# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

## VIRTUAL IMMERSION TECHNOLOGIES LLC,

Plaintiff,

v.

GENERAL ELECTRIC COMPANY, a conglomerate of BAKER HUGHES, A GE COMPANY, a dba designation including BAKER HUGHES, A GE COMPANY, LLC, and BAKER HUGHES PROCESS AND PIPELINE SERVICES LLC; GE AVIATION, a dba designation including GE **AVIATION LLC, GE AVIATION** MATERIALS, INC., GE AVIATION SYSTEMS LLC, GE AVIATION SYSTEMS NORTH AMERICA LLC, and GE AVIATION WILMINGTON LLC; GE DIGITAL, a dba designation including GE DIGITAL LLC; GE HEALTHCARE, a dba designation including GE HEALTHCARE INC., GE HEALTHCARE BIO-SCIENCES **CORP., GE HEALTHCARE** BIOTECHNOLOGIES LLC, GE HEALTHCARE MANUFACTURING LLC, GE HEALTHCARE TRADE AND **DEVELOPMENT LLC, and GE** PRECISION HEALTHCARE LLC; GE LIGHTING, a dba designation including GE LIGHTING SOLUTIONS LLC; GE POWER, a dba designation including GE **DISTRIBUTED ENERGY SOLUTIONS** LLC, GE ENERGY, LLC, GE ENERGY (USA), LLC, GE ENERGY CONTROL **SOLUTIONS, LLC, GE ENERGY** MANAGEMENT SERVICES, LLC, GE **ENERGY POWER CONVERSION NAVAL** 

Civ. No.	
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JURY TRIAL DEMANDED

SYSTEMS INC., GE ENERGY POWER CONVERSION USA INC., GE-HITACHI NUCLEAR ENERGY AMERICAS LLC, GE-HITACHI NUCLEAR ENERGY INTERNATIONAL LLC, GE PACKAGED POWER, LLC, and GE STEAM POWER, **INC.; GE TECHNOLOGY** INFRASTRUCTURE, a dba designation including GE INFRASTRUCTURE SENSING, LLC, and GE INFRASTRUCTURE TECHNOLOGY INTERNATIONAL LLC; and GE RENEWABLE ENERGY, a dba designation including GE RENEWABLES HOLDING, LLC and GE RENEWABLES NORTH **AMERICA, LLC;** 

Defendants.

## **COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Virtual Immersion Technologies LLC ("VIT" or "Plaintiff"), by and through its attorneys, hereby alleges for its Complaint on personal knowledge as to its own activities and on information and belief as to all other matters, as follows:

## **NATURE OF THE ACTION**

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq*.

#### **THE PARTIES**

- 2. Plaintiff Virtual Immersion Technologies LLC is a limited liability company organized under the laws of the State of Texas.
- 3. VIT is the current assignee of United States Patent No. 6,409,599 ("the '599 patent" or "the patent-in-suit"). On June 25, 2002, the United States Patent and Trademark

Office duly and legally issued the '599 patent. The '599 patent is titled "Interactive Virtual Reality Performance Theater Entertainment System." The application leading to the '599 patent was filed on July 19, 1999. A true and correct copy of the '599 patent is attached hereto as Exhibit A.

- 4. On or around February 24, 2016, VIT acquired 100% ownership of all right, title and interest in the patent-in-suit, including the right to bring patent enforcement actions for damages accruing prior to February 24, 2016. The assignment to VIT of ownership of the patent-in-suit was recorded with the United States Patent & Trademark Office ("PTO") on or around August 26, 2016.
- 5. Defendant General Electric Company ("GEC" or "General Electric Company") is a New York corporation, organized and existing under the laws of the State of New York, with its principal place of business at 41 Farnsworth Street, Boston, Massachusetts 02210. GEC is organized as a conglomerate extending into several subsidiary businesses. In GEC, these subsidiaries are identified by a "doing business as" ("DBA") designation associated with their respective markets and/or products. The GEC subsidiaries are themselves subdivided across multiple subunit corporations as shown below.
- 6. Defendant GEC, as a New York corporation, may be served with process via the New York Secretary of State as an agent for the company. The New York DOS ID No. for GEC is 112. GEC may also be served directly by directing service of process to Michael Holston, Senior Vice President, General Counsel & Secretary at 41 Farnsworth Street, Boston, Massachusetts 02210. GEC is also registered to do business in Delaware and may be served by its registered agent in this District: The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801.

