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GEOVECTOR CORPORATION

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

GEOVECTOR CORPORATION, a California corporation,

Plaintiff;

v.

SAMSUNG INTERNATIONAL, INC., a New Jersey corporation;
SAMSUNG ELECTRONICS CO., LTD., a Korean corporation;
SAMSUNG ELECTRONICS AMERICA, INC., a New York corporation;
SAMSUNG RESEARCH AMERICA, INC. a California corporation;

Defendants.

Case No. 4:16-CV-02463-WHO

SECOND AMENDED COMPLAINT FOR:

(1) DIRECT PATENT INFRINGEMENT;
(2) INDUCING PATENT INFRINGEMENT;
(3) MISAPPROPRIATION OF TRADE SECRETS UNDER CAL. CIV. CODE § 3426, *ET SEQ.*; AND
(4) MISAPPROPRIATION OF TRADE SECRETS UNDER NEW YORK LAW

JURY TRIAL DEMANDED

Plaintiff GeoVector Corporation (originally CritiCom Corporation, hereinafter "GeoVector," "Plaintiff," or the "Company") alleges the following against Defendants Samsung International, Inc., Samsung Electronics Co., Ltd. ("SEC"), Samsung Electronics America, Inc. ("SEA"), and Samsung Research America, Inc. (collectively, "Samsung," "Defendants" or the "Samsung Defendants") and each of them, as follows:

NATURE OF ACTION

1. This action involves claims of patent infringement under 35 U.S.C. § 271, *et seq.*, and violations of the California Uniform Trade Secret Act.

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

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

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PARTIES

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

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

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

6. Samsung Telecommunications America, LLC ("STA") was a limited liability company that was organized under the laws of Delaware and with its principal place of business at 1301 East Lookout Drive, Richardson, Texas, 75082. Plaintiff is informed and believes that it researched, developed, and marketed smart mobile phones and smart tablet computers throughout the United States. SEA is the surviving corporation of STA to which all the debts, liabilities and duties of STA outlined herein attach to the same extent as if said debts, liabilities and duties had been incurred by SEA or contracted by it.

7. Defendant Samsung International, Inc. is a corporation organized and existing under the laws of New Jersey with its principal place of business at 105 Challenger Road 3rd Floor Ridgefield Park, NJ 07660; and registered to do business in California. Plaintiff is informed and believes that it researches, develops, and markets smart mobile phones and smart tablet computers throughout the United States.

8. Defendant Samsung Research America, Inc., is a corporation organized and existing under the laws of California and with its principal place of business at 665 Clyde Avenue, Mountain View, CA 94043. Plaintiff is informed and believes that it researches and develops smart mobile phones and smart tablet computers in Northern California.

9. The Samsung Defendants, and each of them, are doing business in the United States and, more particularly, in the State of California and in the Northern District of California,

by designing, marketing, making, using, selling, importing, and/or offering for sale products that infringe the patent claims involved in this action, or by transacting other business in this District.

10. Plaintiff alleges based on the foregoing facts that each and every defendant is jointly and severally liable for the wrongdoing of the other defendants under the doctrine of successor liability. Defendants, and each of them, are mere continuations of the each other, share one or more persons as officers, directors, or stockholders of both entities, and the assets of the defendant entities were transferred in a sale to other defendants, without adequate consideration for the assets and made available for meeting the claims of its unsecured creditors, for the purpose of escaping liability, such that it would be inequitable for the defendants to escape liability by recognizing their separate existence. Defendants, and each of them, are likewise each other's product line successors in interest.

11. Further, Plaintiff alleges based on the foregoing facts that each and every defendant is jointly and severally liable of the wrongdoing of the other defendants, as each other's alter ego, whereby each defendant is so completely dominated, owned, and controlled by one or more of the other defendants such that to recognize separate existence would perpetrate a fraud and injustice. Defendants, and each of them, are successors, heirs, assignees, or otherwise stand in the place of each other.

12. Plaintiff further alleges based on the foregoing facts that at all times herein mentioned Defendants, and each of them, were and are the agent, servant, employee, representative and/or an employer of each other said defendant and as such are sued herein individually and as agent, servant, employee, representative and/or employer of each other said defendant. Further, said Defendants, and each of them, were at all times mentioned herein acting within the course and scope of such agency, servitude, employment, and/or representation of each other and with the express and/or implied authority of each defendant to act on behalf of each other said defendant and with such other defendants' actual and/or constructive knowledge.

13. Plaintiff alleges, that among the Defendants, and each of them, exists a unity of interest and ownership between the entities such that separate personalities do not in reality exist. There would be an inequitable result if the acts in question are treated as those of one corporation

or individual alone. Recognition of corporate form would work an injustice to Plaintiff. The Defendants, and each of them, are a mere shell, instrumentality, and conduit for a single venture for the business of another individual or corporation.

