

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

INPRIA CORPORATION,

Plaintiff,

v.

LAM RESEARCH CORP.,

Defendant.

C.A. No. \_\_\_\_\_

**JURY TRIAL DEMANDED**

**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Inpria Corporation hereby alleges as follows:

**THE PARTIES**

1. Inpria Corporation (“Inpria”) is incorporated under the laws of the state of Delaware and has a regular and established place of business at 1100 NE Circle Blvd., Suite 360, Corvallis, Oregon 97330.

2. Inpria is a technological pioneer based in Corvallis, Oregon. Founded in 2007 in connection with researchers from Oregon State University, Inpria has spent the last 15 years developing new technology and becoming the world leader in cutting edge metal oxide photoresist design, development and manufacturing, with an emphasis on applications for extreme ultraviolet light (EUV) semiconductor processing.

3. Inpria has been awarded numerous patents around the world as a result of its research and innovation, with additional patent applications under examination in patent offices around the world.

4. Upon information and belief, defendant Lam Research Corporation (“Defendant” or “Lam”) is incorporated under the laws of the state of Delaware, with its principal place of business at 4650 Cushing Parkway, Fremont, CA 94538.

**JURISDICTION AND VENUE**

5. This action arises under the United States patent laws, 35 U.S.C. §§ 101, *et seq.* This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331, 1338, and 35 U.S.C. § 1, *et seq.*

6. Upon information and belief, this Court has personal jurisdiction over Defendant because Defendant has purposely availed itself of the privilege of conducting activities within this State and judicial District. For example, Defendant is incorporated in this District.

7. Venue is proper in this District pursuant to 28 U.S.C. § 1400(b).

**GENERAL ALLEGATIONS RELATED TO THE  
INFRINGEMENT OF INPRIA’S PATENTS**

8. Inpria is now, and has been since its issuance, the assignee and sole owner of all right, title, and interest in United States Patent No. 10,732,505, entitled “Organotin oxide hydroxide patterning compositions, precursors, and patterning” (“the ’505 Patent”), which was duly and legally issued on August 4, 2020. A true and correct copy of the ’505 Patent is attached hereto as Exhibit A.

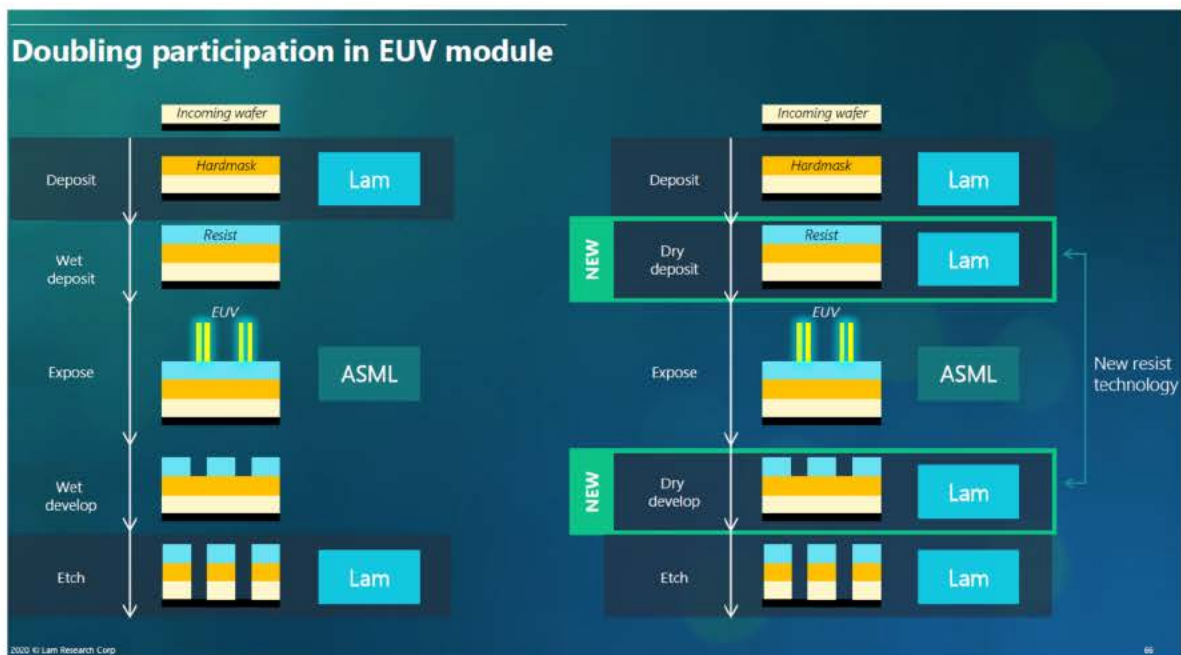
9. Inpria is now, and has been since its issuance, the assignee and sole owner of all right, title, and interest in United States Patent No. 9,823,564, entitled “Patterned inorganic layers, radiation based patterning compositions and corresponding methods” (“the ’564 Patent”), which was duly and legally issued on November 21, 2017. A true and correct copy of the ’564 Patent is attached hereto as Exhibit B.