- 7. Defendant Baker Hughes, a GE Company, LLC, a subunit corporation of GEC doing business as part of Baker Hughes, a GE Company, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 17021 Aldine Westfield Road, Houston, Texas 77073.
- 8. Defendant Baker Hughes, Process and Pipeline Services LLC, a subunit corporation of GEC doing business as part of Baker Hughes, a GE Company, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 17021 Aldine Westfield Road, Houston, Texas 77073.
- 9. Defendant GE Aviation LLC, a subunit corporation of GEC doing business as part of GE Aviation, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 3290 Patterson Avenue SE, Grand Rapids, Michigan, 49512.
- 10. Defendant GE Aviation Materials, Inc., a subunit corporation of GEC doing business as part of GE Aviation, is a Delaware corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 3010 Red Hawk Drive, Suite 100, Grand Prairie, Texas 75052.
- 11. Defendant GE Aviation Systems LLC, a subunit corporation of GEC doing business as part of GE Aviation, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 3290 Patterson Avenue SE, Grand Rapids, Michigan, 49512.
- 12. Defendant GE Aviation Systems North America LLC, a subunit corporation of GEC doing business as part of GE Aviation, is a Delaware limited liability corporation,

organized and existing under the laws of the State of Delaware, with its principal place of business at 1 Neumann Way, Cincinnati, Ohio 45215.

- 13. Defendant GE Aviation Wilmington LLC, a subunit corporation of GEC doing business as part of GE Aviation, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 3901 Castle Hayne Rd., Wilmington, North Carolina 28401.
- 14. Defendant GE Digital LLC, a subunit corporation of GEC doing business as part of GE Digital, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 7100 Stevenson Boulevard, Fremont, California 94538.
- 15. Defendant GE Healthcare Inc., a subunit corporation of GEC doing business as part of GE Healthcare, is a Delaware corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 100 Results Way, Marlborough, Massachusetts 01752.
- 16. Defendant GE Healthcare Bio-Sciences Corp., a subunit corporation of GEC doing business as part of GE Healthcare, is a Delaware corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 100 Results Way, Marlborough, Massachusetts, 01752.
- 17. Defendant GE Healthcare Biotechnologies LLC, a subunit corporation of GEC doing business as part of GE Healthcare, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 100 Results Way, Marlborough, Massachusetts, 01752.

- 18. Defendant GE Healthcare Manufacturing LLC, a subunit corporation of GEC doing business as part of GE Healthcare, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 3000 N. Grandview Boulevard, Waukesha, Wisconsin 53188.
- 19. Defendant GE Healthcare Trade and Development LLC, a subunit corporation of GEC doing business as part of GE Healthcare, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 3000 N. Grandview Boulevard, Waukesha, Wisconsin 53188.
- 20. Defendant GE Precision Healthcare LLC, a subunit corporation of GEC doing business as part of GE Healthcare, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 3000 N. Grandview Boulevard, Waukesha, Wisconsin 53188.
- 21. Defendant GE Lighting Solutions, LLC, a subunit corporation of GEC doing business as part of GE Lighting, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 1975 Noble Road East, Cleveland, Ohio 44112-6300.
- 22. Defendant GE Distributed Energy Solutions LLC, a subunit corporation of GEC doing business as part of GE Power, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 1 River Road, Schenectady, New York 12345.
- 23. Defendant GE Energy, LLC, a subunit corporation of GEC doing business as part of GE Power, is a Delaware limited liability corporation, organized and existing under the laws

of the State of Delaware, with its principal place of business at 4200 Wildwood Parkway, Atlanta, Georgia 30339.

- 24. Defendant GE Energy (USA), LLC, a subunit corporation of GEC doing business as part of GE POWER, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 4200 Wildwood Parkway, Atlanta, Georgia 30339.
- 25. Defendant GE Energy Control Solutions, LLC, a subunit corporation of GEC doing business as part of GE Power, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 1800 Nelson Road, Longmont, Colorado 80501-6324.
- 26. Defendant GE Energy Management Services, LLC, a subunit corporation of GEC doing business as part of GE Power, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 4200 Wildwood Parkway, Atlanta, Georgia 30339.
- 27. Defendant GE Energy Power Conversion Naval Systems Inc., a subunit corporation of GEC doing business as part of GE POWER, is a Delaware corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 100 East Kensinger Drive, Suite 500, Cranberry Township, Pennsylvania 16066.
- 28. Defendant GE Energy Power Conversion USA Inc., a subunit corporation of GEC doing business as part of GE Power, is a Delaware corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 100 East Kensinger Drive, Suite 500, Cranberry Township, Pennsylvania 16066.

