

1 KEKER, VAN NEST & PETERS LLP  
 BRIAN L. FERRALL - # 160847  
 2 bferrall@keker.com  
 ASHOK RAMANI - # 200020  
 3 aramani@keker.com  
 EDWARD A. BAYLEY - # 267532  
 4 ebayley@keker.com  
 BRYN A. WILLIAMS - # 301699  
 5 bwilliams@keker.com  
 633 Battery Street  
 6 San Francisco, CA 94111-1809  
 Telephone: 415 391 5400  
 7 Facsimile: 415 397 7188

8 Attorneys for Plaintiffs  
 TSMC NORTH AMERICA and TAIWAN SEMICONDUCTOR  
 9 MANUFACTURING COMPANY LIMITED

10 UNITED STATES DISTRICT COURT  
 11 NORTHERN DISTRICT OF CALIFORNIA  
 12 SAN FRANCISCO DIVISION

13 TSMC NORTH AMERICA and TAIWAN  
 SEMICONDUCTOR MANUFACTURING  
 14 COMPANY LIMITED,  
 15 Plaintiffs,  
 16 v.  
 17 URI COHEN,  
 18 Defendant.

Case No. 3:17-cv-05001  
**COMPLAINT FOR DECLARATORY  
 RELIEF**  
**DEMAND FOR JURY TRIAL**

19  
 20  
 21  
 22  
 23  
 24  
 25  
 26  
 27  
 28

1 Plaintiffs TSMC North America and Taiwan Semiconductor Manufacturing Company  
2 Limited complain against Defendant Uri Cohen as follows:

3 **INTRODUCTION**

4 1. On May 5, 2017, Dr. Uri Cohen (“Cohen” or “Defendant”) sued Taiwan  
5 Semiconductor Manufacturing Company Limited (“TSMC Ltd.”) and TSMC North America  
6 (“TSMC NA”) (collectively “Plaintiffs” or “TSMC”), along with Apple, Inc. and various Huawei  
7 entities, in the U.S. District Court for the Eastern District of Texas (“Cohen’s ED Texas  
8 Complaint”). Cohen’s ED Texas Complaint alleges infringement of four patents over a limited  
9 aspect of semiconductor manufacturing technology based on a narrow aspect of chips  
10 manufactured by TSMC Ltd. for Apple, the Huawei entities, and other unnamed customers.

11 2. Seventeen days later, the U.S. Supreme Court issued its opinion in *TC Heartland*  
12 *LLC v. Kraft Foods Group Brands LLC*, \_\_\_ U.S. \_\_\_ (Slip Op. May 22, 2017), which clarified  
13 venue rules in patent cases. As a result, Cohen’s lawsuit against TSMC NA could not lawfully  
14 remain in the Eastern District of Texas.

15 3. Recognizing the fatal venue problems with Cohen’s ED Texas Complaint, on  
16 August 24, 2017, Cohen voluntarily dismissed TSMC NA and Apple, Inc. from the ED Texas  
17 case. Both dismissals were without prejudice, and purport to expressly reserve the right for Cohen  
18 to sue TSMC NA and Apple again for the same alleged infringement. Having been already sued  
19 by Cohen and dismissed from that suit with no assurance that it will not be sued in the future,  
20 TSMC NA has a reasonable apprehension of suit by Cohen.

21 4. On August 28, 2017, Cohen filed an amended complaint in the U.S. District Court  
22 for the Eastern District of Texas that continued to name TSMC Ltd. and various Huawei entities  
23 as defendants (“Cohen’s Amended ED Texas Complaint”). Cohen’s Amended ED Texas  
24 Complaint alleges materially identical infringement allegations as Cohen’s ED Texas Complaint,  
25 in that Cohen alleges infringement of the same four patents over the same limited aspect of  
26 semiconductor manufacturing technology based on the same narrow aspect of chips manufactured  
27 by TSMC Ltd. for Apple, the Huawei entities, and other unnamed customers.

28

1 5. TSMC Ltd. will move to transfer the claims against TSMC Ltd. in Cohen's  
2 Amended ED Texas Complaint shortly. TSMC files this complaint so that the litigation may  
3 proceed expeditiously in one venue that can resolve all material disputes between the parties, and  
4 so that TSMC may demonstrate that it does not infringe the Cohen patents.

