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10	Attorneys for Plaintiff Document Security Systems, Inc.			
11	IN THE UNITED STATES DISTRICT COURT			
12	FOR THE CENTRAL DISTRICT OF CALIFORNIA SOUTHERN DIVISION			
13	SUUTHER			
14	DOCUMENT SECURITY SYSTEMS,	Case. No. 8:17-cv-00981-JVS-JCG		
15	INC.,			
16	Plaintiff,	SECOND AMENDED COMPLAINT		
17		FOR PATENT INFRINGEMENT		
18	V.	JURY TRIAL DEMANDED		
19	SEOUL SEMICONDUCTOR CO., LTD.,			
20	and SEOUL SEMICONDUCTOR, INC.,			
20 21	Defendants.			
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	SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT	1 Case No. 8:17-cv-0098		

This is an action for patent infringement arising under the Patent Laws of the 1 United States of America, 35 U.S.C. § 1 et seq. in which Document Security Systems, 2 Inc. ("DSS" or "Plaintiff") makes the following allegations against Defendants Seoul 3 Semiconductor Co., Ltd. ("Seoul Korea") and Seoul Semiconductor, Inc. ("Seoul 4 5 America") (collectively "Seoul" or "Defendants").

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### PARTIES

Document Security Systems, Inc. is a publicly-traded New York 1. 7 corporation. Founded in 1984, DSS is a global leader in brand protection, digital 8 security solutions and anti-counterfeiting technologies. 9

2. In November 2016, DSS acquired a portfolio of patents covering 10 technologies used in Light-Emitting Diode ("LED") lighting products, including the 11 patents-in-suit. The patents in this portfolio were originally assigned to Agilent 12 13 Technologies, Inc. and/or the successors of its LED business. Since its recent acquisition of these patents, DSS has worked to expand its business efforts regarding 14 LED technology. DSS is pursuing both licensing and commercialization of this 15 16 technology acquisition.

3. On information and belief, Seoul Semiconductor Co., Ltd. is a corporation 17 organized and existing under the laws of the Republic of Korea with its principal place 18 of business at 1B-25, 727, Wonsi- dong, Danwon-gu, Ansan-city, Gyeonggi-do, 19 Korea 425-851. Upon information and belief, Seoul Korea manufactures light-20 emitting diode ("LED") products in Korea and, through its subsidiary, Defendant 21 Seoul America, has sales offices in the United States. Defendant Seoul Korea can be 22 23 served with process in Korea pursuant to the Hague Convention on the Service 24 Abroad of Judicial and Extrajudicial Documents, Article 1, November 15, 1965 T.I.A.S. No. 6638, 20 U.S.T. 361 (U.S. Treaty 1969). 25

4. On information and belief, Seoul Semiconductor, Inc. is a California 26 corporation with its principal place of business at 1895 Beaver Ridge Circle, Suite G, 27 Norcross, Georgia 30071. Upon information and belief, Seoul America sells and/or 28

offers for sale nationwide LED products manufactured by Seoul Korea, including in 1 the State of California and in this judicial district. Defendant Seoul America can be 2 served through its registered agent, Jiyoon Jun, 5856 Corporate Avenue, Suite 240, 3 Cypress, California 90630. 4

#### JURISDICTION AND VENUE

5. This action arises under the patent laws of the United States, Title 35 of the 6 United States Code. Accordingly, this Court has subject matter jurisdiction under 28 7 U.S.C. §§ 1331 and 1338(a). 8

6. This Court has personal jurisdiction over Defendants in this action because, 9 among other reasons, Defendants have committed acts within the Central District of 10 11 California giving rise to this action and have established minimum contacts with the forum state of California. Defendants directly and/or through subsidiaries or 12 13 intermediaries (including distributors, retailers, and others), have committed and continue to commit acts of infringement in this District by, among other things, 14 making, using, importing, offering for sale, and/or selling products and/or services 15 16 that infringe the patents-in-suit. Thus, Defendants have purposefully availed themselves of the benefits of doing business in the State of California and the exercise 17 18 of jurisdiction over Defendants would not offend traditional notions of fair play and substantial justice. 19

7. Venue is proper in this District under 28 U.S.C. §§ 1391 (b)-(c) and 1400(b) 20 because Defendants have a regular and established place of business in this District 21 and have committed acts of patent infringement in this District. Defendants, for 22 23 example, have a regular and established place of business at 5856 Corporate Ave, No. 24 240, Cypress, CA 90630, which is located in Orange County.

