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6 Attorneys for Plaintiff  
GEOVECTOR CORPORATION

7  
8 UNITED STATES DISTRICT COURT  
9 NORTHERN DISTRICT OF CALIFORNIA

10  
11 **GEOVECTOR CORPORATION**, a California  
corporation,

12 Plaintiff;

13 v.

14 **SAMSUNG ELECTRONICS CO., LTD.**, a  
15 Korean corporation;  
16 **SAMSUNG ELECTRONICS AMERICA, INC.**, a  
New York corporation; and  
17 **SAMSUNG TELECOMMUNICATIONS**  
**AMERICA, LLC**, a Delaware limited liability  
18 company.

19 Defendants.

Case No. 3:16-CV-02463

**COMPLAINT FOR:**

- (1) DIRECT PATENT INFRINGEMENT;**
- (2) INDUCING PATENT INFRINGEMENT;**
- (3) MISAPPROPRIATION OF TRADE SECRETS UNDER CAL. CIV. CODE § 3426, ET SEQ.;**
- (4) Lanham Act 43(a) [15 U.S.C.1125];**
- (5) DECLARATORY RELIEF; AND,**
- (6) RACKETEER INFLUENCED AND CORRUPT ORGANIZATIONS ACT, 18 U.S.C. §1962(C).**

**JURY TRIAL DEMANDED**

1 Plaintiff GeoVector Corporation (originally CritiCom Corporation, hereinafter  
2 “GeoVector,” “Plaintiff,” or the “Company”) alleges the following against Defendants Samsung  
3 Electronics Co., Ltd. (“SEC”), Samsung Electronics America, Inc. (“SEA”), and Samsung  
4 Telecommunications America, LLC (“STA,” and collectively, “Samsung,” “Defendants” or the  
5 “Samsung Defendants”) and each of them, as follows:

6 **NATURE OF ACTION**

7 1. This action involves claims of patent infringement under 35 U.S.C. § 271, *et seq.*,  
8 violation of the Lanham Act under 18 U.S.C. 1125(a), violations of the California Uniform Trade  
9 Secret Act, declaratory relief, and violations of the Racketeer Influenced and Corrupt  
10 Organizations Act under 18 U.S.C. §1962(c).

11 2. Plaintiff GeoVector's pioneering work in creating the entire field of Augmented  
12 Reality through the inventive and innovative work of the Ellenby Family and which is the  
13 subject of the patents, trade secret, and other intellectual property protections owned by Plaintiff  
14 as set forth hereinafter was and is being infringed by Defendants, and each of them, as  
15 demonstrated by their widely publicized campaign by Samsung as demonstrated by the picture  
16 below:



24 <http://www.whatafuture.com/2014/05/30/samsung-just-capture-an-image-to-reach-anywhere/#sthash.WUFNkwxH.dpbs>

25 //  
26 //  
27 //  
28 //

1 **PARTIES**

2 3. Plaintiff GeoVector is a corporation organized under the laws of and registered to  
3 do business in California, with its principal place of business in San Francisco, California.

4 4. Defendant SEC is a South Korean multinational electronics company, with its  
5 principal place of business and home office at San #24 Nongseo-Dong Giheung-Gu Yongincity,  
6 Gyeonggi-Do, Korea, 446-711, South Korea.

7 5. Defendant SEA is a wholly owned subsidiary of Samsung Electronics Co., Ltd.,  
8 and is a corporation organized and existing under the laws of New York, and registered to do  
9 business in California. Its principal place of business is at 85 Challenger Road, Ridgefield Park,  
10 New Jersey, 07660.

11 6. Defendant STA is a limited liability company organized and existing under the  
12 laws of Delaware and with its principal place of business at 1301 East Lookout Drive,  
13 Richardson, Texas, 75082; STA is a subsidiary of Samsung Electronics, and purports to research,  
14 develop, and market smart mobile phones and smart tablet computers throughout the United  
15 States.

16 7. Defendants SEC, SEA, and STA, and each of them, are doing business in the  
17 United States and, more particularly, in the State of California and in the Northern District of  
18 California, by designing, marketing, making, using, selling, importing, and/or offering for sale  
19 products that infringe the patent claims involved in this action, or by transacting other business in  
20 this District.

21 **JURISDICTION AND VENUE**

22 8. This action is for, among other things, patent infringement arising under the  
23 patent laws of the United States, Title 35, United States Code. This Court has exclusive subject  
24 matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a) because Federal courts have exclusive  
25 jurisdiction in patent cases, and because those claims are Federal questions.

26 9. The Court has supplemental jurisdiction pursuant to 28 U.S.C. §1367(a) over  
27 GeoVector's claims arising under state law because these claims are so related to GeoVector's  
28

1 claims under federal law that they form part of the same case or controversy, and derive from a  
2 common nucleus of facts.

3 10. This Court has personal jurisdiction over all Defendants because Defendants, and  
4 each of them, do substantial business in this District, and have purposely transacted business in  
5 this judicial district, elsewhere in California, and within the United States.

6 11. Venue is proper, under 28 U.S.C. §§ 1331, 1391(c), 1391(d), and 1400(b). This  
7 action raises federal questions (including patent infringement); substantial events giving rise to  
8 this action occurred in this District; the creation, infringement, and sale of the augmented reality  
9 innovations at issue involved corporations registered to do business in California with California  
10 subsidiaries, branches, and partners, found in and doing business in this District; and at least one  
11 act of infringement took place in this District.

12 12. This Court has personal jurisdiction over the Defendants. Defendants, and each of  
13 them, have conducted, and do conduct business within the State of California. Defendants, and  
14 each of them, directly or through intermediaries (including distributors, retailers, and others),  
15 ship, distribute, offer for sale, sell, and advertise products in the United States, the State of  
16 California, and the Northern District of California. Defendants, and each of them, purposefully  
17 and voluntarily sold one or more of their infringing products with the expectation that they will  
18 be purchased by consumers in the Northern District of California. These infringing products  
19 have been and continue to be purchased by consumers in the Northern District of California.  
20 Defendants, and each of them, have committed acts of patent infringement within the United  
21 States and, more particularly, within the Northern District of California.

22 **BACKGROUND FACTS**

23 13. GeoVector was founded in 1987 by John Ellenby with his two sons, Thomas  
24 Ellenby and Peter Ellenby (together, the “Ellenbys” or the “Ellenby Family”), who joined the  
25 Company in 1990 and 1993 respectively.

26 14. John Ellenby is an inventor and computer scientist who has over fifty (50) years’  
27 experience in the computer science field. He has held a number of senior positions in the  
28 Computer Sciences Laboratory at Xerox-PARC, where he oversaw the development of the Alto

1 II. John Ellenby is also a founder of GRiD Systems Corporation, which developed one of the  
2 world's first laptop computers.

3 15. In 1990 John Ellenby and his son, Thomas Ellenby, conceptualized and invented  
4 the first augmented reality device which utilized data as to the device's position and orientation  
5 to display relevant information to the user. Originally, they envisioned a navigation system using  
6 a computer to analyze input data from a global positioning system ("GPS") sensor and compass,  
7 which would then display accurate nautical maps superimposed over the landscape when viewed  
8 through a set of configured binoculars.

9 16. John and Thomas Ellenby then told Peter Ellenby of their inventive concept, and  
10 Peter and they realized the invention extended too many more purposes beyond navigation,  
11 including video gaming, tourism, advertising, and a host of other important real-world  
12 applications of significant economic value.

13 17. In 1991 GeoVector hired SAIC ("Science Applications International  
14 Corporation," whose website is at www.saic.com) to do a patent search for any previous  
15 inventions in this area. No directly relevant prior art was found; it was confirmed that they were  
16 the first inventors of what they first coined "augmented reality" and sometimes abbreviated as  
17 "AR" innovations.

18 18. In 1993 GeoVector contracted a Patent & Trademark Office ("PTO") licensed  
19 patent agent who wrote the first patents for them for assignment to the Company.