5 **PARTIES**

6 6. Plaintiff TSMC Ltd. is a Taiwanese corporation and is headquartered at No. 8, Li-  
7 Hsin Rd. VI, Hsinchu, Taiwan 300, R.O.C.

8 7. Plaintiff TSMC NA is a California corporation with its headquarters and principal  
9 place of business at 2851 Junction Avenue, San Jose, California 95134. TSMC NA is a wholly-  
10 owned subsidiary of TSMC Ltd.

11 8. Defendant Cohen is a United States citizen who, on information and belief, resides  
12 at 4147 Dake Ave., Palo Alto, CA 94306.

13 **JURISDICTION**

14 9. This Court has subject-matter jurisdiction over this action pursuant to 28 U.S.C.  
15 §§ 1331 and 1338(a) because Plaintiffs' claims arise under the patent laws of the United States,  
16 35 U.S.C. § 1, et seq., and under the Federal Declaratory Judgment Act, 28 U.S.C. §§ 2201 and  
17 2202. As alleged more fully below, there is a substantial controversy of sufficient immediacy and  
18 reality between Plaintiffs and Defendant regarding non-infringement of the patents-in-suit to  
19 warrant the issuance of a declaratory judgment.

20 10. This Court has personal jurisdiction over Cohen because he is a resident of  
21 California, and upon information and belief, has continuous and systematic contacts with the  
22 State of California.

23 **VENUE**

24 11. Venue is proper under 28 U.S.C. § 1391(b) because Cohen resides in this District.

25 **INTRADISTRICT ASSIGNMENT**

26 12. Pursuant to Local Rule 3-2(c), this case is subject to district-wide assignment  
27 because it is an Intellectual Property Action.

28

**BACKGROUND AND NATURE OF THE ACTION**

1  
2 13. TSMC Ltd., based in Hsinchu, Taiwan, with 41,000 employees, pioneered the  
3 foundry model that revolutionized the semiconductor and electronics industries and enabled the  
4 manufacturing of made-to-specification silicon semiconductor wafers. For years, TSMC has been  
5 recognized as the world’s most advanced and most successful provider of semiconductor  
6 fabrication services for customers who design their own circuit layouts, but who either lack their  
7 own semiconductor manufacturing expertise and facilities, or simply wish to use TSMC’s  
8 leading-edge fabrication services and technology to manufacture wafers. Each year, TSMC Ltd.  
9 spends billions of dollars on research and development related to semiconductor technology, and  
10 some of the most advanced semiconductor manufacturing capability in the world. TSMC’s efforts  
11 have also resulted in a world-class patent portfolio, with thousands of patents awarded in the  
12 United States and worldwide every year, and a total of almost 30,000 patents to date.

13 14. TSMC NA, a wholly owned subsidiary of TSMC Ltd., is the exclusive sales,  
14 marketing, and customer-service entity for TSMC Ltd. in North America. TSMC NA does not  
15 manufacture wafers. Almost all of TSMC NA’s employees operate out of its headquarters in San  
16 Jose, California.

17 15. Defendant Cohen has alleged that he is the owner of the entire right, title, and  
18 interest in U.S. Patent No. 6,518,668 (“the ‘668 patent”), entitled “Multiple Seed Layers for  
19 Metallic Interconnects”; U.S. Patent No. 6,924,226 (“the ‘226 patent”), entitled “Methods for  
20 Making Multiple Seed Layers for Metallic Interconnects”; U.S. Patent No. 7,199,052 (“the ‘052  
21 patent”), entitled “Seed Layers for Metallic Interconnects”; and U.S. Patent No. 7,282,445 (“the  
22 ‘445 patent”), entitled “Multiple Seed Layers for Interconnects” (collectively the “patents-in-  
23 suit”). The patents-in-suit are attached hereto as Exhibits A-D.

