IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

CMC MATERIALS, INC., Plaintiff, v. DUPONT DE NEMOURS, INC., ROHM AND HAAS ELECTRONIC MATERIALS CMP LLC, ROHM AND HAAS ELECTRONIC MATERIALS CMP ASIA INC. (d/b/a ROHM AND HAAS ELECTRONIC MATERIALS CMP ASIA INC, TAIWAN BRANCH (U.S.A.)), ROHM AND HAAS ELECTRONIC MATERIALS ASIA-PACIFIC CO. LTD., ROHM AND HAAS ELECTRONIC MATERIALS K.K., and ROHM AND HAAS ELECTRONIC MATERIALS LLC, Defendants.	)	C.A. No. 20-738-MN **JURY TRIAL DEMANDED**

FIRST AMENDED COMPLAINT

Plaintiff CMC Materials, Inc.[1] ("CMC") alleges as follows against Defendants DuPont de Nemours, Inc., Rohm and Haas Electronic Materials CMP LLC, Rohm and Haas Electronic Materials CMP Asia Inc. (d/b/a Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.)), Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd., Rohm and Haas Electronic Materials K.K., and Rohm and Haas Electronic Materials LLC (collectively, "Defendants").

[1] Original plaintiff Cabot Microelectronics Corporation changed its name to CMC Materials, Inc. while this litigation was stayed. The parties are preparing a stipulation to effect this change formally. The Rule 7.1 disclosure statement for plaintiff remains accurate.

NATURE OF THE ACTION

1. This is a civil action for patent infringement under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq*., of CMC's U.S. Patent No. 9,499,721 (the "'721 Patent"), and for such other relief as the Court deems just and proper.

2. CMC is one of the largest suppliers of consumable materials to the semiconductor industry. Among its many innovations, CMC has for decades been a pioneer in providing chemical mechanical planarization ("CMP") slurry products to nearly all semiconductor device manufacturers in the United States and throughout the world.

3. CMP slurries play a critical role in the increasingly complex production of advanced semiconductor devices. CMP slurries, in conjunction with CMP pads, are used to remove excess material that is deposited during the numerous steps in semiconductor device manufacturing and to level and smooth the surfaces of various layers of the semiconductor devices via a combination of chemical reactions and mechanical abrasion, leaving minimal residue and defects on the device surface. CMP enables semiconductor manufacturers to produce smaller, faster, and more complex semiconductor devices with a greater density of transistors. Innovation in CMP slurries is constantly needed to meet the ever-growing demand for such leading-edge devices with lower defectivity, higher production throughput, and lower cost.

4. CMC spends millions of dollars in research and development ("R&D") annually and has invested considerable capital, labor, expertise, and ingenuity in delivering innovative CMP slurry solutions to the semiconductor industry. Before the '721 Patent, CMP slurries for dielectric applications were dominated by traditional products that require a high concentration of abrasive silica particles in a high pH environment—a design that achieves high removal rates of dielectric materials, but has a high cost and a high defect level.

5. As part of CMC's extensive R&D efforts, by 2014, the inventors of the '721 Patent developed low pH CMP slurry products for dielectric applications based on engineered colloidal silica abrasive particles. Even at a low solid content, these CMP slurries can improve planarity, reduce defects, speed up polishing rates, and lower the cost of ownership—all significant benefits to CMC's customers in addressing the increasingly precise and numerous polishing steps needed in advanced semiconductor device manufacturing. These novel slurries, released by CMC as part of its D922x family of slurries, were praised by CMC's customers and have since enjoyed commercial success across the semiconductor industry.

6. The '721 Patent, entitled "Colloidal Silica Chemical-Mechanical Polishing Composition," was duly and legally issued by the United States Patent and Trademark Office on November 22, 2016, to named inventors Steven Grumbine, Jeffrey Dysard, Ernest Shen, and Mary Cavanaugh. *See* Exhibit A. The application leading to the '721 Patent was filed on June 25, 2015, and claims priority to a provisional application filed on June 25, 2014. *See id.* A true, correct, and certified copy of the '721 Patent is attached hereto as Exhibit A.