20 19. On September 10, 1993, GeoVector filed its first patent application in this  
21 domain, since issued as Patent No. 5,815,411 with the title "Electro-optic vision system which  
22 exploits position and attitude" (the "411 Patent"), attached hereto as **Exhibit 1**.

23 20. The '411 Patent discloses:

24 devices of the invention can be envisioned to include six major components: A 1)  
25 camera to collect optical information about a real scene and present that  
26 information as an electronic signal to; a 2) computer processor; a 3) device to  
27 measure the position of the camera; and a 4) device to measure the attitude of the  
28 camera (direction of the optic axis), thus uniquely identifying the scene being  
viewed, and thus identifying a location in; a 5) data base where information  
associated with various scenes is stored, the computer processor combines the  
data from the camera and the data base and perfects a single image to be

1 presented at: a 6) display whose image is continuously aligned to the real scene as  
2 it is viewed by the user.

3 21. Between 1993 and 2007, through the inventive efforts of the Ellenby Family,  
4 GeoVector applied for and was awarded at least seventeen (17) U.S. Patents for the numerous  
5 other applications for augmented reality technologies that are protected by federal and state  
6 intellectual property protections (collectively the “IP Rights”). GeoVector developed its IP Rights  
7 over these years in confidence, including substantial trade secrets and confidential information  
8 which it will list in an Addendum to this Complaint, which it will file under seal following entry  
9 of a Protective Order by the Court (hereinafter collectively the “Trade Secrets and Confidential  
10 Information”).

### 11 THE GEOVECTOR PATENTS AT ISSUE

12 22. On March 14, 2000, GeoVector was issued U.S. Patent No. 6,037,936 entitled  
13 “Computer vision system with a graphic user interface and remote camera control” (the “936  
14 Patent”), attached hereto as **Exhibit 2**. The ‘936 Patent expired on September 10, 2013.

15 23. The ‘936 Patent contains 40 claims (including 5 independent claims), covering:  
16 Computer vision systems provide a user a view of a scene whereby an image of  
17 the scene may have been augmented with information generated by a computer.  
18 Computer vision systems of the present invention include graphical user  
19 interfaces which have been discovered to operably interact with geometric  
20 constructs of a user environment, objects within a scene, perspective of the scene,  
21 image features of a signal which represents the scene, among others. These  
22 graphical user interfaces of the invention do not behave as those known because  
23 operation of these interfaces depends on properties and features particular to  
24 computer vision systems which have position and attitude determining means.

25 24. On November 27, 2007, GeoVector was issued U.S. Patent No. 7,301,536 entitled  
26 “Electro-optic vision systems” (the “536 Patent”), attached hereto as **Exhibit 3**. The ‘536  
27 expired on November 29, 2013.

28 25. The ‘536 Patent contains 7 claims (including 2 independent claims), covering “An  
image processing system for delivering real scene information to a data processor. The system  
includes the data processor, an image-delivery mechanism, an information delivery mechanism,  
and a graphic processor.”

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1           26.     On March 29, 2011, GeoVector was issued U.S. Patent No. 7,916,138 entitled  
2 “Electro-optic vision systems” (the “138 Patent”), attached hereto as **Exhibit 4**. The ‘138 Patent  
3 expired on September 10, 2013.

4           27.     The ‘138 Patent contains 18 claims (including 3 independent claims), covering  
5 “An image processing system for delivering real scene information to a data processor. The  
6 system includes the data processor, an image-delivery mechanism, an information delivery  
7 mechanism, and a graphic processor.”

8           28.     There has been no challenge to any of the GeoVector Patents or any other  
9 GeoVector Intellectual Property Rights and no one has challenged the validity of GeoVector’s  
10 Trade Secrets and Confidential Information.

11           29.     GeoVector was and is the legal owner via assignment of the ‘936 Patent, ‘536  
12 Patent, and ‘138 Patent (collectively “Patents-in-Suit”) throughout the period of Defendants’  
13 infringing acts, and still owns the patents. GeoVector uses patent numbers on its devices,  
14 products, documentation, and briefings to give actual and constructive notice of the existence of  
15 the GeoVector Patents.

16           30.     The Patents-in-Suit are valid and enforceable. GeoVector is the owner of all right,  
17 title, and interest in and to the Patents-in-Suit, with full right to bring suit to enforce them, and  
18 each of them, including the right to recover for past and accrued infringement damages and the  
19 right to past, present and future recover future royalties, damages, income and other  
20 compensation from Defendants and each of them.

21           31.     The Patents-in-Suit have been commercially successful in a diverse array of  
22 applications and GeoVector has in fact licensed its Patents-in-Suit to a number of large public  
23 companies including other large smartphone, smart tablet and video game manufacturers.

24           32.     GeoVector has substantial evidence that Samsung has manufactured products with  
25 the same augmented reality technology that other large manufacturers license from GeoVector.  
26 GeoVector will make this evidence available to the Court for *in camera* review in connection  
27 with the filing under seal of other documents in support of this Complaint following entry of a  
28 Protective Order in this case.

**GEOVECTOR PROTOTYPES**

1  
2 33. In May 1998, GeoVector developed in confidence a working, pointing search  
3 prototype, internally named “Little Guy.” This prototype was, and is, subject to state law  
4 protections for trade secrets and confidential information.

5 34. The Little Guy prototype was a hand-held pointing device that would use the  
6 same basic technology covered by the previously issued patents, but instead of viewing a super-  
7 imposed image, it would provide the user with relevant information about whatever location it  
8 was pointed at.

9 35. In 2002, GeoVector contracted with Socket Communications to make GeoVector  
10 Pointing Cards, which were PCMCIA cards containing GPS and compass sensors, mostly used in  
11 Pocket PCs.

12 36. In 2003, GeoVector created a location-based game called Real World Doom,  
13 which allowed people to fight monsters on the streets of Auckland, New Zealand.

14 37. Also in 2003 GeoVector, along with partners Vodafone, HP, Microsoft, Virtual  
15 Spectator, and Animation Research Ltd., showcased the Actual Spectator Augmented Reality app  
16 at America’s Cup Sailing Races in Auckland, New Zealand.

17 38. In January 2006 GeoVector partnered with Japanese company Mapion to develop  
18 the world’s first Pointing Based Search for mobile phones. In May of 2007, GeoVector and  
19 Mapion enhanced the Mapion Local Search application, and rebranded it as Mapion Point Appli.

20 39. In October 2008, GeoVector launched the location-based game Navimon in Japan.  
21 The Navimon game allowed players to encounter and capture virtual monster pets at various  
22 locations in the real world by using their cell phones’ GPS and compass sensors.

23 40. In September 2009 GeoVector launched World Surfer (TM) for the iPhone &  
24 Google Android platforms. Developed for compass-enabled GPS smartphones, World Surfer  
25 allows users to point their phones in a particular direction to search for retailers, restaurants, and  
26 other points of interest.

27 41. In February 2010, GeoVector launched World Surfer 2 with Augmented Reality  
28 object view for the iPhone 3GS platform.



- 1 1. Samsung will receive a world-wide, non-exclusive, perpetual (subject to  
2 the retention terms of paragraph 5 below) license (the License) to produce  
3 and sell all GeoVector enabled devices other than those that connect to  
4 GeoVector servers via Telco (GV Direct devices). i.e. the License will be  
5 for all GV devices that connect to the web without going through a Telco.
- 6 2. Samsung will be GeoVector's world-wide preferred partner for GV Direct  
7 devices.
- 8 3. Samsung will pay GeoVector an upfront license fee of \$5 million (US\$).
- 9 4. For years 2 and 3 of the License Samsung guarantees a minimum GV  
10 Direct device royalty revenue to GeoVector of \$500,000 a quarter.
- 11 5. To the retain the License after year 3 Samsung will yearly, before the onset  
12 of the final quarter of the current license year, guarantee a minimum GV  
13 Direct device royalty revenue to GeoVector of \$750,000 a quarter. If  
14 Samsung fails to commit to this guarantee before the onset of the final  
15 quarter of the license year then the License will terminate as of the end of  
16 the current license year.
- 17 6. Samsung will pay GeoVector a royalty of 5% of the value of any GV  
18 Direct devices sold.

