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11 UNITED STATES DISTRICT COURT
12 NORTHERN DISTRICT OF CALIFORNIA

14 APPLIED MATERIALS, INC.,
15 Plaintiff,
16 vs.
17 DEMARAY LLC,
18 Defendant.

CASE NO. 5:20-cv-05676

**FIRST AMENDED COMPLAINT FOR
DECLARATORY JUDGMENT**

FIRST AMENDED COMPLAINT FOR
DECLARATORY JUDGMENT

NATURE OF THE ACTION

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2 1. This is an action for declaratory relief arising under the patent laws of the United States.
3 Applied Materials, Inc. (“Applied”) brings the instant action because Defendant Demaray LLC
4 (“Demaray”) has filed lawsuits alleging that certain of Applied’s customers infringe United States
5 Patent Nos. 7,544,276 and 7,381,657 (the “Asserted Patents”) by using “semiconductor
6 manufacturing equipment including reactive magnetron sputtering reactors” manufactured by
7 Applied. True and correct copies of these complaints against Applied’s customers are attached as
8 Exhibits A and B. Demaray’s lawsuits against Applied’s customers have placed a cloud over
9 Applied’s products; threatened Applied’s business and relationships with its customers and
10 partners, as well as the sales of its reactors; and created a justiciable controversy between Applied
11 and Demaray.
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13 2. Therefore, Applied requests declaratory relief as follows: (1) a declaratory judgment that
14 Applied’s products do not infringe the Asserted Patents because they do not meet each and every
15 limitation of any asserted claim; (2) declaratory judgment that Applied’s products cannot infringe
16 the Asserted Patents because the rights of named inventor, Mukundan Narasimhan (“Narasimhan”),
17 in the Asserted Patents were assigned to Applied, making Applied at least a co-owner of the
18 Asserted Patents that has not joined and will not join Demaray in alleging infringement of the
19 Asserted Patents; and (3) declaratory judgment that Applied’s products cannot infringe because
20 Applied has a license to use the Asserted Patents by reason of a license granted to at least Applied
21 Komatsu Technology (“AKT”) and Applied Komatsu Technology America, Inc. (“AKTA”)
22 (collectively “Applied Komatsu”), affiliates of Applied, by Demaray’s predecessor company,
23 Symmorphix, Inc. (“Symmorphix”) covering the Asserted Patents; or alternatively, declaratory
24 judgment that Applied’s products cannot infringe the Asserted Patents because the rights of one or
25 more of the other named inventors of the Asserted Patents were assigned to AKTA, making AKTA
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1 at least a co-owner of the Asserted Patents that has not been joined and will not join Demaray in
 2 alleging infringement of the Asserted Patents.

3 **THE PARTIES**

4 3. Plaintiff Applied Materials, Inc. (“Applied”) is a corporation organized and existing under
 5 the laws of the state of Delaware, with its principal place of business at 3050 Bowers Avenue, Santa
 6 Clara, CA 95054-3299. Applied is a leader in materials engineering solutions that creates
 7 technology and products used for semiconductor fabrication, including but not limited to reactors
 8 in the Endura product line.

9 4. Defendant Demaray LLC (“Demaray”) is a limited liability company organized and existing
 10 under the laws of the state of Delaware. Dr. Richard Ernest Demaray is the founder of Demaray
 11 LLC. Dr. Demaray is also one of the named inventors on the Asserted Patents. Dr. Demaray
 12 describes Demaray LLC as a “Silicon Valley, CA” company which “[is] about the portfolio of my
 13 patents.”¹

14 **JURISDICTIONAL STATEMENT**

15 5. This action arises under the Declaratory Judgment Act, 28 U.S.C. § 2201, and under the
 16 patent laws of the United States, 35 U.S.C. §§ 1–390.

17 6. This Court has subject matter jurisdiction over this action under 28 U.S.C. §§ 1331, 1338(a),
 18 and 2201(a).