14. Defendants have created multiple entities with similar-sounding generic names that are designed to confuse the public, including Plaintiff. No bona fide business purpose is apparent to Plaintiff for the existence of these multiple entities, which include (or have included) but are not at all limited to, the following Delaware limited liability companies:

a. SAMSUNG TELECOMMUNICATIONS AMERICA, LLC;

b. SAMSUNG TELECOMMUNICATIONS AMERICA GENERAL, LLC;

c. SAMSUNG TELECOMMUNICATIONS AMERICA LIMITED, LLC; and

d. SAMSUNG TELECOMMUNICATIONS AMERICA SERVICE, LLC.

15. Because certain entities have (or have had) the same address and same agent for service of process, they appear to be mere shells designed to conceal Defendants' wrongful acts. Defendants have asserted that at least one entity they have created no longer is in good standing. Defendants have not given Plaintiff a clear and valid business reason for why that entity is no longer in good standing. As a result, Defendants appear to have closed at least one entity for the purpose of evading their legal obligations by confusing the public, among other things. As a consequence of Defendants' pattern of creating shell entities, it is possible that additional entities exist, and that Defendants will create additional entities in the future for the purpose of evading their obligations, and that one or more Defendant entities currently in good standing will cease to be in good standing in the future. Defendants have not merely stolen Plaintiff's intellectual property, they then also have sought to avoid liability for their wrongful acts with an unjust and unfair use of the corporate form. Defendants have engaged, and continue to engage, in a pattern of this wrongful conduct. Certain instances of this wrongful conduct are outlined herein.

16. As Defendants' phone business was expanding by historical proportions, they were also closing down a series of telecommunication or electronics corporate entities for the purpose of evading liability. For example, after Apple sued STA, LLC in 2012 and what did Samsung do while expanding its business? On January 1, 2015 it finalized the process of closing

that entity. Defendants have abused the corporate form through their pattern of having a corporate history of closing telecommunications or electronics entities while dramatically expanding their business in those areas. Their course of conduct has been designed to conceal, obfuscate, and confuse the public with regard to the exact nature and extent of their abuse.

17. Defendants have abused the corporate from by not following basic formalities because older Samsung entities that no longer exist apparently were not closed down in an orderly manner. Plaintiff asserts on information and belief that Samsung Electronics USA was closed in 2003 with $34,275 in taxes remaining due. Samsung Corp. apparently was given a "Void, AR's, or Tax Delinquent" status in 2001. Samsung Electronics USA, Inc. was given that status in 2006.

18. Instead of starting one company called “Samsung Smartphones, Inc.” or “Samsung Tablets, Inc.,” and growing those companies, Defendants, and each of them, have abused the corporate form by creating complexity and confusion in the eyes of the public.

19. Defendants’ pattern of creating - and closing down - a series of telecommunications and electronics entities, all while growing dramatically, creates a substantial risk that they will continue this pattern of behavior. This is especially true since Defendants have not given Plaintiff a concrete representation that their corporate formation strategy has changed. As a result, there is no guarantee that the current entities will continue to be around when Plaintiff obtains a judgment against them, nor is it at all clear what happened to the liability of the former entities. While Defendants have been willing to stipulate that certain liability has traveled from a defunct entity to one currently existing entity, Defendants have not provided a representation that all the potential liabilities asserted in Plaintiff’s pleading traveled exclusively to that one entity. There may be other entities that were created joint ventures across which Defendants have – and will –spread the liabilities for their wrongful conduct outlined herein.

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

21. The Court has supplemental jurisdiction pursuant to 28 U.S.C. §1367(a) over GeoVector's claims arising under state law because these claims are so related to GeoVector's claims under federal law that they form part of the same case or controversy, and derive from a common nucleus of facts.

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

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

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

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BACKGROUND FACTS

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

26. John Ellenby is an inventor and computer scientist who has over 50 years' experience in the computer science field. He has held a number of senior positions in the Computer Sciences Laboratory at Xerox-PARC, where he oversaw the development of the Alto II. John Ellenby is also a founder of GRiD Systems Corporation, which developed one of the world's first laptop computers.

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

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

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

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

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

32. The '411 Patent discloses:

> devices of the invention can be envisioned to include six major components: A 1) camera to collect optical information about a real scene and present that information as an electronic signal to; a 2) computer processor; a 3) device to measure the position of the camera; and a 4) device to measure the attitude of the 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 presented at; a 6) display whose image is continuously aligned to the real scene as it is viewed by the user.