7. Each and every Defendant has, for years, infringed, directly and/or indirectly, CMC's '721 Patent by making, using, selling, and/or offering for sale within the United States and/or importing into the United States products that are covered by one or more of the claims of the '721 Patent (at least composition claims 1, 3, 4, 6, 10, 11, 13, 14, 17, 18, 19, 20, 24, 26, 27, 28, 29, 31, 35, 36, 37 and method claims 39, 40, 41, 42, 43, 44, and 46, collectively, the "Asserted Claims"), including at least the Optiplane 2300 and 2600 family of products and other products with similar components and characteristics (collectively, the "Accused Products").

8. Indeed, the International Trade Commission ("ITC"), in *Certain Chemical Mechanical Planarization Slurries and Components Thereof*, Inv. No. 337-TA-1204 ("1204

Investigation") has already found knowing infringement of the '721 Patent by all Defendants based on their importation and sale of the Accused Products.

9. In the 1204 Investigation, after extensive fact and expert discovery and a full evidentiary hearing with all Defendants represented by counsel, an Administrative Law Judge ("ALJ") found that each of the Defendants named in this matter directly and/or indirectly infringe one or more of the Asserted Claims of the '721 Patent. Exhibit B (July 8, 2021 Initial Determination, Public Version) at 87-144. The ALJ also rejected all of Defendants' invalidity and unenforceability arguments with respect to the '721 Patent. *See id.* at 169-297; *id.* at 169 (summarizing Defendants' six invalidity and unenforceability arguments).

10. Each of Defendants' infringement, inducement, and/or contribution to infringement was and continues to be willful, with full pre-suit knowledge of the '721 Patent, with full pre-suit knowledge of infringement, and with blatant disregard for CMC's intellectual property rights as embedded in the '721 Patent.

11. Indeed, the ALJ found that "each of the respondents" (and therefore each of the Defendants here) "knew of the '721 Patent" and "knew" that the composition of Defendants' CMP slurries was "patented" by CMC well before CMC filed suit in June 2020. *Id.* at 142-43. Specifically, "the timeline of events shows that [Defendants] were well-aware of the '721 patent during their development of the Accused Products," and the evidence in fact shows "that any development that [Defendants] had prior to the '721 patent did not work and was abandoned." *Id.* at 134, 211.

12. Defendants' knowledge and egregious willful infringement is further confirmed by the fact that, "one month after learning of CMC's patent," a 2017 patent application filed by Rohm and Haas Electronic Materials CMP Holdings, Inc., another affiliate of each of the Defendants,

included nearly identical language to the '721 Patent, as shown below. *See id.* at 210-11 (citing U.S. 10,557,060).

CMC's '721 Patent at 11:4-13 (Published December 31, 2015)	DuPont's '060 Patent at 7:28-38 (Filed March 1, 2016)
By permanent positive charge it is meant that the positive of the colloidal silica particles in the original polishing charge on the silica particles is not readily reversible, for example, via flushing, dilution, filtration, and the like. A permanent positive charge may be the result of incorporating the positive charged species in the particle. A permanent positive charge may further result from a covalent interaction between the particle and a positively charged species and is in contrast to a reversible positive charge that may be the result, for example, of an electrostatic interaction between the particle and a positively charged species.	The term permanent positive surface charge as used herein is meant that the positive charge on the silica particles is not readily reversible. That is, the positive charge on the silica particles is not reversed through flushing, dilution or filtration. A permanent positive charge can be the result, for example, of covalently bonding a cationic species to the colloidal silica particles. Colloidal silica having a permanent positive charge is in contrast to colloidal silica having a readily reversible positive charge, which can be the result of an electrostatic interaction between a cationic species and the colloidal silica.