19 7. This Court has personal jurisdiction over Demaray. Among other things, Demaray has
 20 continuous and systematic business contacts with Northern California. Demaray’s “founder and
 21 president,” Dr. Demaray, describes Demaray as a “Silicon Valley, CA” company:²

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28 ¹ <https://www.edemaray.com/bios.html>

² <https://www.edemaray.com/bios.html>; <https://www.linkedin.com/in/ernestdemarayphd/>

Experience:

Founder and President: Demaray LLC March 2013 – Present Silicon Valley CA

Intellectual Property invention and development, including licensing for thin film energy conversion and storage technologies and devices, thin film optics, solar energy, photo-chemistry, solid state Li+ ion films and devices, advanced thin film coatings and devices.



Founder and President

Demaray LLC

Jan 2006 – Present · 14 yrs 7 mos

Silicon Valley CA

Intellectual Property invention and development, including licensing for thin film energy conversion and storage technologies and devices, thin film optics, solar energy, photo-chemistry, solid state Li+ ion films and devices, advanced thin film coatings and devices.

On information and belief, according to Demaray's website, several of the Board members and employees of Demaray are from and/or based in Northern California.³ Under its "Partners" sub-page, Demaray's website lists the University of California at Santa Cruz as one of its primary partners, and claims that "Professor Kobayashi of UCSC is working with Demaray LLC to further develop the Sun2Fiber technology with a grant from ARPA-E."⁴ Further, on information and belief, the technology underlying the Asserted Patents was allegedly developed in Northern California.

8. In addition, this Court has personal jurisdiction over Demaray because Demaray has purposefully directed into California its enforcement activities regarding the Asserted Patents. As referenced above, Demaray has filed complaints against Intel (headquartered in Northern California)⁵ and Samsung (conducts substantial business operations related to the allegedly infringing technology in Northern California and holds a large US office in Northern California).⁶ Further, Demaray's complaints against both Samsung and Intel accuse Applied technology, and Applied is also headquartered in Northern California.⁷ And, at least against Samsung, Demaray

³ <https://www.edemaray.com/bios.html>

⁴ <https://www.edemaray.com/partners.html>

⁵ <https://www.intel.com/content/www/us/en/support/articles/000015107/programs.html>

⁶ **Error! Hyperlink reference not valid.** <https://www.samsung.com/us/ssic/location/san-jose-ca/>

⁷ <http://www.appliedmaterials.com/company/contact/locations>

1 relies on meetings occurring in Northern California to establish alleged pre-suit notice and
2 knowledge of the Asserted Patents, and alleged willful infringement.⁸

3 9. Venue is proper in this District under 28 U.S.C. §§ 1391(b), (c), because a substantial part
4 of the events giving rise to Applied's claim occurred in this district, and because Demaray is subject
5 to personal jurisdiction here.

6 10. On information and belief, Dr. Demaray has filed over a hundred patents over the course of
7 his career, which has been spent almost entirely in Northern California.⁹ After receiving the entirety
8 of his education at schools located in Northern California (Cal State Hayward and the University
9 of California at Santa Cruz), Dr. Demaray has spent almost 40 years working at California-based
10 companies, including Applied Komatsu, Varian Semiconductor, Symmorphix, and Demaray.¹⁰

11 11. On information and belief, in addition to Dr. Demaray, Ravi Mullapudi, one of the other
12 named inventors of the Asserted Patents, also resides in Northern California. On information and
13 belief, Gary Edwards, the patent prosecution attorney for the Asserted Patents, resides in Northern
14 California.¹¹ Further, on information and belief, the research and development of the Asserted
15 Patents was performed in Northern California. On information and belief, the Sales and
16 Relationship Agreement between Applied Komatsu and Symmorphix, which granted Applied
17 Komatsu a license to the Asserted Patents, as detailed *infra*, was negotiated and executed in
18 Northern California.

19 12. An immediate, real, and justiciable controversy exists between Applied and Demaray as to
20 whether Applied and/or Applied's products are infringing or have infringed the Asserted Patents.

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⁸ See Ex. B at 24–25.

27 ⁹ <https://www.linkedin.com/in/ernestdemarayphd/>

28 ¹⁰ *Id.*

¹¹ <https://www.haynesboone.com/people/e/edwards-gary>

FACTUAL BACKGROUND

13. Demaray, its principals and predecessor companies, on the one hand, and Applied and Applied Komatsu, on the other hand, have a long history together, including as it relates to the Asserted Patents.