10. Inpria is now, and has been since its issuance, the assignee and sole owner of all right, title, and interest in United States Patent No. 9,310,684, entitled “Organometallic solution based high resolution patterning compositions” (“the ’684 Patent”), which was duly and legally

issued on April 12, 2016. A true and correct copy of the '684 Patent is attached hereto as Exhibit C.

11. Inpria practices its patented EUV semiconductor processing technology.

12. Defendant makes, uses, and offers for sale products it refers to as its “dry resist” or “dry deposition” process (“dry resist”) products, including a product Defendant describes as Aether. Defendant’s dry resist products are described in detail in numerous public publications, including Defendant’s 2020 Investor Day presentation (“Investor Day presentation”), a true and correct copy of an excerpt of which is attached as Exhibit D, and which may be obtained from <https://investor.lamresearch.com/events/event-details/2020-investor-meeting> (retrieved as of October 14, 2022), and a series of slides regarding Defendant’s dry resist products that Defendant filed with the U.S. Patent and Trademark office in connection with provisional U.S. patent application No. 62/868,710 (“Provisional Filing”). Upon information and belief, Defendant’s Investor Day presentation was presented publicly on or around March 3, 2020, including, for example, its description of Defendant’s dry resist products on slide 66 as shown below:



13. Defendant's Investor Day presentation included additional depictions of its infringing dry resist products, including, for example (Exhibit D at slide 73):



14. Defendant has also made public projections that the market for its dry resist products would be greater than \$1B in the coming years.

15. As alleged below, Defendant's dry resist products infringe one or more claims of each of Inpria's '505, '564, and '684 Patents.

### **FIRST CAUSE OF ACTION**

#### **INFRINGEMENT OF U.S. PATENT NO. 10,732,505**

16. The facts and allegations of paragraphs 1-15 are incorporated by reference for this First Cause of Action as though fully set forth herein.

17. Inpria is now, and has been since its issuance, the assignee and sole owner of all right, title, and interest in United States Patent No. 10,732,505, entitled "Organotin oxide hydroxide patterning compositions, precursors, and patterning" ("the '505 Patent"), which was

duly and legally issued on August 4, 2020. A true and correct copy of the '505 Patent is attached hereto as Exhibit A.

18. In violation of 35 U.S.C. § 271, Defendant has directly infringed and continues to directly infringe, both literally and/or under the doctrine of equivalents, the '505 Patent by making, using, offering for sale, selling, and/or importing its dry resist product(s) in the United States, without the authority of Inpria.

19. Defendant's dry resist products infringe at least claim 1 of the '505 Patent, as set forth in the accompanying claim chart attached as Exhibit E.

20. Accordingly, Defendant directly infringes at least claim 1 of the '505 Patent, both literally and under the doctrine of equivalents. Inpria expressly reserves the right to assert additional claims in this litigation against the same or additional products of Defendant, in accordance with the rules of this Court.

21. Defendant has also infringed at least claim 1 of the '505 Patent by inducing others, including end users of the dry resist products, to infringe at least claim 1 of the '505 Patent. On information and belief, Defendant takes active steps to induce infringement of at least claim 1 of the '505 Patent by others, including end users of the dry resist products, and Defendant does so knowing that those steps will induce, encourage and facilitate direct infringement by others. On information and belief, Defendant is aware of the '505 Patent and knows or should know that such activities induce others to directly infringe at least claim 1 of the '505 Patent.