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

THE GEOVECTOR PATENTS AT ISSUE

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

35. The '936 Patent contains 40 claims (including 5 independent claims), covering:

> Computer vision systems provide a user a view of a scene whereby an image of the scene may have been augmented with information generated by a computer. Computer vision systems of the present invention include graphical user interfaces which have been discovered to operably interact with geometric constructs of a user environment, objects within a scene, perspective of the scene, image features of a signal which represents the scene, among others. These graphical user interfaces of the invention do not behave as those known because operation of these interfaces depends on properties and features particular to computer vision systems which have position and attitude determining means.

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

37. 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."

38. On March 29, 2011, GeoVector was issued U.S. Patent No. 7,916,138 entitled "Electro-optic vision systems" (the "138 Patent"), attached hereto as **Exhibit 4**. The '138 Patent expired on September 10, 2013.

39. The '138 Patent contains 18 claims (including 3 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."

40. There has been no challenge to any of the GeoVector Patents or any other GeoVector Intellectual Property Rights and no one has challenged the validity of GeoVector's Trade Secrets and Confidential Information.

41. GeoVector was and is the legal owner via assignment of the '936 Patent, '536 Patent, and '138 Patent (collectively "Patents-in-Suit") throughout the period of Defendants' infringing acts, and still owns the patents. GeoVector uses patent numbers on its devices, products, documentation, and briefings to give actual and constructive notice of the existence of the GeoVector Patents.

42. The Patents-in-Suit are valid and enforceable. GeoVector is the owner of all rights, titles, and interests in and to the Patents-in-Suit, with full right to bring suit to enforce them, and each of them, including the right to recover for past and accrued infringement damages and the right to past, present and future recover future royalties, damages, income and other compensation from Defendants and each of them.

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

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

GEOVECTOR PROTOTYPES

45. In May 1998, GeoVector developed in confidence a working, pointing search prototype, internally named "Little Guy." This prototype was, and is, subject to state law protections for trade secrets and confidential information.

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

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

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

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

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

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

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

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

54. All of the innovations and intellectual property owned by GeoVector that are described herein are referred to collectively as the "GeoVector Augmented Reality Technologies."

NEGOTIATIONS WITH SAMSUNG

55. Starting in calendar year 2000, GeoVector approached numerous cell phone and device manufacturers to discuss the licensing of GeoVector patents and the development of consumer products that would utilize the Trade Secrets and Confidential Information associated with the GeoVector Augmented Reality Technologies. Among the companies that GeoVector approached were the Samsung Defendants.

56. In December 2002, Samsung visited GeoVector. GeoVector produced a confidential slide deck demonstrating the possibility of integrating GeoVector technology into Samsung handsets such as the Samsung SPH-i330. A copy of that slide deck is attached hereto as **Exhibit 5**.

57. On July 19, 2006, Samsung met with GeoVector at GeoVector's offices in San Francisco to further discuss the possibility of integrating GeoVector Augmented Reality Technologies with Samsung's mobile device platforms.

58. In August 2006, GeoVector sent a confidential briefing to Samsung regarding the use and integration of GeoVector technology in Samsung smart phone handsets.

59. On August 16, 2006, GeoVector met with Samsung at Samsung's Headquarters in Seoul, South Korea. For this meeting, Samsung produced a set of slides marked "SAMSUNG CONFIDENTIAL", which stated that "We feel that GeoVector enabled devices make existing location based content more accessible through pointing as well as create a whole new genre of pointing enabled applications (with patent technology)." Plaintiff will file those slides under seal as **Exhibit 6** hereto after the Court enters a Protective Order.

60. On August 23, 2006, GeoVector sent Samsung a licensing and partnership proposal, attached hereto as **Exhibit 7**. GeoVector proposed that:

1. Samsung will receive a world-wide, non-exclusive, perpetual (subject to the retention terms of paragraph 5 below) license (the License) to produce and sell all GeoVector enabled devices other than those that connect to GeoVector servers via Telco (GV Direct devices). i.e. the License will be for all GV devices that connect to the web without going through a Telco.

2. Samsung will be GeoVector's world-wide preferred partner for GV Direct devices.

3. Samsung will pay GeoVector an upfront license fee of $5 million (US$).

4. For years 2 and 3 of the License Samsung guarantees a minimum GV Direct device royalty revenue to GeoVector of $500,000 a quarter.

5. To the retain the License after year 3 Samsung will yearly, before the onset of the final quarter of the current license year, guarantee a minimum GV Direct device royalty revenue to GeoVector of $750,000 a quarter. If Samsung fails to commit to this guarantee before the onset of the final quarter of the license year then the License will terminate as of the end of the current license year.