14. On information and belief, Dr. Demaray was a general manager of a joint venture between Applied and Komatsu Ltd., called Applied Komatsu Technology, Inc. (“AKT”), developing sputtered silicon deposition technology for flat panel displays.¹² On information and belief, Dr. Demaray, and other employees working with Dr. Demaray, were working in Northern California and employed by AKT’s subsidiary, AKTA.

15. On information and belief, Dr. Demaray, along with several other colleagues from Applied and/or Applied Komatsu left in late 1998 to start a new company, Symmorphix. On information and belief, Dr. Demaray was a founder and the CTO of Symmorphix.¹³

16. On information and belief, at Symmorphix, Dr. Demaray and his team of former Applied or Applied Komatsu employees continued to develop the technology they worked on at Applied or Applied Komatsu related to sputtered silicon deposition technology, including on methods of sputtering using varying frequencies of RF in order to produce denser dielectric films for optical components, such as optical waveguides.

17. On December 11, 1998, Applied Komatsu and Symmorphix executed a Sale and Relationship Agreement, under which Symmorphix would purchase two Applied Komatsu systems and continue using the Applied Komatsu facilities to operate the equipment.¹⁴ A true and correct copy of the Sale and Relationship Agreement attached hereto as Exhibit C.¹⁵ Pursuant to the Sales

¹² <https://www.linkedin.com/in/ernestdemarayphd/>

¹³ <https://www.linkedin.com/public-profile/in/ernestdemarayphd/>

¹⁴ Ex. C, Sales and Relationship Agreement (“SRA”), ¶¶ 1, 6.

¹⁵ Ex. C has been redacted to remove confidential financial information and to remove hand-written notes from the copy of the SRA maintained by Applied in its business records.

1 and Relationship Agreement, Symmorphix continued using the Applied Komatsu facilities and
 2 equipment until at least until September 30, 1999, as evidenced by two further Addendums to the
 3 Sale and Relationship Agreement.¹⁶

4 18. The Sale and Relationship Agreement provided that “[t]he parties have agreed to certain
 5 provisions regarding future dealings, intellectual property, confidential information, and licenses,
 6 as described in Exhibit C.”¹⁷ On January 29, 1999, Applied Komatsu and Symmorphix executed
 7 an amended Exhibit C to the Sale and Relationship Agreement which modified the December 11,
 8 1998 version:

10 THIS MODIFIED VERSION OF EXHIBIT C IS EFFECTIVE ON THE
 11 DATE SIGNED ON BEHALF OF [APPLIED KOMATSU] AND
 12 SYMMORPHIX, AND SUPERCEDES THE VERSION ATTACHED TO
 THE SALE AND RELATIONSHIP AGREEMENT DATED 12/11/98.¹⁸

13 19. The Amended Exhibit C included a license grant from Symmorphix to Applied Komatsu,
 14 including for “inventions, improvements, or enhancements developed by Symmorphix relating to
 15 sputtered silicon deposition technology”—the technology embodied in the Asserted Patents.
 16 Further, the license grant also expressly permitted Applied Komatsu to transfer or assign such
 17 license grant to Applied, and expressly allowed Applied Komatsu’s customers to use such
 18 inventions as well:

20 To the extent required by existing [Applied Komatsu] Employee
 21 Agreements with any Symmorphix personnel, **Symmorphix grants to**
 22 **[Applied Komatsu] a non-assignable, non-transferable, non-exclusive,**
 23 **perpetual, royalty-free license to any rights of Symmorphix under any**
 24 **patents issued based on any patent applications filed for inventions,**
 25 **improvements, or enhancements developed by Symmorphix relating to**
 26 **sputtered silicon deposition technology**, provided that [Applied Komatsu]
 shall not utilize such rights to pursue a business of providing Services.
 Notwithstanding the generality of the foregoing, [Applied Komatsu] shall
 be authorized to assign or transfer any or all of the above license to one or
 more of [Applied Komatsu’s] parent entities, with the same restriction on

27 ¹⁶ Ex. C, SRA, Second Addendum at ¶ 6.