19 49. In September 2006, GeoVector sent further confidential briefing to Samsung  
20 regarding potential applications of GeoVector technology in Samsung devices. GeoVector  
21 proposed using its sensor-based augmented reality technology to provide enhanced views of the  
22 2008 Beijing Olympics, and using its pointing technology to provide tourists with relevant  
23 information regarding landmarks and attractions.

24 50. On February 12, 2008, GeoVector and STA executed a Mutual Nondisclosure  
25 Agreement, Plaintiff will file the NDA under seal as **Exhibit 8** hereto after the Court enters a  
26 Protective Order.

27 51. On April 8, 2008, GeoVector sent a further business proposal to Samsung,  
28 attached hereto as **Exhibit 9**.

52. Despite extensive (now proven to be pretextual) negotiations and numerous  
substantial (and now proven to be misleadingly deceptive) communications, Samsung did not  
accept any of GeoVector's proposals. Furthermore, Samsung never reached a licensing  
agreement with, nor did it obtain other authorization from, GeoVector. However, this did not  
stop Defendants, and each of them, from unilaterally taking advantage of the trust and

1 confidence that the Ellenby Family in particular, and GeoVector in general, placed in  
2 Defendants, and each of them.

### 3 SAMSUNG'S INFRINGING DEVICES

4 53. Without any license (express or implied), or any other authorization from  
5 GeoVector, Defendants, and each of them, have made, sold, offered to sell, and imported within  
6 the United States over three hundred (300) million smartphones and smart tablet devices that  
7 incorporate technology embodied in GeoVector's Patents-in-Suit, the GeoVector Augmented  
8 Reality Technologies, and/or that are otherwise set forth in GeoVector's Trade Secrets and  
9 Confidential Information. None of this was authorized.

10 54. Between 2009 and 2013, Samsung has sold, offered to sell, and imported within  
11 the United States the following Samsung Galaxy devices, per the Wikipedia article that is

12 **Exhibit 11** hereto:

#### 13 2013

14 <b>December</b>	Samsung Galaxy Win Pro (SM-G3812)
	Samsung Galaxy J (SGH-N075)
15	Samsung Galaxy S Duos 2 (GT-S7582)
	Samsung Galaxy Trend Plus (GT-S7580)
16 <b>November</b>	Samsung Galaxy Grand 2 (SM-G7100)
17 <b>October</b>	Samsung Galaxy Star Pro (GT-S7260)
	Samsung Galaxy Express 2 (SM-G3815)
18	Samsung Galaxy Round (SM-G9105)
	Samsung Galaxy Trend Lite (GT-S7390)
19	Samsung Galaxy Fame Lite (GT-S6790)
20	Samsung Galaxy Light (SGH-T399)
	Samsung Galaxy Core Plus (SM-G3500)
21 <b>September</b>	Samsung Galaxy Note 3
	Samsung Galaxy Gear
22 <b>July</b>	Samsung Galaxy S4 Mini (GT-I9190)
23 <b>June</b>	Samsung Galaxy S4 Active (GT-I9295)
24	Samsung Galaxy S4 Zoom (SM-C1010)
	Samsung Galaxy Ace 3 (GT-S7270)
25	Samsung Galaxy Pocket Neo (GT-S5310)
26 <b>May</b>	Samsung Galaxy Star (GT-S5280)
	Samsung Galaxy Core (GT-S8262)
27	Samsung Galaxy Y Plus (GT-S5303)
28	

	Samsung Galaxy Win (GT-I8550)
<b>April</b>	Samsung Galaxy Mega
	Samsung Galaxy Fame (GT-S6810)
	Samsung Galaxy S4 (GT-I9500)
<b>March</b>	Samsung Galaxy Xcover 2 (GT-S7710)
	Samsung Galaxy Young (GT-S6310)
<b>January</b>	Samsung Galaxy Grand (GT-I9080)
	Samsung Galaxy S II Plus (GT-I9105)
	Samsung Galaxy Pocket Plus (GT-S5301)

**2012**

<b>November</b>	Samsung Galaxy S III Mini (GT-I8190)
<b>October</b>	Samsung Galaxy Rugby Pro (SGH-I547)
	Samsung Galaxy Express
<b>September</b>	Samsung Galaxy Rush
	Samsung Galaxy S Relay 4G
	Samsung Galaxy Note II
	Samsung Galaxy Reverb
	Samsung Galaxy Victory 4G LTE (SPH-L300)
	Samsung Galaxy Pocket Duos (GT-S5302)
<b>August</b>	Samsung Galaxy S Duos (GT-S7562)
<b>July</b>	Samsung Galaxy Stellar (SCH-I200)
<b>May</b>	Samsung Galaxy Ch@t (GT-B5330)
	Samsung Galaxy Appeal (SGH-I827)
	Samsung Galaxy S III (GT-I9300)
<b>April</b>	Samsung Galaxy S Advance
	Samsung Galaxy Rugby (GT-S5690M)
<b>March</b>	Samsung Galaxy Pocket (GT-S5300)
	Samsung Galaxy Rugby Smart (SGH-i847)
<b>February</b>	Samsung Galaxy Beam
	Samsung Galaxy Y DUOS (GT-S6102)
	Samsung Galaxy Mini 2 (GT-S6500)
	Samsung Galaxy Ace 2 (GT-I8160)
<b>January</b>	Samsung Galaxy Ace Plus (GT-S7500[L/T/W])
	Samsung Galaxy Y Pro Duos (GT-B5510)

**2011**

<b>November</b>	Samsung Galaxy Nexus (i9250)
<b>October</b>	Samsung Galaxy Note
	Samsung Stratosphere
<b>August</b>	Samsung Galaxy Xcover (S5690)
	Samsung Galaxy Precedent
	Samsung Galaxy Y (GT-S5360)

	Samsung Galaxy M
	Samsung Galaxy W (I8150)
	Samsung Galaxy R (I9103)
	Samsung Galaxy S Plus (GT-i9001)
<b>June</b>	Samsung Galaxy Z
	Samsung Exhibit 4G (SGH-T759)
<b>May</b>	Samsung Galaxy S II (GT-I9100)
<b>April</b>	Samsung Galaxy Neo
	Samsung Galaxy Pro
	Samsung Galaxy Prevail (SPH-M820)
<b>March</b>	Samsung Galaxy Mini (GT-S5570)
	Samsung Galaxy Gio (GT-S5660)
<b>February</b>	Samsung Galaxy SL (GT-I9003)
	Samsung Galaxy Fit (S5670)
	Samsung Galaxy Ace (GT-S5830, GT-S5830i)
	<b>2010</b>
<b>October</b>	Samsung Galaxy 551
<b>August</b>	Samsung Galaxy U
	Samsung Galaxy 5
<b>July</b>	Samsung Galaxy 3
<b>June</b>	Samsung Galaxy S (GT-I9000)
	<b>2009</b>
<b>November</b>	Samsung Galaxy Spica

[https://en.wikipedia.org/wiki/Samsung\\_Galaxy](https://en.wikipedia.org/wiki/Samsung_Galaxy)

55. Samsung has sold other similar products, including tablets or pads, which perform substantially the same infringing acts or substantially the same functions in substantially the same way to achieve the same or substantially the same results.

56. Based on the foregoing facts as alleged, Defendants, and each of them, have infringed and/or continue to infringe (literally and/or under the doctrine of equivalents) one or more claims of the Patents-in-Suit in this judicial district and elsewhere in California and the United States, including at least Claim 1 of each of the Patents-in-Suit, by, among other things, making, using, offering for sale, selling, and/or importing smartphones and other electronic devices, including, without limitation, the devices listed herein.

1 57. The Samsung Galaxy devices all include compass and GPS sensors.

