services, including websites and associated web pages, that infringes any claim of Plaintiff's patents. TI denies all remaining allegations contained in this paragraph.

17. Venue is proper in this judicial district under 28 U.S.C. § 1391 and 28 U.S.C. §1400(b). On information and belief, TI has a regular and established place of business in this District, including at least at 6412 US-75, Sherman, TX 75090. On information and belief, TI's acts of infringement have taken place within this District. On information and belief, TI's presence in this District is substantial, including at least at 6412 US-75, Sherman, TX 75090. TI's presence in this District includes an 80,000 square foot, 150 mm fabrication facility that produces over 4,500 device types, including at least semiconductors and integrated circuits for use in multiple automotive, commercial, military, and space applications.

TI's Response: TI does not contest that venue is proper in this District. The question of a regular and established place of business is a conclusion of law, rather than a statement of fact, to which no response is required. To the extent a response is required, TI admits that it has facilities and employees located in this District. TI denies all allegations of patent infringement in this District or elsewhere.

18. Additionally, TI—directly or through intermediaries (including distributors, retailers, and others), subsidiaries, alter egos, and/or agents—ships, distributes, offers for sale, and/or sells its products and services in the United States and this District. TI has purposefully and voluntarily placed one or more of its products into the stream of commerce through the accused instrumentalities that infringe the patents asserted in this action with the awareness and/or intent that they will be purchased by consumers in this District. TI knowingly and purposefully ships infringing products into, and within, this District. These infringing products have been, and continue to be, purchased by consumers and businesses in this District.

TI's Response: TI admits that it offers for sale, and/or sells its products and services in the United States and this District. TI denies all allegations of patent infringement in this District

or elsewhere. TI denies that it makes, ships, distributes, offers for sale, or sells any product or services that infringes any claim of Plaintiff's patents. TI denies that it is aware of or intends for others to purchase products that infringe any claim of Plaintiff's patents. TI denies that it knowingly or purposefully ships any product that infringes any claim of Plaintiff's patents. TI denies any remaining allegations contained in this paragraph.

THE ASSERTED PATENTS

19. On September 22, 2015, U.S. Patent No. 9,138,862 ("the '862 patent"), entitled "CMP Pad Dresser Having Leveled Tips and Associated Methods" was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the '862 patent is attached as Exhibit 1.

TI's Response: TI admits that the face of the '862 Patent is titled "CMP Pad Dresser Having Leveled Tips and Associated Methods" and lists an issue date of September 22, 2015. TI admits that a copy of what purports to be the '862 Patent is attached as Exhibit 1. TI lacks sufficient knowledge and information to admit or deny the remaining allegations contained in this paragraph and therefore denies them.

20. Plaintiff is the assignee and owner of the right, title and interest in and to the '862 patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.

TI's Response: TI lacks sufficient knowledge and information to admit or deny the allegations contained in this paragraph and therefore denies them.

21. On August 8, 2017, U.S. Patent No. 9,724,802 ("the '802 patent"), entitled "CMP Pad Dressers Having Leveled Tips and Associated Methods" was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the '802 patent is attached

as Exhibit 2.

TI's Response: TI admits that the face of the '802 Patent is titled "CMP Pad Dressers Having Leveled Tips and Associated Methods" and lists an issue date of August 8, 2017. TI admits that a copy of what purports to be the '802 Patent is attached as Exhibit 2. TI lacks sufficient knowledge and information to admit or deny the remaining allegations contained in this paragraph and therefore denies them.

22. Plaintiff is the assignee and owner of the right, title and interest in and to the '802 patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.

TI's Response: TI lacks sufficient knowledge and information to admit or deny the allegations contained in this paragraph and therefore denies them.

23. On March 10, 2015, U.S. Patent No. 8,974,270 ("the '270 patent"), entitled "CMP Pad Dresser Having Leveled Tips and Associated Methods" was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the '270 patent is attached as Exhibit 3.

TI's Response: TI admits that the face of the '270 Patent is titled "CMP Pad Dresser Having Leveled Tips and Associated Methods" and lists an issue date of March 10, 2015. TI admits that a copy of what purports to be the '270 Patent is attached as Exhibit 3. TI lacks sufficient knowledge and information to admit or deny the remaining allegations contained in this paragraph and therefore denies them.

24. Plaintiff is the assignee and owner of the right, title and interest in and to the '270 patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.

TI's Response: TI lacks sufficient knowledge and information to admit or deny the allegations contained in this paragraph and therefore denies them.

25. The '862, '802, and '270 patents (collectively, "Asserted Patents") generally relate to chemical mechanical polishing/planarization ("CMP") pad dressers and dressing and conditioning methods associated with pad conditioning (e.g., smoothing, polishing, and dressing), and the CMP polishing of a work piece such as an integrated circuit or semiconductor wafer.

TI's Response: TI lacks sufficient knowledge and information to admit or deny the allegations contained in this paragraph and therefore denies them.

26. In manufacturing semiconductor wafers, one important physical trait is their surface flatness and smoothness. To achieve these important physical characteristics, CMP techniques, which involve pad polishing and conditioning, are generally used to planarize the wafer surface through both chemical and mechanical reactions, whereby protrusions and residues existing on the surface of a wafer chemically react with a slurry supplied to the wafer at the same time when they are planarized mechanically by rotation of a polishing pad. In CMP, the quality of the polishing pad dictates the removal rate, planarization, and uniformity, and thus plays a key role in the overall performance of the polishing process.

TI's Response: TI admits that CMP pad conditioners are used during the manufacture of semiconductor wafers. TI lacks sufficient knowledge and information to admit or deny the remaining allegations contained in this paragraph and therefore denies them.

27. To optimize the condition and minimize deformation of the pad, a pad dresser is used to dress the pad so as to remove debris and by-products in the pad (e.g., deglazing the pad) and to regenerate new pad surface sufficient to open up asperities in the pad surface to capture and hold chemical slurry for cleaning the semiconductor wafer.

TI's Response: TI lacks sufficient knowledge and information to admit or deny the allegations contained in this paragraph and therefore denies them.

28. As discussed above, the pad dresser is used to create and form pad asperities in the pad, which in turn polish the semiconductor wafer. In polishing, the dresser's tips profile generally dictates the pad asperities profile. Due to the miniaturization of transistors and advancement of manufacturing technologies, these tips must be stringently coordinated (e.g., in terms of count, configuration, spacing, and cutting depth) to avoid any possibility of damaging the semiconductor wafer (e.g., via scratches on wafer surface or underlying metal-interconnect). The Asserted Patents are generally directed to providing a pad dresser with optimized tips for performing CMP polishing and conditioning using the same.

TI's Response: TI lacks sufficient knowledge and information to admit or deny the allegations contained in this paragraph and therefore denies them.

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 9,138,862

29. Plaintiff incorporates and realleges the preceding paragraphs as if fully set forth herein.

TI's Response: TI incorporates by reference its responses to the allegations contained in the foregoing paragraphs.

30. At least as of December 8, 2021, Dr. Sung placed TI on actual notice of the '862 patent and actual notice that its actions constituted and continued to constitute infringement of the '862 patent. TI has had actual knowledge of the '862 patent and its own infringement of the '862 patent since at least that time.

TI's Response: The statements of actual notice reflect conclusions of law, rather than statements of fact, to which no response is required. To the extent a response is required, TI admits

it received a letter from the Timothy Devlin, dated December 8, 2021, and that the letter listed eight patents, including the three Asserted Patents. TI denies that Sung had complete ownership rights in the Asserted Patents at the time of Mr. Devlin's letter. TI denies that it received actual notice of infringement through Mr. Devlin's letter. TI denies all remaining allegation contained in this paragraph.

31. On information and belief, Defendant TI has directly infringed and continues to infringe at least claim 1 of the '862 patent literally or under the doctrine of equivalents, by importing into the United States, and/or making, using, and/or selling, and/or offering for sale in the United States, without authority or license, semiconductor devices and/or integrated circuits designed, developed, fabricated and/or manufactured using certain infringing CMP pad conditioners, including 3M's pad conditioners, Saesol's CMP pad conditioners, Shinhan's CMP pad conditioners, AT's CMP pad conditioners, EHWA's pad conditioners, and/or similar pad conditioners (e.g., pad conditioners with the same claimed structural characteristics and manufactured by other pad conditioner manufacturers) ("'862 Accused Instrumentalities"), and systems, products, and/or devices containing these semiconductor devices and/or integrated circuits including at least the Accused Products in violation of 35 U.S.C. § 271(a). The Accused Products are/were manufactured and/or fabricated using pad conditioners with the claimed structural characteristics. Each such product includes an integrated circuit fabricated or manufactured using, for example, at least one of 3M's Trizact or Diamond pad conditioners, Seasol's Standard or Hive pad conditioners, Shinhan's Diamond pad conditioners, AT's Infinity II pad conditioners; and/or EHWA's CVD CMP pad conditioners.

TI's Response: Denied.

32. On information and belief, TI sells and/or offers for sale the Accused Products in

the United States. For example, TI provides direct sales through its own sales channels and/or its distributors and sells the Accused Products to businesses including original equipment manufacturers and electronic manufacturing service providers. On information and belief, these direct sales include sales of the Accused Products in the United States. For example, TI engages in sales, marketing, and contracting activity in the United States and/or with United States offices of its customers.

TI's Response: TI admits that it offers for sale, sells and/or markets its semiconductor products in the United States, through TI's website and/or through TI-authorized third-party distributors. TI denies all allegations of patent infringement in the United States or elsewhere and denies any remaining allegations contained in this paragraph.

33. Discovery is expected to uncover the full extent of TI's infringement of the '862 patent beyond the Accused Products already identified herein.

TI's Response: TI denies all allegations of infringement by TI or any TI product. TI denies all remaining allegations contained in this paragraph

34. Additionally, on information and belief, TI has directly infringed and continues to infringe at least claim 1 of the '862 patent literally or under the doctrine of equivalents, by importing into the United States, and/or making, using, and/or selling, and/or offering for sale in the United States, without authority or license, the Accused Products, in violation of 35 U.S.C. § 271(g). On information and belief, Defendant TI imports the Accused Products into the United States for sales and distribution to customers located in and outside the United States. On information and belief, Defendant TI sells and/or offers for sale the Accused Products in the United States. For example, Defendant TI provides direct sales through its own sales channels and/or its distributors or contract manufacturers and sells the Accused Products to businesses

including original equipment manufacturers and electronic manufacturing service providers. On information and belief, these direct sales include sales of the Accused Products in the United States. For example, Defendant TI engages in sales, marketing, and contracting activity in the United States and/or with United States offices of its customers.

TI's Response: Denied.

35. The Accused Products are/were manufactured by a process including all of the limitations of at least claim 1 of the '862 patent. The Accused Products are/were made by the claimed methods. Each of the Accused Products, for example, is or contains an integrated circuit fabricated or manufactured using, for example, at least one of the '862 Accused Instrumentalities, such as 3M's pad conditioners (e.g., Trizact or Diamond), Saesol's pad conditioners (Standard or Hive), Shinhan's pad conditioners (e.g., Diamond), AT's pad conditioners (e.g., Infinity II), or EHWA's pad conditioners (e.g., CVD CMP).

TI's Response: Denied.

36. For example, during the manufacture of the Accused Products, Defendant TI uses the '862 Accused Instrumentalities to perform the steps of: pressing a CMP pad dresser (e.g., any of 3M's Trizact or Diamond pad conditioner, Saesol's Standard or Hive pad conditioner, Shinhan's Diamond pad conditioner, AT's Infinity II pad conditioner, or EHWA's CVD CMP pad conditioner) against a CMP pad, the dresser including a monolayer of a plurality of superabrasive particles protruding from a matrix layer, wherein the difference in protrusion distance between the highest protruding tip and the second highest protruding tip of the monolayer of superabrasive particles is less than or equal to about 10 microns and the difference in protrusion distance between the highest 10 protruding tips of the monolayer of superabrasive particles are within about 20 microns or less; and rotating the dresser against the CMP pad such that asperities

are cut into the CMP pad having a maximum cutting depth of about 60 microns. On information and belief, TI contracted and continues to contract with at least one of 3M, Seasol, Shinhan, AT and/or EWHA to purchase and use the '862 Accused Instrumentalities with the claimed structural characteristics for the manufacture or fabrication of the Accused Products by or on behalf of TI.

TI's Response: Denied.

37. Attached hereto as Exhibits 4-8, and incorporated by reference herein, are claim charts detailing how the '862 Accused Instrumentalities are used to manufacture or fabricate the Accused Products and satisfy each element of at least claim 1 of the '862 patent, literally or under the doctrine of equivalents. For example, each chart illustrates a representative pad conditioner from 3M, Saesol, Shinhan, AT, and EHWA (e.g., 3M's Trizact pad conditioner, Saesol's Standard or Hive pad conditioner, Shinhan's Diamond pad conditioner, AT's Infinity II pad conditioner, and EHWA's CVD CMP pad conditioner), which is representative of the remaining '862 Accused Instrumentalities (including any pad conditioners that remain unknown to Plaintiff) because the representative pad conditioner has the same claimed structural characteristics as these remaining '862 Accused Instrumentalities.

TI's Response: TI denies all allegations of infringement and specifically denies that Exhibits 4-8 demonstrate infringement of the '862 Patent by TI or any TI product. TI denies all remaining allegations contained or referenced in this paragraph.

38. On information and belief, at least as of December 8, 2021, TI has induced and continues to induce others, including third-party pad conditioner manufacturers, to infringe one or more claims of the '862 patent, including, but not limited to, claim 1, pursuant to 35 U.S.C. § 271(b), by actively encouraging or inducing them to make, use, sell and/or offer to sell in the United States, the '862 Accused Instrumentalities with the claimed characteristics for the

manufacture of the Accused Products, through TI's commitment to purchase the '862 Accused Instrumentalities and actual order placement for the '862 Accused Instrumentalities.

TI's Response: Denied.

39. On information and belief, at least as of December 8, 2021, TI also has induced and continues to induce others actively, knowingly, and intentionally, including its suppliers and contract manufacturers, to infringe one or more claims of the '862 patent, including, but not limited to, claim 1, pursuant to 35 U.S.C. § 271(b), by actively encouraging others to import into the United States, and/or make, use, sell, and/or offer to sell in the United States, the Accused Products or systems, devices, or products containing the Accused Products, by actively inducing others to infringe the '862 patent by making, using, selling, offering for sale, marketing, advertising, and/or importing the Accused Products to their customers for use in downstream products that infringe, or were manufactured using processes that infringe, the '862 patent, and by instructing others to infringe the '862 patent.

TI's Response: Denied.

40. For example, TI actively promotes the sale and importation of the Accused Products in marketing materials, technical specifications, data sheets, web pages on its website (e.g., https://www.ti.com), press releases, training tutorials, development and design tools, user manuals, and developer forums as well as at trade shows (e.g., the Consumer Technology Association's Consumer Electronics Show ("CES")) and through its sales and distribution channels that encourage infringing sales, offers to sell, and importation of the Accused Products. As another example, TI's representatives travel to customer sites in and outside the United States for sales, support, and/or importation activities that include working with customers to facilitate these customers' infringing testing, marketing, importation, and sales activity. On information

and belief, TI supplies customers with Accused Products so that they may be imported, sold, or offered for sale by those customers, and/or incorporated into third-party products (more below). For example, TI provides direct sales to original equipment manufacturers and electronic manufacturing service providers. On information and belief, these direct sales include sales to customers in and outside the United States. TI also promotes, publicly on its website, uses of the Accused Products by customers in the United States. TI additionally provides a wide range of technical support to its customers and businesses in connection with the Accused Products made using the '862 Accused Instrumentalities by or on behalf of TI, including product-specific solutions (see, e.g., https://education.ti.com/en/customer-support; https://ticsc.service-now.com/csm; https://www.ti.com/info/contact-us.html) and community forums (e.g., https://e2e.ti.com/).

TI's Response: TI denies all allegations of infringement. TI admits that TI maintains a publicly available website, that the website advertises a variety of TI products, that the website contains user guides/manuals, reference designs, and other product documentation and materials for various TI products. TI admits that TI attends various trade shows where it provides information for certain TI products. TI admits that E2E support forums assist customers with the design process of certain TI products. TI admits that it provides customers of certain semiconductor products with various support resources relating to those products, including manuals, datasheets sheets, and various training materials. TI admits that it sells its semiconductor products through TI's website and/or through TI-authorized third-party distributors. TI denies all remaining allegations contained in this paragraph.

41. On information and belief, TI also actively encourages third-party pad conditioner manufacturers so that the '862 Accused Instrumentalities may be designed, developed, used,

imported, sold, or offered for sale to TI with the claimed structural characteristics. On information and belief, TI assisted and continues to assist these third-party manufacturers, directly and/or through intermediaries, in the design, development or manufacture of the '862 Accused Instrumentalities, and provides technical support or supports the sales and importation of the '862 Accused Instrumentalities (as well as the Accused Products that are/were manufactured using the '862 Accused Instrumentalities).