24 16. Cohen has never, on information and belief, manufactured, sold, offered for sale,  
25 or imported any product or service claimed by the patents-in-suit. On information and belief,  
26 Cohen has only ever used the patents-in-suit to threaten litigation and thereby obtain licensing  
27 revenue.  
28

1 17. Cohen’s ED Texas Complaint alleged that Plaintiffs directly infringe the patents-  
2 in-suit by selling and/or offering for sale allegedly infringing products. Cohen’s ED Texas  
3 Complaint also alleged that Plaintiffs induce infringement of the patents-in-suit by (i) providing  
4 advertising, sales, and/or technical materials that contain instructions, directions, suggestions  
5 and/or invitations for allegedly infringing products and (ii) collaborating with customers on the  
6 design of the allegedly infringing products. Cohen’s ED Texas Complaint sought, among other  
7 forms of relief, damages and attorneys’ fees. Cohen’s Amended ED Texas Complaint makes  
8 identical allegations as to TSMC Ltd.

9 18. Cohen’s ED Texas Complaint alleged that TSMC infringes the patents-in-suit at  
10 the 20nm and 16nm process nodes through use of Applied Materials, Inc.’s Endura Platform and  
11 Endura Volta system. Cohen’s Amended ED Texas Complaint makes identical allegations as to  
12 TSMC Ltd. However, contrary to Cohen’s allegations, TSMC’s use of the Endura Platform and  
13 Endura Volta system in its 20nm and 16nm process nodes do not infringe the patents-in-suit for at  
14 least the reason that cobalt cannot comprise the “seed layer” that is claimed in the patents-in-suit.

15 **FIRST CAUSE OF ACTION**

16 **(Declaratory Judgment of Non-Infringement of U.S. Patent No. 6,518,668)**

17 19. Plaintiffs incorporate by reference paragraphs 1 through 18, inclusive, as though  
18 fully set forth in this paragraph.

19 20. Cohen’s ED Texas Complaint alleged that Plaintiffs infringe at least claim 26 of  
20 the ’668 patent. Cohen’s Amended ED Texas Complaint alleges that TSMC Ltd. infringes at least  
21 claim 26 of the ’668 patent.

22 21. Plaintiffs have never infringed and are not currently infringing – whether directly  
23 or indirectly, contributorily or by inducement, literally or otherwise – any claims of the ’668  
24 patent, including claim 26, because, among other reasons, the cobalt layer identified by Cohen  
25 does not satisfy the “first seed layer” element claimed in the ’668 patent.

26 22. Accordingly, an actual and justiciable controversy has arisen and exists between  
27 Plaintiffs and Cohen relating to the non-infringement of at least claim 26 of the ’668 patent.  
28 Plaintiffs seek a judicial determination and declaration of the respective rights and duties of the

1 parties herein. Such a determination and declaration is necessary and appropriate at this time to  
2 enable the parties to ascertain their respective rights and duties.

3 **SECOND CAUSE OF ACTION**

4 **(Declaratory Judgment of Non-Infringement of U.S. Patent No. 6,924,226)**

5 23. Plaintiffs incorporate by reference paragraph 1 through 18, inclusive, as though  
6 fully set forth in this paragraph.

7 24. Cohen’s ED Texas Complaint alleged that Plaintiffs infringe at least claim 1 of the  
8 ’226 patent. Cohen’s Amended ED Texas Complaint alleges that TSMC Ltd. infringes at least  
9 claim 1 of the ’226 patent.

10 25. Plaintiffs have never infringed and are not currently infringing – whether directly  
11 or indirectly, contributorily or by inducement, literally or otherwise – any claims of the ’226  
12 patent, including claim 1, because, among other reasons, the cobalt layer identified by Cohen  
13 does not satisfy the “substantially conformal seed layer” element claimed in the ’226 patent.

14 26. Accordingly, an actual and justiciable controversy has arisen and exists between  
15 Plaintiffs and Cohen relating to the non-infringement of at least claim 1 of the ’226 patent.  
16 Plaintiffs seek a judicial determination and declaration of the respective rights and duties of the  
17 parties herein. Such a determination and declaration is necessary and appropriate at this time to  
18 enable the parties to ascertain their respective rights and duties.

19 **THIRD CAUSE OF ACTION**

20 **(Declaratory Judgment of Non-Infringement of U.S. Patent No. 7,199,052)**

21 27. Plaintiffs incorporate by reference paragraph 1 through 18, inclusive, as though  
22 fully set forth in this paragraph.