2 58. Between 2010 and 2012, Samsung shipped at least 21,251,000 smartphone  
3 devices, which generated at least \$7,516,000,000 in revenue for Samsung, as is shown in the  
4 Table attached here to as **Exhibit 12**. Plaintiff will file **Exhibit 12** under seal hereto after the  
5 Court enters a Protective Order.

6 [http://assets.sbnation.com/assets/1286669/Apple\\_v\\_Samsung\\_US\\_sales\\_numbers.pdf](http://assets.sbnation.com/assets/1286669/Apple_v_Samsung_US_sales_numbers.pdf)

7 59. Each of these infringing devices contains compass and GPS sensors.

8 60. Based on the foregoing facts, Samsung uses sensors to compute real-time  
9 location and orientation data, which are used to provide its users with relevant information.

10 61. Based on the foregoing facts,  
11 Samsung has incorporated augmented reality  
12 technology in a number of applications, and  
13 has distributed this technology to various  
14 application developers with which it has, and  
15 is, partnered. Samsung distributes these third-  
16 party applications via its own store – the  
17 Samsung Galaxy Apps and Smarthub.



18 62. Neither Samsung nor any of these application developers have any commercial  
19 license or other authorization to use, or otherwise benefit from, any of the Patents-in-Suit nor to  
20 any of GeoVector's Trade Secrets and Confidential Information, nor any authorization to make,  
21 use, sell, offer to sell, or import, within the United States, any of the foregoing, including the  
22 GeoVector Augmented Reality Technologies.

23 63. On April 16, 2013, GeoVector caused its licensing agents to send numerous notice  
24 letters to Samsung management at various locations throughout the United States.

25 64. Then, on April 29, 2013, GeoVector caused its agents to send demand letters to  
26 the same Samsung parties notifying them of infringement with proof of infringement claim  
27 charts, detailing each infringement.

28 //

1           65.     The infringement by Defendants, and each of them, of Plaintiff’s patent rights will  
2 continue to damage Plaintiff’s business, causing irreparable harm, for which there is no adequate  
3 remedy of law.

4           66.     Defendants, and each of them, knew of the Patents-in-Suit and knew of the  
5 infringement, including by way of this lawsuit and earlier as described above.

6           67.     The affirmative acts by Defendants, and each of them, of making, using and  
7 selling products that infringe the Patents-in-Suit, causing those products to be manufactured and  
8 distributed, and providing instruction manuals for those products, have induced and continue to  
9 induce manufacturers, resellers, and/or end-users to make or use those products in their normal  
10 and customary way to infringe the Patents-in-Suit. Defendants, and each of them, specifically  
11 intended and were aware that these normal and customary activities would infringe on the  
12 Patents-in-Suit. Defendants, and each of them, performed the acts that constitute induced  
13 infringement, and would induce actual infringement, with the knowledge of the patents, and with  
14 the knowledge, or willful blindness to the probability, that the induced acts would constitute  
15 infringement.

16           **SAMSUNG WRONGFULLY TOOK GEOVECTOR’S INTELLECTUAL PROPERTY**

17           68.     Through a pattern of deceit, misrepresentations, theft, and other wrongful  
18 conduct, Samsung took a wide range of virtual reality and augmented reality intellectual  
19 property, including the following property. Plaintiff disclosed to Samsung in confidence its  
20 Trade Secrets and Confidential Information including but not limited to the mechanics of  
21 augmented reality and GeoVector’s Augmented Reality Technologies because Samsung  
22 fraudulently and wrongfully induced Plaintiff to do so. Furthermore, Plaintiff disclosed in  
23 confidence its Trade Secrets and Confidential Information in various unpublished patent filings,  
24 which Samsung also wrongfully took without authorization; these thefts are described in more  
25 detail below.

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1 **I. PLAINTIFF DISCLOSED TO SAMSUNG A WIDE RANGE OF VALUABLE**  
2 **AUGMENTED REALITY TECHNOLOGIES, WHICH SAMSUNG THEN TOOK.**

3 **A. Plaintiff Disclosed Innovative Augmented Reality Technology.**

4 69. In reliance on principles of good faith and fair dealing and the trust and  
5 confidence which Plaintiff placed in Defendants, and each of them, Plaintiff disclosed in  
6 confidence to Samsung its entire unpublished patent application portfolio, including its early  
7 applications for augmented reality patents describing functional devices and their required  
8 components. This included the application for US Patent No. US5682332, all of which can be  
9 found at <http://www.google.com/patents/US5682332> (GeoVector was known as CritiCom at the  
10 time of the filing in 1994). That, then unpublished, patent application described exactly how an  
11 augmented reality system overlaid valuable information onto a scene to enrich the viewer's  
12 experience.

13 70. The Trade Secrets and Confidential Information of Plaintiff have substantial  
14 independent economic value. This is so because that confidential information provides a missing  
15 but critical innovative step forward. Instead of accessing different pieces of information in  
16 multiple devices in different formats, the viewer observes a scene and intuitively accesses and  
17 understands additional valuable information about that scene. In an instant, people could more  
18 accurately and fully understand reality and react to it.

19 71. In more technical terms, Claim 1 of Patent No. US5682332 reads:

20 An apparatus for viewing a scene comprising: a camera; a position  
21 determining means; an attitude determining means; a computer; and a  
22 display, the camera having a lens and transducer for converting an optical  
23 image of a scene into an electronic signal, the lens having a symmetry axis  
24 which defines a pointing direction of the camera; the position determining  
25 means being operable for determining the position of the camera; the  
26 attitude determining means being operable for determining the attitude of  
27 the camera pointing direction; the computer operable for receiving an  
28 image signal from the camera and further operable for generating images  
relating to the position and attitude of the apparatus and operable for  
combining those images into a composite image and transmitting a  
composite image signal to a display having a normal direction aligned  
with and collinear with the camera pointing direction.

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1           **B.     Samsung Then Wrongly Patented That Same Augmented Reality Technology.**

2           72.     Incredibly, despite dramatic improvements in computing power and software, and  
3 despite having the resources of an entirely large multinational company, Samsung did not move  
4 augmented reality technology forward. Instead, several years after the above patent issued,  
5 Samsung wrongfully patented *the exact same technology*. In 2014 Samsung filed for and  
6 received grant in 2016 for US patent US9245185 B2  
7 (<http://www.google.com/patents/US9245185>), which describes an almost identical system. Not  
8 only did it cite to the above CritiCom patent, it copied and re-worded it. In its filing it disclosed  
9 a terminal with a camera, a display, various positioning and directional determining means, and  
10 various computer schemas for creating augmented reality.

11          73.     In more technical terms, Claim 1 from Samsung’s filing reads:

12           a camera configured to output an image; a terminal posture estimator configured  
13           to estimate a posture of the terminal based on the position and the direction  
14           associated with the terminal detected by the sensor; a virtual object composition  
15           device configured to compose a virtual object and the image input by the camera;  
16           and a controller configured to: determine whether camera property information is  
17           stored when generating an augmented reality is requested, request camera  
18           property information of the terminal from a camera property information  
19           providing server when the camera property information is not stored, and  
20           compose the virtual object and the image based on the camera property  
21           information and the estimated posture when the requested camera property  
22           information is received.

18          74.     This technical language is a mere rewording of Plaintiff’s much earlier invention.  
19 For example, Plaintiff’s innovative “position determining means” was copied and reworded by  
20 Samsung to be “a terminal posture estimator.” Plaintiff’s description of the process of  
21 “combining those images into a composite image” was copied and reworded by Samsung to read  
22 “compose the virtual object and the image.”

23          75.     No bona fide reason exists for why Samsung describes augmented reality  
24 technology the way it does. It is not a more detailed description of general principles outlined in  
25 Plaintiff’s patents, nor is there any other bona fide reason for Samsung’s description.

26          76.     Samsung’s description of how data is transferred back and forth based on various  
27 criteria is not innovative because it is only a closed loop algorithm with which any computer  
28 science professional would be familiar.