6. Samsung will pay GeoVector a royalty of 5% of the value of any GV Direct devices sold.

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

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

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

64. In April 2013, Gary Summers, a skilled licensing professional, continued those discussions with Samsung and others on GeoVector's behalf.

65. To build up GeoVector's intellectual property, and to inform and aid those discussions, Mr. Summers arranged to have an expert create high quality detailed confidential claim charts to organize, outline and explain GeoVector's innovations in detail. Those claim charts had value because they helped GeoVector organize, outline, explain and protect its innovations. Mr. Summers then sent those confidential claim charts to Samsung, which were clearly labeled in bold and all caps as "CONFIDENTIAL." These charts aided the negotiations by carefully notifying Samsung of its acts of infringement. These confidential charts also helped Samsung understand GeoVector's innovations. This is a standard way that Mr. Summers has successfully carried out negotiations regarding highly valuable confidential innovations. Samsung understood the value of these charts because it circulated them to multiple internal Samsung teams for them to review the innovations.

66. GeoVector clearly believed Samsung would license its innovations without enforcement actions – and informed Samsung of that specific fact. In April 2013, Mr. Summers asked Samsung to look at GeoVector's patents, "…and get back to me as soon as possible to discuss very favorable licensing terms under these inventions. [GeoVector] is not interested in any form of enforcement activity and would like to grant STA a similar license under these patents as those already granted to other smart phone manufacturers."

67. Mr. Summers carried out a number of verbal and written communications with Samsung concerning negotiations to license GeoVector's innovations. Specifically, among other communications with Samsung, Mr. Summers, on May 15, 2013, indicated to Samsung that, "I would like to have an initial telephone call to discuss your review schedule and any other questions you may have regarding our license/sale proposal." In those discussions Samsung gave GeoVector reason to believe that Samsung would license GeoVector's technology. Samsung assured GeoVector that a deal was definitely possible. For example, on May 15, 2013

Samsung responded to Mr. Summers by indicating that GeoVector's "portfolio is out for review by our teams. I'm available this afternoon if you would like to discuss at a high level." Mr. Summers is skilled at negotiating intellectual property transactions of this nature and he has obtained licensing deals under these circumstances from companies who make representations of the nature made by Samsung. Therefore, it was reasonable for GeoVector to believe that, based on Samsung's assertions, a deal could in fact be reached with Samsung.

68. Mr. Summers again continued the prior GeoVector – Samsung negotiations in a June 5 letter to Samsung in which Mr. Summers indicated, "please look at the attached presentation made to Samsung by my client in Korea in 2006 regarding the AR technology and its value to Samsung, which we feel is still of great value to Samsung."

69. Samsung gave GeoVector reason to believe that in the future it may license – or otherwise pay for GeoVector's innovations – by indicating to GeoVector on July 11, 2013, "*At this time* we are not interested in a license." (emphasis added) An obvious implication of that statement is that at a future time Samsung could be interested in purchasing GeoVector's innovations. Samsung therefore not only acknowledged and responded to GeoVector's licensing efforts, it also attempted to dissuade GeoVector from bringing a lawsuit right then by making the assertion that "At this time" it was not interested.

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

SAMSUNG'S INFRINGING DEVICES

71. Without any license (express or implied), or any other authorization from GeoVector, Defendants, and each of them, have made, sold, offered to sell, and imported within the United States substantial numbers of smartphones and smart tablet devices that incorporate technology embodied in GeoVector's Patents-in-Suit, the GeoVector Augmented Reality

Technologies, and/or that are otherwise set forth in GeoVector's Trade Secrets and Confidential Information. None of this was authorized.

72. Between 2009 and 2013, Samsung has sold, offered to sell, and imported within the United States the following Samsung Galaxy devices, per the Wikipedia article that is **Exhibit 11** hereto:

2013

December	Samsung Galaxy Win Pro (SM-G3812)
	Samsung Galaxy J (SGH-N075)
	Samsung Galaxy S Duos 2 (GT-S7582)
	Samsung Galaxy Trend Plus (GT-S7580)
November	Samsung Galaxy Grand 2 (SM-G7100)
October	Samsung Galaxy Star Pro (GT-S7260)
	Samsung Galaxy Express 2 (SM-G3815)
	Samsung Galaxy Round (SM-G9105)
	Samsung Galaxy Trend Lite (GT-S7390)
	Samsung Galaxy Fame Lite (GT-S6790)
	Samsung Galaxy Light (SGH-T399)
	Samsung Galaxy Core Plus (SM-G3500)
September	Samsung Galaxy Note 3
	Samsung Galaxy Gear
July	Samsung Galaxy S4 Mini (GT-I9190)
June	Samsung Galaxy S4 Active (GT-I9295)
	Samsung Galaxy S4 Zoom (SM-C1010)
	Samsung Galaxy Ace 3 (GT-S7270)
	Samsung Galaxy Pocket Neo (GT-S5310)
May	Samsung Galaxy Star (GT-S5280)
	Samsung Galaxy Core (GT-S8262)
	Samsung Galaxy Y Plus (GT-S5303)
	Samsung Galaxy Win (GT-I8550)
April	Samsung Galaxy Mega
	Samsung Galaxy Fame (GT-S6810)
	Samsung Galaxy S4 (GT-I9500)
March	Samsung Galaxy Xcover 2 (GT-S7710)
	Samsung Galaxy Young (GT-S6310)
January	Samsung Galaxy Grand (GT-I9080)
	Samsung Galaxy S II Plus (GT-I9105)
	Samsung Galaxy Pocket Plus (GT-S5301)