28 ¹⁷ Ex. C, SRA ¶ 21.

¹⁸ Ex. C, SRA, Amended Ex. C.

1 competition with the Services provided by Symmorphix, and **[Applied**
 2 **Komatsu's] customers may use equipment provided by [Applied**
 3 **Komatsu] incorporating inventions licensed to [Applied Komatsu]**
 4 **hereunder without further consideration.**¹⁹

5 20. On March 16, 2002, U.S. Patent Application No. 10/101,863 ("863 Application") was filed
 6 naming Richard E. Demaray, Hongmei Zhang, Mukundan Narasimhan, and Ravi Mullapudi as
 7 named inventors.

8 21. On October 1, 2004, U.S. Patent Application No. 10/954,182 was filed as a continuation
 9 application of the '863 Application naming Richard E. Demaray, Hongmei Zhang, Mukundan
 10 Narasimhan, and Ravi Mullapudi as named inventors. On June 3, 2008, this application issued as
 11 U.S. Patent No. 7,381,657 ("the '657 patent"). A true and correct copy of the '657 patent is attached
 12 hereto as Exhibit D.

13 22. On September 16, 2005, U.S. Patent Application No. 10/228,834 was filed as a divisional
 14 application of the '863 Application naming Richard E. Demaray, Hongmei Zhang, Mukundan
 15 Narasimhan, and Ravi Mullapudi as named inventors. On June 9, 2009, this application issued as
 16 U.S. Patent No. 7,544,276 ("the '276 patent"). A true and correct copy of the '276 patent is attached
 17 hereto as Exhibit E.

18 23. On information and belief, all four named inventors had executed Employee Agreements
 19 with Applied, or its subsidiary, Applied Komatsu.

20 24. On information and belief, one or more of the named inventors has the following assignment
 21 provision in their Applied Komatsu Employee Agreement:
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23 In case any invention is described in a patent application or is disclosed to
 24 third parties by me after terminating my employment with [Applied
 25 Komatsu], it is to be presumed that the invention was conceived or made
 26 during the period of my employment for [Applied Komatsu], and the
 27 invention will be assigned to [Applied Komatsu] as provided by this

28 ¹⁹ Ex. C, SRA, Amended Ex. C ¶ 3(b)(emphasis added).

1 Agreement, provided it relates to my work with [Applied Komatsu] or any
2 of its subsidiaries.

3 25. On information and belief, Mukundan Narasimhan (“Narasimhan”), one of the named
4 inventors, left Applied to join Symmorphix on April 16, 2001. Narasimhan’s Employee Agreement
5 with Applied contains the following assignment provision:

6 In case any invention is described in a patent application or is disclosed to
7 third parties by me within one (1) year after terminating my employment
8 with APPLIED, it is to be presumed that the invention was conceived or
9 made during the period of my employment for APPLIED, and the invention
10 will be assigned to APPLIED as provided by this Agreement, provided it
11 relates to my work with APPLIED or any of its subsidiaries.

12 26. The Asserted Patents claims priority to the ’863 Application, which was filed on March 16,
13 2002, and within one year of Narasimhan terminating his employment with Applied.

14 ***APPLIED DOES NOT INFRINGE THE ASSERTED PATENTS***

15 27. Applied’s reactors in the Endura product line do not directly or indirectly infringe any claim
16 of the Asserted Patents. To the best of Applied’s knowledge, no third party infringes any claim of
17 the Asserted Patents by using Applied’s reactors in the Endura product line. Applied has not caused,
18 directed, requested, or facilitated any such infringement, much less with specific intent to do so.
19 Applied’s reactors in the Endura product line are not designed for use in any combination which
20 infringes any claim of the Asserted Patents. To the contrary, each is a product with substantial uses
21 that does not infringe any claim of these patents.

22 ***APPLIED HAS AN OWNERSHIP INTEREST IN THE ASSERTED PATENTS BASED ON***
23 ***NARASIMHAN’S EMPLOYMENT AGREEMENT WITH APPLIED***

24 28. Even though Applied’s reactors do not directly or indirectly infringe any of the Asserted
25 Patents, the licensing and/or ownership issues, described *infra*, would further moot any potential
26 infringement question.