1           77.     Furthermore, Samsung’s description of an issue about augmented reality accuracy  
2 is not innovative because it does not describe a particular solution to that issue. Samsung in its  
3 patent states, “In addition, an augmented reality has been generated using common camera  
4 property information obtained by generalizing camera property information of all terminals and  
5 thus, *there is a drawback in that an input image and a virtual object are not accurately*  
6 *matched.*” (emphasis added) Again, with this language Samsung describes an issue, but not an  
7 innovative, better, augmented reality approach. Instead, Samsung describes substantial  
8 exchanges of information that do not in fact solve this issue.

9           **C.     Samsung’s Products Include Property Stolen from Plaintiff.**

10           78.     Samsung has followed up its patent copying with products that include the stolen  
11 augmented reality technology. For example, all Samsung phones sold starting in 2009, with their  
12 Galaxy phones, can be used as the device or terminal described in the above GeoVector and  
13 Samsung patents.

14           **II.     PLAINTIFF DISCLOSED TO SAMSUNG INNOVATIVE WAYS FOR**  
15           **AUGMENTED REALITY DEVICES TO COMMUNICATE WITH EACH OTHER.**

16           **A.     Plaintiff Invented a Process For**  
17           **Combining Data from Different Input Devices.**

18           79.     Plaintiff invented a process through which a person can experience a reality  
19 augmented – impossible to experience otherwise – by combining data from multiple devices  
20 gathering data from different locations. More specifically, Plaintiff patented an augmented  
21 reality vision system that derives image information from another vision system. The abstract  
22 for Plaintiff’s Patent No. US 6307556 B1 describes Plaintiff’s invention as:

23                   A vision system which collects information from similar vision systems  
24                   having a different perspective of a scene are arranged to produce a  
25                   composite image. The composite image having information from both  
26                   perspectives can then include features impossible to otherwise show.  
27                   Objects otherwise “hidden” from a first perspective are displayed as  
28                   information from a second perspective may contain imagery relating to  
                    those images. A translation of spatial coordinates conditions the image  
                    from the second perspective such that it will fit into a composite image  
                    and match the first perspective.

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1           **B. Samsung Then Patented That Same Invention.**

2           80. Again, several years after Plaintiff discovered this technology, Samsung patented  
3 the same invention when it filed its application, No. US8797353 B2 in 2010, which was granted  
4 in 2014. Again, Samsung copied and reworded Plaintiff's invention when it summarized its  
5 supposed invention as follows:

6           The invention is related to a method for generating and viewing on a handheld  
7 device a 3-D augmented reality feature containing a rich media message that is  
8 linked to a physical object, comprising the steps of:

9           a) By a first user:

- 10           i. Taking a picture of a physical object;  
11           ii. Selecting an augmented reality theme;  
12           iii. Attaching the rich media animated object to the image taken, in the  
13           desired position and location on the physical object;  
14           iv. Generating a rich media message from the augmented reality  
15           image obtained in step (iii);  
16           iv. Optionally attaching an additional file to the rich media message;  
17           v. Transferring the physical object to a second user; and  
18           vi. Sending to said second user a message via a communication  
19           channel, which contains the augmented reality rich media;

20           b) By the second user (the recipient):

- 21           vii. viewing the physical object received from the first user, using an  
22           AR viewer in the mobile phone camera, thereby to see the  
23           augmented reality rich media appearing on said physical object.

24           81. Clearly, Samsung copied Plaintiff's invention by describing how one augmented  
25 reality device sends data to another device to produce a richer reality.

26           **C. Samsung Devices Now Use that Stolen Multiple-Device Technology.**

27           82. All Samsung Galaxy phones released since 2009 can be used as the devices or  
28 terminals described in both the above GeoVector and Samsung patents.

29           **III. PLAINTIFF DISCLOSED TO SAMSUNG THE INNOVATION OF ENHANCING  
30 REALITY WHEN A USER ENTERTAINED A CERTAIN GEOGRAPHIC LOCATION.**

31           **A. Plaintiff Enhanced the User's Experience with Location-Specific Media.**

32           83. Plaintiff created a prototype called "Little Guy" with music files and other such  
33 files (which are called "rich media files") that Plaintiff showed to Samsung under a non-  
34 disclosure agreement when Plaintiff first visited Samsung at their offices in Seoul, Korea. With  
35 this device, a person could experience the world in a rich, detailed, and more meaningful manner.

1 For example, if a person carried the device with them to present-day Yankee Stadium in New  
2 York, one could hear the sound of a home run hit by Babe Ruth many years ago. In more  
3 technical terms, the device would access location-specific rich media.

4 **B. Samsung Also Stole this Location-Specific Media Invention.**

5 84. Samsung then blatantly stole Plaintiff’s invention in its application No.  
6 US20110201362 A1, in which it claimed to have “A method for generating and viewing on a  
7 handheld device a 3-D augmented reality feature containing a rich media message that is linked  
8 to a physical object...”

9 **C. Samsung’s Devices Now Have the Stolen Location-Specific Media Invention.**

10 85. Again, Samsung implemented this stolen invention in all of its Galaxy phones  
11 sold since 2009, because all of those phones can be used as a device or terminal described in  
12 both the GeoVector and Samsung patents that describe how to access rich geo-located media.

13 **FIRST CLAIM FOR RELIEF**

14 **DIRECT PATENT INFRINGEMENT**

15 **(AGAINST ALL DEFENDANTS)**

16 86. GeoVector incorporates the allegations in all the paragraphs above and below as if  
17 set forth here in full.

18 87. The ‘936 Patent-in-Suit was duly and legally issued by the U.S. Patent and  
19 Trademark Office on March 14, 2000. **Exhibit 2.**

20 88. The ‘536 Patent-in-Suit was duly and legally issued by the U.S. Patent and  
21 Trademark Office on November 27, 2007. **Exhibit 3.**

22 89. The ‘138 Patent-in-Suit was duly and legally issued by the U.S. Patent and  
23 Trademark Office on March 29, 2011. **Exhibit 4.**

24 90. GeoVector is the legal owner by assignment of the Patents-in-Suits and has full  
25 rights to enforce and/or license the Patents.

26 91. The Patents-in-Suit are valid and enforceable.

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1           92.     Based on the foregoing facts as alleged above, the Defendants, and each of them,  
2 have infringed on one or more claims of the ‘936 Patent, including but not limited to Claims 1,  
3 20, 22, and 23, pursuant to 35 U.S.C. § 271(a) by making, using, selling, offering to sell, and/or  
4 importing within the United States without authority the Galaxy family including, but not limited  
5 to, those smart phone and tablet products itemized under paragraph 48.

6           93.     Based on the foregoing facts as alleged above, the Defendants, and each of them,  
7 have infringed on one or more claims of the ‘536 Patent, including but not limited to Claims 1  
8 through 7, pursuant to 35 U.S.C. § 271(a) by making, using, selling, offering to sell, and/or  
9 importing within the United States without authority the Galaxy family including, but not limited  
10 to, those smart phone and tablet products itemized in the foregoing.

11           94.     Based on the foregoing facts as alleged above, the Defendants, and each of them,  
12 have infringed on one or more claims of the ‘138 Patent, including but not limited to Claims 1  
13 through 9, 11 through 13, 15, 16, and 18, pursuant to 35 U.S.C. § 271(a) by making, using,  
14 selling, offering to sell, and/or importing within the United States without authority the Galaxy  
15 family including, but not limited to, those smart phone and tablet products itemized under  
16 paragraph 48.

17           95.     The conduct of Defendants, and each of them, constitutes direct infringement of  
18 GeoVector’s patent rights under 35. U.S.C. §271(a).