- 29. Defendant GE-Hitachi Nuclear Energy Americas LLC, a subunit corporation of GEC doing business as part of GE Power, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 3901 Castle Hayne Road, Wilmington, North Carolina 28402-2819.
- 30. Defendant GE-Hitachi Nuclear Energy International LLC, a subunit corporation of GEC doing business as part of GE Power, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 3901 Castle Hayne Road, Wilmington, North Carolina 28402-2819.
- 31. Defendant GE Packaged Power, LLC, a subunit corporation of GEC doing business as part of GE Power, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 16415 Jacinto Port Boulevard, Houston, Texas 77015.
- 32. Defendant GE Steam Power Inc., a subunit corporation of GEC doing business as part of GE POWER, is a Delaware corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 175 Addison Road, Windsor, Connecticut 06095.
- 33. Defendant GE Infrastructure Sensing, LLC, a subunit corporation of GEC doing business as part of GE Technology Infrastructure, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 1100 Technology Park Drive, Billerica, Massachusetts 01821-4111.
- 34. Defendant GE Infrastructure Technology International LLC, a subunit corporation of GEC doing business as part of GE Technology Infrastructure, is a Delaware limited liability

corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at 300 Garlington Road, Greenville, South Carolina 29615.

- 35. Defendant GE Renewables Holding, LLC, a subunit corporation of GEC doing business as part of GE Renewable Energy, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at Rond Point du Pont De Sèvres, 92100 Boulogne-Billancourt, Paris, France.
- 36. Defendant GE Renewables North America, LLC, a subunit corporation of GEC doing business as part of GE Renewable Energy, is a Delaware limited liability corporation, organized and existing under the laws of the State of Delaware, with its principal place of business at Rond Point du Pont De Sèvres, 92100 Boulogne-Billancourt, Paris, France.
- 37. Each of the Defendants identified above, in paragraphs 7-36, as subunit corporations within the GEC conglomerate are each Delaware corporations and all may be served with process through their common registered agent: The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801.

## **JURISDICTION AND VENUE**

- 38. This is an action for patent infringement arising under the patent laws of the United States, Title 35, United States Code. Jurisdiction as to these claims is conferred on this Court by 35 U.S.C. §§ 1331 and 1338(a).
- 39. Regarding Defendant GEC, venue is proper within this District under 28 U.S.C. § 1400(b) because, on information and belief, GEC maintains a regular and established place of business in this District and has committed infringing acts in this District.
- 40. Regarding each of the remaining Defendants identified above, in paragraphs 7-36, as subunit corporations of GEC, venue is proper for each of these Defendants within this District under 28 U.S.C. § 1400(b) because each of these subunit corporations is a Delaware corporation

and they each therefore reside in this District. Further, this Court has personal jurisdiction over each these Defendants, identified in paragraphs 7-36, because each is incorporated in Delaware and have purposely availed themselves of the privileges and benefits of the laws of the State of Delaware.

- 41. Upon information and belief, all the Defendants are subject to this Court's general and specific personal jurisdiction because each has sufficient minimum contacts within the State of Delaware and this District, pursuant to due process and/or the Del. Code. Ann. Tit. 3, § 3104, because Defendants purposefully availed themselves of the privileges of conducting business in the State of Delaware and in this District, because each Defendant regularly conducts and solicits business within the State of Delaware and within this District, and because Plaintiff's causes of action arise directly from Defendants' business contacts and other activities in the State of Delaware and this District. Having purposefully availed itself of the privilege of conducting business within this District, each Defendant should reasonably and fairly anticipate being brought into court here.
- 42. Upon information and belief, Defendant GEC maintains at least one regular and established place of business in this District: at least part or all of a permanent manufacturing center with about 100 employees. The manufacturing center is located at 400 Bellevue Road in Newark, Delaware 19713. According to the New Castle Co., Delaware, Office of Assessment, the owner of the property at the location is E. I. DuPont De Nemours and Co. (Sources: http://www3.nccde.org/parcel/Details/Default.aspx?ParcelKey=144566, and http://www3.nccde.org/parcel/Details/Default.aspx?ParcelKey=144567, both last accessed on February 25, 2019.)