29. On information and belief, Narasimhan, one of the named inventors of the Asserted Patents, left Applied to join Symmorphix on April 16, 2001. On information and belief, Narasimhan's Employment Agreement contains the following assignment provision:

In case any invention is described in a patent application or is disclosed to third parties by me within one (1) year after terminating my employment with APPLIED, it is to be presumed that the invention was conceived or made during the period of my employment for APPLIED, and the invention will be assigned to APPLIED as provided by this Agreement, provided it relates to my work with APPLIED or any of its subsidiaries.

30. On March 16, 2002, the '863 Application, the parent patent application to the Asserted Patents, was filed naming Narasimhan as one of the named inventors. The '863 Application was filed less than one year after Narasimhan's termination from Applied. On information and belief, at Symmorphix, the named inventors continued developing work from their time at Applied or Applied Komatsu related to sputtered silicon deposition technology.

31. On information and belief, Mr. Narasimhan's Applied Employee Agreement further provides:

I agree that all inventions, copyrightable works and confidential information (including but not limited to new contributions, improvements, ideas or discoveries, whether patentable or not and computer source code and documentation) produced, conceived, made or first actually reduced to practice by me solely or jointly with others during the period of my employment with APPLIED (the foregoing are subsequently referred to as Creative Works), are hereby assigned to APPLIED and shall be the exclusive property of APPLIED.

32. The Sales and Relationship Agreement between Applied Komatsu and Symmorphix explains that it applies "[t]o the extent required by existing [Applied Komatsu] Employee Agreements with any Symmorphix personnel."²⁰ On information and belief, Narasimhan was an employee of Applied, not an employee of Applied Komatsu.

²⁰ Ex. C, SRA, Amended Ex. C ¶ 3(b)(emphasis added).

33. On information and belief, the SRA did not amend Narasimhan's assignment obligations to Applied and Applied's Employee Agreement with Narasimhan bestowed an automatic assignment of Narasimhan's ownership rights in the Asserted Patents to Applied.

APPLIED HAS A LICENSE TO THE ASSERTED PATENTS

34. Applied has a perpetual, royalty-free license to the Asserted Patent pursuant to the terms of the Sales and Relationship Agreement between Applied Komatsu and Symmorphix.

35. Applied Komatsu and Symmorphix executed the Sales and Relationship Agreement and an Amended Exhibit 3, agreeing that Symmorphix grants Applied Komatsu a perpetual, royalty-free license to Symmorphix's patents "based on any patent applications filed for inventions, improvements, or enhancements developed by Symmorphix relating to sputtered silicon deposition technology."²¹ Both Asserted Patents relate to sputtered silicon deposition technology. Further, Applied Komatsu is authorized to assign or transfer its license to any of Applied Komatsu's parent entities, including Applied.²² Moreover, the amended agreement permits "[Applied Komatsu's] customers may use equipment provided by [Applied Komatsu] incorporating inventions licensed to [Applied Komatsu] hereunder without further consideration."²³

36. The license grant explains that it applies "[t]o the extent required by existing [Applied Komatsu] Employee Agreements with any Symmorphix personnel."²⁴ On information and belief, one or more of Applied Komatsu Employee Agreements with the named inventors contains the following provision:

In case any invention is described in a patent application or is disclosed to third parties by me after terminating my employment with [Applied Komatsu], it is to be presumed that the invention was conceived or made during the period of my employment for [Applied Komatsu], and the invention will be assigned to [Applied Komatsu] as provided by this

²¹ *Id.*

²² *Id.*

²³ *Id.*

²⁴ *Id.*

Agreement, provided it relates to my work with [Applied Komatsu] or any of its subsidiaries.

37. The Amended Exhibit 3 converted this assignment obligation into a perpetual royalty-free license to Symmorphix's patents relating to sputtered silicon deposition technology. Both Asserted Patents relate to sputtered silicon deposition technology, and all four named inventors are former Applied or Applied Komatsu employees. Applied is a parent entity of Applied Komatsu. Under the terms of Amended Exhibit 3, Applied has a perpetual, royalty-free license to the Asserted Patents.