19           96.     The patent infringement by Defendants, and each of them, was and is knowing  
20 and willful. Defendants met with GeoVector numerous times between 2000 and 2008, and  
21 received briefings, presentations, and proposals. These documents all included the GeoVector  
22 patent numbers, and Samsung’s own documents reference the GeoVector patent portfolio.  
23 Therefore, the Defendants, and each of them, actually knew or reasonably should have known, at  
24 least as early as 2006, if not much earlier, of the existence of the GeoVector patents which they  
25 did not have a commercial license or any right to use. Defendants, and each of them, did in fact  
26 make, use, sell, offer to sell, and/or import within the United States, without authority, products  
27 with the innovations described in the GeoVector patents. Those products infringe on those  
28 patents. At no time from did Defendants ever obtain a commercial license or other permissions

1 from GeoVector. The Defendants, and each of them, were on actual notice before the filing of  
2 this lawsuit, and were on inquiry long before.

3 97. The direct infringement of the Patents-in-Suit by Defendants, and each of them,  
4 entitles GeoVector to an award of all past, present and future royalties, profits and other damages  
5 sustained by GeoVector as a result of the infringement, and enhanced damages adequate to  
6 compensate for the collective and willful infringement of each and all of GeoVector's patent  
7 rights, as well as an award of attorney's fees and costs pursuant to 35 U.S.C. §§ 284-285.

8 **SECOND CLAIM FOR RELIEF**

9 **INDUCING PATENT INFRINGEMENT**

10 **(AGAINST ALL DEFENDANTS)**

11 98. GeoVector incorporates the allegations in all the paragraphs above and below as if  
12 set forth here in full.

13 99. The Defendants, and each of them, have infringed and have induced infringement  
14 of the Patents-in-Suit.

15 100. The Defendants, and each of them, deliberately incorporated technologies claimed  
16 in the GeoVector patents into their products, and provided these technologies to a number of  
17 customers and third-party application developers through the Samsung App Store, who  
18 incorporated these technologies into their own products and which they use in the daily course of  
19 business with no authorization, and without entering into a commercial license agreement with  
20 GeoVector.

21 101. Without entering into a commercial license with, or without otherwise having  
22 authorization from, GeoVector, the Defendants, and each of them, are in violation of 35 U.S.C.  
23 §271 (b), because they knowingly aided, abetted, and actively induced others to infringe on  
24 GeoVector's patents by using or distributing stolen and licensed copies of technology that  
25 infringes upon GeoVector's patents.

26 102. The Defendants, and each of them, have committed contributory infringement on  
27 GeoVector's exclusive rights, which has damaged and will continue to damage GeoVector's  
28 business. The Defendants, and each of them, engaged in willful contributory infringement of

1 GeoVector’s patents, which is the direct and proximate cause of damages to GeoVector, and  
2 GeoVector is entitled to compensatory damages in an amount to be determined at trial.

3 103. The direct infringement of the Patents-in Suit by Defendants, and each of them,  
4 entitles GeoVector to an award of all damages sustained by GeoVector as a result of Defendants’  
5 infringement. GeoVector is also entitled to enhanced damages adequate to compensate it for the  
6 collective and willful infringement of GeoVector’s patent rights, as well as an award of  
7 attorney’s fees and costs pursuant to 35 U.S.C. §§ 284-285.

8 **THIRD CLAIM FOR RELIEF**

9 **MISAPPROPRIATION OF TRADE SECRETS UNDER CAL. CIV. CODE §3426, *ET SEQ.***

10 **(AGAINST ALL DEFENDANTS)**

11 104. GeoVector incorporates the allegations in all the paragraphs above and below as if  
12 set forth here in full.

13 105. GeoVector’s Trade Secrets and Confidential Information includes confidential and  
14 trade secret techniques, concepts, steps, information, and technologies used in GeoVector’s  
15 prototype devices. The implementation of these technologies was kept as secret. At all times,  
16 GeoVector was the lawful owner of its Trade secrets and Confidential Information.

17 106. GeoVector’s Trade Secrets and Confidential Information was not publicly available, was  
18 maintained by the Company in confidential and secure electronic or physical storage, and was  
19 kept within the knowledge and know-how of GeoVector’s employees under strict confidentiality  
20 obligations and only shared with other parties bound by contractual obligations of secrecy.

21 107. The Trade Secrets and Confidential Information, including but not limited to the  
22 implementation of GeoVector’s augmented reality technology and pointing search technology,  
23 had actual or potential value from not being generally known to the public or other persons who  
24 could obtain or derive economic value from their disclosure or use. The Trade Secrets and  
25 Confidential Information would have been of significant value to GeoVector’s competitors and  
26 customers, and would have allowed them to quickly and easily create competing augmented  
27 reality and pointing search devices.

28 //

1           108.   GeoVector took numerous and reasonable efforts to keep its Trade Secrets and  
2 Confidential Information confidential and undisclosed. GeoVector has policies and enters into  
3 contracts that bind its employees to strict confidentiality, both during and after their employment,  
4 and enters into contracts binding customers and other parties into strict confidentiality.  
5 GeoVector maintained the physical security of all prototypes in locked office spaces, and secures  
6 access to electronically stored trade secret information through the use of secure electronic  
7 passwords.

8           109.   Under strict confidentiality obligations and a signed Mutual Nondisclosure  
9 Agreement, Samsung had access to GeoVector’s Trade Secrets and Confidential Information for  
10 internal confidential pre-licensing evaluation purposes only and for no other purpose.

11           110.   Despite GeoVector’s reasonable efforts to protect its Trade Secrets and  
12 Confidential Information, Samsung misappropriated them to create its own competing products  
13 using GeoVector’s augmented reality and pointing search technologies and without first  
14 obtaining any license, permission or other authorization from GeoVector.

15           111.   Samsung used GeoVector’s trade secret information without express or implied  
16 consent of GeoVector. At the time of its use, Samsung knew or had reason to know that the Trade  
17 Secrets and Confidential Information were acquired under circumstances that gave rise to a duty  
18 to maintain its secrecy and limit its use, as Samsung had signed a Mutual Nondisclosure  
19 Agreement with GeoVector.

20           112.   Defendants, and each of them, lulled and continued to lull Plaintiff into the view  
21 that they would eventually obtain appropriate assignments, licenses, or other permission or  
22 authorizations from Plaintiff and based thereon, Defendants, and each of them, have unclean  
23 hands, and should be equitably barred from using the statute of limitations, laches or any other  
24 time-based defense to challenge the damages, accounting and other legal and equitable relief to  
25 which Plaintiff is entitled for violations of its trade secrets rights and for the use, disclosure, or  
26 other exploitation of any GeoVector Trade Secrets and/or Confidential Information by  
27 Defendants, or any of them.

28 //

**FOURTH CLAIM FOR RELIEF**

**LANHAM ACT § 43(A), 15 U.S.C. § 1125(A) VIOLATIONS**

**(AGAINST ALL DEFENDANTS)**

1  
2  
3  
4 113. GeoVector incorporates the allegations in all the paragraphs above and below as if  
5 set forth here in full.

6 114. GeoVector not only invented augmented reality, it developed fully functional  
7 devices that implemented those inventions. For this, it received substantial world-wide  
8 recognition as an innovative leader. For example, NEC, a leading Japanese company, recognized  
9 GeoVector's genius by implementing its technology in conjunction with GeoVector.

10 115. Also, the New York Times in an article entitled, "With a Cell phone As My  
11 Guide" of June 28, 2006 showcased the new paradigm of functionality that was deployed in  
12 Japan by GeoVector's ground-breaking innovative augmented reality system. A copy of that  
13 New York Times article is attached hereto as **Exhibit 13**.

14 116. GeoVector's augmented reality inventions were fully conceptualized, patented,  
15 protected by federal patent, copyright and trademark attribution and design protection laws as  
16 well as state trade secret and confidential information protection laws and other intellectual  
17 property laws, both in the United States, in California and elsewhere. GeoVector was ushering a  
18 new paradigm in which people could experience the world in far richer, more nuanced, and more  
19 informatively robust ways, which was coined as "AR" for "Augmented Reality" which were  
20 terms and concepts that Samsung admitted they knew nothing about and wanted the help of the  
21 Ellenby Family and GeoVector, given their expertise.