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# BACKGROUND

8. DSS is the owner by assignment of United States Patent No. 6,949,771 ("the 26 '771 Patent") entitled "Light Source." The '771 Patent was duly and legally issued by 27 the United States Patent and Trademark Office on September 27, 2005. A true and 28

1 correct copy of the '771 Patent is included as Exhibit A.

9. DSS is the owner by assignment of United States Patent No. 7,524,087 ("the
 '087 Patent") entitled "Optical Device." The '087 Patent was duly and legally issued
 by the United States Patent and Trademark Office on April 28, 2009. A true and
 correct copy of the '087 Patent is included as Exhibit B.

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10. DSS is the owner by assignment of United States Patent No. 7,256,486
("the '486 Patent") entitled "Packing Device for Semiconductor Die, Semiconductor Device Incorporating Same and Method of Making Same." The '486 Patent was duly and legally issued by the United States Patent and Trademark Office on August 14, 2007. A true and correct copy of the '486 Patent is included as Exhibit C

11 11. DSS owns all rights, title, and interest in and to the '771, '087 and '486
12 Patents (collectively, "asserted patents" or "patents-in-suit"), including all rights to
13 sue and recover for past and future infringement.

#### COUNT I

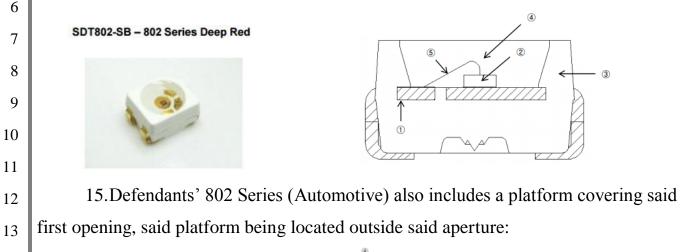
## **INFRINGEMENT OF THE '771 PATENT**

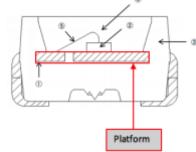
16 12. DSS references and incorporates by reference paragraphs 1 through 10 of
17 this Complaint.

18 13. Defendants make, use, offer for sale, sell, and/or import in the United States products and/or services that infringe various claims of the '771 Patent, and 19 continues to do so. By way of illustrative example, Defendants' infringing products 20 include without limitation, all versions and variations, including predecessor and 21 22 successor models, of its T6 Series LEDs, SFT-722NS, and LEDs including the 3020, 23 3030 (automotive), 3528, and 5630 (automotive) packages. Defendants' infringing 24 products also include products, e.g., light bulbs, displays and fixtures that contain at least one infringing LED product. Defendants' infringing products are collectively 25 referred to hereinafter as "771 Accused Instrumentalities." 26

27 14. As an illustrative example, Defendants import, sell and offer to sell their
28 802 Series (Automotive) LED products. Defendants' 802 Series (Automotive)

infringes, for example, Claim 3 of the '771 patent because it is a light source
 comprising a substrate having opposing first and second surfaces, the substrate
 defining an aperture extending from the first surface to the second surface, said
 aperture having a first opening in the first surface and second opening in said second
 surface:





16.Defendants' 802 Series (Automotive) also includes a light emitting diode mounted on the platform within the aperture, and a transparent encapsulant material encapsulating the light emitting diode in the aperture:



1 17. Defendants' 802 Series' (Automotive) "platform" is made from thermally
 2 conductive material for conducting heat away from the light emitting diode because
 3 the "platform" comprises a metal lead frame that conducts heat away from the light
 4 emitting diode.

18.Defendants have directly infringed and continue to directly infringe the '771
Patent by, among other things, making, using, offering for sale, selling, and/or
importing the '771 Accused Instrumentalities. Such products and/or services are
covered by one or more claims of the '771 Patent's including at least claims 1 to 8
because they contain each element of those claims.