ALTERNATIVELY, APPLIED HAS AN OWNERSHIP INTEREST IN THE ASSERTED PATENTS BASED ON THE AKTA EMPLOYMENT AGREEMENTS

38. In the alternative, if the Amended Exhibit 3 did not convert the former Applied Komatsu employee's assignment obligations into a perpetual, royalty-free license to the Asserted Patents, Applied has an ownership interest in the Asserted Patents.

39. On information and belief, at Symmorphix, Dr. Demaray and the other named inventors continued developing work from their time at Applied Komatsu related to sputtered silicon deposition technology.

40. On information and belief, under the terms of the Applied Komatsu Employee Agreement with at least one of the named inventors:

In case any invention is described in a patent application or is disclosed to third parties by me after terminating my employment with [Applied Komatsu], it is to be presumed that the invention was conceived or made during the period of my employment for [Applied Komatsu], and the invention will be assigned to [Applied Komatsu] as provided by this Agreement, provided it relates to my work with [Applied Komatsu] or any of its subsidiaries.

41. The Applied Komatsu Employee Agreement further specifically provides:

I agree that all inventions, copyrightable works and confidential information (including but not limited to new contributions, improvements, ideas or discoveries, whether patentable or not and computer source code and documentation) produced, conceived, made or first actually reduced to practice by me solely or jointly with others during the period of my employment with [Applied Komatsu] (the foregoing are subsequently

referred to as Creative Works), are hereby assigned to [Applied Komatsu] and shall be the exclusive property of [Applied Komatsu].

42. Thus, the Applied Komatsu Employee Agreement bestowed an automatic assignment of at least one or more of the named inventors' ownership rights in the Asserted Patents to Applied Komatsu.

FIRST COUNT
(Declaration of Non-Infringement of U.S. Patent No. 7,544,276)

43. Applied restates and incorporates by reference all allegations in this Complaint as if fully set forth herein.

44. Demaray claims to own all rights, title, and interest, including the right to seek damages for past, present, and future infringement thereof, in U.S. Patent No. 7,544,276 ("the '276 patent"). A true and correct copy of the '276 patent is attached hereto as Exhibit E.

45. In the cases Demaray has brought against Samsung and Intel, Demaray accuses Defendants Samsung Electronics Ltd, Samsung Electronics America, Inc., Samsung Semiconductor, Inc., Samsung Austin Semiconductor, LLC, and Intel Corporation of infringing the '276 patent based on allegations that each "mak[es], us[es], offer[s] to sell, and sell[s] within the United States, suppl[ies] or caus[es] to be supplied in or from the United States, and/or import[s] into the United States" Applied technology and devices. Ex. A at 6; Ex. B at 7-8. For example, in its complaints against both the Intel and Samsung Defendants, Demaray accuses the Defendants' use of "RMS reactors" from "the Endura product line from Applied Materials, Inc." Ex. A at 7-14; Ex. B. at 8-16.

46. A substantial, immediate, and real controversy exists between Applied and Demaray regarding whether Applied's reactors infringe or have infringed the '276 patent. A judicial declaration is necessary to determine the parties' respective rights regarding the '276 patent.

47. Applied seeks a judgment declaring that Applied's reactors, including those in the Endura product line, do not directly or indirectly infringe any claim of the '276 patent. In its complaints against Applied's customers, Demaray cites to Applied's Endura products as purported evidence of infringement of claim 1 of the '276 patent. Based on Applied's present understanding of claim 1 of the '276 patent and Demaray's allegations, Applied's Endura products fail to meet or embody limitations of claim 1 of the '276 patent. For example, claim 1 recites a reactor comprising, in part, "a pulsed DC power supply coupled to the target area" and "a narrow band-rejection filter that rejects at a frequency of the [RF] bias power supply coupled between the pulsed DC power supply and the target area." Applied's Endura products do not infringe claim 1 of the '276 patent at least because these products do not meet or embody a reactor comprising "a pulsed DC power supply coupled to the target area" and/or "a narrow band-rejection filter that rejects at a frequency of the [RF] bias power supply coupled between the pulsed DC power supply and the target area."