2012

November	Samsung Galaxy S III Mini (GT-I8190)
October	Samsung Galaxy Rugby Pro (SGH-I547)
	Samsung Galaxy Express
September	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)
August	Samsung Galaxy S Duos (GT-S7562)
July	Samsung Galaxy Stellar (SCH-I200)
May	Samsung Galaxy Ch@t (GT-B5330)
	Samsung Galaxy Appeal (SGH-I827)
	Samsung Galaxy S III (GT-I9300)
April	Samsung Galaxy S Advance
	Samsung Galaxy Rugby (GT-S5690M)
March	Samsung Galaxy Pocket (GT-S5300)
	Samsung Galaxy Rugby Smart (SGH-i847)
February	Samsung Galaxy Beam
	Samsung Galaxy Y DUOS (GT-S6102)
	Samsung Galaxy Mini 2 (GT-S6500)
	Samsung Galaxy Ace 2 (GT-I8160)
January	Samsung Galaxy Ace Plus (GT-S7500[L/T/W])
	Samsung Galaxy Y Pro Duos (GT-B5510)
	2011
November	Samsung Galaxy Nexus (i9250)
October	Samsung Galaxy Note
	Samsung Stratosphere
August	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)
June	Samsung Galaxy Z
	Samsung Exhibit 4G (SGH-T759)
May	Samsung Galaxy S II (GT-I9100)
April	Samsung Galaxy Neo
	Samsung Galaxy Pro
	Samsung Galaxy Prevail (SPH-M820)
March	Samsung Galaxy Mini (GT-S5570)

	Samsung Galaxy Gio (GT-S5660)
February	Samsung Galaxy SL (GT-I9003)
	Samsung Galaxy Fit (S5670)
	Samsung Galaxy Ace (GT-S5830, GT-S5830i)
	2010
October	Samsung Galaxy 551
August	Samsung Galaxy U
	Samsung Galaxy 5
July	Samsung Galaxy 3
June	Samsung Galaxy S (GT-I9000)
	2009
November	Samsung Galaxy Spica

https://en.wikipedia.org/wiki/Samsung_Galaxy

73. 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.

74. 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.

75. The Samsung Galaxy devices all include compass and GPS sensors.

76. Between 2010 and 2012, Samsung shipped substantial numbers of smartphone and tablet devices, which generated substantial revenue for Samsung. Plaintiff will file as **Exhibit 12** hereto a Table. Plaintiff will file such Table under seal after the Court enters a Protective Order.

77. Each of these infringing devices contains compass and GPS sensors.

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

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

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

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

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

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

the knowledge, or willful blindness to the probability, that the induced acts would constitute infringement.

SAMSUNG WRONGFULLY TOOK GEOVECTOR'S INTELLECTUAL PROPERTY

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

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

86. Samsung, without attribution and without a license or any other permission, made a bodily appropriation of GeoVector's augmented reality invention and wrongfully claimed that Samsung itself had originated that invention. *See, e.g.,* pages from Samsung's website attached hereto as **Exhibit 14** that describe Augmented Reality and that assert Samsung is a prominent innovator.

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

A. Plaintiff Disclosed Innovative Augmented Reality Technology.

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

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

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

> An apparatus for viewing a scene comprising: a camera; a position determining means; an attitude determining means; a computer; and a display, the camera having a lens and transducer for converting an optical image of a scene into an electronic signal, the lens having a symmetry axis which defines a pointing direction of the camera; the position determining means being operable for determining the position of the camera; the attitude determining means being operable for determining the attitude of the camera pointing direction; the computer operable for receiving an 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.