- 19. By making, using, offering for sale, selling, and/or importing the '771
   Accused Instrumentalities infringing the '771 Patent, Defendants have injured DSS
   and are liable to DSS for infringement of the '771 Patent pursuant to 35 U.S.C. §
   271(a) directly and/or under the doctrine of equivalents.
- 20. In addition, Defendants are actively inducing others, such as their 14 customers and end users of Accused Instrumentalities, services based thereupon, and 15 16 related products and/or processes, to directly infringe each and every claim limitation, including without limitation claims 1 to 8 of the '771 Patent, in violation of 35 U.S.C. 17 § 271(b). Defendants' customers and/or end users have directly infringed and are 18 directly infringing each and every claim limitation, including without limitation 19 claims 1 to 8 of the '771 Patent. Defendants have had actual knowledge of the '771 20 Patent at least as of service of this Complaint. Defendants are knowingly inducing 21 their customers and/or end users to directly infringe the '771 Patent, with the specific 22 23 intent to encourage such infringement, and knowing that the induced acts constitute patent infringement. Defendants' inducement includes, for example, providing 24 technical guides, product data sheets, demonstrations, software and hardware 25 specifications, installation guides, and other forms of support that induce their 26 customers and/or end users to directly infringe the '771 Patent. The '771 Accused 27 Instrumentalities are designed in such a way that when they are used for their intended 28

purpose, the user infringes the '771 Patent. Defendants know and intend that
 customers that purchase the '771 Accused Instrumentalities will use those products for
 their intended purpose.

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21. Defendants specifically intend their United States customers infringe the '771 patent through use of the '771 Accused Instrumentalities in this country by at least advertising and promoting the use (e.g., hyperlinked "Application" below) of the '771 Accused Instrumentalities on their United States website: See, e.g.,

http://www.seoulsemicon.com/en/applications/. Defendant also specifically intends its 8 customers infringe the '771 Patent through use of the '771 Accused Instrumentalities 9 through trade show presentations, customer visits, direct customer contacts and 10 application guides. Defendants also specifically intend its customers infringe the '771 11 Patent through selling '771 Accused Instrumentalities overseas with the specific intent 12 13 that the customer import, offer to sell, and/or sell the '771 Accused Instrumentalities in order to develop and serve the United States market for Defendant's LED products, 14 either alone or used in products such as bulbs, displays, consumer products and/or 15 16 fixtures. Such customers include Defendant's LED distributors, consumer products companies and retailers that serve the United States market. See 17 http://www.seoulsemicon.com/en/support/where-to-buy/, naming Avnet, Digi-Key, 18

Mouser Electronics, and WPG Americas as United States distributors of Defendants'products.

22. Defendants have been aware of the '771 Patent and of its infringement as 21 22 of a date no later than the date they were served with the complaint in the case 2:17-23 cv-308, filed April 13, 2017. Since that date, Defendants have failed to investigate 24 and remedy their infringement of the '771 Patent and thus willfully and egregiously continue to infringe the '771 Patent. On information and belief, Defendants continued 25 to offer infringing products without having modified or altered those products in a 26 manner that would not infringe the '771 patent. Defendants, at the very least, have 27 been egregiously and willfully blind to infringement of the '771 Patent. Further 28

evidence of Defendants' egregious and willful infringement are the acts of active
 inducement described in this Complaint. Defendants actively induce and encourage
 customers to make, use, sell, offer to sell and/or import the '771 Accused
 Instrumentalities with knowledge that these acts constitute infringement of the '771
 Patent, with the purpose of, *inter alia*, developing and serving the United States
 market for Defendants' LED products and consumer devices that include Defendants'
 products.

8 23. As a result of Defendants' infringement of the '771 Patent, DSS has 9 suffered monetary damages in an amount adequate to compensate for Defendants' 10 infringement, but in no event less than a reasonable royalty for the use made of the 11 invention by Defendants, together with interest and costs as fixed by the Court.