- 43. Currently, the Newark manufacturing center location is publicly associated with GE Aviation, a subsidiary of GEC. However, in the recent past, the manufacturing center has also been associated with another GE subsidiary, GE Energy a predecessor of GE Power. (Source: https://www.genewsroom.com/press-releases/ge-accelerates-solar-energy-research-255016, last accessed on February 25, 2019.) In addition, on its corporate website, GEC identifies the Newark manufacturing center merely as a "GE" manufacturing site, without designation as to a subsidiary. (Source: https://www.ge.com/reports/gevoices/#Delaware, last accessed on February 25, 2019.) In addition, a third-party provider of business information describes the manufacturing center in Newark as being associated with both GE Aviation, the GEC subsidiary, and the GEC parent company, the "General Electric Company." (Source: http://www.buzzfile.com/business/GE-302-631-1300, last accessed on February 25, 2019.) Finally, postings associated with the Newark facility are associated with GEC, or both GEC and GE Aviation. (See, e.g., Source: https://www.google.com/search?client=firefox-b-1d&q=general+electric+newark&ibp=htl;jobs&sa=X&ved=2ahUKEwjaovu lcbgAhUj1lkKHTs1 CVAQp4wCMAJ6BAgEECE#fpstate=tldetail&htidocid=ahzJIKWsBBoyk0P1AAAAAA%3D% 3D&htivrt=jobs, last accessed on March 1, 2019.) Based at least on these facts, the manufacturing facility in Newark, Delaware is believed to be a regular and established place of business that is associated directly, at least in part, with GEC, the parent to GE Aviation.
- 44. Defendant GEC has committed and continue to commit acts of infringement within the state of Delaware, as alleged herein.
- 45. Defendant GEC, and each of its Defendant subunit corporations named in this Complaint, use in their operations remote expert augmented reality systems (*See* "Skylight is already being *used by almost every GE business.*" (emphasis added) quoted from the GEC

publication entitled: "Looking Smart: Augmented Reality Is Seeing Real Results In Industry" at https://www.ge.com/reports/looking-smart-augmented-reality-seeing-real-results-industry-today/), including an immersive virtual reality environment where participants and live performers can interact with each other and the environment via input and output devices for the performers and the participants. (*See* VIT's Claim Chart for claims 1-2 and 8-9 of the '599 patent, Ex. B at 1-11.) Note especially the overlap of engineering duties of the employees at the Newark manufacturing facility with those of the GEC and other Defendant employees described in the GEC publication cited above.

- 46. As detailed in the paragraphs below, each Defendant utilizes the virtual reality systems and practice methods, for participants and performers to interact in an immersive virtual reality environment, which meets all the features of the asserted claims. (*Id.* at 1-11.)
- 47. Each of the Defendant's systems includes one or more performer input and output devices in electronic communication with the virtual environment and one or more participant input and output devices in electronic communication with the virtual environment. (*Id.* at 2-3.)
- 48. Each of the Defendant's systems provide the virtual environment, which includes a video image of one or more live performers with audio communication between the one or more live performers and one or more participants. (*Id.* at 4-5.)
- 49. In the each Defendant's system, the one or more participants interact with the one or more live performers and the virtual environment resulting in an experience partially controlled by the one or more participants using an input device. (*Id.* at 5.)
- 50. Each Defendant has derived substantial revenues from its infringing acts, including those of GEC occurring within Delaware.

- 51. GEC is subject to the Court's personal jurisdiction at least due to its utilization of the virtual reality system within Delaware.
- 52. GEC has committed such purposeful acts or transactions in Delaware such that it reasonably should know and expect that it could be haled into court in this State because of such activities.
- 53. As detailed in the paragraphs below, each Defendant supports the creation, maintenance and utilization of an immersive virtual reality system, which permits live performers and participants to interact with each other and the environment in the United States, including those infringing actions of GEC occurring within the state and District of Delaware.
  - 54. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).
- 55. Venue is proper in this district under 28 U.S.C. § 1400(b) with respect to each Defendant. Defendant GEC maintains a regular and established place of business in this District and has committed infringing acts in this District. For each of the remaining Defendants, identified above in paragraphs 7-36 as subunit corporations of GEC, venue is proper because each of these subunit corporations is a Delaware corporation and therefore each resides in this District.
- 56. For these reasons, for each Defendant personal jurisdiction exists and venue is proper in this Court for each Defendant under 28 U.S.C. § 1400(b).