TI's Response: Denied.

42. In addition, on information and belief, TI sells or offers for sale the Accused Products to third parties that incorporate the Accused Products into third party products ("the '862 Third Party Products").

TI's Response: TI admits that it sells or offers for sale its semiconductor products to third parties. TI lacks sufficient knowledge and information to admit or deny the remaining allegations contained in this paragraph and therefore denies them.

43. On information and belief, TI assists third parties, directly and/or through intermediaries, in the development and manufacture of the '862 Third Party Products and provides technical support and supports the sales and importation of the '862 Third Party Products.

TI's Response: TI admits that TI provides customers of certain semiconductor products with various support resources relating to those products, including manuals, datasheets, tutorials, and various training materials. TI denies all allegations of patent infringement and denies any remaining allegations contained in this paragraph.

44. On information and belief, the '862 Third Party Products are imported into the United States for use, sale, and/or offer for sale in this District and throughout the United States

("Imported '862 Third Party Products").

TI's Response: TI lacks sufficient knowledge and information to admit or deny the allegations contained in this paragraph and therefore denies them.

45. On information and belief, to the extent any entity other than TI, including but not limited to any of TI's third-party importers, imports the Accused Products and/or '862 Third- Party Products into the United States for or on behalf of TI ("Third Party Importer"), TI is liable for inducement of infringement by the Third Party Importer. TI has encouraged the Third Party Importer to infringe the '862 patent and intended that it do so. This encouragement includes at least ordering or instructing the Third Party Importer to import the Accused Products and/or '862 Third-Party Products into the United States, providing directions and other materials to the Third Party Importer to enable such importation, and/or conditioning the receipt of benefits (included but not limited to payment) to the Third Party Importer on such importation. On information and belief, this behavior has continued since TI first became aware of the '862 patent and the infringement thereof.

TI's Response: Denied.

46. On information and belief, to the extent any entity other than TI, including but not limited to any foundry contracted or engaged by TI, uses the patented method to fabricate or manufacture the Accused Products and/or Imported '862 Third-Party Products in the United States for or on behalf of TI ("Third Party Manufacturer"), TI is liable for inducement of infringement by the Third Party Manufacturer. TI has encouraged the Third Party Manufacturer to infringe the '862 patent and intended that it do so. This encouragement includes, without limitation, ordering or seeking the importation of the Accused Products from the Third Party Manufacturer since TI first became aware of the '862 patent, or instructing the Third Party

Manufacturer to use the ’862 Accused Instrumentalities for the manufacture or fabrication of the Accused Products.

TI’s Response: Denied.

47. For example, by providing technical specification and development criteria of the Accused Products to the Third Party Manufacturer for manufacturing such products (and/or third party pad conditioner manufacturers), including instructing such Third Party Manufacturer to use any of the ’862 Accused Instrumentalities in order to accomplish or achieve such criteria, TI has induced, and continues to induce, third parties to infringe using the claimed methods and the ’862 Accused Instrumentalities. Specifically, by providing technical specification and/or design/development criteria of the Accused Products to the Third Party Manufacturer for manufacturing such products using the claimed methods and the ’862 Accused Instrumentalities, TI has induced, and continues to induce, third parties to infringe the ’862 patent (e.g., to ensure that the Accused Products are/were manufactured without errors or flaws or that the Accused Products meet TI’s stringent technical/design/development criteria).

TI’s Response: Denied.

48. Despite having notice of the ’862 patent prior to the filing of this Complaint, TI has made a decision to continue the alleged inducement post-service of the Complaint. Indeed, following the filing of this Complaint, on information and belief, TI—acting with knowledge of the ’862 patent—used and continues to use the ’862 Accused Instrumentalities in the manufacture or fabrication of the Accused Products, and/or submitted and continues to submit purchase orders for the ’862 Accused Instrumentalities to third-party pad conditioner manufacturers with the intent of using the ’862 Accused Instrumentalities for manufacturing or fabricating the Accused Products.

TI's Response: Denied.

49. TI has benefitted and continues to benefit from the importation into the United States of the Accused Products, '862 Third Party Products, and Imported '862 Third Party Products.

TI's Response: Denied.

50. Dr. Sung has suffered, and continues to suffer, damages as a result of TI's infringement of the '862 patent.

TI's Response: Denied.

51. TI has continued to infringe the '862 patent since at least December 8, 2021, despite being on notice of the '862 patent and its infringement. TI has therefore infringed the '862 patent knowingly, willfully, deliberately, and in disregard of Dr. Sung's patent rights since at least December 8, 2021, at least by performing acts of infringement with actual knowledge of its direct and indirect infringement or while remaining willfully blind to the fact of its direct and indirect infringement. As a result of at least this conduct, Plaintiff is entitled to enhanced damages under 35 U.S.C. § 284 and to attorneys' fees and costs under 35 U.S.C. § 285.

TI's Response: Denied.

52. Dr. Sung reserves the right to modify its infringement theories as discovery progresses in this case. Dr. Sung shall not be estopped or otherwise limited or restricted for purposes of its infringement contentions or its claim constructions by the claim charts that it provides with this Complaint. Dr. Sung intends the claim charts for the '862 patent to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure. The claim chart is not Dr. Sung's preliminary or final infringement contentions or preliminary or final claim construction positions.

TI's Response: TI lacks sufficient knowledge and information to admit or deny the allegations contained in this paragraph and therefore denies them.

COUNT II – INFRINGEMENT OF U.S. PATENT NO. 9,724,802

53. Plaintiff incorporates and realleges the preceding paragraphs as if fully set forth herein.

TI's Response: TI incorporates by reference its responses to the allegations contained in the foregoing paragraphs.

54. At least as of December 8, 2021, Dr. Sung placed TI on actual notice of the '802 patent and actual notice that its actions constituted and continued to constitute infringement of the '802 patent. TI has had actual knowledge of the '802 patent and its own infringement of the '802 patent since at least that time.

TI's Response: The statements of actual notice reflect conclusions of law, rather than statements of fact, to which no response is required. To the extent a response is required, TI admits it received a letter from the Timothy Devlin, dated December 8, 2021, and that the letter listed eight patents, including the three Asserted Patents. TI denies that Sung had complete ownership rights in the Asserted Patents at the time of Mr. Devlin's letter. TI denies that it received actual notice of infringement through Mr. Devlin's letter. TI denies all remaining allegation contained in this paragraph.

55. On information and belief, Defendant TI has directly infringed and continues to infringe at least claim 1 of the '802 patent literally or under the doctrine of equivalents, by using in the United States, or importing into the United States, without authority or license, certain CMP pad conditioners, including 3M's pad conditioners, Saesol's CMP pad conditioners, Shinhan's CMP pad conditioners, AT's CMP pad conditioners, EHWA's pad conditioners, and/or similar

pad conditioners (e.g., pad conditioners with the same claimed structural characteristics and manufactured by other pad conditioner manufacturers) ("'802 Accused Instrumentalities") to design, develop, manufacture or fabricate semiconductor devices and/or integrated circuits, and systems, products, and/or devices containing these semiconductor devices and/or integrated circuits, including at least the Accused Products, in violation of 35 U.S.C. § 271(a).

TI's Response: Denied.

56. Discovery is expected to uncover the full extent of TI's infringement of the '802 patent beyond the Accused Products already identified herein.

TI's Response: TI denies all allegations of infringement by TI or any TI product. TI denies all remaining allegations contained in this paragraph

57. The Accused Products are/were manufactured by using a pad conditioner that includes all of the limitations of at least claim 1 of the '802 patent. For example, each of the Accused Products is/was fabricated or manufactured using, for example, at least one of the '802 Accused Instrumentalities, such as 3M's pad conditioners (e.g., Trizact or Diamond), Saesol's pad conditioners (Standard or Hive), Shinhan's pad conditioners (e.g., Diamond), AT's pad conditioners (e.g., Infinity II), or EHWA's pad conditioners (e.g., CVD CMP).

TI's Response: Denied

58. For example, during the manufacture of the Accused Products, Defendant TI uses a CMP pad dresser (e.g., any of 3M's Trizact or Diamond pad conditioner, Saesol's Standard or Hive pad conditioner, Shinhan's Diamond pad conditioner, AT's Infinity II pad conditioner, or EHWA's CVD CMP pad conditioner) that includes a rigid support substrate; and a monolayer of a plurality of superabrasive particles coupled to the support substrate, wherein each superabrasive particle in the monolayer extends away from the support substrate to a protrusion distance, wherein

a tip of each of the plurality of superabrasive particles aligns along a designated profile with a tip variation of from about 5 microns to about 100 microns, and wherein the difference in protrusion distance between the highest protruding tip and the second highest protruding tip of the monolayer of superabrasive particles is less than or equal to about 50 microns, and the difference in protrusion distance between the highest 1% of the protruding tips of the monolayer of superabrasive particles are within about 80 microns or less. On information and belief, TI contracted and continues to contract with at least one of 3M, Seasol, Shinhan, AT and/or EWHA to purchase and use the '802 Accused Instrumentalities with the claimed structural characteristics for the manufacture or fabrication of the Accused Products by or on behalf of TI.

TI's Response: Denied.

59. Attached hereto as Exhibits 9-13, and incorporated by reference herein, are claim charts detailing how the '802 Accused Instrumentalities used by or on behalf of TI to manufacture or fabricate the Accused Products satisfy each element of at least claim 1 of the '802 patent, literally or under the doctrine of equivalents. Each chart illustrates a representative pad conditioner from each of the pad conditioner manufacturers, including 3M, Saesol, Shinhan, AT, and EHWA (e.g., 3M's Trizact pad conditioner, Saesol's Standard or Hive pad conditioner, Shinhan's Diamond pad conditioner, AT's Infinity II pad conditioner, and EHWA's CVD CMP pad conditioner), which is representative of the remaining '802 Accused Instrumentalities (including any pad conditioners that remain unknown to Plaintiff) because it has the same claimed structural characteristics as these remaining '802 Accused Instrumentalities.

TI's Response: TI denies all allegations of infringement and specifically denies that Exhibits 9-13 demonstrate infringement of the '802 Patent by TI or any TI product. TI denies all remaining allegations contained or referenced in this paragraph.

60. On information and belief, at least as of December 8, 2021, TI has induced and continues to induce others, including third-party pad conditioner manufacturers, to infringe one or more claims of the ’802 patent, including, but not limited to, claim 1, pursuant to 35 U.S.C. § 271(b), by actively encouraging or inducing them to make, use, sell and/or offer to sell in the United States, the ’802 Accused Instrumentalities with the claimed characteristics for the manufacture of the Accused Products, through TI’s commitment to purchase the ’802 Accused Instrumentalities and actual order placement for the ’802 Accused Instrumentalities.

TI’s Response: Denied.

61. On information and belief, at least as of December 8, 2021, TI also has induced and continues to induce others actively, knowingly, and intentionally, including its suppliers and contract manufacturers, to infringe one or more claims of the ’802 patent, including, but not limited to, claim 1, pursuant to 35 U.S.C. § 271(b), by actively encouraging others to import into the United States, and/or make, use, sell, and/or offer to sell in the United States, the Accused Products or systems, devices, or products containing the Accused Products, by actively inducing others to infringe the ’802 patent by making, using, selling, offering for sale, marketing, advertising, and/or importing the Accused Products to their customers for use in downstream products that infringe, or were manufactured using processes that infringe, the ’802 patent, and by instructing others to infringe the ’802 patent.

TI’s Response: Denied.

62. For example, TI actively promotes the sale and importation of the Accused Products in marketing materials, technical specifications, data sheets, web pages on its website (e.g., https://www.ti.com), press releases, training tutorials, development and design tools, user manuals, and developer forums as well as at trade shows (e.g., the Consumer Technology Association’s

Consumer Electronics Show ("CES")) and through its sales and distribution channels that encourage infringing sales, offers to sell, and importation of the Accused Products. As another example, TI's representatives travel to customer sites in and outside the United States for sales, support, and/or importation activities that include working with customers to facilitate these customers' infringing testing, marketing, importation, and sales activity. On information and belief, TI supplies customers with Accused Products so that they may be imported, sold, or offered for sale by those customers, and/or incorporated into third-party products (more below). For example, TI provides direct sales to original equipment manufacturers and electronic manufacturing service providers. On information and belief, these direct sales include sales to customers in and outside the United States. TI also promotes, publicly on its website, uses of the Accused Products by customers in the United States. TI additionally provides a wide range of technical support to its customers and businesses in connection with the Accused Products made using the '802 Accused Instrumentalities by or on behalf of TI, including product-specific solutions (see, e.g., https://education.ti.com/en/customer-support; https://ticsc.service-now.com/csm; https://www.ti.com/info/contact-us.html) and community forums (e.g., https://e2e.ti.com/).

TI's Response: TI denies all allegations of infringement. TI admits that TI maintains a publicly available website, that the website advertises a variety of TI products, that the website contains user guides/manuals, reference designs, and other product documentation and materials for various TI products. TI admits that TI attends various trade shows where it provides information for certain TI products. TI admits that E2E support forums assist customers with the design process of certain TI products. TI admits that it provides customers of certain semiconductor products with various support resources relating to those products, including

manuals, datasheets sheets, and various training materials. TI admits that it sells its semiconductor products through TI's website and/or through TI-authorized third-party distributors. TI denies the remaining allegations contained in this paragraph.

63. On information and belief, TI also actively encourages third-party pad conditioner manufacturers so that the '802 Accused Instrumentalities may be designed, developed, used, imported, sold, or offered for sale to TI with the claimed structural characteristics. On information and belief, TI assisted and continues to assist these third-party manufacturers, directly and/or through intermediaries, in the design, development or manufacture of the '802 Accused Instrumentalities and provides technical support or supports the sales and importation of the '802 Accused Instrumentalities (as well as the Accused Products that are/were manufactured using the '802 Accused Instrumentalities).

TI's Response: Denied.

64. Additionally, on information and belief, TI sells or offers for sale the Accused Products to third parties that incorporate the Accused Products into third party products ("the '802 Third Party Products").

TI's Response: TI admits that it sells or offers for sale its semiconductor products to third parties. TI lacks sufficient knowledge and information to admit or deny the remaining allegations contained in this paragraph and therefore denies them.

65. On information and belief, TI assists third parties, directly and/or through intermediaries, in the development and manufacture of the '802 Third Party Products and provides technical support and supports the sales and importation of the '802 Third Party Products.

TI's Response: TI admits that TI provides customers of certain semiconductor products with various support resources relating to those products, including manuals, datasheets, tutorials,

and various training materials. TI denies all allegations of patent infringement and denies any remaining allegations contained in this paragraph.

66. On information and belief, the '802 Third Party Products are imported into the United States for use, sale, and/or offer for sale in this District and throughout the United States ("Imported '802 Third Party Products").

TI's Response: TI lacks sufficient knowledge and information to admit or deny the allegations contained in this paragraph and therefore denies them.

67. On information and belief, to the extent any entity other than TI, including but not limited to any of TI's third-party importers, imports the '802 Accused Instrumentalities, the Accused Products and/or '802 Third-Party Products into the United States for or on behalf of TI ("Third Party Importer"), TI is liable for inducement of infringement by the Third Party Importer. TI has encouraged the Third Party Importer to infringe the '802 patent and intended that it do so. This encouragement includes at least ordering or instructing the Third Party Importer to import the '802 Accused Instrumentalities, Accused Products and/or '802 Third- Party Products into the United States, providing directions and other materials to the Third Party Importer to enable such importation, and/or conditioning the receipt of benefits (included but not limited to payment) to the Third Party Importer on such importation. On information and belief, this behavior has continued since TI first became aware of the '802 patent and the infringement thereof.

TI's Response: Denied.

68. On information and belief, to the extent any entity other than TI, including but not limited to any foundry contracted or engaged by TI, uses the '802 Accused Instrumentalities to fabricate or manufacture the Accused Products and/or Imported '802 Third-Party Products in the United States for or on behalf of TI ("Third Party Manufacturer"), TI is liable for inducement of

infringement by the Third Party Manufacturer. TI has encouraged the Third Party Manufacturer to infringe the '802 patent and intended that it do so. This encouragement includes, without limitation, ordering or seeking the importation of the Accused Products from the Third Party Manufacturer since TI first became aware of the '802 patent, or instructing the Third Party Manufacturer to use the '802 Accused Instrumentalities for the manufacture or fabrication of the Accused Products.

TI's Response: Denied.