22. Defendant also contributes to the infringement of at least claim 1 of the '505 Patent by others, including end users of the dry resist products. Acts by Defendant that contribute to the infringement of others include, but are not limited to, the use, sale or provision of the dry resist products to end users of the dry resist products. The accused dry resist products are especially made or adapted for use to infringe at least claim 1 of the '505 Patent and are at



least a material part of those claims. The dry resist products, including the functionality contributing to infringement of the '505 Patent, are not a staple article or commodity of commerce suitable for substantial noninfringing use.

23. By way of at least this Complaint, Defendant knows of the '505 Patent and performs acts that Defendant knows, or should know, induce and/or contribute to the direct infringement of the '505 Patent.

24. Despite Defendant's knowledge of the '505 Patent and its ongoing infringement, Defendant has continued to manufacture, use, sell, offer for sale, and/or import the accused dry resist products in a manner that willfully infringes the '505 Patent.

25. Inpria has been irreparably harmed by Defendant's infringement of the '505 Patent and will continue to be harmed unless and until Defendant's infringement is enjoined by this Court.

26. Inpria has been damaged as a result of Defendant's infringing conduct. Defendant is therefore liable to Inpria for damages in an amount that adequately compensates for Defendant's infringement, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

### **SECOND CAUSE OF ACTION**

#### **INFRINGEMENT OF U.S. PATENT NO. 9,823,564**

27. The facts and allegations of paragraphs 1-26 are incorporated by reference for this Second Cause of Action as though fully set forth herein.

28. Inpria is now, and has been since its issuance, the assignee and sole owner of all right, title, and interest in United States Patent No. 9,823,564, entitled "Patterned inorganic layers, radiation based patterning compositions and corresponding methods" ("the '564 Patent"),

which was duly and legally issued on November 21, 2017. A true and correct copy of the '564 Patent is attached hereto as Exhibit B.

29. Defendant's dry resist products infringe at least claim 1 of the '564 Patent, as set forth in the accompanying claim chart attached as Exhibit F.

30. Accordingly, Defendant directly infringes at least claim 1 of the '564 Patent, both literally and under the doctrine of equivalents. Inpria expressly reserves the right to assert additional claims in this litigation against the same or additional products of Defendant, in accordance with the rules of this Court.

31. Defendant has also infringed at least claim 1 of the '564 Patent by inducing others, including end users of the dry resist products, to infringe at least claim 1 of the '564 Patent. On information and belief, Defendant takes active steps to induce infringement of at least claim 1 of the '564 Patent by others, including end users of the dry resist products, and Defendant does so knowing that those steps will induce, encourage and facilitate direct infringement by others. On information and belief, Defendant is aware of the '564 Patent and knows or should know that such activities induce others to directly infringe at least claim 1 of the '564 Patent.

32. Defendant also contributes to the infringement of at least claim 1 of the '564 Patent by others, including end users of the dry resist products. Acts by Defendant that contribute to the infringement of others include, but are not limited to, the use, sale or provision of the dry resist products to end users of the dry resist products. The accused dry resist products are especially made or adapted for use to infringe at least claim 1 of the '564 Patent and are at least a material part of those claims. The dry resist products, including the functionality contributing to infringement of the '564 Patent, are not a staple article or commodity of commerce suitable for substantial noninfringing use.

33. By way of at least this Complaint, Defendant knows of the '564 Patent and performs acts that Defendant knows, or should know, induce and/or contribute to the direct infringement of the '564 Patent.

34. Despite Defendant's knowledge of the '564 Patent and its ongoing infringement, Defendant has continued to manufacture, use, sell, offer for sale, and/or import the accused dry resist products in a manner that willfully infringes the '564 Patent.

35. Inpria has been irreparably harmed by Defendant's infringement of the '564 Patent and will continue to be harmed unless and until Defendant's infringement is enjoined by this Court.