22 117. As a result of inventing augmented reality, GeoVector is the owner of all right,  
23 title and interest in that invention. Furthermore, as a result of its augmented reality innovations,  
24 GeoVector had tremendous commercial goodwill. GeoVector's inventions were ushering a new  
25 era by changing the way the world experienced reality.

26 118. Samsung intentionally copied, duplicated and counterfeited GeoVector's  
27 augmented reality inventions, without attributing those inventions to the rightful intellectual  
28 property owner GeoVector, to wrongfully profit from them and to harm GeoVector.

1           119. Samsung, without attribution and without a license or any other permission, made  
2 a bodily appropriation of GeoVector’s augmented reality invention and wrongfully claimed that  
3 Samsung itself had originated that invention. *See, e.g.*, pages from Samsung’s website attached  
4 hereto as **Exhibit 14** that describe Augmented Reality and that assert Samsung is a prominent  
5 innovator. As a result, Samsung mis-designated the origin of the augmented reality inventions  
6 because GeoVector, and not Samsung, originated those inventions.

7           120. As a result, Samsung concealed the true origin of the augmented reality  
8 innovation. GeoVector was the true innovator and owner of the augmented reality intellectual  
9 property rights, not Samsung.

10          121. Samsung carried out its wrongful acts intentionally and with a conscious  
11 disregard for the rights of GeoVector. Samsung understood the innovations because it had  
12 extensive discussions with GeoVector when it fraudulently induced GeoVector to disclose  
13 confidential information about the inventions, among other things.

14          122. Samsung made false or misleading statements of fact in commerce about its  
15 products by using the augmented reality inventions and by wrongfully referring to those  
16 inventions as being its own inventions without reference to, or license from, GeoVector.

17          123. These statements deceived or had the capacity to deceive a substantial segment of  
18 potential consumers because they led those customers to believe they are doing business with the  
19 inventors of augmented reality, when in fact they are doing business with Samsung.

20          124. The deception is material in that it is likely to influence consumers’ purchasing  
21 decisions. For example, the technology industry is a highly competitive industry in which being  
22 innovative is a sign of excellence.

23          125. GeoVector has been, and is likely to be, injured further as a result of the false or  
24 misleading statements. Samsung has built a competing business based on GeoVector’s name.  
25 This competing business has significantly harmed GeoVector. As a result, GeoVector has been  
26 damaged by Samsung’s unlawful competition.

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1           140. Defendants, and each of them, have wrongfully and unlawfully been employed  
2 by, or associated with, an enterprise engaged in, or the activities of which affect, interstate or  
3 foreign commerce, to conduct or participate, directly or indirectly, in the conduct of such  
4 enterprise's affairs through a pattern of racketeering activity outlined above and described further  
5 herein.

6           141. Defendants, and each of them, have conducted their enterprise through a pattern  
7 of racketeering activity, thereby causing injury to GeoVector, a long list of additional victims,  
8 and the United States' economic, business, and geopolitical interests.

9           142. Defendants, and each of them, either committed, or aided, abetted, counseled,  
10 commanded, induced, or procured the commission of, a large number of wrongful predicate acts  
11 that comprise a pattern of racketeering activity. In addition, Defendants, and each of them, have  
12 willfully caused the commission of many predicate acts that comprise the pattern of racketeering  
13 activity in question. Defendants, and each of them, are part of a large and sophisticated  
14 international enterprise that has acted with intent and knowledge, and not by mistake or accident.

15           143. The Samsung Defendants, and each of them, are a RICO enterprise based out of  
16 Korea and operating in the United States and around the world, because they form a cohesive  
17 organization engaged in a pattern of criminal conduct with a myriad of legal entities, a number of  
18 which have been sued.

19           144. Because of the extensive distinct instances of racketeering activity that  
20 Defendants, and each of them, have engaged in against numerous victims, Defendants, and each  
21 of them, have engaged in a pattern of racketeering activity that is so continuous that it poses a  
22 threat of future criminal activity.

23           145. The pattern of wrongful predicate acts are related to each other, in that they are  
24 part of a scheme to harm the economic interests of GeoVector, of Americans, and of the United  
25 States through the criminal appropriation and use of technology. They have perpetrated that  
26 harm by criminally and wrongfully taking, appropriating, or otherwise using inventions patented,  
27 protected by federal patent, copyright and trademark attribution and design protection laws as  
28 well as state trade secret and confidential information protection laws and other intellectual

1 property laws, both in the United States and in California. As a result, Defendants' wrongful  
2 conduct has the same or similar purposes, results, participants, victims, or methods. Its wrongful  
3 conduct is not comprised of isolated acts.

4 146. Defendants' conduct is continuous because for decades it has deliberately,  
5 purposefully, and in an ongoing manner enriched the enterprise at the expense of others.

6 147. Specifically, Defendants, and each of them, used the mail and wires to commit  
7 numerous acts of fraud. For example, Samsung has extensively defrauded GeoVector into  
8 disclosing valuable intellectual property to Defendants. Samsung defrauded GeoVector for years  
9 by falsely asserting that it would license GeoVector's extensive intellectual property if  
10 GeoVector would explain its inventions in detail. As a result of Samsung's false assertions,  
11 GeoVector travelled to Korea to explain its technology in detail to senior Samsung management.  
12 **Exhibit 10** is a true and correct copy of a PowerPoint presentation through which GeoVector  
13 explained its technology.

14 148. Instead of licensing the technology, Samsung stole it by incorporating virtual  
15 reality and augmented reality into its smartphones without paying GeoVector anything.

16 149. Samsung worked through a number of people and entities to achieve its wrongful  
17 goal to steal GeoVector's property. It did so by, among other things, engaging in a fake  
18 negotiation process on the false assertion that the process would help Samsung understand  
19 GeoVector's innovations and on the false assertion that through such fake negotiation process  
20 Samsung could better implement those innovations after licensing them from GeoVector.

21 150. Defendants, and each of them, also breached the duty of confidence they owed  
22 GeoVector. GeoVector confidentially conveyed to Samsung confidential and novel information,  
23 including but not limited to certain know-how relating to virtual reality and augmented reality  
24 described herein.

25 151. Defendants, and each of them, knew or had reason to know that the information  
26 GeoVector was sharing with them was disclosed in confidence, and that GeoVector placed a  
27 great deal of trust in the Defendants, and each of them, to respect the confidentiality of the  
28 information. The disclosure in confidence is clear from, among other places, GeoVector's

1 PowerPoint presentation, which is clearly labeled, “Commercial in Confidence” on the footer of  
2 the slides.

3 152. There was an understanding between Defendants, and each of them, and  
4 GeoVector that the confidence be maintained. GeoVector entrusted its information to Samsung  
5 and expected it would maintain its secrecy.

6 153. Defendants, and each of them, have incorporated the confidential information into  
7 their products, and have otherwise disclosed GeoVector’s technology in their marketing and  
8 other materials. This is a violation of the understanding of confidence that GeoVector and  
9 Defendants had. Defendants, and each of them, have misused and abused GeoVector’s trust.

10 154. In addition, for reasons outlined above, Samsung has misappropriated  
11 GeoVector’s trade secrets.

12 155. Defendants, and each of them, have also stolen the Ellenby Family’s valuable  
13 public name. The Ellenby Family’s novel inventions generated publicity that included, among  
14 other things, positive coverage in the New York Times. Samsung has harmed the Ellenby Family  
15 by taking their inventions, together with the good name that they had.

16 156. Defendants, and each of them, have harmed many additional people and  
17 companies. Their pattern of wrongful conduct, together with their unwillingness to rectify that  
18 conduct, has given rise to a long list of victims. Among people in the industries that Defendants,  
19 and each of them, operate in, it is well understood that it simply tramples on rights and waits to  
20 see if anyone has the “guts” to sue a large multinational conglomerate. In the process,  
21 Defendants, and each of them, have engaged in a pattern of harming and marginalizing all the  
22 smaller owners of intellectual property who can’t afford to fight. This is unethical and runs  
23 against the “corporate ethics” that Defendants, and each of them, profess to have.