69. For example, by providing technical specification and development criteria of the Accused Products to the Third Party Manufacturer for manufacturing such products (and/or third party pad conditioner manufacturers), TI has induced, and continues to induce, third parties to infringe using the '802 Accused Instrumentalities. Specifically, by providing technical specification and/or design/development criteria of the Accused Products to the Third Party Manufacturer for manufacturing such products or to third-party pad conditioner manufacturers for designing, developing and/or configuring the '802 Accused Instrumentalities for manufacturing such products, TI has induced, and continues to induce, third parties to infringe the '802 patent (e.g., to ensure that the Accused Products are/were manufactured without errors or flaws or that the Accused Products meet TI's stringent technical/design/development criteria).

TI's Response: Denied.

70. Despite having notice of the '802 patent prior to the filing of this Complaint, TI has made a decision to continue the alleged inducement post-service of the Complaint. Indeed, following the filing of this Complaint, on information and belief, TI—acting with knowledge of the '802 patent—used and continues to use the '802 Accused Instrumentalities in the manufacture or fabrication of the Accused Products, and/or submitted and continues to submit purchase orders

for the ’802 Accused Instrumentalities to third-party pad conditioner manufacturers with the intent of using the ’802 Accused Instrumentalities for manufacturing or fabricating the Accused Products.

TI’s Response: Denied.

71. Through active inducement, TI has benefitted and continues to benefit from using the ’802 Accused Instrumentalities in the United States, or importing them into the United States, for the manufacture and fabrication of the Accused Products and third-party products that incorporate the Accused Products.

TI’s Response: Denied.

72. Dr. Sung has suffered, and continues to suffer, damages as a result of TI’s infringement of the ’802 patent.

TI’s Response: Denied.

73. TI has continued to infringe the ’802 patent since at least December 8, 2021, despite being on notice of the ’802 patent and its infringement. TI has therefore infringed the ’802 patent knowingly, willfully, deliberately, and in disregard of Dr. Sung’s patent rights since at least December 8, 2021, at least by performing acts of infringement with actual knowledge of its direct and indirect infringement or while remaining willfully blind to the fact of its direct and indirect infringement. As a result of at least this conduct, Plaintiff is entitled to enhanced damages under 35 U.S.C. § 284 and to attorneys’ fees and costs under 35 U.S.C. § 285.

TI’s Response: Denied.

74. Dr. Sung reserves the right to modify its infringement theories as discovery progresses in this case. Dr. Sung shall not be estopped or otherwise limited or restricted for purposes of its infringement contentions or its claim constructions by the claim charts that it

provides with this Complaint. Dr. Sung intends the claim charts for the ’802 patent to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure. The claim chart is not Dr. Sung’s preliminary or final infringement contentions or preliminary or final claim construction positions.

TI’s Response: TI lacks sufficient knowledge and information to admit or deny the allegations contained in this paragraph and therefore denies them.

COUNT III – INFRINGEMENT OF U.S. PATENT NO. 8,974,270

75. Plaintiff incorporates and realleges the preceding paragraphs as if fully set forth herein.

TI’s Response: TI incorporates by reference its responses to the allegations contained in the foregoing paragraphs.

76. At least as of December 8, 2021, Dr. Sung placed TI on actual notice of the ’270 patent and actual notice that its actions constituted and continued to constitute infringement of the ’270 patent. TI has had actual knowledge of the ’270 patent and its own infringement of the ’270 patent since at least that time.

TI’s Response: The statements of actual notice reflect conclusions of law, rather than statements of fact, to which no response is required. To the extent a response is required, TI admits it received a letter from the Timothy Devlin, dated December 8, 2021, and that the letter listed eight patents, including the three Asserted Patents. TI denies that Sung had complete ownership rights in the Asserted Patents at the time of Mr. Devlin’s letter. TI denies that it received actual notice of infringement through Mr. Devlin’s letter. TI denies all remaining allegation contained in this paragraph.

77. On information and belief, Defendant TI has directly infringed and continues to

infringe at least claim 1 of the '270 patent literally or under the doctrine of equivalents, by using in the United States, or importing into the United States, without authority or license, certain CMP pad conditioners, including 3M's pad conditioners and/or similar pad conditioners (e.g., pad conditioners with the same claimed structural characteristics and manufactured by other pad conditioner manufacturers not presently known) ("'270 Accused Instrumentalities") to design, develop, manufacture or fabricate semiconductor devices and/or integrated circuits, and systems, products, and/or devices containing these semiconductor devices and/or integrated circuits, including at least the Accused Products, in violation of 35 U.S.C. § 271(a).

TI's Response: Denied.

78. Additionally, on information and belief, TI sells and/or offers for sale the Accused Products in the United States. For example, TI provides direct sales through its own sales channels and/or its distributors and sells the Accused Products to businesses including original equipment manufacturers and electronic manufacturing service providers. On information and belief, these direct sales include sales of the Accused Products in the United States. For example, TI engages in sales, marketing, and contracting activity in the United States and/or with United States offices of its customers.

TI's Response: TI admits that it offers for sale, sells and/or markets its semiconductor products in the United States, through TI's website and/or through TI-authorized third-party distributors. TI denies all allegations of patent infringement in the United States or elsewhere and denies any remaining allegations contained in this paragraph.

79. Discovery is expected to uncover the full extent of TI's infringement of the '270 patent beyond the Accused Products already identified herein.

TI's Response: TI denies all allegations of infringement by TI or any TI product. TI

denies all remaining allegations contained in this paragraph.

80. The Accused Products are/were manufactured by a process including all of the limitations of at least claim 1 of the ’270 patent. The Accused Products are/were made by the claimed methods. Each of the Accused Products, for example, is or contains an integrated circuit fabricated or manufactured using, for example, at least one of the ’270 Accused Instrumentalities, such as 3M’s Trizact and Diamond pad conditioners.

TI’s Response: Denied.

81. For example, during the manufacture of the Accused Products, Defendant TI uses a CMP pad dresser (e.g., 3M’s Trizact pad conditioner) that includes a first monolayer of superabrasive particles disposed on and protruding from one side of a metal support layer, wherein the difference in protrusion distance between the highest protruding tip and the second highest protruding tip of the monolayer of superabrasive particles is less than or equal to about 50 microns; a second monolayer of superabrasive particles disposed on the metal support layer on an opposite side from the first monolayer, wherein the superabrasive particles of the second monolayer are positioned to have substantially the same distribution as the superabrasive particles of the first monolayer; and a rigid support coupled to the second monolayer of superabrasive particles opposite the first monolayer. On information and belief, TI contracted and continues to contract with 3M and/or other pad conditioner vendors to purchase and use the ’270 Accused Instrumentalities with the claimed structural characteristics for the manufacture or fabrication of the Accused Products by or on behalf of TI.

TI’s Response: Denied.

82. Attached hereto as Exhibit 14, and incorporated by reference herein, are claim charts detailing how the ’270 Accused Instrumentalities used to manufacture or fabricate the

Accused Products satisfy each element of at least claim 1 of the ’270 patent, literally or under the doctrine of equivalents. The chart illustrates a representative pad conditioner from 3M, which is representative of the remaining ’270 Accused Instrumentalities (including any pad conditioners that remain unknown to Plaintiff) because it has the same claimed structural characteristics as these remaining ’270 Accused Instrumentalities.

TI’s Response: TI denies all allegations of infringement and specifically denies that Exhibit 14 demonstrate infringement of the ’270 Patent by TI or any TI product. TI denies all remaining allegations contained or referenced in this paragraph.

83. On information and belief, at least as of December 8, 2021, TI has induced and continues to induce others, including third-party pad conditioner manufacturers, to infringe one or more claims of the ’270 patent, including, but not limited to, claim 1, pursuant to 35 U.S.C. § 271(b), by actively encouraging or inducing them to make, use, sell and/or offer to sell in the United States, the ’270 Accused Instrumentalities with the claimed characteristics for the manufacture of the Accused Products, through TI’s commitment to purchase the ’270 Accused Instrumentalities and actual order placement for the ’270 Accused Instrumentalities.

TI’s Response: Denied.

84. On information and belief, at least as of December 8, 2021, TI also has induced and continues to induce others actively, knowingly, and intentionally, including its suppliers and contract manufacturers, to infringe one or more claims of the ’270 patent, including, but not limited to, claim 1, pursuant to 35 U.S.C. § 271(b), by actively encouraging others to import into the United States, and/or make, use, sell, and/or offer to sell in the United States, the Accused Products or systems, devices, or products containing the Accused Products, by actively inducing others to infringe the ’270 patent by making, using, selling, offering for sale, marketing,

advertising, and/or importing the Accused Products to their customers for use in downstream products that infringe, or were manufactured using processes that infringe, the ’270 patent, and by instructing others to infringe the ’270 patent.

TI’s Response: Denied.

85. For example, TI actively promotes the sale and importation of the Accused Products in marketing materials, technical specifications, data sheets, web pages on its website (e.g., https://www.ti.com), press releases, training tutorials, development and design tools, user manuals, and developer forums as well as at trade shows (e.g., the Consumer Technology Association’s Consumer Electronics Show (“CES”)) and through its sales and distribution channels that encourage infringing sales, offers to sell, and importation of the Accused Products. As another example, TI’s representatives travel to customer sites in and outside the United States for sales, support, and/or importation activities that include working with customers to facilitate these customers’ infringing testing, marketing, importation, and sales activity. On information and belief, TI supplies customers with Accused Products so that they may be imported, sold, or offered for sale by those customers, and/or incorporated into third-party products (more below). For example, TI provides direct sales to original equipment manufacturers and electronic manufacturing service providers. On information and belief, these direct sales include sales to customers in and outside the United States. TI also promotes, publicly on its website, uses of the Accused Products by customers in the United States. TI additionally provides a wide range of technical support to its customers and businesses in connection with the Accused Products made using the ’802 Accused Instrumentalities by or on behalf of TI, including product-specific solutions (see, e.g., https://education.ti.com/en/customer-support; https://ticsc.service-now.com/csm; https://www.ti.com/info/contact-us.html) and community forums (e.g.,

https://e2e.ti.com/).

TI's Response: TI denies all allegations of infringement. TI admits that TI maintains a publicly available website, that the website advertises a variety of TI products, that the website contains user guides/manuals, reference designs, and other product documentation and materials for various TI products. TI admits that TI attends various trade shows where it provides information for certain TI products. TI admits that E2E support forums assist customers with the design process of certain TI products. TI admits that it provides customers of certain semiconductor products with various support resources relating to those products, including manuals, datasheets sheets, and various training materials. TI admits that it sells its semiconductor products through TI's website and/or through TI-authorized third-party distributors. TI denies the remaining allegations contained in this paragraph.

86. On information and belief, TI also actively encourages third-party pad conditioner manufacturers so that the '270 Accused Instrumentalities may be designed, developed, used, imported, sold, or offered for sale to TI with the claimed structural characteristics. On information and belief, TI assisted and continues to assist these third-party manufacturers, directly and/or through intermediaries, in the design, development or manufacture of the '270 Accused Instrumentalities and provides technical support or supports the sales and importation of the '270 Accused Instrumentalities (as well as the Accused Products that are/were manufactured using the '270 Accused Instrumentalities).

TI's Response: Denied.

87. Additionally, on information and belief, TI sells or offers for sale the Accused Products to third parties that incorporate the Accused Products into third party products ("the '270 Third Party Products").

TI's Response: TI admits that it sells or offers for sale its semiconductor products to third parties. TI lacks sufficient knowledge and information to admit or deny the remaining allegations contained in this paragraph and therefore denies them.

88. On information and belief, TI assists third parties, directly and/or through intermediaries, in the development and manufacture of the '270 Third Party Products and provides technical support and supports the sales and importation of the '270 Third Party Products.

TI's Response: TI admits that TI provides customers of certain semiconductor products with various support resources relating to those products, including manuals, datasheets, tutorials, and various training materials. TI denies all allegations of patent infringement and denies any remaining allegations contained in this paragraph.

89. On information and belief, the '270 Third Party Products are imported into the United States for use, sale, and/or offer for sale in this District and throughout the United States ("Imported '270 Third Party Products").

TI's Response: TI lacks sufficient knowledge and information to admit or deny the allegations contained in this paragraph and therefore denies them.

90. On information and belief, to the extent any entity other than TI, including but not limited to any of TI's third-party importers, imports the '270 Accused Instrumentalities, the Accused Products and/or '270 Third-Party Products into the United States for or on behalf of TI ("Third Party Importer"), TI is liable for inducement of infringement by the Third Party Importer. TI has encouraged the Third Party Importer to infringe the '270 patent and intended that it do so. This encouragement includes at least ordering or instructing the Third Party Importer to import the '270 Accused Instrumentalities, Accused Products and/or '270 Third- Party Products into the United States, providing directions and other materials to the Third Party Importer to enable such

importation, and/or conditioning the receipt of benefits (included but not limited to payment) to the Third Party Importer on such importation. On information and belief, this behavior has continued since TI first became aware of the ’270 patent and the infringement thereof.

TI’s Response: Denied.

91. On information and belief, to the extent any entity other than TI, including but not limited to any foundry contracted or engaged by TI, uses the ’270 Accused Instrumentalities to fabricate or manufacture the Accused Products and/or Imported ’270 Third-Party Products in the United States for or on behalf of TI (“Third Party Manufacturer”), TI is liable for inducement of infringement by the Third Party Manufacturer. TI has encouraged the Third Party Manufacturer to infringe the ’270 patent and intended that it do so. This encouragement includes, without limitation, ordering or seeking the importation of the Accused Products from the Third Party Manufacturer since TI first became aware of the ’270 patent, or instructing the Third Party Manufacturer to use the ’270 Accused Instrumentalities for the manufacture or fabrication of the Accused Products.

TI’s Response: Denied.

92. For example, by providing technical specification and development criteria of the Accused Products to the Third Party Manufacturer for manufacturing such products (and/or third party pad conditioner manufacturers), TI has induced, and continues to induce, third parties to infringe using the ’270 Accused Instrumentalities. Specifically, by providing technical specification and/or design/development criteria of the Accused Products to the Third Party Manufacturer for manufacturing such products or to third-party pad conditioner manufacturers for designing, developing and/or configuring the ’270 Accused Instrumentalities for manufacturing such products, TI has induced, and continues to induce, third parties to infringe

the ’270 patent (e.g., to ensure that the Accused Products are/were manufactured without errors or flaws or that the Accused Products meet TI’s stringent technical/design/development criteria).

TI’s Response: Denied.

93. Despite having notice of the ’270 patent prior to the filing of this Complaint, TI has made a decision to continue the alleged inducement post-service of the Complaint. Indeed, following the filing of this Complaint, on information and belief, TI—acting with knowledge of the ’270 patent—used and continues to use the ’270 Accused Instrumentalities in the manufacture or fabrication of the Accused Products, and/or submitted and continues to submit purchase orders for the ’270 Accused Instrumentalities to third-party pad conditioner manufacturers with the intent of using the ’270 Accused Instrumentalities for manufacturing or fabricating the Accused Products.

TI’s Response: Denied.

94. Through active inducement, TI has benefitted and continues to benefit from using the ’270 Accused Instrumentalities for the manufacture and fabrication of the Accused Products and third-party products that incorporate the Accused Products.

TI’s Response: Denied.

95. Dr. Sung has suffered, and continues to suffer, damages as a result of TI’s infringement of the ’270 patent.

TI’s Response: Denied.

96. TI has continued to infringe the ’270 patent since at least December 8, 2021, despite being on notice of the ’270 patent and its infringement. TI has therefore infringed the ’270 patent knowingly, willfully, deliberately, and in disregard of Dr. Sung’s patent rights since at least December 8, 2021, at least by performing acts of infringement with actual knowledge of its direct

and indirect infringement or while remaining willfully blind to the fact of its direct and indirect infringement. As a result of at least this conduct, Plaintiff is entitled to enhanced damages under 35 U.S.C. § 284 and to attorneys' fees and costs under 35 U.S.C. § 285.

TI's Response: Denied.

97. Dr. Sung reserves the right to modify its infringement theories as discovery progresses in this case. Dr. Sung shall not be estopped or otherwise limited or restricted for purposes of its infringement contentions or its claim constructions by the claim charts that it provides with this Complaint. Dr. Sung intends the claim charts for the '270 patent to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure. The claim chart is not Dr. Sung's preliminary or final infringement contentions or preliminary or final claim construction positions.

TI's Response: TI lacks sufficient knowledge and information to admit or deny the allegations contained in this paragraph and therefore denies them.

JURY DEMAND

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiff demands a trial by jury on all issues triable as such.