23 28. Cohen’s ED Texas Complaint alleged that Plaintiffs infringe at least claim 4 of the  
24 ’052 patent. Cohen’s Amended ED Texas Complaint alleges that TSMC Ltd. infringes at least  
25 claim 4 of the ’052 patent.

26 29. Plaintiffs have never infringed and are not currently infringing – whether directly  
27 or indirectly, contributorily or by inducement, literally or otherwise – any claims of the ’052  
28

1 patent, including claim 4, because, among other reasons, the cobalt layer identified by Cohen  
2 does not satisfy the “first seed layer” element claimed in the ’052 patent.

3 30. Accordingly, an actual and justiciable controversy has arisen and exists between  
4 Plaintiffs and Cohen relating to the non-infringement of at least claim 4 of the ’052 patent.  
5 Plaintiffs seek a judicial determination and declaration of the respective rights and duties of the  
6 parties herein. Such a determination and declaration is necessary and appropriate at this time to  
7 enable the parties to ascertain their respective rights and duties.

8 **FOURTH CAUSE OF ACTION**

9 **(Declaratory Judgment of Non-Infringement of U.S. Patent No. 7,282,445)**

10 31. Plaintiffs incorporate by reference paragraph 1 through 18, inclusive, as though  
11 fully set forth in this paragraph.

12 32. Cohen’s ED Texas Complaint alleged that Plaintiffs infringe at least claim 18 of  
13 the ’445 patent. Cohen’s Amended ED Texas Complaint alleges that TSMC Ltd. infringes at least  
14 claim 18 of the ’445 patent.

15 33. Plaintiffs have never infringed and are not currently infringing – whether directly  
16 or indirectly, contributorily or by inducement, literally or otherwise – any claims of the ’445  
17 patent, including claim 18, because, among other reasons, the cobalt layer identified by Cohen  
18 does not satisfy the “CVD first seed layer” element claimed in the ’445 patent.

19 34. Accordingly, an actual and justiciable controversy has arisen and exists between  
20 Plaintiffs and Cohen relating to the non-infringement of at least claim 18 of the ’445 patent.  
21 Plaintiffs seek a judicial determination and declaration of the respective rights and duties of the  
22 parties herein. Such a determination and declaration is necessary and appropriate at this time to  
23 enable the parties to ascertain their respective rights and duties.

24 **PRAYER FOR RELIEF**

25 WHEREFORE, Plaintiffs TSMC North America and Taiwan Semiconductor  
26 Manufacturing Company Ltd. request that this Court enter a judgment in its favor and against  
27 Defendant Uri Cohen as follows:  
28

1 A. A declaration that Plaintiffs have not infringed, willfully infringed, induced others  
2 to infringe, or contributed to the infringement of any claim of the '668 patent;

3 B. A declaration that Plaintiffs have not infringed, willfully infringed, induced others  
4 to infringe, or contributed to the infringement of any claim of the '226 patent;

5 C. A declaration that Plaintiffs have not infringed, willfully infringed, induced others  
6 to infringe, or contributed to the infringement of any claim of the '052 patent;

7 D. A declaration that Plaintiffs have not infringed, willfully infringed, induced others  
8 to infringe, or contributed to the infringement of any claim of the '445 patent;

9 E. For costs of suit incurred herein;

10 F. A declaration that Cohen's pursuit of this case is exceptional under 35 U.S.C.  
11 § 285; and

12 G. For such other relief as the Court deems just and proper.

13 **JURY DEMAND**

14 Plaintiffs hereby demand a jury trial for non-infringement of the patents-in-suit and all  
15 other issues so triable.

16 Dated: August 28, 2017

KEKER, VAN NEST & PETERS LLP

18 By: /s/ Brian L. Ferrall  
19 BRIAN L. FERRALL  
20 ASHOK RAMANI  
EDWARD A. BAYLEY  
BRYN WILLIAMS

21 Attorneys for Plaintiffs  
22 TSMC NORTH AMERICA and TAIWAN  
SEMICONDUCTOR MANUFACTURING  
23 COMPANY LIMITED

24  
25  
26  
27  
28