COUNT II

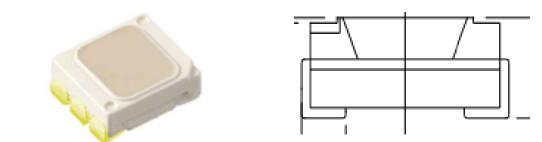
#### **INFRINGEMENT OF THE '087 PATENT**

24. DSS references and incorporates by reference paragraphs 1 through 23 of 14 this Complaint. Defendants make, use, offer for sale, sell, and/or import in the United 15 16 States products and/or services that infringe various claims of the '087 Patent, and continues to do so. By way of illustrative example, Defendants' infringing products 17 include without limitation, all versions and variations, including predecessor and 18 successor models, of its SFT722N-S LED, 801 Series (Auto), 802 Series (Auto), 825 19 Series, 3528, 3528 (white), MJT 3528, and 6050 packages. Defendants' infringing 20 products also include products, e.g., light bulbs, displays and fixtures that contain at 21 least one infringing LED product. Defendants' infringing products are collectively 22 referred to hereinafter as "087 Accused Instrumentalities." 23

24 25. Defendants have directly infringed and continue to directly infringe the
'087 Patent by, among other things, making, using, offering for sale, selling, and/or
importing the '087 Accused Instrumentalities. Such products and/or services are
covered by one or more claims of the '087 Patent's including at least claim 1 because
they contain each element of that claim.

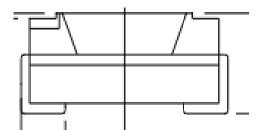
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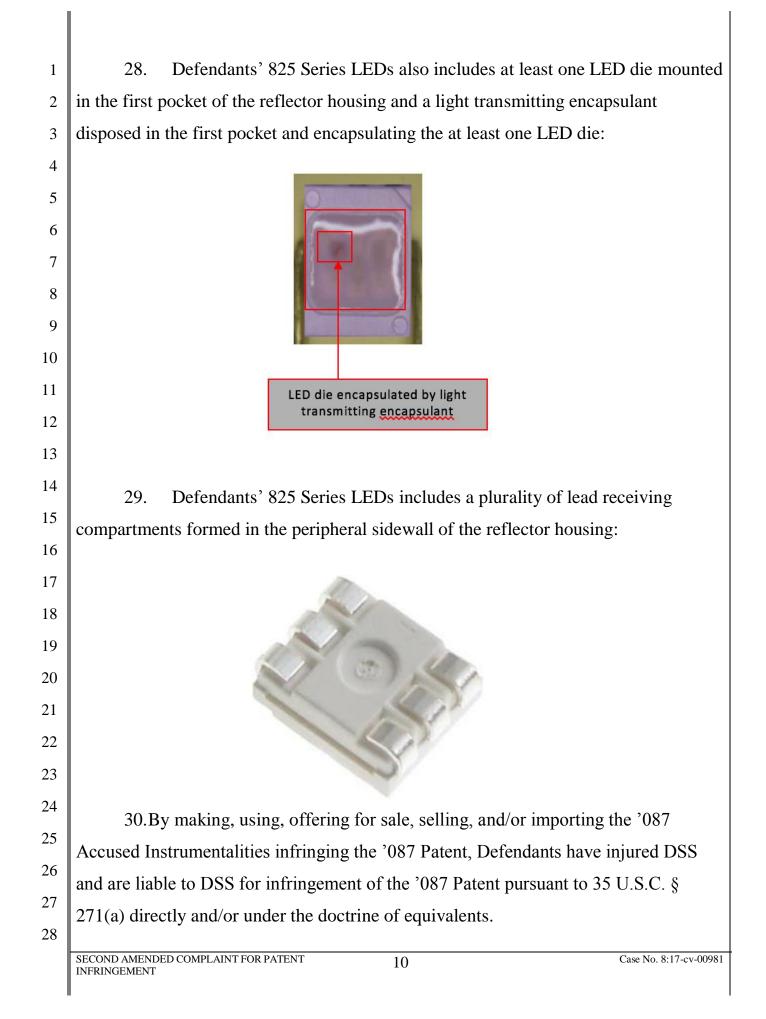
26. As an illustrative example, Defendants import, sell and offer to sell its 825 Series LED products. Defendants' 825 Series infringes, for example, Claim 1 of the '087 patent because it is an optical device comprising a lead frame with a plurality of leads:



Defendants' 825 Series LED also includes a reflector housing formed 27. around the lead frame, the reflector housing having a first end face and a second end face and a peripheral sidewall extending between the first end face and the second end face, the reflector housing having a first pocket with a pocket opening in the first end face and a second pocket opening in the second end face.