13. In addition, all Defendants "have had direct knowledge of their infringement of the '721 patent since at least April 13, 2020, when CMC sent a claim chart detailing infringement" to Defendants DuPont de Nemours, Inc., Rohm and Haas Electronic Materials CMP, LLC, and Rohm and Haas Electronic Materials LLC. *Id.* at 134.

14. On information and belief, each Defendant operates in concert with each other Defendant, and under the direction and control of Defendant DuPont de Nemours, Inc., with respect to the making, using, selling, offering for sale, and importation of the domestically manufactured Accused Products and, accordingly, each Defendant became aware of its direct and/or indirect infringement of the '721 Patent at least by April 13, 2020.

15. The full ITC reviewed the ALJ's findings, found in favor of CMC on all issues, and issued an exclusion order and cease and desist orders against Defendants on December 16, 2021. *See* Exhibit C (Comm'n Op.). The ITC specifically upheld the ALJ's findings on direct and indirect infringement. *See e.g.*, *id.* at 14 ("The Commission affirms that finding with regard to the composition claims, and finds that importation of the Optiplane™ slurry is a violation of section

337 because it constitutes the importation of an 'article[] that – infringe[s]' within the meaning of section 337(a)(1)(B)(i).''), 19 ("Thus, the Commission affirms the ID's finding that Respondents contribute to Rohm and Haas Electronic Materials CMP LLC's direct infringement of the method claims for the reasons stated in the ID."). The ITC determined not to review, and therefore maintained, the ALJ's findings on validity. *Id.* at 6.

16. Defendants did not appeal any of the ITC's findings. Accordingly, the ITC's findings became final, and this Court lifted the stay of this case on May 18, 2022. D.I. 18. CMC now seeks, and is entitled to, a monetary recovery resulting from Defendants' infringement, including treble damages, a finding of willful infringement, and any necessary additional injunction to stop Defendants' remaining infringement for the life of the '721 Patent.

THE PARTIES

17. Plaintiff CMC is a publicly traded Delaware corporation with its principal place of business at 870 North Commons Drive, Aurora, IL 60504.

18. Defendant DuPont de Nemours, Inc. is a Delaware corporation with its principal place of business at 974 Centre Road, Building 730, Wilmington, DE 19805. Defendant DuPont de Nemours, Inc. is the ultimate parent of the remaining Defendants and sells and offers to sell the Accused Products and controls the making, use, and importation of the Accused Products by the other Defendants.

19. Defendant Rohm and Haas Electronic Materials CMP LLC, a subsidiary of DuPont de Nemours, Inc., is a Delaware corporation with its principal place of business at 451 Bellevue Road, Newark, DE 19713. Defendant Rohm and Haas Electronic Materials CMP LLC makes, uses, sells, offers to sell, and imports the Accused Products.

20. Defendant Rohm and Haas Electronic Materials CMP Asia Inc., a subsidiary of

DuPont de Nemours, Inc., which also does business as Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.), is a Delaware corporation with its principal place of business at 4F., NO.6, LN. 280, Zhongshan N. Rd., Dayuan Dist., Taoyuan City, 337017 Taiwan. Defendant Rohm and Haas Electronic Materials CMP Asia Inc. imports the Accused Products and/or induces the making, use, sale, offering to sell, and importing of the Accused Products.

21. Defendant Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd., a subsidiary of DuPont de Nemours, Inc., is a Taiwan corporation with its principal place of business at 6, Kesi 2nd Rd., Chunan, Miaoli, 350401 Taiwan. Defendant Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd. imports the Accused Products and/or induces the making, use, sale, offering to sell, and importing of the Accused Products.

22. Defendant Rohm and Haas Electronic Materials K.K., a subsidiary of DuPont de Nemours, Inc., is a Japanese corporation with its principal place of business at Sanno Park Tower, 2-11-1, Nagata-cho, Chiyoda-ku, Tokyo 100-0014 Japan. Defendant Rohm and Haas Electronic Materials K.K. imports the Accused Products and/or components thereof, and/or induces the making, use, sale, offering to sell, and importing of the Accused Products.