TI's Response: No response to the Jury Demand is necessary.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff Dr. Sung demands judgment for itself and against Defendant TI as follows:

A. A judgment that Defendant TI has directly infringed, and continues to infringe, one or more claims of each of the Asserted Patents;

B. A judgment that Defendant TI has induced infringement, and continues to induce

infringement, of one or more claims of the Asserted Patents;

C. A judgment awarding Plaintiff damages to be paid by Defendant TI in an amount to be proven at trial adequate to compensate Plaintiff for TI's past infringement and any continuing or future infringement through the date such judgment is entered, but in no event less than a reasonable royalty for TI's infringement;

D. A judgment awarding Plaintiff treble damages pursuant to 35 U.S.C. § 284 as a result of Defendant TI's willfulness;

E. A judgment and order finding that this case is exceptional and awarding Plaintiff its reasonable attorneys' fees to be paid by Defendant TI as provided by 35 U.S.C. § 285;

F. A judgment awarding expenses, costs, and disbursements in this action against Defendant TI, including pre-judgment and post-judgment interest; and

G. A judgment awarding Plaintiff such other relief as the Court may deem just and equitable.

TI's Response: No response to the Prayer for Relief is necessary. To the extent a response is required, TI denies that Dr. Sung is entitled to any of the requested relief against TI.

DEFENSES

TI asserts the following defenses to Dr. Sung's claims without admitting or acknowledging that it bears the burden of proof as to any of the defenses asserted. TI reserves the right to amend its Answer to add additional defenses.

FIRST DEFENSE: NON-INFRINGEMENT

TI does not infringe and has never infringed any valid and enforceable claim of the '862 Patent, '802 Patent, or the '270 Patent ("Asserted Patents"), under any theory—directly, indirectly,

jointly with any other person or entity, by inducement, contributorily, literally, under the doctrine of equivalents, or otherwise under any section of 35 U.S.C. § 271—and as such, is without any liability to Dr. Sung.

SECOND DEFENSE: INVALIDITY

Each of the claims of the Asserted Patents are invalid for failure to comply with the requirements of the patent laws of the United States, including provisions of 35 U.S.C. §§ 101, 102, 103, and/or 112.

THIRD DEFENSE: LIMITATION ON DAMAGES

Any recovery of damages by Dr. Sung is limited in whole or in part by 35 U.S.C. §§ 252, 286, 287, and/or 288.

FOURTH DEFENSE: LIMITATION FOR SALES COVERED BY 28 U.S.C. § 1498(A)

Dr. Sung's remedies are limited under 28 U.S.C. § 1498(a) for the TI accused products or services that are provided, made, or used by or for the government of the United States of America.

FIFTH DEFENSE: LICENSE

Sung's claims for patent infringement are precluded in whole or in part: (i) to the extent that any accused instrumentality and/or TI accused products are imported by, sold by or to, offered for sale by, made by, made for, or otherwise supplied (directly or indirectly) by or to any entity or entities having express or implied licenses to the Asserted Patents; (ii) under the doctrine of patent exhaustion; and/or (iii) any doctrine precluding double recovery for claims of infringement attributable to the same device.

SIXTH DEFENSE: STANDING

To the extent that Plaintiff lacks all substantive rights to bring suit and to exclude others from practicing the claims of any of the Asserted Patents, Plaintiff's claims are barred by a lack of

standing.

RESERVATION OF RIGHT TO ASSERT ADDITIONAL DEFENSES

TI has not knowingly or intentionally waived any applicable defenses, and it reserves the right to assert and rely upon other applicable defenses that may become available or apparent throughout the course of this action. TI reserves the right to amend, or seek to amend, its answer, including its affirmative and other defenses.

COUNTERCLAIMS

Pursuant to Federal Rule of Civil Procedure 13, Texas Instruments Incorporated ("TI") counterclaims against Chien-Min Sung, Ph.D. ("Counterclaim-Defendant" or "Dr. Sung") and, in support thereof, alleges the following:

PARTIES

1. Counterclaim-Plaintiff TI is a Delaware corporation with a principal place of business at 12500 TI Boulevard, Dallas, TX 75243.

2. Upon information and belief, Counterclaim-Defendant Dr. Sung is an individual residing at No. 4, Lane 32, Chung Cheng Road, Tansui, Taipei, Taiwan.

JURISDICTION AND VENUE

3. This is an action for declaratory judgment of invalidity of the '862 Patent,'802 Patent, and '270 Patent. This Court has subject matter jurisdiction over this claim pursuant to 28 U.S.C. §§ 1331, 1338(a), 2201, and 2202.

4. Venue is proper in the Eastern District of Texas, under 28 U.S.C. §§ 1391 and 1400, as a result of Dr. Sung having filed this action in this District. By filing its Complaint in this District, Dr. Sung has consented to personal jurisdiction and venue.

BACKGROUND

5. On August 21, 2023, Dr. Sung filed suit against TI, claiming infringement of the ’862 Patent,’802 Patent, and ’270 Patent. In his Complaint, Dr. Sung alleges he is the owner by assignment of the right, title and interest in and to the Asserted Patents, including the right to collect for past damages. Compl. (ECF No. 1) ¶¶ 20, 22, 24.

6. An actual, substantial, and justiciable controversy, within the meaning of 28 U.S.C. §§ 2201 and 2202, exists between Dr. Sung and TI concerning the non-infringement and invalidity of the Asserted Patents. This controversy is of sufficient immediacy and reality to warrant the issuance of a declaratory judgment.

COUNT ONE

(Declaratory Judgment of Patent Invalidity of the ’862 Patent)

7. TI incorporates paragraphs 1–6 of its Counterclaims as if fully set forth herein.

8. The claims of the ’862 Patent are invalid for failure to comply with one or more requirements of patentability, including requirements under 35 U.S.C. §§ 101, 102, 103, and/or 112.

9. TI is entitled to a declaratory judgment that the claims of the ’862 Patent are invalid.

COUNT TWO

(Declaratory Judgment of Patent Invalidity of the ’802 Patent)

10. TI incorporates paragraphs 1–6 of its Counterclaims as if fully set forth herein.

11. The claims of the ’802 Patent are invalid for failure to comply with one or more requirements of patentability, including requirements under 35 U.S.C. §§ 101, 102, 103, and/or 112.

12. TI is entitled to a declaratory judgment that the claims of the’802 Patent are invalid.

COUNT THREE

(Declaratory Judgment of Patent Invalidity of the ’270 Patent)

13. TI incorporates paragraphs 1–6 of its Counterclaims as if fully set forth herein.

14. The claims of the’270 Patent are invalid for failure to comply with one or more requirements of patentability, including requirements under 35 U.S.C. §§ 101, 102, 103, and/or 112.

15. TI is entitled to a declaratory judgment that the claims of the’270 Patent are invalid.

DEMAND FOR JURY TRIAL

TI demands a jury trial on all issues that may be so tried.

PRAYER FOR RELIEF

For these reasons, TI respectfully requests that this Court enter judgment in its favor and grant the following relief:

a. Enter judgment that TI does not and has not infringed any valid and enforceable claim of the ’862 Patent,’802 Patent, and ’270 Patent under any theory—directly, indirectly, jointly with any other person or entity, by inducement, contributorily, literally, under the doctrine of equivalents, or otherwise under any section of 35 U.S.C. § 271;

b. Enter judgment and a declaration that the claims of the ’862 Patent,’802 Patent, and ’270 Patent are invalid and unenforceable;

c. Deny each request for relief made by Dr. Sung;

d. Enter an order declaring that this is an exceptional case and award TI its costs, expenses, and reasonable attorney fees under 35 U.S.C. § 285 and all other applicable statutes, rules, and common law;

e. Dismiss Dr. Sung's Complaint against TI with prejudice; and,

f. Any such other relief as the Court may deem appropriate and just under the circumstances.

Dated: October 16, 2023

Respectfully submitted,

/s/ Amanda A. Abraham

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ATTORNEYS FOR DEFENDANT TEXAS INSTRUMENTS INCORPORATED

CERTIFICATE OF SERVICE

The undersigned certifies that all counsel of record who have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system on this the 16th day of October, 2023.

/s/ Amanda A. Abraham
Amanda A. Abraham

EXHIBIT 4

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION

CHIEN-MIN SUNG	§	
	§	
v.	§	CIVIL NO. 4:23-CV-753-SDJ
	§	
TEXAS INSTRUMENTS	§	
INCORPORATED	§	

ORDER GOVERNING PROCEEDINGS
(Patent Case)

This case is **SET** for Rule 16 Management Conference on **Wednesday, January 3, 2024, at 2:00 p.m.** at the United States Courthouse, 7940 Preston Road, Plano, TX 75024. Lead counsel for each party, with authority to bind their respective clients, and all unrepresented parties, shall be present. Continuance of the management conference will not be allowed absent a showing of good cause.[1]

A. SETTLEMENT

If the parties reach a settlement or other resolution of the case, Plaintiff's counsel shall immediately submit a notice advising the Court of the status of the case. **If such notice is not submitted to the Court, the Court may order counsel to appear at a hearing to address the failure to submit a timely notice.** Thereafter, the Court may enter such orders as are just and necessary to ensure prompt resolution of the case.

B. Rule 26(f) Attorney Conference

The Rule 26(f) attorney conference in this case must occur by **November 24, 2023**. The conference may be by telephone. Rule 26(f) requires attorneys of record and all unrepresented parties to confer and attempt in good faith to agree on a proposed scheduling order, *see* Appendix B, and to electronically file a joint report outlining their proposals **no later than December 8, 2023**.

[1] Before the case management conference, counsel and unrepresented parties should review the FEDERAL RULES OF CIVIL PROCEDURE, the LOCAL COURT RULES FOR THE EASTERN DISTRICT OF TEXAS, and the PATENT RULES of this Court (all as most recently amended). The Local Court Rules and the Patent Rules are available on the Eastern District of Texas website (http://www.txed.uscourts.gov).

Before commencing the Rule 26(f) conference, counsel must discuss settlement options with their clients, including whether an offer or demand should be made at the Rule 26(f) attorney conference.

The parties must include the following matters in the joint conference report:

1. Suggested modifications of the proposed deadlines for the scheduling order set out in Appendix B, including:

    a. The need for and any specific limits on discovery relating to claim construction, including depositions of witnesses, including expert witnesses;

    b. The scheduling of a Claim Construction Pre-hearing Conference to be held after the Joint Claim Construction and Pre-hearing Statement provided for in P.R.4-3 has been filed.

2. If the parties believe mediation may be appropriate, and the parties can agree upon a mediator, the name, address, and phone number of that mediator should be stated.

3. What changes, if any, should be made to the limitations on discovery imposed by the rules, including the number of depositions and interrogatories.

4. The identity of persons expected to be deposed.

5. Any issues relating to disclosure of information (electronically stored and otherwise) including the form or forms in which it should be produced and timing of production. *See infra* Section E - Mandatory Disclosures.

6. Any issues relating to preserving discoverable information, including whether a Preservation Order is needed to protect any documents and/or electronically stored information ("ESI").

7. Whether any other orders should be entered by the Court pursuant to FED. R. CIV. P. 26(c), FED. R. CIV. P. 16(b), or FED. R. CIV. P. 16(c).

8. Estimated trial time.

9. The names of the attorneys who will appear on behalf of the parties at the management conference (the appearing attorney must be an attorney of record and have full authority to bind the client).

10. Any other matters counsel deem appropriate for inclusion in the joint conference report.

C. Motions to Transfer

Any motions to transfer shall be filed no later than twenty-one days before the Case Management Conference.

D. Scheduling Conference

At the scheduling conference, counsel shall be prepared to discuss the proposed scheduling order and the following issues related to the Claim Construction Hearing:

1. Whether the Court will hear live testimony at the Claim Construction Hearing;
2. The order of presentation at the Claim Construction Hearing; and
3. Estimated time limits for the Claim Construction Hearing.

E. Protective Order

The Protective Order, attached as Appendix A, is hereby entered in this case and shall apply to all discovery and disclosures herein.

F. Contested Motion Practice

Counsel and parties shall comply with Local Rules CV-7, 10, 11, and 56, in addition to the Federal Rules of Civil Procedure. Local Rule CV-7 requires you to attach affidavits and other supporting documents to the motion or response. **Labeled tabs** on the attachments to the **courtesy copy** will make it easier to find them.

If a document filed electronically exceeds twenty (20) pages in length, including attachments, a paper copy of the filed document must be sent contemporaneously to Judge Jordan's chambers in Plano. The parties are also encouraged, although not required, to send a paper copy of any document ten (10) pages or more in length, including attachments, to Judge Jordan's chambers.

Pursuant to Local Rule CV-7(b), highlight in the courtesy copy the portions of the affidavits or other supporting documents which are cited in your motion or response.

Any reply or sur-reply must be filed in accordance with Local Rule CV-6 and Local Rule CV-7(f). The parties are reminded that "[t]he Court need **not** wait for the reply or sur-reply before ruling on the motion." Local Rule CV-7(f) (emphasis added).

G. Safeguarding Personal Information

The Judicial Conference of the United States has implemented policies to protect sensitive private information about parties, witnesses, and others involved in a civil, criminal, or bankruptcy case. To that end, all documents filed with the Court

and made available to the public, whether electronically or on paper, should limit certain information as follows:

- for Social Security numbers, use only the last four digits;
- for financial account numbers, use only the last four digits;
- for names of minor children, use only their initials; and
- for dates of birth, use only the year.

If such information is elicited during testimony or other court proceedings, it will become available to the public when the official transcript is filed at the courthouse unless and until it is redacted. The better practice is for you to avoid introducing this information into the record in the first place. Please take this into account when questioning witnesses or making other statements in court.

H. Compliance with Patent Rules

The Local Patent Rules of the Eastern District of Texas (cited as P.R._ and available on the Eastern District Website), shall apply to all proceedings in this case. In the absence of a showing of good cause by a party objecting to a required disclosure, the parties shall disclose, without further request or order, all information required by the Patent Rules in accordance with the deadlines set by the Rules.

I. Mandatory Disclosures

To the extent any such information is not required by the Local Patent Rules to be disclosed at an earlier date, Mandatory Disclosures shall be completed by the date set in the Scheduling Order entered after the Rule 16 management conference. Mandatory Disclosures consist of Initial Disclosures required by FED. R. CIV. P. 26(a)(1) and the information listed below:

1. The correct names of the parties to the action.
2. The name and, if known, address and telephone number of any potential parties to the action.
3. The name and, if known, the address and telephone number of persons having knowledge of facts relevant to the claim or defense of any party, a brief characterization of their connection to the case, and a fair summary of the substance of the information known by such person. This may be combined with the list of persons required under Rule 26(a)(1)(A)(i) so two list are not needed.
4. The authorizations described in Local Rule CV-34.

5. Depending upon agreements of the parties or ruling of the Court, a copy of, or a description by category and location where each is available for inspection and copying, all documents, ESI, and tangible things that are in the possession, custody, or control of the party relevant to the claims or defenses of any party. In this regard, the parties might agree to exchange images of documents electronically or by means of computer disk instead of paper; or the parties might agree to review and copy disclosure materials at the offices of the attorneys representing the parties instead of requiring each side to furnish copies of the disclosure materials. Various forms of staggered, or rolling, disclosures might be considered. This may be combined with disclosures under Rule 26(a)(1)(A)(ii) to avoid duplication. Parties are encouraged to agree upon provision of information by electronic means. See Local Rule CV-26(d) for the meaning of "relevant to the claim or defense of any party."

The duty of disclosure is continuing and requires supplementation as set out in Fed. R. Civ. P. 26(e).

A party that fails to disclose any information required to be disclosed by any order of this Court or the Patent Rules of this Court will not, unless such failure is harmless, be permitted to use such evidence at trial, hearing or in support of a motion.

To the extent that any party pleads a claim for relief or defensive matter other than those addressed in the Court's Patent Rules, the parties shall also, without waiting for a request from other parties, exchange, by the date set for Mandatory Disclosures, all such information relevant to those additionally pleaded claims or defenses involved in this action.

Absent agreement of the parties, depositions of witnesses shall not be taken until after the Initial Rule 16 management conference. Following the management conference, the Court will enter a scheduling order establishing parameters of discovery and setting deadlines controlling disposition of the case.

J. Discovery Limitations

Given the extensive disclosures required without a request from opposing party, absent further order of this Court, discovery in this cause is limited to the disclosures described in this order, the Local Patent Rules, and the Scheduling Order, together with 45 interrogatories, 45 requests for admissions, depositions on written questions of custodians of business records for third parties, and 40 hours of deposition time per side. "Side" means a party or a group of parties with a common interest. Time will count whether used in direct examination or cross-examination of any witness.

Any party may move at the Initial Management Conference to modify these limitations for good cause.