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

90. Despite dramatic improvements in computing power and software, and despite having the resources of an entirely large multinational company, Samsung did not move

augmented reality technology forward. Instead, several years after the above patent issued, Samsung wrongfully patented *the exact same technology*. In 2014 Samsung filed for and received grant in 2016 for US patent US9245185 B2 (http://www.google.com/patents/US9245185), which describes an almost identical system. Not only did it cite to the above CritiCom patent, it copied and re-worded it. In its filing it disclosed a terminal with a camera, a display, various positioning and directional determining means, and various computer schemas for creating augmented reality.

91. In more technical terms, Claim 1 from Samsung's filing reads:

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

92. This technical language is a mere rewording of Plaintiff's much earlier invention. For example, Plaintiff's innovative "position determining means" was copied and reworded by Samsung to be "a terminal posture estimator." Plaintiff's description of the process of "combining those images into a composite image" was copied and reworded by Samsung to read "compose the virtual object and the image."

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

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

95. Samsung's description of an issue about augmented reality accuracy is not innovative because it does not describe a particular solution to that issue. Samsung in its patent states, "In addition, an augmented reality has been generated using common camera property

information obtained by generalizing camera property information of all terminals and thus, *there is a drawback in that an input image and a virtual object are not accurately matched*." (emphasis added) Again, with this language Samsung describes an issue, but not an innovative, better, augmented reality approach. Instead, Samsung describes substantial exchanges of information that do not in fact solve this issue.

C. Samsung's Products Include Property Stolen from Plaintiff.

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

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

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

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

> A vision system which collects information from similar vision systems having a different perspective of a scene are arranged to produce a composite image. The composite image having information from both perspectives can then include features impossible to otherwise show. Objects otherwise "hidden" from a first perspective are displayed as 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.

B. Samsung Then Patented That Same Invention.

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

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

a) By a first user:

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

b) By the second user (the recipient):

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

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

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

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

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

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

101. Plaintiff created a prototype called "Little Guy" with music files and other such files (which are called "rich media files") that Plaintiff showed to Samsung under a non-disclosure agreement when Plaintiff first visited Samsung at their offices in Seoul, Korea. With this device, a person could experience the world in a rich, detailed, and more meaningful manner. For example, if a person carried the device with them to present-day Yankee Stadium in New York, one could hear the sound of a home run hit by Babe Ruth many years ago. In more technical terms, the device would access location-specific rich media.

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

102. Samsung then blatantly stole Plaintiff's invention in its application No. US20110201362 A1, in which it claimed to have "A method for generating and viewing on a handheld device a 3-D augmented reality feature containing a rich media message that is linked to a physical object…"

C. Samsung's Devices Now Have the Stolen Location-Specific Media Invention.

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

104. Samsung itself admits that GeoVector's intellectual property is entirely valuable. For example, in the Samsung advertisement attached as **Exhibit 15**, Samsung asserts that the GeoVector virtual reality technology that it incorporated into its phones is worth at least $150.

IV. SAMSUNG STOLE PLAINTIFF'S CONFIDENTIAL AND VALUABLE HIGH-QUALITY EXPERT ANALYSIS DISCLOSED BY GEOVECTOR

105. Samsung in its discussions with GeoVector made a point of not telling GeoVector that all along it was working on filing patent applications with the innovations Samsung learned from GeoVector. As a result, GeoVector did not discover the filing or issuance of the Samsung patents that stole GeoVector's innovations until early in 2016. At that point it became clear to GeoVector that Samsung's indication that it was not interested in a license "at this time" probably meant that it would never be interested. This left GeoVector with no choice but to file a suit to enforce its rights.

106. Samsung has used the confidential high-quality expert analysis of augmented reality innovations GeoVector provided to Samsung to file or otherwise prosecute those patent applications. With that analysis, Samsung better understood augmented reality principles, the use of those principles in devices, and the patent process for protecting those innovative principles. Samsung stole that valuable confidential information in one or more patent applications. Attached hereto as **Exhibit 16** are three charts that show how Samsung stole confidential expert analysis of three of GeoVector's patents by later incorporating stolen

GeoVector confidential property into its patent No. 9,245,185. The first column in the charts contains GeoVector patent claims in issued patents. The second column contains GeoVector expert analysis of those claims that Mr. Summers provided to Samsung in April 2013. Those two columns are – verbatim – what Mr. Summers sent to Samsung in April 2013. In the third column of those charts is language from Samsung's 9,245,185 patent that stole GeoVector's innovations. Samsung filed the patent application for that patent in December 2013, after it had obtained GeoVector's innovative expert analysis of augmented reality earlier that year. The patent was issued in January 2016. GeoVector first learned of the existence of Samsung's theft of GeoVector property in that patent later in 2016.