23. Defendant Rohm and Haas Electronic Materials LLC, a subsidiary of DuPont de Nemours, Inc., is a Delaware company with its principal place of business at 455 Forest Street, Marlborough, MA 01752. Defendant Rohm and Haas Electronic Materials LLC imports, sells and/or offers to sell the Accused Products and/or induces the making, use, sale, offering to sell, and importing of the Accused Products.

JURISDICTION AND VENUE

24. CMC incorporates by reference paragraphs 1-23.

25. This Court has jurisdiction over the subject matter of this action under 28 U.S.C.

§§ 1331 and 1338(a) because this action arises under the patent laws of the United States, including 35 U.S.C. § 271.

26. This Court has personal jurisdiction over Defendant DuPont de Nemours, Inc. because DuPont de Nemours, Inc., directly or through affiliates, has committed and is continuing to commit acts of patent infringement in Delaware, including manufacture, use, sale, offering to sell, and/or importing the Accused Products in Delaware. Personal jurisdiction also exists over DuPont de Nemours, Inc. because it is an entity organized under the laws of Delaware and has purposefully availed itself of the benefits and protections of Delaware state law by transacting substantial business in Delaware, including having its principal place of business in the state.

27. This Court has personal jurisdiction over Defendant Rohm and Haas Electronic Materials CMP LLC because Rohm and Haas Electronic Materials CMP LLC, directly or through affiliates, has committed and is continuing to commit acts of patent infringement in Delaware, including manufacture, use, sale, offering to sell, and/or importing the Accused Products in Delaware. Personal jurisdiction also exists over Rohm and Haas Electronic Materials CMP LLC because it is an entity organized under the laws of Delaware and has purposefully availed itself of the benefits and protections of Delaware state law by transacting substantial business in Delaware, including having its principal place of business in the state.

28. This Court has personal jurisdiction over Defendant Rohm and Haas Electronic Materials CMP Asia Inc. because Rohm and Haas Electronic Materials CMP Asia Inc., directly or through affiliates, has committed and is continuing to commit acts of patent infringement in Delaware, including manufacture, use, sale, offering to sell, and/or importing the Accused Products in Delaware. Personal jurisdiction also exists over Rohm and Haas Electronic Materials CMP Asia Inc. because it is an entity organized under the laws of Delaware and has purposefully

availed itself of the benefits and protections of Delaware state law by transacting substantial business in Delaware, including establishing substantial, systematic, and continuous contacts and engaging in concerted actions with the other Defendants that are based in Delaware.

29. This Court has personal jurisdiction over Defendant Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd. because Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd., directly or through affiliates, has committed and is continuing to commit acts of patent infringement in Delaware, including manufacture, use, sale, offering to sell, and/or importing the Accused Products in Delaware. Personal jurisdiction also exists over Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd. because it has purposefully availed itself of the benefits and protections of Delaware state law by transacting substantial business in Delaware, including establishing substantial, systematic, and continuous contacts and engaging in concerted actions with the other Defendants that are based in Delaware.

30. This Court has personal jurisdiction over Defendant Rohm and Haas Electronic Materials K.K. because Rohm and Haas Electronic Materials K.K., directly or through affiliates, has committed and is continuing to commit acts of patent infringement in Delaware, including manufacture, use, sale, offering to sell, and/or importing the Accused Products and/or components thereof in Delaware. Personal jurisdiction also exists over Rohm and Haas Electronic Materials K.K. because it has purposefully availed itself of the benefits and protections of Delaware state law by transacting substantial business in Delaware, including establishing substantial, systematic, and continuous contacts and engaging in concerted actions with the other Defendants that are based in Delaware.