31. In addition, Defendants are actively inducing others, such as their 1 customers and end users of Accused Instrumentalities, services based thereupon, and 2 3 related products and/or processes, to directly infringe each and every claim limitation, including without limitation claim 1 of the '087 Patent, in violation of 35 U.S.C. § 4 5 271(b). Defendants' customers and/or end users have directly infringed and are directly infringing each and every claim limitation, including without limitation claim 6 1 of the '087 Patent. Defendants have had actual knowledge of the '087 Patent at 7 least as of service of this Complaint. Defendants are knowingly inducing their 8 customers and/or end users to directly infringe the '087 Patent, with the specific intent 9 to encourage such infringement, and knowing that the induced acts constitute patent 10 infringement. Defendants' inducement includes, for example, providing technical 11 guides, product data sheets, demonstrations, software and hardware specifications, 12 13 installation guides, and other forms of support that induce their customers and/or end users to directly infringe the '087 Patent. The '087 Accused Instrumentalities are 14 designed in such a way that when they are used for their intended purpose, the user 15 16 infringes the '087 Patent. Defendants know and intend that customers that purchase the '087 Accused Instrumentalities will use those products for their intended purpose. 17

18 32. Defendants specifically intend their United States customers infringe the '087 patent through use of the '087 Accused Instrumentalities in this country by at 19 least advertising and promoting the use (e.g., hyperlinked "Application" below) of the 20 '087 Accused Instrumentalities on their United States website: See, e.g., 21 http://www.seoulsemicon.com/en/applications/. Defendant also specifically intends its 22 23 customers infringe the '087 Patent through use of the '087 Accused Instrumentalities through trade show presentations, customer visits, direct customer contacts and 24 application guides. Defendants also specifically intend its customers infringe the '087 25 Patent through selling '087 Accused Instrumentalities overseas with the specific intent 26 that the customer import, offer to sell, and/or sell the '087 Accused Instrumentalities 27 in order to develop and serve the United States market for Defendant's LED products, 28

either alone or used in products such as bulbs, displays, consumer products and/or
 fixtures. Such customers include Defendant's LED distributors, consumer products
 companies and retailers that serve the United States market. See

4 http://www.seoulsemicon.com/en/support/where-to-buy/, naming Avnet, Digi-Key,
5 Mouser Electronics, and WPG Americas as United States distributors of Defendants'
6 products.

33.Defendants have been aware of the '087 Patent and of its infringement as of 7 a date no later than the date they were served with the complaint in the case 2:17-cv-8 308, filed April 13, 2017. Since that date, Defendants have failed to investigate and 9 remedy their infringement of the '087 Patent and thus willfully and egregiously 10 continue to infringe the '087 Patent. On information and belief, Defendants continued 11 to offer infringing products without having modified or altered those products in a 12 13 manner that would not infringe the '087 patent. Defendants, at the very least, have been egregiously and willfully blind to infringement of the '087 Patent. Further 14 evidence of Defendants' egregious and willful infringement are the acts of active 15 16 inducement described in this Complaint. Defendants actively induce and encourage customers to make, use, sell, offer to sell and/or import the '087 Accused 17 18 Instrumentalities with knowledge that these acts constitute infringement of the '087 Patent, with the purpose of, *inter alia*, developing and serving the United States 19 market for Defendants' LED products and consumer devices that include Defendants' 20 products. 21

- 34. As a result of Defendants' infringement of the '087 Patent, DSS has
  suffered monetary damages in an amount adequate to compensate for Defendants'
  infringement, but in no event less than a reasonable royalty for the use made of the
  invention by Defendants, together with interest and costs as fixed by the Court.
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## COUNT III