36. Inpria has been damaged as a result of Defendant's infringing conduct. Defendant is therefore liable to Inpria for damages in an amount that adequately compensates for its infringement, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

### **THIRD CAUSE OF ACTION**

#### **INFRINGEMENT OF U.S. PATENT NO. 9,310,684**

37. The facts and allegations of paragraphs 1-36 are incorporated by reference for this Third Cause of Action as though fully set forth herein.

38. Inpria is now, and has been since its issuance, the assignee and sole owner of all right, title, and interest in United States Patent No. 9,310,684, entitled "Organometallic solution based high resolution patterning compositions" ("the '684 Patent"), which was duly and legally issued on April 12, 2016. A true and correct copy of the '684 Patent is attached hereto as Exhibit C.

39. Defendant's dry resist products infringe at least claim 10 of the '684 Patent, as set forth in the accompanying claim chart attached as Exhibit G.



40. Accordingly, Defendant directly infringes at least claim 10 of the '684 Patent, both literally and under the doctrine of equivalents. Inpria expressly reserves the right to assert additional claims in this litigation against the same or additional products of Defendant, in accordance with the rules of this Court.

41. Defendant has also infringed at least claim 10 of the '684 Patent by inducing others, including end users of the dry resist products, to infringe at least claim 10 of the '684 Patent. On information and belief, Defendant takes active steps to induce infringement of at least claim 10 of the '684 Patent by others, including end users of the dry resist products, and Defendant does so knowing that those steps will induce, encourage and facilitate direct infringement by others. On information and belief, Defendant is aware of the '684 Patent and knows or should know that such activities induce others to directly infringe at least claim 10 of the '684 Patent.

42. Defendant also contributes to the infringement of at least claim 10 of the '684 Patent by others, including end users of the dry resist products. Acts by Defendant that contribute to the infringement of others include, but are not limited to, the use, sale or provision of the dry resist products to end users of the dry resist products. The accused dry resist products are especially made or adapted for use to infringe at least claim 10 of the '684 Patent and are at least a material part of those claims. The dry resist products, including the functionality contributing to infringement of the '684 Patent, are not a staple article or commodity of commerce suitable for substantial noninfringing use.

43. By way of at least this Complaint, Defendant knows of the '684 Patent and performs acts that Defendant knows, or should know, induce and/or contribute to the direct infringement of the '684 Patent.

44. Despite Defendant's knowledge of the '684 Patent and its ongoing infringement, Defendant has continued to manufacture, use, sell, offer for sale, and/or import the accused dry resist products in a manner that willfully infringes the '684 Patent.

45. Inpria has been irreparably harmed by Defendant's infringement of the '684 Patent and will continue to be harmed unless and until Defendant's infringement is enjoined by this Court.

46. Inpria has been damaged as a result of Defendant's infringing conduct. Defendant is therefore liable to Inpria for damages in an amount that adequately compensates for its infringement, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

#### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiff Inpria requests the following relief:

- (a) judgment that Defendant infringes the '505 Patent;
- (b) judgment that Defendant infringes the '564 Patent;
- (c) judgment that Defendant infringes the '684 Patent;
- (d) Enter an order permanently enjoining Defendant and its officers, agents, employees, attorneys, parent company, and all persons in active concert or participation with any of them, from infringing the '505, '564, and/or '684 Patents;
- (e) Award Inpria damages in an amount sufficient to compensate it for Defendant's infringement of one or more claims of the '505, '564, and/or '684 Patents, together with pre-judgment and post-judgment interest and costs, and all other damages permitted under 35 U.S.C. § 284;
- (f) Treble the damages awarded to Inpria under 35 U.S.C. § 284 by reason of Defendant's willful infringement of one or more claims of the '505, '564, and/or '684 Patents;

(g) an accounting for infringing sales not presented at trial and an award by the Court of additional damages for any such infringing sales;

(h) Declare this case to be “exceptional” under 35 U.S.C. § 285 and award Inpria its attorneys’ fees, expenses, and costs incurred in this action; and

(i) such other and further relief as the Court finds just and proper.

**JURY DEMAND**

Plaintiff Inpria requests trial by jury.

Dated: October 14, 2022

FISH & RICHARDSON P.C.

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