SECOND COUNT
(Declaration of Non-Infringement of U.S. Patent No. 7,381,657)

48. Applied restates and incorporates by reference all allegations in this Complaint as if fully set forth herein.

49. Demaray claims to own all rights, title, and interest, including the right to seek damages for past, present, and future infringement thereof, in U.S. Patent No. 7,381,657 ("the '657 patent"). A true and correct copy of the '657 patent is attached hereto as Exhibit D.

50. In the cases Demaray recently brought against Samsung and Intel, Demaray accuses Defendants Samsung Electronics Ltd, Samsung Electronics America, Inc., Samsung Semiconductor, Inc., Samsung Austin Semiconductor, LLC, and Intel Corporation of infringing the '657 patent in that each uses "the claimed methods for reactive sputtering in an infringing manner to produce semiconductor products, and/or making, offering to sell, and selling within the United States, and/or importing into the United States, without authority or license, semiconductor

1 products produced using the claimed methods for reactive sputtering in an infringing manner.” Ex.
2 A at 15-16; Ex. B at 17. Specifically, Demaray alleges Defendants use “RMS reactors” to perform
3 the claimed method. Ex. A at 16-23; Ex. B at 17-24. As discussed above, the only RMS reactors
4 Demaray identifies as used by Defendants are “reactors in the Endura product line from Applied
5 Materials, Inc.”
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7 51. A substantial, immediate, and real controversy exists between Applied and Demaray
8 regarding whether Applied’s reactors infringe or have infringed the ’657 patent. A judicial
9 declaration is necessary to determine the parties’ respective rights regarding the ’657 patent.

10 52. Applied seeks a judgment declaring that Applied’s reactors, including those in the Endura
11 product line, do not directly or indirectly infringe any claim of the ’657 patent. In its complaints
12 against Applied’s customers, Demaray cites to Applied’s Endura products as purported evidence
13 of infringement of claim 1 of the ’657 patent. Based on Applied’s present understanding of claim
14 1 of the ’657 patent and Demaray’s allegations, Applied’s Endura products fail to meet or embody
15 steps of the method recited in claim 1 of the ’657 patent. For example, claim 1 recites a method
16 comprising, in part, “providing pulsed DC power to the target through a narrow band rejection filter
17 such that the target alternates between positive and negative voltages” and “providing an RF bias
18 at a frequency that corresponds to the narrow band rejection filter to the substrate.” Using Applied’s
19 Endura products does not infringe claim 1 of the ’657 patent at least because these products do not
20 comprise “providing pulsed DC power to the target through a narrow band rejection filter such that
21 the target alternates between positive and negative voltages” and/or “providing an RF bias at a
22 frequency that corresponds to the narrow band rejection filter to the substrate.”
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THIRD COUNT

(Declaration of Non-Infringement Based on Assignment of Rights to Applied and Demaray's Failure to Join All Co-Owners)

53. Applied restates and incorporates by reference all allegations in this Complaint as if fully set forth herein.

54. A substantial, immediate, and real controversy exists between Applied and Demaray regarding whether Applied's reactors infringe or have infringed the Asserted Patents. A judicial declaration is necessary to determine the parties' respective rights regarding the Asserted Patents.

55. Applied's products cannot infringe the Asserted Patents because the rights of named inventor, Narasimhan, in the Asserted Patents were assigned to Applied, making Applied at least a co-owner of the Asserted Patents that has not joined and will not join Demaray in alleging infringement of the Asserted Patents.

56. Demaray cannot bring a claim of infringement of the Asserted Patents and is not entitled to any relief without joining all co-owners. As such, Applied seeks a declaration that Applied's products cannot infringe the Asserted Patents because not all co-owners are joined.

FOURTH COUNT

(Declaration of Non-Infringement Based on License)

57. Applied restates and incorporates by reference all allegations in this Complaint as if fully set forth herein.

58. A substantial, immediate, and real controversy exists between Applied and Demaray regarding whether Applied's reactors infringe or have infringed the Asserted Patents. A judicial declaration is necessary to determine the parties' respective rights regarding the Asserted Patents.