31. This Court has personal jurisdiction over Defendant Rohm and Haas Electronic Materials LLC because Rohm and Haas Electronic Materials LLC, directly or through affiliates,

has committed and is continuing to commit acts of patent infringement in Delaware, including manufacture, use, sale, offering to sell, and/or importing the Accused Products in Delaware. Personal jurisdiction also exists over Rohm and Haas Electronic Materials LLC because it is an entity organized under the laws of Delaware and has purposefully availed itself of the benefits and protections of Delaware state law by transacting substantial business in Delaware, including establishing substantial, systematic, and continuous contacts and engaging in concerted actions with the other Defendants that are based in Delaware.

32. On information and belief, including based upon the information set forth below in paragraphs 34-62, the six Defendants named in this matter are operating in concert, under the direction and control of Defendant DuPont de Nemours, Inc., with respect to the making, using, selling, offering for sale, and importation of the domestically manufactured Accused Products. For example, via its direction and control, Defendant DuPont de Nemours, Inc. induces and contributes to infringement by other subsidiary Defendants, as the ALJ found and the ITC confirmed.

33. Venue properly lies in this District under 28 U.S.C. §§ 1391 and 1400(b) because Defendants DuPont de Nemours, Inc., Rohm and Haas Electronic Materials CMP Inc., Rohm and Haas Electronic Materials CMP Asia Inc., and Rohm and Haas Electronic Materials LLC are Delaware companies and therefore reside in this judicial district, and Defendants Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd. and Rohm and Haas Electronic Materials K.K. are foreign entities who may be sued in any judicial district, including Delaware.

COUNT I — INFRINGEMENT OF U.S. PATENT NO. 9,499,721

34. CMC incorporates by reference the allegations of paragraphs 1-33.

35. CMC is the owner and sole assignee of the ’721 Patent and has full right to enforce

and license the '721 Patent.

36. The Accused Products satisfy each and every limitation of at least claim 1 of the '721 Patent:

> 1. A chemical mechanical polishing composition comprising:
>
> a water based liquid carrier;
>
> colloidal silica abrasive particles dispersed in the liquid carrier;
>
> a chemical species incorporated in the colloidal silica abrasive particles internal to an outer surface thereof, wherein the chemical species is a nitrogen containing compound or a phosphorus containing compound;
>
> a pH in a range from about 3.5 to about 6;
>
> wherein the colloidal silica abrasive particles have a permanent positive charge of at least 15 mV; and
>
> wherein the chemical species is not an aminosilane or a phosphonium silane.

37. The Accused Products directly and indirectly infringe at least this claim 1. Indeed, in the 1204 Investigation, the ALJ found overwhelming evidence of infringement. *See* Exhibit B at 87-144. And the ITC confirmed Defendants' direct and indirect infringement. *See* Exhibit C.

38. Specifically, "[t]he Accused Products are chemical mechanical polishing compositions used for chemical mechanical planarization," as shown by Defendants' own "marketing material and safety data sheets for the Accused Products." *See, e.g.*, Exhibit B at 92.

39. Moreover, as found by the ALJ, "[t]he Accused Products include a water based liquid carrier." *Id.* at 93. Defendants' own "recipes and technical documents" prove this limitation is met. *Id.*

40. The Accused Products also include "colloidal silica abrasive particles." *Id.* at 93-94. As found by the ALJ, Defendants' own "documents describe the Accused Products as including colloidal silica abrasive particles dispersed in a liquid carrier." *Id.*

41. The Accused Products comprise, and the ALJ also found that, "a chemical species, incorporated in the colloidal silica abrasive particles internal to an outer surface thereof, wherein the chemical species is a nitrogen containing compound or a phosphorous containing compound." *Id.* at 95-96. Indeed, at the ITC, Defendants did not "dispute this limitation is met." *Id.* at 95. Moreover, testing of the Accused Products, including testing by CMC's expert in the 1204 Investigation confirmed that this limitation is met. *Id.*

42. The Accused Products also have a pH of between approximately 3.5-6. *Id.* at 97. The pH of the Accused Products was shown by CMC's expert, which was "consistent with [Defendants'] technical documents." *Id.*

43. In the Accused Products, the colloidal silica abrasive particles have a permanent positive charge of at least 15 mV. As found by the ALJ, "[i]nfringement is clear from the extensive testing [CMC's expert] directed and oversaw at two independent commercial labs…." *Id.* at 97. "The Accused Products were measured in accordance with testing procedure in the '721 patent." *Id.* at 98. The "infringing permanent positive charge values measured by" multiple instruments "were highly consistent." *Id.* "Ultimately," as the ALJ concluded, "the permanent positive charge values of all Accused Products fall well within the claimed range." *Id.* at 99.