24 157. Because Samsung regularly refuses to license technology without being sued,  
25 victims are forced to sue Samsung. However, while many victims are not able to stand up to the  
26 substantial economic wealth Defendants, and each of them, have wrongfully acquired, not all of  
27 its victims have been unable to sue the Samsung Defendants. For example, because of  
28 Samsung’s widespread theft of Apple’s designs, its products look a lot like those of Apple. Its

1 recently released Galaxy S7 phone looks a lot like Apple's iPhone 6s. Additional victims who  
2 have taken a stance and stood up to Defendants include:

- 3 1. Simmons (Maryland District Court - 8:11-cv-02971, Oct 17, 2011)
- 4 2. Rabinowitz (California Northern District Court - 3:14-cv-00801, Feb 20, 2014)
- 5 3. Bravo (California Northern District Court - 3:15-cv-00885, Feb 25, 2015)
- 6 4. Groetken (Missouri Western District Court - 6:15-cv-03506, Nov 23, 2015)
- 7 5. PanTaurus LLC (Texas Eastern District Court - 1:14-cv-00237, Apr 22, 2014)
- 8 6. Miller (New Jersey District Court - 2:14-cv-04076, Jun 25, 2014)
- 9 7. Davis (New Jersey District Court - 2:14-cv-04076, Jun 25, 2014)
- 10 8. Nikolin (New Jersey District Court - 2:10-cv-01456 Filed: Mar 18, 2010)
- 11 9. Spansion LLC (California Northern District Court - 5:11-mc-80115, May 22,  
12 2011)
- 13 10. ORENSTEIN (New Jersey District Court - 2:15-cv-04054, Jun 14, 2015)
- 14 11. Lee (California Northern District Court - 3:15-cv-05235, Nov 15, 2015)
- 15 12. Carnition LLC (Texas Eastern District Court - 2:15-cv-01506, Sep 07, 2015)
- 16 13. DURSO (New Jersey District Court - 2:12-cv-05352, Aug 23, 2012)
- 17 14. Apple Inc (Washington Western District Court - 2:12-cv-00476, Mar 18, 2012)
- 18 15. Rabinowitz (New Jersey District Court - 2:14-cv-06356, Oct 14, 2014)
- 19 16. Giraldo (Florida Southern District Court - 1:14-cv-20662, Feb 21, 2014)
- 20 17. Olivistar, LLC (Texas Eastern District Court - 2:14-cv-00345, Apr 13, 2014)
- 21 18. SPERA et al (New Jersey District Court - 2:12-cv-05412, Aug 27, 2012)
- 22 19. Magnacross LLC (Texas Eastern District Court - 2:14-cv-00960, Oct 14, 2014)
- 23 20. NOBLE (New Jersey District Court - 2:15-cv-03713, Jun 01, 2015)
- 24 21. Apple Inc (Washington Western District Court - 2:12-mc-00027, Mar 05, 2012)
- 25 22. CUBILLO (New Jersey District Court - 2:09-cv-05583, Nov 02, 2009)
- 26 23. Penovia LLC (Texas Eastern District Court - 2:13-cv-00426, May 20, 2013)
- 27 24. KIM (New Jersey District Court - 2:10-cv-05848, Nov 09, 2010)
- 28 25. Fischer (Georgia Northern District Court - 1:12-cv-02874, Aug 19, 2012)

1 26. CHOWNING et al (New Jersey District Court - 2:12-cv-05440, Aug 28, 2012)

2 27. TiVo Inc. (Texas Eastern District Court - 2:15-cv-01503, Sep 07, 2015)

3 28. ZiiLabs Inc., Ltd. (California Southern District Court - 3:15-cv-01133, May 19,  
4 (2015)

5 29. The matter of The Liquidating Trustee of the MPC Liquidating Tru.

6 158. In a large number of lawsuits there have been confirmation that Defendants, and  
7 each of them, have, in fact, stolen intellectual property.

8 159. Samsung knows full well that it is harming owners of intellectual property by  
9 stealing from them, because theft is a basic, ongoing practice of Defendants, and each of them.

10 160. Defendants, and each of them, have conspired to commit foreign economic  
11 espionage. Beginning in the year 2000 and through the present time Defendants, and each of  
12 them, together and with others known and unknown, knowingly combined, conspired and agreed  
13 to:

- 14 a. **Knowingly steal and without authorization appropriate, take, carry away**  
15 **and conceal, and by fraud, artifice and deception obtain trade secrets**  
16 **belonging to GeoVector;**
- 17 b. **Knowingly and without authorization copy, duplicate, sketch, draw, alter,**  
18 **photocopy, replicate, transmit, deliver, send, communicate, and convey trade**  
19 **secrets belonging to GeoVector;**
- 20 c. **knowingly receive, buy and possess trade secrets belonging to GeoVector,**  
21 **knowing the same to have been stolen, appropriated, obtained and converted**  
22 **without authorization; intending and knowing that the offenses would benefit**  
23 **a foreign government, namely that of Korea, and foreign instrumentalities,**  
24 **namely Samsung and its myriad affiliates, subsidiaries and related**  
25 **companies, in violation of Title 18, United States Code, Sections 1831(a)(1),**  
26 **(a)(2) and (a)(3).**

27 161. Under 18 U.S.C. Section 1831(a)(1), (2), (3) and (4) Defendants, and each of  
28 them, have also attempted further economic espionage. They are persistently seeking to enlarge  
their already astounding amount of wrongfully acquired resources. These acts were all in  
violation of Title 18, United States Code, Section 1831(a)(4).

162. Defendants, and each of them, have also conspired to operate a RICO enterprise,  
because they knowingly agreed to facilitate a scheme that includes the operation or management  
of an enterprise engaged in racketeering.



1 I. On the Fifth Claim for Relief, for a declaration that:

2 a. GeoVector is the sole owner of the Patents-in-Suit;

3 b. The Patents-in-Suit are valid and enforceable;

4 c. GeoVector has the exclusive right to make, sell, offer for sale, distribute,  
5 and copy and otherwise exploit products incorporating The Patents-in-  
6 Suit;

7 d. That Samsung has never been granted any license under any of the patents  
8 validly issued to and properly and exclusively owned by GeoVector;

9 J. On the Sixth Claim for Relief, for:

10 a. An award of GeoVector's attorneys' fees pursuant to 18 U.S.C. § 1964(c)  
11 and as otherwise allowed by law; and

12 b. For three times its damages. Id;

13 K. On all Claims for Relief, for a constructive trust of all benefits Defendants, and  
14 each of them, gained, and disgorgement of all revenues and profits associated with Defendants'  
15 licensing or sale of products infringing on GeoVector's patents;

16 L. A judgment and order requiring Defendants, and each of them, to pay to Plaintiff  
17 pre-judgment and post-judgment interest on the damages awarded, including an award of pre-  
18 judgment interest, pursuant to 35 U.S.C. § 284, from the date of each act of infringement of the  
19 patents by Defendants, and each of them, to the day a damages judgment is entered, and a further  
20 award of post-judgment interest, pursuant to 28 U.S.C. § 1961, continuing until such judgment is  
21 paid, at the maximum rate allowed by law;

22 M. A judgment and order that Defendants, and each of them, their agents, employees,  
23 representatives, successors, and assigns, and those acting in privity or in concert with them, be  
24 preliminarily and permanently enjoined from further infringement of the patents;

25 N. In the event a final injunction is not awarded, a compulsory ongoing royalty;

26 O. For costs of suit including any applicable interest and reasonable attorneys' fees  
27 as allowed by law; and

28 P. For such other, further, and different relief as the Court deems just and proper.

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**JURY TRIAL DEMAND**

Plaintiff hereby demands a trial by jury on each and every cause of action which is triable by or which may otherwise be tried by jury in this action.

COMPUTERLAW GROUP LLP

Dated: May 5, 2016

By: /s/ Jack Russo

Jack Russo  
Christopher Sargent

Attorneys for Plaintiff  
GEOVECTOR CORPORATION