59. Applied holds a non-exclusive, perpetual, royalty free license to the Asserted Patents by virtue of the Sales and Relationship Agreement, and its amendments, between Applied Komatsu and Symmorphix. Further, Applied's customers' use of Applied's products incorporating Applied's

1 license without further consideration are similarly permitted under of the Sales and Relationship
2 Agreement, and its amendments.

3 60. Accordingly, Applied seeks a declaration that Applied holds a non-exclusive, perpetual,
4 royalty free license to the Asserted Patents and thus, Applied's products cannot infringe.

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6 **FIFTH COUNT**

7 **(Alternative Declaration to Fourth Count of Non-Infringement Based on
Assignment of Rights to AKTA and Demaray's Failure to Join All Co-Owners)**

8 61. Applied restates and incorporates by reference all allegations in this Complaint as if fully
9 set forth herein.

10 62. A substantial, immediate, and real controversy exists between Applied and Demaray
11 regarding whether Applied's reactors infringe or have infringed the Asserted Patents. A judicial
12 declaration is necessary to determine the parties' respective rights regarding the Asserted Patents.

13 63. In the alternative to the Fourth Count *supra*, Applied's products cannot infringe the Asserted
14 Patents because the rights of one or more of the other named inventors of the Asserted Patents were
15 assigned to AKTA, making AKTA at least a co-owner of the Asserted Patents that has not joined
16 and will not join Demaray in alleging infringement of the Asserted Patents.

17 64. Demaray cannot bring a claim of infringement of the Asserted Patents and is not entitled to
18 any relief without joining all co-owners. As such, Applied seeks a declaration that Applied's
19 products cannot infringe the Asserted Patents because not all co-owners are joined.
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21
22 **PRAYER FOR RELIEF**

23 WHEREFORE, Applied prays for judgment and relief as follows:

24 A. Declaring that Applied's products, including those used in the Endura product line, do not
25 directly or indirectly infringe any claim of the '276 patent and enjoining Demaray, its officers,
26 agents, employees, attorneys, and all persons in active concert or participation with them, from
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1 directly or indirectly charging infringement, or instituting further action for infringement, of the to
2 the '276 patents against Applied or any of its customers;

3 B. Declaring that Applied's products, including those used in the Endura product line, do not
4 directly or indirectly infringe any claim of the '657 patent and enjoining Demaray, its officers,
5 agents, employees, attorneys, and all persons in active concert or participation with them, from
6 directly or indirectly charging infringement, or instituting further action for infringement, of the to
7 the '657 patent against Applied or any of its customers;

9 C. Declaring that that Applied's products cannot infringe the Asserted Patents because the
10 rights of named inventor, Mukundan Narasimhan, in the Asserted Patents were assigned to Applied,
11 making Applied at least a co-owner of the Asserted Patents that has not joined and will not join
12 Demaray in alleging infringement of the Asserted Patents.

14 D. Declaring that Applied holds a non-exclusive, perpetual, royalty free license to the Asserted
15 Patents and thus, Applied's reactors cannot infringe the Asserted Patents, and enjoining Demaray,
16 its officers, agents, employees, attorneys, and all persons in active concert or participation with
17 them, from directly or indirectly charging infringement, or instituting further action for
18 infringement, of the to the Asserted Patents against Applied or any of its customers based on
19 Applied's license;

21 E. In the alternative, Applied's products cannot infringe the Asserted Patents because the rights
22 of one or more of the other named inventors of the Asserted Patents were assigned to AKTA,
23 making AKTA at least a co-owner of the Asserted Patents that has not been joined and will not join
24 Demaray in alleging infringement of the Asserted Patents.

25 F. Finding that this is an exceptional case under 35 U.S.C. § 285;

26 G. Awarding Applied its costs and attorneys' fees in connection with this action; and

27 H. Such further and additional relief as the Court deems just and proper.
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JURY DEMAND

Applied demands a jury trial on all issues and claims so triable.

DATED: September 1, 2020

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APPLIED MATERIALS