44. Finally, in the Accused Products, the ALJ found that "the chemical species … is not an aminosilane or a phosphonium silane." *Id.* at 106. In fact, "the particles do not contain aminosilane or phosphonium silane compounds." *Id.*

45. For all of the above reasons, all of the Accused Products practice claim 1—as CMC effectively informed Defendants before filing suit, as the ALJ already found, and as the ITC already confirmed. *Id.* at 106.

46. In addition to composition claim 1, there is infringement of, and the ALJ likewise

found infringement of, numerous additional claims, including composition claims 3, 4, 6, 10, 11, 13, 14, 17, 18, 19, 20, 24, 26, 27, 28, 29, 31, 35, 36, 37 and method claims 39, 40, 41, 42, 43, 44, and 46. *Id.* at 107-124.

47. Each Defendant directly and/or indirectly infringes these claims, both literally or under the doctrine of equivalents, by making, using, selling and/or offering for sale within the United States and/or importing into the United States the Accused Products in violation of 35 U.S.C. § 271(a).

48. For example, Defendant "Rohm and Haas Electronic Materials CMP LLC makes, uses, sells, and tests the Accused Products" in the United States and directly infringes all of the composition and method claims of the '721 Patent. Exhibit B at 140; *see also* Exhibit C at 19 ("Rohm and Haas Electronic Materials … make[s] the infringing slurries in the United States and thereby directly infringes the asserted composition claims."). Specifically, "Rohm and Haas Electronic Materials CMP LLC combines the … particle with other components of the Accused Products" to make the Accused Products in the United States. Exhibit B at 140. "Rohm and Haas Electronic Materials CMP LLC then tests the completed slurries using the process claimed in the method claims, and thereby directly infringe[s] the asserted method claims." Exhibit C at 19; *see also* Exhibit E (DuPont Public Interest Statement) at 2 ("Since 2000, DuPont has owned and operated a state-of-the-art production facility in Newark, Delaware where Optiplane™ CMP slurries are manufactured … Thus, DuPont's Optiplane™ CMP slurries are a domestically manufactured product.").

49. In addition, Defendant DuPont de Nemours, Inc. offers for sale and sells the Accused Products in the United States. For example, DuPont admitted that "after using the imported particles to make and use the Accused Products, respondents sell samples of the Accused

Products to customers and others in the United States." Exhibit B at 129. The Accused Products are advertised and offered for sale in the United States on Defendant DuPont de Nemours, Inc.'s website. *See* Exhibit D (DuPont Website); *see also* Exhibit E (DuPont Public Interest Statement) at 3 ("Multiple semiconductor companies … use DuPont's Optiplane™ CMP slurries."); Exhibit F (DuPont Public Interest Submission) at 1 ("DuPont is a global leader in the CMP slurry market and supplies its domestically made slurries to major companies in the semiconductor chip manufacturing industry in the United States and overseas.").

50. Finally, Defendants Rohm and Haas Electronic Materials CMP Asia Inc. (d/b/a Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.)), Rohm and Haas Electronic Materials CMP Asia Inc., (d/b/a Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.), Rohm and Haas Electronic Materials Asia-Pacific Co. Ltd., and Rohm and Haas Electronic Materials K.K. import the Accused Products and/or components thereof into the United States, and Rohm and Haas Electronic Materials LLC imports, sells, and/or offers to sell the Accused Products in the United States.

51. In addition to directly infringing the '721 Patent, Defendants have indirectly infringed and continue to indirectly infringe one or more claims of the '721 Patent.