K. Privileged Information

There is no duty to disclose privileged documents or information. However, the parties are directed to meet and confer concerning privileged documents or information at the Initial Rule 26 Conference. As directed in the Scheduling Order, the parties shall exchange privilege logs identifying the documents or information and the basis for any disputed claim of privilege in manner that, without revealing information itself privileged or protected, will enable the other parties to assess the applicability of the privilege or protection. Any party may move the Court for an order compelling the production of any documents or information identified on any other party's privilege log. If such a motion is made, the party asserting privilege shall respond to the motion within the time period provided by Local Rule CV-7. The party asserting privilege shall file with its response any proof in the form of declarations or affidavits to support assertions of privilege, along with the documents over which privilege is asserted for *in camera* inspection.

If the parties have no disputes concerning privileged documents or information, then the parties shall inform the Court of that fact.

L. Failure to Serve

Any defendant who has not been served with the summons and complaint within 90 days after the filing of the complaint shall be dismissed, **without further notice**, unless prior to such time the party on whose behalf such service is required shows good cause why service has not been made. *See* FED. R. CIV. P. 4(m).

M. Fictitious Parties

The name of every party shall be set out in the complaint. *See* FED. R. CIV. P. 10(a). The use of fictitious names is disfavored by federal courts. *See, e.g.*, *Doe v. Blue Cross & Blue Shield*, 112 F.3d. 869, 872 (7th Cir. 1997). It is hereby **ORDERED** that this action be **DISMISSED** as to all fictitious parties. Dismissal is without prejudice to the right of any party to take advantage of the provisions of Rule 15(c).

N. Compliance

Attorneys and *pro se* litigants who appear in this Court shall comply with the deadlines set forth in the Federal Rules of Civil Procedure, the Local Rules for the Eastern District of Texas as modified by the Patent Rules of this Court, and this Order. **A party is not excused from the requirements of a Rule or scheduling order by virtue of the fact that dispositive motions are pending, the party has not completed its investigation, the party challenges the sufficiency of the opposing party's disclosures, or because another party has failed to comply with this Order or the rules.**

Failure to comply with relevant provisions of the Local Rules, the Federal Rules of Civil Procedure, the Patent Rules of this Court, or this Order may result in the exclusion of evidence at trial, the imposition of sanctions by the Court, or both. Counsel are reminded of Local Rule AT-3, particularly AT-3(i), (j).

O. Resources

The Eastern District of Texas website (http://www.txed.uscourts.gov) contains the Eastern District Local Rules and the Local Patent Rules, links to other judicial sites, and other information. For a fee, the PACER system allows you to access case information via the internet. To establish a PACER account, call (800) 676-6856.

P. Appendices

Appendices A and B are attached and incorporated herein.

So ORDERED and SIGNED this 25th day of October, 2023.

SEAN D. JORDAN
UNITED STATES DISTRICT JUDGE

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION

CHIEN-MIN SUNG	§	
	§	
v.	§	CIVIL NO. 4:23-CV-753-SDJ
	§	
TEXAS INSTRUMENTS	§	
INCORPORATED	§	

PROTECTIVE ORDER
(Appendix A)

The Court, *sua sponte*, issues this Protective Order to facilitate document disclosure and production under the Local Rules of this Court and the Federal Rules of Civil Procedure. Unless modified pursuant to the terms contained in this Order, this Order shall remain in effect through the conclusion of this litigation.

In support of this order, the Court finds that:

1. Documents or information containing confidential proprietary and business information and/or trade secrets ("Confidential Information") that bear significantly on the parties' claims or defenses is likely to be disclosed or produced during the course of discovery in this litigation;
2. The parties to this litigation may assert that public dissemination and disclosure of Confidential Information could severely injure or damage the party disclosing or producing the Confidential Information and could place that party at a competitive disadvantage;
3. Counsel for the party or parties receiving Confidential Information are presently without sufficient information to accept the representation(s) made

by the party or parties producing Confidential Information as to the confidential, proprietary, and/or trade secret nature of such Confidential Information; and

4. To protect the respective interests of the parties and to facilitate the progress of disclosure and discovery in this case, the following Order should issue:

IT IS THEREFORE ORDERED THAT:

1. Documents or discovery responses containing Confidential Information disclosed or produced by any party in this litigation are referred to as "Protected Documents." Except as otherwise indicated below, all documents or discovery responses designated by the producing party as "Confidential" and which are disclosed or produced to the attorneys for the other parties to this litigation are Protected Documents and are entitled to Confidential Treatment as described below.
2. Protected Documents shall not include (a) advertising materials, (b) materials that on their face show that they have been published to the general public, or (c) documents that have submitted to any governmental entity without request for Confidential Treatment.
3. At any time after the delivery of Protected Documents, counsel for the party or parties receiving the Protected Documents may challenge the Confidential designation of all or any portion thereof by providing written notice thereof to counsel for the party disclosing or producing the Protected Documents. If the parties are unable to agree as to whether the confidential designation of

discovery material is appropriate, the party or parties receiving the Protected Documents shall certify to the Court that the parties cannot reach an agreement as to the confidential nature of all or a portion of the Protected Documents. Thereafter, the party or parties disclosing or producing the Protected Documents shall have ten (10) days from the date of certification to file a motion for protective order regarding any Protected Documents in dispute. The party or parties producing the Protected Documents shall have the burden of establishing that the disputed Protected Documents are entitled to confidential treatment. If the party or parties producing the Protected Documents do not timely file a motion for protective order, then the Protected Documents in dispute shall no longer be subject to Confidential Treatment as provided in this Order. All Protected Documents are entitled to Confidential Treatment pursuant to the terms of this Order unless and until the parties agree in writing to the contrary, a party fails to timely move for a protective order, or a contrary determination is made by the Court as to whether all or a portion of a Protected Document is entitled to Confidential Treatment.

4. Confidential Treatment means that Protected Documents and any information contained therein shall not be used or shown, disseminated, copied, or in any way communicated to anyone for any purpose whatsoever, except as provided for below:

    a. Protected Documents and any information contained therein shall be disclosed only to the following persons ("Qualified Persons"):

i. Outside counsel of record in this action for the party or party receiving Protected Documents or any information contained therein;

ii. Employees of such counsel (excluding experts and investigators) assigned to and necessary to assist such counsel in the preparation and trial of this action; and

iii. The Court.

b. Protected Documents and any information contained therein shall be used solely for the prosecution of this litigation.

5. Outside counsel of record for the party or parties receiving Protected Documents may create an index of the Protected Documents and furnish it to attorneys of record representing or having represented parties involved in litigation involving the claims alleged in this suit against the party or parties disclosing or producing the Protected Documents. The index may only identify the document, date, author, and general subject matter of any Protected Document, but may not reveal the substance of any such document. Counsel for the party or parties receiving Protected Documents shall maintain a current log of the names and addresses of persons to whom the index was furnished.

6. The term "copy" as used herein means any photographic, mechanical, or computerized copy or reproduction of any document or thing, or any verbatim transcript, in whole or in part, of such document or thing.

7. To the extent that Protected Documents or information contained therein are used in depositions, such documents or information shall remain subject to the provisions of this Order, along with the transcript pages of the deposition referring to the Protected Documents or information contained therein.
8. Any court reporter or transcriber who reports or transcribes deposition testimony in this action shall agree that all "confidential" information designated as such under this Order shall remain "confidential" and shall not be disclosed by them, except pursuant to the terms of this Order, and that any notes or transcriptions of such deposition testimony (and any accompanying exhibits) will be retained by the reporter or delivered to counsel of record.
9. Inadvertent or unintentional production of documents or information containing Confidential Information which are not designated "confidential" shall not be deemed a waiver in whole or in part of a claim for confidential treatment.
10. The party or parties receiving Protected Documents shall not under any circumstances sell, offer for sale, advertise, or publicize Protected Documents or any information contained therein.
11. After termination of this litigation, the provisions of this Order shall continue to be binding, except with respect to those documents and information that become a matter of public record. This Court retains and shall have continuing jurisdiction over the parties and recipients of the Protected Documents for

enforcement of the provisions of this Order following termination of this litigation.

12. Upon termination of this action by dismissal, judgment, or settlement, counsel for the party or parties receiving Protected Documents shall return the Protected Documents to the counsel for the party or parties disclosing or producing the Protected Documents. The party or parties receiving the Protected Documents shall keep their attorney work product which refers or relates to any Protected Documents. Attorney work product may be used in subsequent litigation provided that such use does not disclose Protected Documents or any information contained therein.

13. This Order shall be binding upon the parties and their attorneys, successors, executors, personal representatives, administrators, heirs, legal representatives, assigns, subsidiaries, divisions, employees, agents, independent contractors, or other persons or organizations over which they have control.

The Court anticipates that the parties may file a motion to modify the terms hereof with respect to the sharing of Protected Documents with experts and consultants, shifting the cost burden of production equitably, and other terms that may be reasonably required to protect a party as provided in Rule 26(b) or (c) of the Federal Rules of Civil Procedure.

PROPOSED DEADLINES
(Appendix B)

Parties are directed to discuss the proposed deadlines in conjunction with the E.D. Tex. Patent Rules.[2]

To be discussed at mgmt. conf.	Mediation. The Court will appoint a mediator at the Scheduling Conference.
10 days after mgmt. conf.	P.R. 3-1 Disclosure of Asserted Claims and Infringement Contentions (and P.R. 3-2 document production) to be served.
5 weeks after mgmt. conf.	Join additional parties. P.R. 3-3 Invalidity Contentions (and P.R. 3-4 document production) to be served. To the extent not already required to be disclosed, exchange Mandatory Disclosures on all issues, including damages.
No later than 45 days after mgmt. conf.	Parties to exchange proposed terms for construction and identify any claim element governed by 35 U.S.C. § 112, ¶ 6 (P.R. 4-1).
7 weeks after mgmt. conf.	Privilege logs to be exchanged by parties (or a letter to the Court stating that there are no disputes as to claims of privileged documents).
No later than 65 days after mgmt. conf.	Parties to exchange preliminary proposed claim construction and extrinsic evidence supporting same. (P.R. 4-2).
13 weeks after mgmt. conf.	Parties' Final Amended Pleadings.[3] (A motion for leave is required.)
No later than 95 days after mgmt. conf.	Joint Claim Construction and Prehearing Statement to be filed. (P.R. 4-3). Provide an

[2] If a deadline falls on a Saturday, Sunday, or a legal holiday as defined in Federal Rule of Civil Procedure 6, the effective date is the first federal court business day following the deadline imposed.

[3] Except as otherwise provided by Federal Rule of Civil Procedure 12(a)(4).

	estimate of how many pages are needed to brief the disputed claims.
16 weeks after mgmt. conf.	Respond to Amended Pleadings.
No later than 125 days after mgmt. conf.	Completion date for discovery on claim construction. (P.R. 4-4).
No later than 140 days after mgmt. conf.	Opening claim construction brief. (P.R. 4-5(a)).
No later than 2 weeks after claim construction brief	Responsive claim construction brief. (P.R. 4-5(b)).
No later than 7 days after response	Reply claim construction brief. (P.R. 4-5(c)).
4 weeks before claim construction hearing	Submit technology synopsis/tutorial (both hard copy and disk).
At least 10 days before claim construction hearing	Parties to file joint claim construction and chart. (P.R. 4-5(d)). Parties shall work together to agree on as many claim terms as possible.
Date of claim construction hearing	Claim Construction hearing **Monday, June 17, 2024, at 10:00 a.m.** at the United States Courthouse, 7940 Preston Road, Plano, TX 75024.
5 weeks after claim construction hearing	Deadline for Initial Mandatory Disclosure of all persons, documents, data compilations and tangible things, which are relevant to a claim or defense of any party and which has not previously been disclosed. This deadline is not an extension of earlier deadlines set out in this Court's order or the Patent Rules, nor an excuse to delay disclosure of information. It is a "catchall" deadline for provision of all remaining information which may be relevant to a claim or defense of any party at trial.

6 weeks after claim construction hearing	Parties shall notify the Court of the name, address, and telephone number of the agreed-upon mediator, or request that the Court select a mediator, if they are unable to agree on one.
9 weeks after claim construction hearing	Parties with burden of proof to designate Expert Witnesses other than claims construction experts and provide their expert witness reports, to include for ALL experts all information set out in Rule 26(a)(2)(B). Comply with P.R. 3-7 (Designation of Willfulness Opinions).
11 weeks after claim construction hearing	Parties to Designate Expert Witnesses on issues for which the parties do not bear the burden of proof, and provide their expert witness report, to include for ALL experts all information set out in Rule 26(2)(B). **Note: Objections to any expert, including *Daubert* motions, shall be filed within 3 weeks after the expert's Report has been disclosed. Such objections and motions are limited to ten pages each.**
12 weeks after claim construction hearing	Mediation deadline.
13 weeks after claim construction hearing	Discovery deadline. All discovery must be served in time to be completed by this deadline.
16 weeks after claim construction hearing (and no later than 110 days prior to the filing of the Joint Final PTO)	File Dispositive Motions and any other motions that may require a hearing. Regardless of how many dispositive motions a party files, each party is limited to a total of sixty pages for such motions. Each individual motion shall comply with Local Rule CV-7. **Responses to motions shall be due in accordance with Local Rule CV-7(e).**

5 weeks before final pretrial conference	Counsel and unrepresented parties are each responsible for contacting opposing counsel and unrepresented parties to determine how they will prepare the Joint Final Pretrial Order, *see* www.txed.uscourts.gov, and Proposed Jury Instructions and Verdict Form (or Proposed Findings of Fact and Conclusions of Law in nonjury cases).
30 days before final pretrial conference	Motions in limine due. File Joint Final Pretrial Order. Exchange Exhibits and deliver copies to the Court. At this date, all that is required to be submitted to the Court is a hyperlinked exhibit list on disk (2 copies) and no hard copies.
4 weeks before final pretrial conference	Video Deposition Designation due. Each party who proposes to offer a deposition by video shall serve on all other parties a disclosure identifying the line and page numbers to be offered. All other parties will have seven calendar days to serve a response with any objections and requesting cross examination line and page numbers to be included. Counsel must consult on any objections and only those which cannot be resolved shall be presented to the Court. The party who filed the initial Video Deposition Designation is responsible for preparation of the final edited video in accordance with all parties' designations and the Court's rulings on objections.
2 weeks before final pretrial conference	Response to motions in limine due. File objections to witnesses, deposition extracts, and exhibits, listed in pre-trial order. (This does not extend the deadline to object to expert witnesses.) If numerous objections are filed, the Court may set a hearing prior to docket call. File Proposed Jury Instructions/Form of Verdict (or Proposed Findings of Fact and Conclusions of Law). File Proposed Voir Dire Questions.

02/02/2025	Final Pretrial Conference at 1:30 p.m. at the United States Courthouse located at 7940 Preston Road, Plano, TX 75024.
To be determined	9:00 a.m. Jury Selection and Trial at the United States Courthouse located at 7940 Preston Road, Plano, TX 75024.

EXHIBIT 5

CSC

Notice of Service of Process

null / ALL
Transmittal Number: 27944850
Date Processed: 11/03/2023

Primary Contact: Sheryl Arneson
3M Company
3M Center
Bldg 220-9E-02 220-10W/F06
Saint Paul, MN 55144-1000

Electronic copy provided to: Canhnha Luu
Cheryl Muellner

Entity:	3M Company Entity ID Number 3571748
Entity Served:	3M Company
Title of Action:	Chien-Min Sung vs. Texas Instruments Incorporated
Matter Name/ID:	Chien-Min Sung vs. Texas Instruments Incorporated (14813074)
Document(s) Type:	Subpoena
Nature of Action:	Information/Appearance Request
Court/Agency:	U.S. District Court Eastern District, TX
Case/Reference No:	4:23-cv-00753-SDJ
Jurisdiction Served:	Delaware
Date Served on CSC:	11/03/2023
Answer or Appearance Due:	11/17/2023
Originally Served On:	CSC
How Served:	Personal Service
Sender Information:	Devlin Law Firm LLC 302-449-9010

Information contained on this transmittal form is for record keeping, notification and forwarding the attached document(s). It does not constitute a legal opinion. The recipient is responsible for interpreting the documents and taking appropriate action.

To avoid potential delay, please do not send your response to CSC
251 Little Falls Drive, Wilmington, Delaware 19808-1674 (888) 690-2882 | sop@cscglobal.com

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

CHIEN-MIN SUNG, Plaintiff, v. TEXAS INSTRUMENTS INCORPORATED Defendant.	C.A. No. 4:23-cv-00753-SDJ DEMAND FOR JURY TRIAL

NOTICE OF SERVICE OF SUBPOENA TO TESTIFY AT A DEPOSTION
AND FOR PRODUCTION OF DOCUMENTS ON 3M COMPANY

TO ALL PARTIES AND THEIR ATTORNEYS OF RECORD:

PLEASE TAKE NOTICE that pursuant to Rule 45 of the Federal Rules of Civil Procedure, Plaintiff CHIEN-MIN SUNG ("Dr. Sung" or "Plaintiff") intends to serve a subpoena to testify at a deposition and for the production of documents on 3M Company ("3M"). A copy of the subpoena is attached hereto.