V. SAMSUNG'S EXTENSIVE WRONGDOING GIVES RISE TO ENHANCED DAMAGES

107. Enhanced damages against Samsung are appropriate because of the extended aggravated circumstances of this case. Samsung has acted as a wanton and malicious pirate against GeoVector, which was founded by an icon and pioneer of Silicon Valley. Samsung knowingly, willfully, flagrantly, consciously, deliberately and in bad faith copied GeoVector's innovations. This is a bald case of piracy by Samsung, which is stubbornly litigious and has caused substantial unnecessary expense and trouble to GeoVector and to others.

108. The pattern of wrongful conduct consists of, among other things, wrongfully taking, appropriating, or otherwise using inventions patented, protected by federal patent, copyright and trademark attribution and design protection laws as well as state trade secret and confidential information protection laws and other intellectual property laws, both in the United States and in California. Its wrongful conduct is not comprised of isolated acts.

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

110. Specifically, Defendants, and each of them, used the mail and wires to commit numerous acts of fraud. For example, Samsung has extensively defrauded GeoVector into disclosing valuable intellectual property to Defendants. Samsung defrauded GeoVector for years by falsely asserting that it would license GeoVector's extensive intellectual property if GeoVector would explain its inventions in detail. As a result of Samsung's false assertions,

GeoVector travelled to Korea to explain its technology in detail to senior Samsung management. **Exhibit 10** is a true and correct copy of a PowerPoint presentation through which GeoVector explained its technology.

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

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

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

114. Defendants, and each of them, knew or had reason to know that the information GeoVector was sharing with them was disclosed in confidence, and that GeoVector placed a great deal of trust in the Defendants, and each of them, to respect the confidentiality of the information. The disclosure in confidence is clear from, among other places, GeoVector's PowerPoint presentation, which is clearly labeled, "Commercial in Confidence" on the footer of the slides.

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

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

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117. In addition, for reasons outlined above, Samsung has misappropriated GeoVector's trade secrets.

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

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

120. Because Samsung regularly refuses to license technology without being sued, victims are forced to sue Samsung. However, while many victims are not able to stand up to the substantial economic wealth Defendants, and each of them, have wrongfully acquired, not all of its victims have been unable to sue the Samsung Defendants. For example, because of Samsung's widespread theft of Apple's designs, its products look a lot like those of Apple. Its recently released Galaxy S7 phone looks a lot like Apple's iPhone 6s.

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

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

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

a. Knowingly steal and without authorization appropriate, take, carry away and conceal, and by fraud, artifice and deception obtain trade secrets belonging to GeoVector;

b. Knowingly and without authorization copy, duplicate, sketch, draw, alter, photocopy, replicate, transmit, deliver, send, communicate, and convey trade secrets belonging to GeoVector;

c. knowingly receive, buy and possess trade secrets belonging to GeoVector, knowing the same to have been stolen, appropriated, obtained and converted without authorization; intending and knowing that the offenses would benefit a foreign government, namely that of Korea, and foreign instrumentalities, namely Samsung and its myriad affiliates, subsidiaries and related companies, in violation of Title 18, United States Code, Sections 1831(a)(l), (a)(2) and (a)(3).

124. Under 18 U.S.C. Section 1831(a)(1), (2), (3) and (4) Defendants, and each of 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).

125. Defendants' breach of confidence has resulted in irreparable harm, and has unjustly enriched Defendants, and each of them, in amounts to be proven at trial.

126. Defendants' wrongful acts have allowed Defendants, and each of them, to obtain a significantly larger market share than any other company, including Apple. As of 2015, Samsung had 22.2% of the global smart phone market, while Apple was second place at 16.1%.

FIRST CLAIM FOR RELIEF

DIRECT PATENT INFRINGEMENT

(AGAINST ALL DEFENDANTS)

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

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

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

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

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

132. The Patents-in-Suit are valid and enforceable.

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

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

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

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

137. The patent infringement by Defendants, and each of them, was and is knowing and willful. Defendants met with GeoVector numerous times between 2000 and 2008, and received briefings, presentations, and proposals. These documents all included the GeoVector patent numbers, and Samsung's own documents reference the GeoVector patent portfolio. Therefore, the Defendants, and each of them, actually knew or reasonably should have known, at least as early as 2006, if not much earlier, of the existence of the GeoVector patents which they did not have a commercial license or any right to use. Defendants, and each of them, did in fact

make, use, sell, offer to sell, and/or import within the United States, without authority, products with the innovations described in the GeoVector patents. Those products infringe on those patents. At no time did Defendants ever obtain a commercial license or other permissions from GeoVector. The Defendants, and each of them, were on actual notice before the filing of this lawsuit, and were on inquiry long before.