### **INFRINGEMENT OF THE '486 PATENT**

35. DSS references and incorporates by reference paragraphs 1 through 24 of 3 this Complaint. 4

5 36. On information and belief, Defendants make, use, offer for sale, sell, and/or import in the United States products and/or services that infringe various 6 claims of the '486 Patent, and continues to do so. By way of illustrative example, 7 Defendants' infringing products include without limitation, all versions and variations, 8 including predecessor and successor models, of its ZPower LED – Z5M, Z5M0, 9 Z5M1, Z5M2, Z5P, Z5, Z7, Z7-F, Z6, and P5 II LED products. Defendants' infringing 10 11 products also include products, e.g., light bulbs, displays and fixtures that contain at least one infringing LED product. Defendants' infringing products are collectively 12 referred to hereinafter as "486 Accused Instrumentalities." 13

37. On information and belief, Defendants have directly infringed and 14 continues to directly infringe the '486 Patent by, among other things, making, using, 15 16 offering for sale, selling, and/or importing the '486 Accused Instrumentalities. On information and belief, such products are covered by one or more claims of the '486 17 18 Patent including at least claim 1 because they contain each element of that claim.

38. As an illustrative example, Defendant imports, sells and offers to sell its 19 Z5 LED products. Defendant's Z5 infringes, for example, Claim 1 of the '486 patent 20 because it is a semiconductor device comprising a substantially planar substrate 21 22 having opposed major surfaces:

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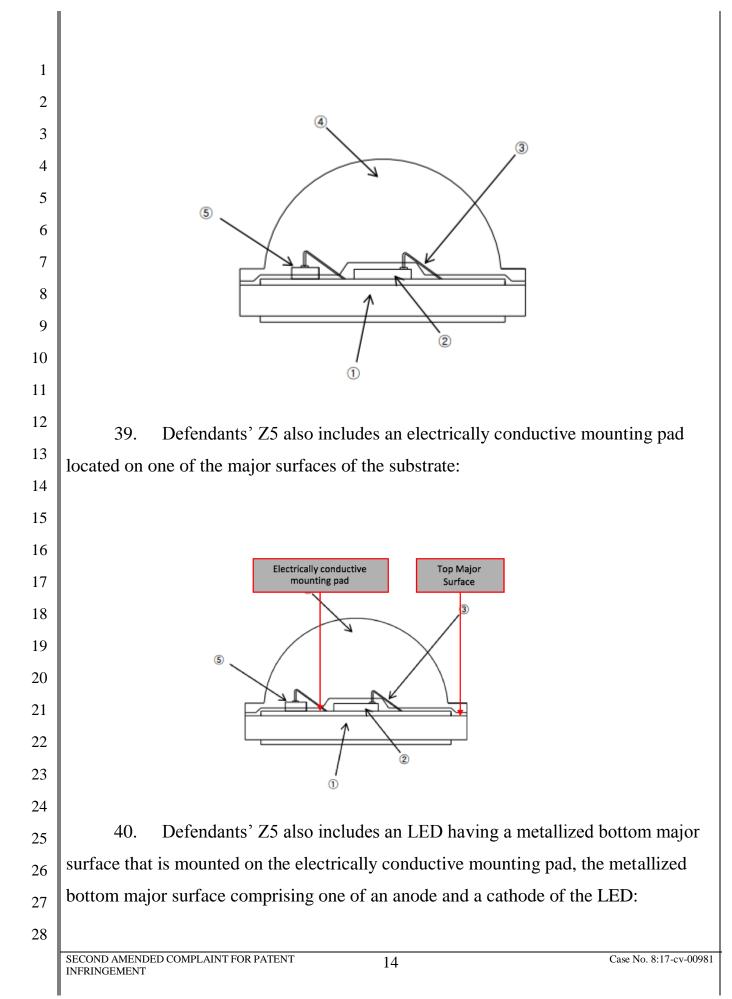
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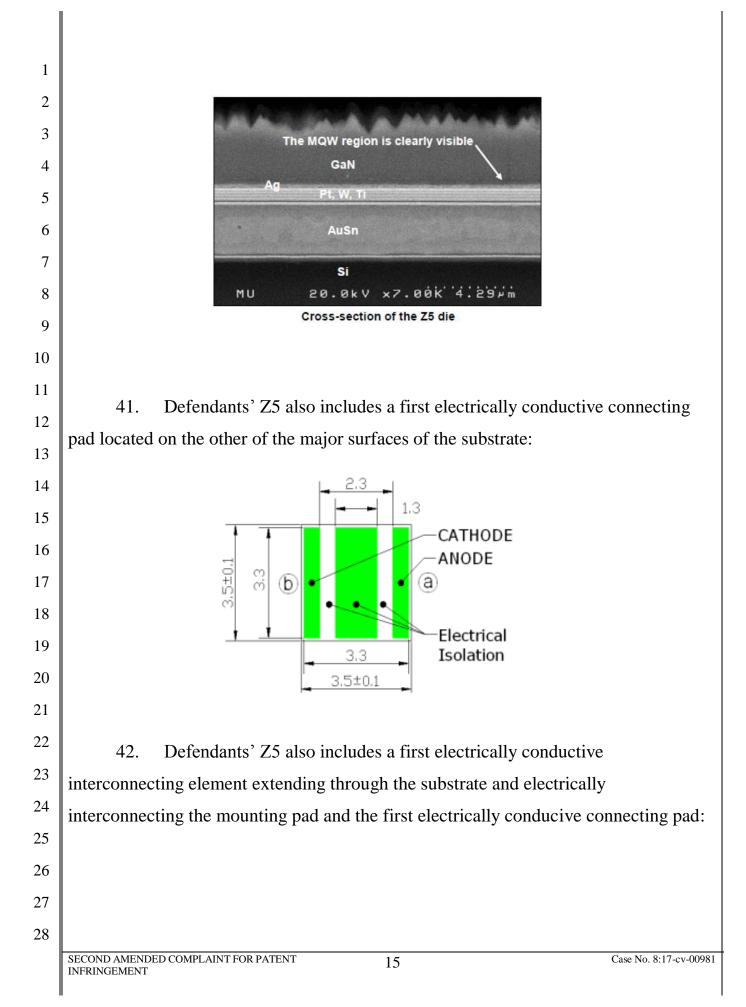
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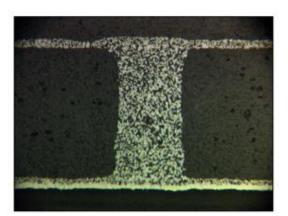
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43. By making, using, offering for sale, selling, and/or importing the '486 Accused Instrumentalities infringing the '486 Patent, Defendants have injured DSS and is liable to DSS for infringement of the '486 Patent pursuant to 35 U.S.C. § 271(a) directly and/or under the doctrine of equivalents.

44. In addition, Defendants are actively inducing others, such as their 13 customers and end users of Accused Instrumentalities, services based thereupon, and 14 related products and/or processes, to directly infringe each and every claim limitation, 15 including without limitation claim 1 of the '486 Patent, in violation of 35 U.S.C. § 16 271(b). Defendants' customers and/or end users have directly infringed and are 17 directly infringing each and every claim limitation, including without limitation claim 18 1 of the '486 Patent. Defendants have had actual knowledge of the '486 Patent at 19 least as of service of this Complaint. Defendants are knowingly inducing their 20 customers and/or end users to directly infringe the '486 Patent, with the specific intent 21 to encourage such infringement, and knowing that the induced acts constitute patent 22 infringement. Defendants' inducement includes, for example, providing technical 23 guides, product data sheets, demonstrations, software and hardware specifications, 24 installation guides, and other forms of support that induce their customers and/or end 25 users to directly infringe the '486 Patent. The '087 Accused Instrumentalities are 26 designed in such a way that when they are used for their intended purpose, the user 27

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infringes the '486 Patent. Defendants know and intend that customers that purchase the '486 Accused Instrumentalities will use those products for their intended purpose. 2