Pursuant to Rule 45 of the Federal Rules of Civil Procedure, Plaintiff respectfully requests that on or before November 17, 2023, Saesol produce the documents described in Attachment A of the attached Subpoena to Plaintiff either electronically or at 4501 Highway 377 South Brownwood, Texas 76804. Additionally, Plaintiff requests that on December 1, 2023, or such other date as mutually agreed upon, 3M appear to testify at a deposition on topics described in Attachment A either remotely via videoconference, at 4501 Highway 377 South Brownwood, Texas 76804, or at a location to be agreed.

Dated: November 3, 2023

By: */s/ Alex Chan*

Alex Chan
achan@devlinlawfirm.com
DEVLIN LAW FIRM LLC
1526 Gilpin Avenue
Wilmington, Delaware 19806
Telephone: (302) 449-9010
Facsimile: (302) 353-4251

Attorney for Plaintiff,
Dr. Chien-Min Sung

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing document has been served on all counsel of record via email on November 3, 2023.

/s/ Alex Chan
Alex Chan

AO 88A (Rev. 12/20) Subpoena to Testify at a Deposition in a Civil Action

UNITED STATES DISTRICT COURT

for the

Eastern District of Texas

CHIEN-MIN SUNG *Plaintiff* v. TEXAS INSTRUMENTS INCORPORATED *Defendant*	))))))	Civil Action No. 4:23-cv-753-SDJ

SUBPOENA TO TESTIFY AT A DEPOSITION IN A CIVIL ACTION

To: 3M Company, c/o CORPORATION SERVICE CO., 251 LITTLE FALLS, WILMINGTON, DE 19808

(Name of person to whom this subpoena is directed)

☑ Testimony: YOU ARE COMMANDED to appear at the time, date, and place set forth below to testify at a deposition to be taken in this civil action. If you are an organization, you must promptly confer in good faith with the party serving this subpoena about the following matters, or those set forth in an attachment, and you must designate one or more officers, directors, or managing agents, or designate other persons who consent to testify on your behalf about these matters:

Place:	Date and Time:
Remote/Virtual (or 3M Company at 4501 Highway 377 South Brownwood, TX 76804 by mutual agreement)	11/17/2023 9:00 am

The deposition will be recorded by this method: Video and Stenographic

☑ *Production:* You, or your representatives, must also bring with you to the deposition the following documents, electronically stored information, or objects, and must permit inspection, copying, testing, or sampling of the material:

See Attachment A.

The following provisions of Fed. R. Civ. P. 45 are attached – Rule 45(c), relating to the place of compliance; Rule 45(d), relating to your protection as a person subject to a subpoena; and Rule 45(e) and (g), relating to your duty to respond to this subpoena and the potential consequences of not doing so.

Date: 11/03/2023

CLERK OF COURT

OR

Signature of Clerk or Deputy Clerk	/s/Alex Chan *Attorney's signature*

The name, address, e-mail address, and telephone number of the attorney representing *(name of party)* Plaintiff Dr. Chien-Min Sung, Ph.D., who issues or requests this subpoena, are:

Alex Chan, Devlin Law Firm LLC, 1526 Gilpin Ave, Wilmington, DE 19806, achan@devlinlawfirm.com, (302) 449-9010

Notice to the person who issues or requests this subpoena

If this subpoena commands the production of documents, electronically stored information, or tangible things before trial, a notice and a copy of the subpoena must be served on each party in this case before it is served on the person to whom it is directed. Fed. R. Civ. P. 45(a)(4).

Civil Action No. 4:23-cv-753-SDJ

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 45.)

I received this subpoena for *(name of individual and title, if any)* _____ on *(date)* _____ .

☐ I served the subpoena by delivering a copy to the named individual as follows: _____

_____ on *(date)* _____ ; or

☐ I returned the subpoena unexecuted because: _____ .

Unless the subpoena was issued on behalf of the United States, or one of its officers or agents, I have also tendered to the witness the fees for one day's attendance, and the mileage allowed by law, in the amount of $ _____ .

My fees are $ _____ for travel and $ _____ for services, for a total of $ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

_____
Server's signature

_____
Printed name and title

_____
Server's address

Additional information regarding attempted service, etc.:

ATTACHMENT A

You are hereby subpoenaed and commanded to appear to testify and produce the documents as requested below:

DEFINITIONS

When used in the below topics, the following definitions apply:

1. "3M," "You," or "Your" shall each mean and refer, individually and collectively, to 3M Company, and all of its corporate locations, and all predecessors, successors, assigns, parents, subsidiaries and divisions, affiliates, partners; and all past and present directors, officers, employees, agents, and representatives (including accountants, consultants, and attorneys) of any of the foregoing, and all persons acting, or purporting to act, on their behalf.

2. "Action" shall mean *Chien-Min Sung v. Texas Instruments Incorporated*, 4:23-cv-00753-SDJ (E.D. Tex.).

3. "TI" shall mean Texas Instruments Incorporated, as well as all predecessors, successors, assigns, parents, subsidiaries and divisions, affiliates, partners of any of the foregoing, and all persons acting, or purporting to act, on behalf of any of the foregoing.

4. "Samsung" shall mean Samsung Electronics Co. LTD., Samsung Electronics America, Inc., Samsung Semiconductor, Inc., and Samsung Austin Semiconductor LLC, as well as all predecessors, successors, assigns, parents, subsidiaries and divisions, affiliates, partners of any of the foregoing, and all persons acting, or purporting to act, on behalf of any of the foregoing.

5. "Defendant" or "Defendants" shall mean TI and Samsung.

6. "Asserted Patents" shall mean U.S. Patent Nos. 9,138,862 ("'862 Patent"), 9,724,802 ("'802 Patent"), and 8,974,270 ("'270 Patent").

7. "CMP" shall mean any chemical mechanical polishing or planarization for cutting, leveling, polishing, planarizing, and/or otherwise smoothing the surfaces, films, or layers of semiconductor wafers or substrates during, for example, the manufacture, fabrication, assembly and/or production of semiconductor systems, devices, components, and/or integrated circuits, such as that described on Your website at https://www.3m.com/3M/en_US/semiconductor-us/solutions/cmp-materials.

8. "Polishing pad" shall mean any disk, pad, substrate, device, tool, or system used to polish, planarize, or smoothen a surface, film, or layer of a semiconductor wafer or substrate during CMP, as described, for example, on Your website at https://www.3m.com/3M/en_US/p/c/electronics-components/cmp-materials/cmp-pads/i/electronics/semiconductor/.

9. "Pad Conditioner" or "Pad Dresser" shall mean any disk, pad, substrate, device, tool, or system used to cut, level, smoothen, dress, or condition a surface, film, or layer of a Polishing Pad in order to, for example, minimize pad wear and maintain consistent or uniform asperities of the Polishing Pad, as described, for example, on Your website at https://www.3m.com/3M/en_US/semiconductor-us/solutions/cmp-materials/.

10. "Pad Conditioning" or "Pad Dressing" shall mean a method or process by which a Polishing Pad is conditioned or dressed, including, without limitations, conditioning the polishing surface, removing polishing debris, and/or maintaining the surface roughness or asperities of the Polishing Pad.

11. "Conditioning Elements" shall mean any crystalline and/or polycrystalline materials (e.g., diamond, polycrystalline diamond, cubic boron nitride, polycrystalline cubic boron nitride, corundum, and sapphire), particles, grits, films, layers, segments, and/or fragments used or

configured to cut, level, smoothen, dress, or condition a surface, film, or layer of a Polishing Pad, where the Conditioning Elements are bonded, assembled, embedded, attached, or affixed to the Polishing Pad.

12. "Cutting Depth" shall mean the depth or height of asperities or grooves that are cut into a Polishing Pad when the Polishing Pad is conditioned or dressed.

13. "CMP Products" shall mean pads, disks/discs, plates, and/or substrates designed, developed, manufactured, installed, implemented, used, or otherwise configured for executing, performing, achieving, or carrying out cutting, leveling, dressing or conditioning a surface, film, or layer of a Polishing Pad, including, for example, Your Diamond Pad Conditioners as described on Your website at https://multimedia.3m.com/mws/media/667824O/design-characteristics-performance-of-diamond-pad-conditioners.pdf?fn=DesignCharDiaPadCond.pdf.

14. "Accused Products" shall mean, without limitation, semiconductor products and devices, such as amplifiers (e.g., current sense amplifiers, difference amplifiers, fully differential amplifiers, instrumentation amplifiers, operational amplifiers, programmable & variable gain amplifiers, and special function amplifiers), audio solutions (e.g., audio amplifiers, audio converters, audio interface ICs, and specialty audio ICs), clock & timing (e.g., clock buffers, clock generators, clock jitter cleaners & synchronizers, oscillators, real-time clocks (RTCs) & timers, RF PLLs & synthesizers), dies and wafers (e.g., amplifiers, data converters, interfaces, switches, voltage regulators, microcontrollers, x-ray detectors, controllers, comparators, processors, transceivers, receivers, temperature sensors, diodes, and current sources), data converters (e.g., analog-to-digital converters, digital potentiometers, digital-to-analog converters, and integrated/special function data converters), DLP products (imaging products such as near-infrared, near-UV, UV, and visible products, scan & machine vision products, automotive products

including display, exterior lighting and projection products, and array products such as array pico and array products, and spectroscopy & optical networking products), interface solutions (e.g., CAN & LIN transceivers & SBCs, circuit protection ICs, ethernet ICs, HDMI/DisplayPort/MIPI ICs, high-speed SerDes, I2 ICs, IO-Link & digital I/Os, LVDS/M-LVDS/PECL ICs, multu0switch detection interface ICs, optical networking ICs, PCIe, SAS & SATA ICs, RS-232 transceivers, RS-485 & RS-422 transceivers, SDI ICs, UARTs, and USB ICs), isolation (e.g., digital isolators, isolated ADCs, isolated amplifiers, isolated comparators, isolated gate drivers, isolated interface ICs, signal isolators, and solid-state relays), logic & voltage translation (e.g., buffers, drivers, & transceivers, flip-flops, latches, registers, logic gates, specialty logic ICs, and voltage translators and level shifters), microcontrollers & processors (e.g., ARM-based microcontrollers, C2000 real-time microcontrollers, MSP 430 microcontrollers, digital signal processors, and ARM-based processors), motor drivers (e.g., actuator drivers, brushed DC motor drivers, brushless D motor drivers, half-bridge drivers, isolated gate drivers, low-side drivers, optical-disk drivers, solenoid drivers, stepper motor drivers), power management (AC/DC and isolated DC/DC switch regulators, battery management ICs, DC/DC switching regulators, DDR memory power ICs, digital power ICs, LED drivers, Linear & low-dropout regulators, MOSFETS, multi-channel ICs, power-over ethernet ICs, power switches, sequencers, supervisor & reset ICs, USB power witches & charging port controllers, USB-type C & USB power delivery ICs, and voltage reference products), RF & microwave products (e.g., mixers, modulators, mmWave radar sensors, RF amplifiers, RF PLLs & synthesizers, RF power detectors, and wideband transceivers, receivers, and transmitters), sensors (humidity sensors, magnetic sensors, mmWave radar sensors, specialty sensors, and temperature sensors), switches & multiplexers (analog switches & mux, digital demux and decoders, digital mux and encoders, power switches, and protocol-specific switches & muxes),

and wireless connectivity products (e.g., Bluetooth products, multi-protocol products, sub-1 GHz products, thread products, Wi-Fi products, Wi-SUN products, and Zigbee products), and similar systems, products, devices, and integrated circuits.

15. "Person" shall mean any natural person or any business, proprietorship, firm, partnership, corporation, association, organization, or other legal entity. The acts of a Person shall include the acts of directors, officers, owners, members, employees, agents, attorneys, or other representatives acting on the Person's behalf.

16. The term "Documents" is defined, without limitation, to be synonymous in meaning and equal in scope to the usage of the phrase "documents or electronically stored information" in Federal Rule of Civil Procedure 34(a)(1)(A), and includes, without limitation, "writings," "recordings," and "photographs," both "originals" and "duplicates," as those terms are defined in Federal Rule of Evidence 1001. The term "Documents" specifically includes all electronic versions of any particular document and any associated metadata.

17. "Thing" shall be construed using the broadest possible construction under the Federal Rules of Civil Procedure.

18. The terms "sale" and "sold" means the transfer of title to property from one party to another and includes the granting of a license with respect to products containing software or firmware.

19. "Communication" shall mean any transmission of information in any context or situation by or between two or more persons by any means or medium whatsoever, whether in the form of an original, a draft, or a copy; whether stored in hard copy, electronically or digitally, or on tape; either orally or in writing, including but not limited to, conversations, correspondence, electronic mails, telexes, facsimile transmissions, telecopies, recordings in any medium of oral,

written, or typed communications, telephone or message logs, notes or memoranda relating to written or oral communications, and any translation thereof.

20. "Identify" and "identity" shall each mean:

a. as applied to an individual: to state the individual's full name, present or last known address and telephone number, present or last known employer, present or last known business address and telephone number, present and prior employment positions and corresponding dates of such positions, and a description of his or her present employment responsibilities;

b. as applied to a Person other than a natural person (including but not limited to any business or other entity): to state the Person's full name, place and date of incorporation or formation, principal place of business or activity, and the identity of the natural persons within that entity having knowledge of the matter with respect to which that entity is named;

c. as applied to a Document (whether or not any claim of privilege is made in respect thereof): to state the type of Document, the date of creation of the Document, the date of communication of the Document, the names and Identities of the individuals who drafted, authored, or signed the Document or to whom a copy thereof was addressed or sent, a summary of the subject matter of the Document, the number of pages of the Document, the present whereabouts of the Document, including, without limitation, all originals and copies, and the name and address of the present or last-known custodian of the Document;

d. as applied to a Thing (including, without limitation, any products or software manufactured, developed, or sold by You): to state the date that the Thing was

first utilized or made available for use in commerce, all versions, parts, or revision numbers or codes, all product names, and all team names or project titles used in connection with the design, development, testing, or engineering of that product or software;

e. as applied to a process: to state the date that the process was first used, the date that products or goods sold through the process were first sold, all numbers or codes used to refer to the process, including but not limited to, process revision numbers or codes, all process names, and all team names or project titles used in connection with the design, development, testing, or engineering of that process; or

f. as applied to a Communication: to state the type of the Communication, the date and the parties to such Communication, and if such Communication has been recorded in documentary form, to identify all Documents recording such Communication.

21. "Software" shall mean instructions, statements, procedures, modules, objects, libraries, subroutines, or programs written in a programming language, design description language or assembly language, including source code, firmware, or microcode, which includes, without limitation, source files, make files, intermediate output files, header files, resource files, library files, module definition files, map files, object files, linker files, browse information files, and debug files.

22. "Information" shall mean information in any form, including but not limited to, documentary, electronic, graphical, or tabular, and communicated by any means, including but not limited to, orally, in writing, or via electronic Communication.

23. "Describe," when used in relation to an act, event, instance, occasion, transaction, conversation, or Communication, shall mean: (1) to state the date and place thereof; (2) to identify the individual participants; (3) to summarize separately for each individual participant what was

said or done; and (4) to identify each Document used or prepared in connection therewith or making any reference thereto.

24. "Date" shall mean the exact date, if known, or the closest approximation to the exact date as can be specified, including, without limitation, the year, month, week in a month, or part of a month.

25. "Relate to," "related to," "relating to," or "concerning" shall mean in whole or in part, constituting, containing, embodying, reflecting, describing, involving, supporting, contradicting, evidencing, analyzing, identifying, mentioning, stating, referring directly or indirectly to, dealing with, or in any way pertaining to.

26. The term "possession" means all Information or Documents actually within Your (including any employee, consultant, aide or other representative (including without limitation attorneys and accountants) and any other Person acting or purporting to act on Your behalf or in concert with You) knowledge, possession, custody or control, and includes any temporary placing of possession, custody or control in any third party by any of the foregoing Persons.

27. As used herein, the singular form of a term shall be interpreted to include the plural and vice versa.

28. As used herein, the masculine form of a term shall be interpreted to include the feminine form and vice versa.

29. Except where the context does not permit, the term "including" shall be without limitation.

30. Except where the context does not permit, the terms "and" and "or" shall be both conjunctive and disjunctive.

31. "Any" means "any and all."

32. The term "Product" or "Products" means any and all components, subcomponents, auxiliary components, and accessory products.

33. If You object to any of the Document requests made herein, You must state a basis for said objection in Your response. If You intend to withhold any potentially responsive Document or redact any portion of a Document produced in response to this Subpoena as privileged, You must Identify the privilege being asserted in Your response.