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

SECOND CLAIM FOR RELIEF

INDUCING PATENT INFRINGEMENT

(AGAINST ALL DEFENDANTS)

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

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

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

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

143. The Defendants, and each of them, have committed contributory infringement on GeoVector's exclusive rights, which has damaged and will continue to damage GeoVector's business. The Defendants, and each of them, engaged in willful contributory infringement of GeoVector's patents, which is the direct and proximate cause of damages to GeoVector, and GeoVector is entitled to compensatory damages in an amount to be determined at trial.

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

THIRD CLAIM FOR RELIEF

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

(AGAINST ALL DEFENDANTS)

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

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

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

148. The Trade Secrets and Confidential Information, including but not limited to the implementation of GeoVector's augmented reality technology and pointing search technology, had actual or potential value from not being generally known to the public or other persons who could obtain or derive economic value from their disclosure or use. The Trade Secrets and

Confidential Information would have been of significant value to GeoVector's competitors and customers, and would have allowed them to quickly and easily create competing augmented reality and pointing search devices.

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

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

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

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

153. Defendants, and each of them, lulled and continued to lull Plaintiff into the view that they would eventually obtain appropriate assignments, licenses, or other permission or authorization from Plaintiff and based thereon, Defendants, and each of them, have unclean hands, and should be equitably barred from using the statute of limitations, laches or any other time-based defense to challenge the damages, accounting and other legal and equitable relief to which Plaintiff is entitled for violations of its trade secrets rights and for the use, disclosure, or

other exploitation of any GeoVector Trade Secrets and/or Confidential Information by Defendants, or any of them.

FOURTH CLAIM FOR RELIEF

MISAPPROPRIATION OF TRADE SECRETS UNDER NEW YORK LAW

(AGAINST ALL DEFENDANTS)

154. GeoVector incorporates the allegations in all the paragraphs above and below as if set forth here in full and asserts this claim as an additional and alternative Claim for Relief.

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

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

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

158. GeoVector took numerous and reasonable efforts to keep its Trade Secrets and Confidential Information confidential and undisclosed. GeoVector has policies and enters into contracts that bind its employees to strict confidentiality, both during and after their employment, and enters into contracts binding customers and other parties into strict confidentiality. GeoVector maintained the physical security of all prototypes in locked office spaces, and secures

access to electronically stored trade secret information through the use of secure electronic passwords.

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

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

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

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

163. GeoVector's Trade Secrets and/or Confidential Information gave GeoVector an opportunity to obtain an advantage over competitors who did not know that information. That information was not known outside of GeoVector and was known only by people involved in the business. It was subject to reasonable measures to guard the secrecy of the valuable information and it was difficult for others to properly acquire independently or duplicate.

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PRAYER FOR RELIEF

GeoVector prays for judgment against all Defendants, and each of them, and those persons in control or acting in concert with them as follows.

A. That Defendants, and each of them, have infringed the Patents-in-Suit;

B. For actual damages under 35 U.S.C. § 284;

C. For attorneys' fees under 35 U.S.C. § 285;

D. For an accounting of damages;

E. On the First Claim for Relief, for all damages sustained by GeoVector as a result of Defendants' infringement, an award to GeoVector of enhanced damages adequate to compensate for Defendants' collective infringement, up to and including trebling of GeoVector's damages for the Samsung Defendant's willful infringement;

F. On the Second Claim for Relief, for all damages sustained by GeoVector as a result of Defendants' infringement, an award to GeoVector of enhanced damages adequate to compensate for Defendants' collective infringement, up to and including trebling of GeoVector's damages for the Samsung Defendant's willful infringement;

G. On the Third Claim for Relief, for all damages sustained by GeoVector as a result of Defendants' misappropriation of GeoVector's Trade Secrets in violation of California's Uniform Trade Secrets Act, Cal. Civ. Code § 3426 *et seq.;*

H. On the Fourth Claim for Relief, for all damages sustained by GeoVector as a result of Defendants' misappropriation of GeoVector's Trade Secrets in violation of New York Law, including the Restatement of Torts, Section 757, as that Section has been interpreted and applied by New York courts;

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

J. A judgment and order requiring Defendants, and each of them, to pay to Plaintiff pre-judgment and post-judgment interest on the damages awarded, including an award of pre-judgment interest, pursuant to 35 U.S.C. § 284, from the date of each act of infringement of the

patents by Defendants, and each of them, to the day a damages judgment is entered, and a further award of post-judgment interest, pursuant to 28 U.S.C. § 1961, continuing until such judgment is paid, at the maximum rate allowed by law;

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

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

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

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

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: November 30, 2016

By: /s/ Jack Russo
Jack Russo
Christopher Sargent

Attorneys for Plaintiff
GEOVECTOR CORPORATION