Defendants specifically intend their United States customers infringe the 3 45. '486 patent through use of the '486 Accused Instrumentalities in this country by at 4 5 least advertising and promoting the use (e.g., hyperlinked "Application" below) of the '486 Accused Instrumentalities on their United States website: See, e.g., 6

http://www.seoulsemicon.com/en/applications/. Defendant also specifically intends its 7 customers infringe the '486 Patent through use of the '486 Accused Instrumentalities 8 through trade show presentations, customer visits, direct customer contacts and 9 application guides. Defendants also specifically intend its customers infringe the '486' 10 Patent through selling '486 Accused Instrumentalities overseas with the specific intent 11 that the customer import, offer to sell, and/or sell the '486 Accused Instrumentalities 12 13 in order to develop and serve the United States market for Defendant's LED products, either alone or used in products such as bulbs, displays, consumer products and/or 14 fixtures. Such customers include Defendant's LED distributors, consumer products 15 16 companies and retailers that serve the United States market. See http://www.seoulsemicon.com/en/support/where-to-buy/, naming Avnet, Digi-Key, 17

Mouser Electronics, and WPG Americas as United States distributors of Defendants' 18 products. 19

46. Defendants have been aware of the '486 Patent and of its infringement as 20 of a date no later than the date they were served with the amended complaint in the 21 case 2:17-cv-308, filed May 9, 2017. Since that date, Defendants have failed to 22 23 investigate and remedy their infringement of the '486 Patent and thus willfully and egregiously continue to infringe the '486 Patent. On information and belief, 24 Defendants continued to offer infringing products without having modified or altered 25 those products in a manner that would not infringe the '486 patent. Defendants, at the 26 very least, have been egregiously and willfully blind to infringement of the '486 27 Patent. Further evidence of Defendants' egregious and willful infringement are the 28

acts of active inducement described in this Complaint. Defendants actively induce
 and encourage customers to make, use, sell, offer to sell and/or import the '486
 Accused Instrumentalities with knowledge that these acts constitute infringement of
 the '86 Patent, with the purpose of, *inter alia*, developing and serving the United
 States market for Defendants' LED products and consumer devices that include
 Defendants' products.

47. As a result of Defendants' infringement of the '486 Patent, DSS has
suffered monetary damages in an amount adequate to compensate for Defendants'
infringement, but in no event less than a reasonable royalty for the use made of the
invention by Defendants, together with interest and costs as fixed by the Court.

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## 12

Plaintiff respectfully requests the following relief from this Court:

**PRAYER FOR RELIEF** 

A. A judgment that Defendants have infringed one or more claims of the
'771, '087 and '486 Patents;

B. A judgment and order requiring Defendants to pay DSS its damages,
costs, expenses, and prejudgment and post-judgment interest for Defendants' acts of
infringement in accordance with 35 U.S.C. § 284;

C. A judgment and order requiring Defendants to provide accountings and
to pay supplemental damages to DSS, including, without limitation, prejudgment and
post-judgment interest;

D. A judgment and order finding that this is an exceptional case within the
meaning of 35 U.S.C. § 285 and awarding to DSS its reasonable attorneys' fees
against Defendants; and

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E.

Any and all other relief to which DSS may show itself to be entitled.

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# JURY TRIAL DEMANDED

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, DSS requests a
trial by jury of any issues so triable by right.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	Dated: November 16, 2017	By:	/s/Brian Ledahl         RUSS AUGUST & KABAT         Brian Ledahl (CA SB No. 186579)         Neil A. Rubin (CA SB No. 250761)         Jacob Buczko (CA SB No. 269408)         RUSS AUGUST & KABAT         12424 Wilshire Boulevard 12th Floor         Los Angeles, California 90025         Telephone: 310-826-7474         Facsimile: 310-826-6991         E-mail: bledahl@raklaw.com         E-mail: jbuczko@raklaw.com         E-mail: jbuczko@raklaw.com         Attorneys for Plaintiff,         Document Security Systems, Inc.
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	SECOND AMENDED COMPLAINT FOR PATENT		19 Case No. 8:17-cv-00981
	INFRINGEMENT		.,