INSTRUCTIONS

1. Each request shall be answered pursuant to Fed. R. Civ. P. Rule 45.

2. If You object to any portion of the subpoena, please state the grounds for the objection and the categories of information to which the objection applies. Please provide a response to the request to the extent that it is not deemed objectionable.

3. If You have no documents responsive to a particular subpoena request, please state that You have no such responsive documents.

4. Please produce documents: (1) as they are kept in the ordinary course of business, complete with the original file folders, binders or other containers in which they are stored (or legible copies of the labels from those folders, binders, or containers); or (2) organized according to document requests to which they are responsive.

5. Please affix production numbers to each page that You produce.

6. In lieu of making documents available for inspection and copying at the date and time specified on the face of the subpoena, You may produce exact copies of the requested documents on, or before, the date specified on the face of the subpoena directed to the attention of the issuing officer of the subpoena.

7. A Protective Order (Dkt. 8 ("PO")) has been entered in the above-captioned matter that contains provisions governing the disclosure of confidential information. A copy of the PO is enclosed herewith. The PO allows You to designate information that You consider confidential by placing the appropriate designation on each page of such document.

DOCUMENTS TO BE PRODUCED

REQUEST FOR PRODUCTION NO. 1

Documents sufficient to identify any and all CMP Products designed, developed, manufactured and/or sold by You since 2017.

REQUEST FOR PRODUCTION NO. 2

Documents sufficient to show the structure, profile, characteristic, and/or configuration of Your CMP Products, including the distribution, placement, and/or location of the Conditioning Elements in Your CMP Products.

REQUEST FOR PRODUCTION NO. 3

Documents sufficient to show the use, utilization, installation, implementation, and/or deployment of Your CMP Products in any manufacturing and/or fabrication facility owned, operated, or controlled by Defendant in connection with the manufacture, fabrication, and/or assembly of any and all systems, devices, components, and/or integrated circuits, including the Accused Products, including: (i) the identification of all versions and models of any such systems, devices, components, and/or integrated circuits; and (ii) the location of such use, utilization, installation, implementation, and/or deployment, including the location of any and all such manufacturing and/or fabrication facilities.

REQUEST FOR PRODUCTION NO. 4

Purchase or sales orders, invoices, purchase agreements, partnership agreements, license agreements, sales agreements, importation agreements, and/or supplier agreements between You and Defendant relating to Your CMP Products.

REQUEST FOR PRODUCTION NO. 5

Documents sufficient to show the height or height variation (e.g., in microns) of each

Conditioning Element in each of Your CMP Products, including the height as measured from the substrate of a CMP Product to the tip of a Conditioning Element.

REQUEST FOR PRODUCTION NO. 6

Documents sufficient to show the difference in height or height variation (e.g., in microns) between the highest or tallest Conditioning Element and the second highest or tallest Conditioning Element in each of Your CMP Products.

REQUEST FOR PRODUCTION NO. 7

Documents sufficient to show the height or height variation of the highest or tallest one percent (1%) of the Conditioning Elements in each of Your CMP Products, including the difference in height (e.g., in microns) between the highest or tallest one percent of the Conditioning Elements.

REQUEST FOR PRODUCTION NO. 8

Documents sufficient to show the difference in height or height variation (e.g., in microns) between the highest or tallest Conditioning Element, the second highest or tallest Conditioning Element, the 10th highest or tallest Conditioning Element, and the 100th highest or tallest Conditioning Element in each of Your CMP Products.

REQUEST FOR PRODUCTION NO. 9

Documents sufficient to show the Cutting Depth (e.g., in microns) of each of Your CMP Products.

REQUEST FOR PRODUCTION NO. 10

For each of Your CMP Products, documents sufficient to show the total number of Conditioning Elements that have a Cutting Depth of 10 microns or more when conditioning or dressing a Polishing Pad.

REQUEST FOR PRODUCTION NO. 11

Documents sufficient to show the total number of Conditioning Elements in each of Your CMP Products.

REQUEST FOR PRODUCTION NO. 12

For each of Your CMP Products, documents sufficient to show the total number of Conditioning Elements that are in physical contact with a Polishing Pad when conditioning or dressing the Polishing Pad.

REQUEST FOR PRODUCTION NO. 13

For each of Your CMP Products, documents sufficient to show the total number of Conditioning Elements that are not in physical contact with a Polishing Pad when conditioning or dressing the Polishing Pad.

REQUEST FOR PRODUCTION NO. 14

For each of Your CMP Products, documents sufficient to show the distance or spacing (e.g., in microns) between the Conditioning Elements in each of Your CMP Products.

REQUEST FOR PRODUCTION NO. 15

For each of Your CMP Products, documents sufficient to show the tip variation (e.g., in micron) between the highest tips of the Conditioning Elements in Your CMP Products.

REQUEST FOR PRODUCTION NO. 16

Documents sufficient to identify Your CMP Products that are double-sided or include two opposite sides having different sets of Conditioning Elements.

REQUEST FOR PRODUCTION NO. 17

Documents sufficient to show the percentage of a radius between an outer edge and a center point of a CMP Product that includes, or is occupied by, the Conditioning Elements.

REQUEST FOR PRODUCTION NO. 18

Documents relating to, or reflecting, any contract or agreement by You to indemnify, or to be indemnified by Defendant for patent infringement in connection with any use, utilization, installation, implementation, and/or deployment of Your CMP Products.

REQUEST FOR PRODUCTION NO. 19

Documents reflecting sales negotiations with, or sales, importation, delivery, shipment, or marketing of Your CMP Products to, Defendant between 2003 and the present.

REQUEST FOR PRODUCTION NO. 20

Documents relating to, or reflecting, any technical evaluation, testing, or inspection of Your CMP Products by Defendant.

REQUEST FOR PRODUCTION NO. 21

Documents sufficient to show how Your CMP Products are used, utilized, installed, implemented, and/or deployed during CMP.

REQUEST FOR PRODUCTION NO. 22

Documents related to, or reflecting, the obtaining, or attempting to obtain, of an intellectual property license related to Your CMP Products, including, but not limited to, communications with any Person regarding royalty rates, licensing fees, and license agreements.

REQUEST FOR PRODUCTION NO. 23

All non-privileged Documents that refer to Plaintiff or the Action, including communications with Defendant, communications between You and any third party, and minutes from Your Board of Directors meetings that mention Plaintiff or any of the Actions.

REQUEST FOR PRODUCTION NO. 24

All Documents that refer, or relate, to the Asserted Patents, any of the patent application(s) to which the Asserted Patents claim priority, or any named inventor(s) of the Asserted Patents.

REQUEST FOR PRODUCTION NO. 25

Documents relating to any efforts to design around, or otherwise avoid, any claims of the Asserted Patents.

REQUEST FOR PRODUCTION NO. 26

Documents sufficient to identify all entities, and the role played by such entities, including any of Your subsidiaries or affiliates or any third-party entity including Defendant, involved in the design, development, manufacture, fabrication, assembly, testing, importation, distribution, marketing, sales, and/or support of Your CMP Products.

DEPOSITION TOPICS

Topic No. 1. Explanation of the context or content of the documents that You produced, or are producing, in response to Ocean's Subpoena for Production of Documents.

Topic No. 2. The source and authenticity of any documents or information provided by You in response to the Requests for Production of Documents, including, without limitation, the processes, systems, Persons and locations that are involved in creating, generating, storing, and/or maintaining any of the produced documents as business records.

Topic No. 3. Your business or professional relationship[s] with the Defendant.

Topic No. 4. The design, development, structure, function, operation, and/or maintenance of Your CMP Products sold, leased, or provided to Defendant.

Topic No. 5. The design, development, structure, function, operation, and/or maintenance of Your CMP Products used by Defendant to manufacture, fabricate, and/or assemble any Accused Product.

Topic No. 6. Manufacturing or fabrication facilities owned, controlled, or operated by, or on behalf of, Defendant that use or deploy Your CMP Products.

Topic No. 7. Any sale of, lease of, or other financial arrangement relating to Your CMP Products sold, leased, or provided to Defendant, including any payments received by You related thereto and any payments in connection with the Accused Products, and the quantity sold, leased, or provided to Defendant.

Topic No. 8. Your warranty of product criteria, including, but not limited to, warranties as to debris removal rate; pad cut rate or cutting depth; dress time; diamond distribution, placement, and location; diamond shape, size, density, protrusion and structural profile; pad wear rate; polishing rate; pad contact area; cost and resource usage; and quality performance in connection with Your CMP Products.

Topic No. 9. Any contracts or agreements between You and any third party (including, but not limited to, customers, partners, distributors, and/or resellers) pertaining to the sale or lease of any of Your CMP Products, including, without limitation, the terms of such agreements.

Topic No. 10. The importation of, or intent to import, any of Your CMP Products into the United States by You or Defendant.

Topic No. 11. Commercial success of Your CMP Products, including: (a) revenues attributable to, the value of, or the benefits to You of Your CMP Products; (b) cost savings; (c) customer retention; and/or (d) customer attraction since 2017.

Topic No. 12. The value and the benefits of Your CMP Products to Your business, including, but not limited to, the direct and indirect costs, revenues, profits, royalties and

other consideration, as well as any monetary or nonmonetary benefit to You (including but not limited to increased goodwill) resulting directly or indirectly from Your CMP Products.

Topic No. 13. The effect, benefit, importance, or value of Your CMP Products to Your business, including its impacts on sales, costs, cost savings, customer retention, customer attraction, marketing, or revenues.

Topic No. 14. Pricing and cost for the design, development, implementation, configuration, and operation of Your CMP Products.

Topic No. 15. All facts and documents relating to contracts or agreements concerning sales, leases, services, warranties or shipment of Your CMP Products used for the manufacture, fabrication, and/or assembly of any system, device, component and/or integrated circuit, including any standard terms of such agreements since 2017, whether the agreements were negotiated in the United States, whether United States laws apply to them, whether the offer to sell was made in the United States, and whether the agreements provide for shipment of any product from, or outside, the United States.

Topic No. 16. Your provision of technical support for any customers, clients, users, operators, partners, distributors, and/or resellers relating to Your CMP Products, including, without limitation, the Persons providing such technical support, the means of providing such technical support, and locations from which such technical support is provided.

Topic No. 17. Your licensing or assigning of patents in any industry or market in which any of Your CMP Products.

Topic No. 18. Any action taken by You and/or Defendant to avoid infringement of the Asserted Patents.

Topic No. 19. The circumstances surrounding when You first became aware of each of the Asserted Patents or any of the inventions claimed in the Asserted Patents, and any actions taken as a result of that awareness, including any attempts to design around the Asserted Patents.

Topic No. 20. Any communications between You and Defendant concerning these Actions, Plaintiff, the Asserted Patents, or any of the Accused Products.

Topic No. 21. All facts and Documents relating to the name and geographic location of each of Your customers in connection with the use, utilization, installation, implementation, and/or deployment of Your CMP Products.

Topic No. 22. Your patent licensing policies and practices, including licensing in and licensing out practices, royalty rates, and royalty bases.

Topic No. 23. Patent royalties actually or customarily paid in the industry involving Your CMP Products.

Topic No. 24. Research, analyses, studies, evaluations, opinions, commercialization plans, revenue forecasts, and any other activity that You undertook, or are undertaking, to determine the past, current, or potential marketability, sales, distribution, revenues, costs, profits, pricing, packaging, market share, or end user perceptions of Your Manufacturing Equipment.

Topic No. 25. The extent of use or operation of Your CMP Products by Your customers or end users.

Topic No. 26. The creation, custody, retention, destruction, and storage of Documents and Information related to any of the above-listed topics.

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
SHERMAN DIVISION

CHIEN-MIN SUNG	§	
	§	
v.	§	CIVIL NO. 4:23-CV-753-SDJ
	§	
TEXAS INSTRUMENTS	§	
INCORPORATED	§	

PROTECTIVE ORDER
(Appendix A)

The Court, *sua sponte*, issues this Protective Order to facilitate document disclosure and production under the Local Rules of this Court and the Federal Rules of Civil Procedure. Unless modified pursuant to the terms contained in this Order, this Order shall remain in effect through the conclusion of this litigation.

In support of this order, the Court finds that:

1. Documents or information containing confidential proprietary and business information and/or trade secrets ("Confidential Information") that bear significantly on the parties' claims or defenses is likely to be disclosed or produced during the course of discovery in this litigation;
2. The parties to this litigation may assert that public dissemination and disclosure of Confidential Information could severely injure or damage the party disclosing or producing the Confidential Information and could place that party at a competitive disadvantage;
3. Counsel for the party or parties receiving Confidential Information are presently without sufficient information to accept the representation(s) made

by the party or parties producing Confidential Information as to the confidential, proprietary, and/or trade secret nature of such Confidential Information; and

4. To protect the respective interests of the parties and to facilitate the progress of disclosure and discovery in this case, the following Order should issue:

IT IS THEREFORE ORDERED THAT:

1. Documents or discovery responses containing Confidential Information disclosed or produced by any party in this litigation are referred to as "Protected Documents." Except as otherwise indicated below, all documents or discovery responses designated by the producing party as "Confidential" and which are disclosed or produced to the attorneys for the other parties to this litigation are Protected Documents and are entitled to Confidential Treatment as described below.
2. Protected Documents shall not include (a) advertising materials, (b) materials that on their face show that they have been published to the general public, or (c) documents that have submitted to any governmental entity without request for Confidential Treatment.
3. At any time after the delivery of Protected Documents, counsel for the party or parties receiving the Protected Documents may challenge the Confidential designation of all or any portion thereof by providing written notice thereof to counsel for the party disclosing or producing the Protected Documents. If the parties are unable to agree as to whether the confidential designation of

discovery material is appropriate, the party or parties receiving the Protected Documents shall certify to the Court that the parties cannot reach an agreement as to the confidential nature of all or a portion of the Protected Documents. Thereafter, the party or parties disclosing or producing the Protected Documents shall have ten (10) days from the date of certification to file a motion for protective order regarding any Protected Documents in dispute. The party or parties producing the Protected Documents shall have the burden of establishing that the disputed Protected Documents are entitled to confidential treatment. If the party or parties producing the Protected Documents do not timely file a motion for protective order, then the Protected Documents in dispute shall no longer be subject to Confidential Treatment as provided in this Order. All Protected Documents are entitled to Confidential Treatment pursuant to the terms of this Order unless and until the parties agree in writing to the contrary, a party fails to timely move for a protective order, or a contrary determination is made by the Court as to whether all or a portion of a Protected Document is entitled to Confidential Treatment.

4. Confidential Treatment means that Protected Documents and any information contained therein shall not be used or shown, disseminated, copied, or in any way communicated to anyone for any purpose whatsoever, except as provided for below:

   a. Protected Documents and any information contained therein shall be disclosed only to the following persons ("Qualified Persons"):

i. Outside counsel of record in this action for the party or party receiving Protected Documents or any information contained therein;

ii. Employees of such counsel (excluding experts and investigators) assigned to and necessary to assist such counsel in the preparation and trial of this action; and

iii. The Court.

b. Protected Documents and any information contained therein shall be used solely for the prosecution of this litigation.

5. Outside counsel of record for the party or parties receiving Protected Documents may create an index of the Protected Documents and furnish it to attorneys of record representing or having represented parties involved in litigation involving the claims alleged in this suit against the party or parties disclosing or producing the Protected Documents. The index may only identify the document, date, author, and general subject matter of any Protected Document, but may not reveal the substance of any such document. Counsel for the party or parties receiving Protected Documents shall maintain a current log of the names and addresses of persons to whom the index was furnished.

6. The term "copy" as used herein means any photographic, mechanical, or computerized copy or reproduction of any document or thing, or any verbatim transcript, in whole or in part, of such document or thing.

7. To the extent that Protected Documents or information contained therein are used in depositions, such documents or information shall remain subject to the provisions of this Order, along with the transcript pages of the deposition referring to the Protected Documents or information contained therein.
8. Any court reporter or transcriber who reports or transcribes deposition testimony in this action shall agree that all "confidential" information designated as such under this Order shall remain "confidential" and shall not be disclosed by them, except pursuant to the terms of this Order, and that any notes or transcriptions of such deposition testimony (and any accompanying exhibits) will be retained by the reporter or delivered to counsel of record.
9. Inadvertent or unintentional production of documents or information containing Confidential Information which are not designated "confidential" shall not be deemed a waiver in whole or in part of a claim for confidential treatment.
10. The party or parties receiving Protected Documents shall not under any circumstances sell, offer for sale, advertise, or publicize Protected Documents or any information contained therein.
11. After termination of this litigation, the provisions of this Order shall continue to be binding, except with respect to those documents and information that become a matter of public record. This Court retains and shall have continuing jurisdiction over the parties and recipients of the Protected Documents for

enforcement of the provisions of this Order following termination of this litigation.