52. As set forth in paragraphs 1-51, each of the Defendants has known about the '721 Patent and its respective infringement well before the original Complaint was filed in this matter. Moreover, Defendants were adjudicated to infringe each and every Asserted Claim nearly one year ago and have still continued to knowingly and willfully infringe.

53. In addition, in violation of 35 U.S.C. § 271(b), each of the Defendants has actively induced and continues to actively induce others (including other Defendants, customers of the Accused Products, and other third parties) to directly infringe the '721 Patent, by engaging in and

actively acting in concert with each other relating to: (a) the supply of the Accused Products and/or components of the Accused Products with the intention they will be used in the United States in an infringing manner by other Defendants, customers, and/or other third parties; (b) the marketing, distribution, and/or sale of the domestically-manufactured Accused Products to domestic and foreign customers (including on Defendants' websites); and/or (c) the instruction and encouragement of customers to use the Accused Products in an infringing manner with knowledge that these actions would infringe the '721 Patent. *See* Exhibit B at 139 ("In light of the above, respondents knowingly induced infringement of the '721 patent with specific intent to do so, including by providing components in the United States to assemble and/or making infringing products, selling these products to United States customers for use in the United States and otherwise intentionally causing direct infringement.").

54. For example, as the ITC found, "Defendants DuPont de Nemours, Inc. and Rohm and Haas Electronic Materials K.K., actively induce other respondent subsidiaries, including at least Rohm and Haas Electronic Materials CMP in Delaware to infringe the '721 Patent." Exhibit C at 17. "Specifically, employees of DuPont de Nemours, Inc. and subsidiary Rohm and Haas Electronic Materials K.K. of Japan purchase BS-3 colloidal silica particles in Japan and cause them to be imported into the United States with the intention that they will be used in the United States by Rohm and Haas Electronic Materials CMP LLC to make infringing CMP slurries, which are then used in an infringing manner in the United States by Rohm and Haas Electronic Materials CMP LLC, its customers, and a third-party lab." *Id.*

55. Similarly, at least Defendants Rohm and Haas Electronic Materials CMP Asia Inc. (d/b/a Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.)) and Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd. actively induce other Defendants, including

at least Rohm and Haas Electronic Materials CMP LLC, to infringe the '721 Patent. Defendants Rohm and Haas Electronic Materials CMP Asia Inc. (d/b/a Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.)) and Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd. are engaged in the marketing, selling, and/or offering for sale of the Accused Products to customers and such activities cause Rohm and Haas Electronic Materials CMP LLC to make, use, and test the Accused Products in the United States, and thereby directly infringe the '721 Patent, to facilitate such sales and marketing activities.

56. Furthermore, as the ALJ found, "there is direct infringement by respondents' customers and respondents induce this infringement by supplying them with the Accused Products" and instructing their use in a manner that infringes the claims. Exhibit B at 138. For example, at least Defendants DuPont de Nemours, Inc., Rohm and Haas Electronic Materials CMP LLC, and Rohm and Haas LLC induce United States customers to infringe the '721 Patent by supplying the Accused Products and instructing their use in a manner that infringes both the asserted composition and method claims of the '721 Patent. In this regard, the evidence shows that Defendants "are familiar with how their customers use the Accused Products," and such use directly infringes the '721 Patent. Exhibit B at 138.

57. In violation of 35 U.S.C. § 271(c), each of the Defendants has also contributed to and is continuing to contribute to infringement of the '721 Patent by others (such as other Defendants and customers) by selling and/or offering for sell within the United States and/or importing into the United States the Accused Products and/or components of the Accused Products, that are especially made and/or adapted for infringing the '721 Patent and are not staple articles of commerce suitable for substantial non-infringing use.

58. For example, Defendants, "including DuPont de Nemours, Inc. and subsidiaries

Rohm and Haas Electronic Materials CMP LLC and Rohm and Haas Electronic Materials K.K. of Japan, cause to be imported into the United States … the … particle component of the Accused Products." Exhibit B at 140. The importation and "supply of the particles by the foreign respondents," Rohm and Haas Electronic Materials CMP Asia Inc. (d/b/a Rohm and Haas Electronic Materials CMP Asia Inc., Taiwan Branch (U.S.A.) and Rohm and Haas Electronic Materials Asia-Pacific Co., Ltd., and Rohm and Haas Electronic Materials K.K., "contributes to direct infringement by Rohm and Haas Electronic Materials CMP LLC." Exhibit C at 18-19. "Rohm and Haas Electronic Materials CMP LLC uses the [imported and] supplied particle to make the infringing slurries in the United States and thereby directly infringes the asserted composition claims." *Id.* at 19. In addition, with respect to the method claims of the '721 Patent, "Rohm and Haas Electronic Materials CMP LLC then tests the completed slurries using the process claimed in the method claims, and thereby directly infringe the asserted method claims." *Id.* at 19.

59. The supplied particle is a "component that [Defendants] control for purposes of making the Accused Products" and thus has no substantial non-infringing uses and is not a staple article of commerce. Exhibit B at 136; *see also id.* at 141 ("[N]either the Accused Products nor the imported … particles have any substantial non-infringing use …. Respondents import … colloidal silica particles that are specifically designed and tailored for respondents to use in respondents' Accused Products …. [The imported colloidal silica particle] is not an off-the-shelf commodity product."); *id.* at 142 ("Indeed, respondents have identified no other use for the … particles than to be made into the Accused Products, and the Accused Products in turn have no use other than to be used for CMP as described in the '721 Patent …. For at least these reasons the … particles are especially made for infringement of the '721 patent and are not a staple article.").

60. In addition, as the ALJ found, "all respondents," and thus all Defendants in this

matter, "contribute to the infringement of respondents' United States customers" and other third parties that use and test the Accused Products in the United States. Exhibit B at 142.

61. Defendants' infringement of the '721 Patent is deliberate and willful, justifying enhanced damages under 35 U.S.C. § 284 and attorneys' fees and costs incurred in prosecuting this action under 35 U.S.C. § 285. As the ALJ found, "[i]t appears respondents followed CMC's invention" and were "well-aware of the '721 Patent during" Defendants' "development of the Accused Products." Exhibit B at 134. As described above, each of the Defendants knew of the '721 Patent and knew that the composition of the Accused Products was patented well before CMC filed suit in June 2020. Nonetheless, despite being on notice of infringement of the '721 Patent, and even after fully litigating the case and receiving a ruling by the ITC in favor of CMC on all issues, each of the Defendants has continued its infringing activity knowing and intending to directly and/or indirectly infringe the '721 Patent.

62. Defendants' infringement has caused and is continuing to cause damage and irreparable injury to CMC, and CMC will continue to suffer damage and irreparable injury unless and until that infringement is enjoined by this Court. By this action, CMC seeks to stop Defendants' willful, unauthorized, and improper use of the '721 Patent, and to obtain monetary relief, including significant damages for the significant harm caused to CMC by Defendants' willful infringement.

PRAYER FOR RELIEF

WHEREFORE, CMC prays for relief as follows:

a. That each Defendant has infringed and continues to infringe the '721 Patent, either directly and/or indirectly;

b. That each Defendant's infringement of the '721 Patent has been and continues to be willful;

c. In accordance with 35 U.S.C. § 284, that each Defendant be ordered to pay to CMC all monetary damages to which CMC is entitled (together with pre and post judgment interest), including increased damages for willful infringement;

d. That this case be declared exceptional in accordance with 35 U.S.C. § 285 and that CMC be awarded and Defendants pay CMC's attorneys' fees;

e. An injunction prohibiting further infringement of the '721 Patent; and

f. Such other and further relief as this Court may deem just and equitable.

DEMAND FOR JURY TRIAL

A jury trial is demanded on all claims and issues so triable.

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