12. Upon termination of this action by dismissal, judgment, or settlement, counsel for the party or parties receiving Protected Documents shall return the Protected Documents to the counsel for the party or parties disclosing or producing the Protected Documents. The party or parties receiving the Protected Documents shall keep their attorney work product which refers or relates to any Protected Documents. Attorney work product may be used in subsequent litigation provided that such use does not disclose Protected Documents or any information contained therein.

13. This Order shall be binding upon the parties and their attorneys, successors, executors, personal representatives, administrators, heirs, legal representatives, assigns, subsidiaries, divisions, employees, agents, independent contractors, or other persons or organizations over which they have control.

The Court anticipates that the parties may file a motion to modify the terms hereof with respect to the sharing of Protected Documents with experts and consultants, shifting the cost burden of production equitably, and other terms that may be reasonably required to protect a party as provided in Rule 26(b) or (c) of the Federal Rules of Civil Procedure.

Federal Rule of Civil Procedure 45 (c), (d), (e), and (g) (Effective 12/1/13)

(c) Place of Compliance.

(1) ***For a Trial, Hearing, or Deposition.*** A subpoena may command a person to attend a trial, hearing, or deposition only as follows:
(A) within 100 miles of where the person resides, is employed, or regularly transacts business in person; or
(B) within the state where the person resides, is employed, or regularly transacts business in person, if the person
(i) is a party or a party's officer; or
(ii) is commanded to attend a trial and would not incur substantial expense.

(2) ***For Other Discovery.*** A subpoena may command:
(A) production of documents, electronically stored information, or tangible things at a place within 100 miles of where the person resides, is employed, or regularly transacts business in person; and
(B) inspection of premises at the premises to be inspected.

(d) Protecting a Person Subject to a Subpoena; Enforcement.

(1) ***Avoiding Undue Burden or Expense; Sanctions.*** A party or attorney responsible for issuing and serving a subpoena must take reasonable steps to avoid imposing undue burden or expense on a person subject to the subpoena. The court for the district where compliance is required must enforce this duty and impose an appropriate sanction—which may include lost earnings and reasonable attorney's fees—on a party or attorney who fails to comply.

(2) ***Command to Produce Materials or Permit Inspection.***
(A) *Appearance Not Required.* A person commanded to produce documents, electronically stored information, or tangible things, or to permit the inspection of premises, need not appear in person at the place of production or inspection unless also commanded to appear for a deposition, hearing, or trial.
(B) *Objections.* A person commanded to produce documents or tangible things or to permit inspection may serve on the party or attorney designated in the subpoena a written objection to inspecting, copying, testing, or sampling any or all of the materials or to inspecting the premises—or to producing electronically stored information in the form or forms requested. The objection must be served before the earlier of the time specified for compliance or 14 days after the subpoena is served. If an objection is made, the following rules apply:
(i) At any time, on notice to the commanded person, the serving party may move the court for the district where compliance is required for an order compelling production or inspection.
(ii) These acts may be required only as directed in the order, and the order must protect a person who is neither a party nor a party's officer from significant expense resulting from compliance.

(3) ***Quashing or Modifying a Subpoena.***

(A) *When Required.* On timely motion, the court for the district where compliance is required must quash or modify a subpoena that:

(i) fails to allow a reasonable time to comply;
(ii) requires a person to comply beyond the geographical limits specified in Rule 45(c);
(iii) requires disclosure of privileged or other protected matter, if no exception or waiver applies; or
(iv) subjects a person to undue burden.
(B) *When Permitted.* To protect a person subject to or affected by a subpoena, the court for the district where compliance is required may, on motion, quash or modify the subpoena if it requires:

(i) disclosing a trade secret or other confidential research, development, or commercial information; or
(ii) disclosing an unretained expert's opinion or information that does not describe specific occurrences in dispute and results from the expert's study that was not requested by a party.
(C) *Specifying Conditions as an Alternative.* In the circumstances described in Rule 45(d)(3)(B), the court may, instead of quashing or modifying a subpoena, order appearance or production under specified conditions if the serving party:
(i) shows a substantial need for the testimony or material that cannot be otherwise met without undue hardship; and
(ii) ensures that the subpoenaed person will be reasonably compensated.

(e) Duties in Responding to a Subpoena.

(1) ***Producing Documents or Electronically Stored Information.*** These procedures apply to producing documents or electronically stored information:
(A) *Documents.* A person responding to a subpoena to produce documents must produce them as they are kept in the ordinary course of business or must organize and label them to correspond to the categories in the demand.
(B) *Form for Producing Electronically Stored Information Not Specified.* If a subpoena does not specify a form for producing electronically stored information, the person responding must produce it in a form or forms in which it is ordinarily maintained or in a reasonably usable form or forms.
(C) *Electronically Stored Information Produced in Only One Form.* The person responding need not produce the same electronically stored information in more than one form.
(D) *Inaccessible Electronically Stored Information.* The person responding need not provide discovery of electronically stored information from sources that the person identifies as not reasonably accessible because of undue burden or cost. On motion to compel discovery or for a protective order, the person responding must show that the information is not reasonably accessible because of undue burden or cost. If that showing is made, the court may nonetheless order discovery from such sources if the requesting party shows good cause, considering the limitations of Rule 26(b)(2)(C). The court may specify conditions for the discovery.

(2) ***Claiming Privilege or Protection.***
(A) *Information Withheld.* A person withholding subpoenaed information under a claim that it is privileged or subject to protection as trial-preparation material must:
(i) expressly make the claim; and
(ii) describe the nature of the withheld documents, communications, or tangible things in a manner that, without revealing information itself privileged or protected, will enable the parties to assess the claim.
(B) *Information Produced.* If information produced in response to a subpoena is subject to a claim of privilege or of protection as trial-preparation material, the person making the claim may notify any party that received the information of the claim and the basis for it. After being notified, a party must promptly return, sequester, or destroy the specified information and any copies it has; must not use or disclose the information until the claim is resolved; must take reasonable steps to retrieve the information if the party disclosed it before being notified; and may promptly present the information under seal to the court for the district where compliance is required for a determination of the claim. The person who produced the information must preserve the information until the claim is resolved.

(g) Contempt.
The court for the district where compliance is required—and also, after a motion is transferred, the issuing court—may hold in contempt a person who, having been served, fails without adequate excuse to obey the subpoena or an order related to it.

For access to subpoena materials, see Fed. R. Civ. P. 45(a) Committee Note (2013).

EXHIBIT 6

From: Alex Chan <achan@devlinlawfirm.com>
Sent: Thursday, November 16, 2023 12:01 PM
To: Jeya Paul
Cc: Mark L. Johnson; Sung-TI-DLF_Intl
Subject: Re: Sung v. Texas Instruments Inc. - Subpoena to 3M

Jeya—

I have already stated that we are willing to reschedule the deposition to 1/5/24 but Dr. Sung is not willing to take the deposition "off the calendar." Rule 45 does not allow 3M to avoid deposition or set its own deposition schedule. If this is not acceptable, please confirm so that we can move to compel and notify the court that 3M is unwilling to provide a date on which to produce both documents and deposition testimony as requested by the subpoena.

Thanks much,
Alex

From: Jeya Paul <JPaul@greeneespel.com>
Date: Thursday, November 16, 2023 at 11:54 AM
To: Alex Chan <achan@devlinlawfirm.com>
Cc: Mark L. Johnson <MJohnson@greeneespel.com>, Sung-TI-DLF_Intl <Sung-TI-DLF_Intl@devlinlawfirm.com>
Subject: RE: Sung v. Texas Instruments Inc. - Subpoena to 3M

Alex,

As I have now stated multiple times, we cannot commit to any dates at this point before we have (a) served objections and the parties have had a chance to try to resolve them; and (b) 3M has had time to obtain input from appropriate client representatives to determine what material it has available that might be produced. We also note that almost every request seeks confidential information and the protective order you enclosed does not cover discovery from nonparties to the litigation. So, there is a lot to be resolved before we can commit to any production or deposition dates.

Again, I ask that you confirm that the deposition is off the calendar for tomorrow--without demanding that we make commitments we have already told you we cannot make. We can then reengage after you have had a chance to review our objections.

Thanks,

Jeya

From: Alex Chan <achan@devlinlawfirm.com>
Sent: Thursday, November 16, 2023 11:15 AM
To: Jeya Paul <JPaul@greeneespel.com>
Cc: Mark L. Johnson <MJohnson@greeneespel.com>; Sung-TI-DLF_Intl <Sung-TI-DLF_Intl@devlinlawfirm.com>
Subject: Re: Sung v. Texas Instruments Inc. - Subpoena to 3M

Jeya—

We will accept service of 3M's objection by email. As to the deposition, Dr. Sung is willing to reschedule the deposition to no later than 1/5/24 on the condition that 3M substantially completes its document collection and production by 12/22/23, two weeks before the deposition. This is one week more than what I initially proposed as a good faith compromise in order to provide 3M more time to produce the requested documents. Please confirm if 3M agrees.

Also, while Dr. Sung is not in any position to dictate who 3M should designate to testify, if the individual 3M intends to designate for this deposition is unavailable, it is advisable that a different witness who is available be designated instead. A corporate witness need not be someone with the most knowledge; a witness who can bind the company is sufficient. As such, that the witness 3M "would most likely designate . . . is unavailable" is not a proper justification to delay or resist discovery, nor does it permit 3M to set its own schedule without offering any certainty as to when it will fully comply with Dr. Sung's subpoena.

Thanks much,
Alex

From: Jeya Paul <JPaul@greeneespel.com>
Date: Thursday, November 16, 2023 at 10:26 AM
To: Alex Chan <achan@devlinlawfirm.com>
Cc: Mark L. Johnson <MJohnson@greeneespel.com>, Sung-TI-DLF_Intl <Sung-TI-DLF_Intl@devlinlawfirm.com>
Subject: RE: Sung v. Texas Instruments Inc. - Subpoena to 3M

Alex,

I wasn't trying to restate your proposal or our discussion. I was offering a new proposal—one that reflects the reality that we don't yet know how much time it will take to collect, review, and produce documents, so we cannot yet commit to a timeline for 3M's production.

Rather than continue to debate this, we will serve formal objections tomorrow. **Please confirm that you will accept service of papers related to this matter by email.** (If not, then we will serve any documents upon you by U.S. mail with a courtesy copy by email.) Once you have reviewed our objections, we can pick up the meet-and-confer process.

Meanwhile, will you agree to take the deposition off the calendar for tomorrow? We note that the notice you enclosed to parties to the litigation refers to a different date and party than the subpoena document itself. Also, due to personal circumstances, the individual 3M would most likely designate for any deposition is unavailable until early next year. Even if he were available today, we would need reasonable time to assert and attempt to resolve scope and other objections with you, and then to prepare any designee. I also assume you would want documents before taking a deposition. We would attempt to reschedule the deposition by mutual agreement, but both sides would reserve the right to seek judicial relief. **Let me know whether you agree the deposition is off the calendar for tomorrow.**

Thanks,

Jeya

From: Alex Chan <achan@devlinlawfirm.com>
Sent: Wednesday, November 15, 2023 9:42 PM
To: Jeya Paul <JPaul@greeneespel.com>
Cc: Mark L. Johnson <MJohnson@greeneespel.com>; Sung-TI-DLF_Intl <Sung-TI-DLF_Intl@devlinlawfirm.com>
Subject: Re: Sung v. Texas Instruments Inc. - Subpoena to 3M

Hi Jeya—

Dr. Sung disagrees with 3M's position. Rule 26(d)(1) governs party discovery, not third-party discovery. And Rule 45, which covers third-party discovery, does not prescribe any defense to a responding party for resisting third party

discovery on the basis that the propounding party has not completed its Rule 26(f) conference. But as discussed during the call, this issue is moot now because the Rule 26(f) conference has been completed. Of course, Dr. Sung would be willing to consider re-serving the subpoena if 3M insists. In that case, however, it would be difficult to justify any extension for 3M to serve its responses and objections given that 3M has been on notice of the pending discovery since the beginning of November.

Also, your proposal does not accurately reflect what the parties discussed yesterday. Specifically, in exchange for Dr. Sung agreeing to the proposed extension for 3M to serve its objections and responses by 12/1 and produce the requested documents and witness(es) at a later date, I mentioned that 3M would need to at least agree to identifying those documents or document requests for which 3M will have decided to withhold on that same day in order to facilitate prompt judicial intervention where necessary. The same is true for deposition topics—to the extent 3M is not willing to produce a corporate witness to testify on a particular deposition topic, 3M would also notify us on that same day (i.e., 12/1).

Further, I mentioned that we are available to meet and confer with 3M this week as well as next week. I also stated that there is no legitimate reason for 3M to put off until the week of December 4, or almost three weeks from today and more than a month after the subpoena was served, before seeking clarification from Dr. Sung as to the nature and scope of any of the pending discovery requests. This makes sense particularly where, as here, you have already stated succinctly that 3M would not be able to produce any documents "until we understand the scope of relevancy and what 3M has that is responsive, relevant and reasonably available." This is why the parties should meet and confer now to the extent 3M needs clarification on any of Dr. Sung's document requests. Otherwise, it's not clear how 3M would be able to serve accurate and good faith responses and objections to Dr. Sung's subpoena.

Additionally, I made it abundantly clear that Dr. Sung has certain deadlines that require completion of this discovery in advance, including contentions-related deadlines. While Dr. Sung is willing to work with 3M and agree to an extension where possible, Dr. Sung is unable to do so without a firm commitment from 3M to produce documents and witnesses by a certain date. Absent such a commitment, 3M would be free to set its own production and deposition schedule. I suspect this is not your intent but this is the net result. That said, Dr. Sung's proposal still stands—he will agree to 3M's proposed extension up to 12/1 provided that 3M: (1) identify those responsive/non-privileged documents and testimony 3M intends to withhold from Dr. Sung on 12/1; and (2) substantially complete its document production by 12/15, which is a month from now and more than six weeks from when the subpoena was served. Dr. Sung believes this is a reasonable counteroffer and remains hopeful that the parties can resolve their differences on the production schedule. Otherwise, Dr. Sung intends to seek judicial relief on Friday and reserves all rights to recover fees and costs in connection with such a motion.

Thanks much,
Alex

From: Jeya Paul <JPaul@greeneespel.com>
Date: Wednesday, November 15, 2023 at 10:31 AM
To: Alex Chan <achan@devlinlawfirm.com>
Cc: Mark L. Johnson <MJohnson@greeneespel.com>
Subject: RE: Sung v. Texas Instruments Inc. - Subpoena to 3M

Alex,

Thanks for the call yesterday.

I had requested that your client agree to withdraw the subpoena served on 3M since it did not comply with F.R.C.P. 26(d)(1), which prevents a party from "seek[ing] discovery from any source before the parties have conferred as required by Rule 26(f)…" You indicated that the F.R.C.P. 26(f) conference would be occurring today (November 15). Assuming that is the case, 3M is amenable to trying to reach a compromise. You have served over 25 document requests

and deposition topics in a multiple-patent case. As I emphasized, 3M needs adequate time, accounting for the upcoming holidays and travel schedules, to engage the appropriate client representatives to respond to your client's requests. We also cannot produce a knowledgeable witness for deposition until at least January; we certainly cannot produce a witness this Friday.

With that in mind, here is what we propose:

- 3M will provide substantive objections to your subpoena by December 1.
- 3M will confer with you to try to resolve those objections during the week of December 4.
- We will do our best to begin producing documents (to which no objections apply) by December 15. But until we understand the scope of relevancy and what 3M has that is responsive, relevant, and reasonably available, we cannot even begin to gather and review all documents that might be produced. So we cannot commit, at this stage, to a particular date for substantial completion of any document production.
- Subject to resolving objections to scope and topics of a Rule 30(b)(6) deposition, we will endeavor to make one or more witnesses available for a deposition in Minnesota in January 2024.

In light of the November 17 deadline in subpoena, please let us know by 4 p.m. today, whether this proposal is acceptable. If we cannot reach an agreement, we reserve all rights.

Best,

Jeya

From: Jeya Paul
Sent: Tuesday, November 14, 2023 10:49 AM
To: achan@devlinlawfirm.com
Cc: Mark L. Johnson <MJohnson@greeneespel.com>
Subject: Sung v. Texas Instruments Inc. - Subpoena to 3M

Hello Alex,

We have been retained by 3M in connection with the subpoena you served it in the Sung. V. Texas Instruments (E.D. Tex. 4:23-cv-00753) matter. I tried to reach you by phone, but am unable to get through or leave a message at the number listed on the subpoena. Can you please give me a call today at 612.373.8320?

Thanks so much.

Jeya

Jeya Paul
Partner
612.373.8320 direct
JPaul@greeneespel.com

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