#### **COUNT I**

## PATENT INFRINGEMENT OF UNITED STATES PATENT NO. 6,409,599

- 57. Plaintiff incorporates the above paragraphs herein by reference.
- 58. The '599 patent relates to a system in which participants interact with a computerized environment in addition to live and/or pre-recorded performers. (*See* Ex. A at

- 1:20-23.)<sup>1</sup> The '599 patent describes and enables immersive interactive virtual reality computer systems in which participants interact with a virtual reality environment and live performers using a variety of immersion and input devices." (*Id.* at 1:23-26.)
- 59. The claims of the '599 patent are directed to tangible embodiments. Claim 1, for example, is a system claim which clearly requires a computer operating software and several input/output devices in electronic communication with an immersive virtual reality environment. (*Id.* at 16:6-22.) Claim 2, for example, expressly recites a processing device and a network connecting the processing device with at least some of the input/output devices. (*Id.* at 16:39-46.)
- 60. The claims of the '599 patent are directed at providing a unique computing solution that addresses a problem particular to computerized virtual reality systems—providing an immersive interactive virtual reality system in which there exists three-way communication among and between participants, live performers and the virtual reality environment. (*Id.* at 3:24-27.)
- 61. Providing an immersive interactive virtual reality system with three-way communication in the manner claimed in the '599 patent solved new challenges over the techniques and systems known in the art at the time. Thus the claims of the '599 patent contain inventive concepts, being both novel and unconventional, which are sufficient to render the '599 patent claims to be patent-eligible.
- 62. Prior to the priority date of the '599 patent, in systems, such as traditional virtual reality systems, figures or objects not controlled by participants moved autonomously or, if a

<sup>&</sup>lt;sup>1</sup> Citations to patents in this Complaint refer to columns and lines within columns of any cited patent. For example, the citation referenced by this footnote refers to column 1, at lines 20 through 23, in the '599 patent.

participant had an opportunity to interact with such objects in the virtual reality environment, the objects were limited to computer generated images and not live performers. (*Id.* at 1:57-67.)

- 63. Groups of participants have been entertained by graphically enhanced performers on stage or television. However, these instances occurred through non-immersion mediums without the enhancements of immersion-type devices or methods. (*Id.* at 2:5-9.)
- 64. Early entertainment systems, which allowed participants to interact with a host and an environment using some input device, did not operate within an immersive virtual reality environment and therefore lacked its immersive effects and their impact on participants. (*Id.* at 2:40-47.)
- 65. The '599 patent overcame these disadvantages by, for example, describing and enabling a system and method for delivering information "which provides three-way immersive interactive communication amongst and between" participants, an immersive environment and live performers. (*Id.* at 2:55-57.)
- 66. The inventors of the claimed invention in the '599 patent changed the focus from an interaction between individual participants and computer generated graphical objects within a virtual reality environment to a three-way communication amongst and between participants, live or pre-recorded performers, and an immersive virtual reality environment. (*Id.* at 3:11-17.) The inclusion of three-way communication results in a synergistic effect, which creates an unparalleled experience. (*Id.* at 3:18-22.)
- 67. Furthermore, the claimed invention of the '599 patent represents an intrinsic improvement to the underlying computer technology involved. The claimed system includes a variety of audio and video components. (*See, e.g.,* claim 1 of the '599 patent.) The variety of audio and video components enable innovative mixing and switching techniques which allows

the system to present to each of the participants a virtual reality environment in which a live representation of the performers is superimposed within the environment. (*Id.* at 4:5-9.) The participants are able to view and interact with a novel display of both graphical data and live representations for an exciting experience. (*Id.* at 4:9-12.)

- 68. The inventors of the '599 patent took considerable personal risks to nurture and prove out the technology systems described in the '599 patent, contributing substantially to today's virtual reality industry explosion.
- 69. The inventors of the '599 patent have utilized the technology described by the '599 patent for more than ten years, shipping virtual reality systems to five continents and entertaining or educating an estimated 30 million people worldwide with their immersive virtual reality live theater attractions and promotions.
- 70. The virtual reality theater technology created by the inventors has been recognized and awarded on an international scale, the products winning "Best New Product" and "Best of Show" at the International Association of Amusement Parks and Attractions global convention in Atlanta in November 2000, and again for 'Best of Show' in 2002 in Orlando, as well as national awards for graphics and creativity in the Print Media industry. The products and concepts have garnered dozens of feature articles in news media promoting clients and their products in a variety of industries.
- 71. The inventors of the '599 patent continue to have a direct interest in activities related to the '599 patent, working closely with Plaintiff to identify and evaluate entities making use of the technology claimed by the '599 patent without permission or license thereto.
- 72. The inventions of the '599 patent resolve technical problems related to virtualized interactive technology. For example, the inventions allow parties to interact in a virtual

environment in real time with one or more live performers and participants, which, on information and belief, is exclusively implemented using computer technology.

- 73. The claims of the '599 patent do not merely recite the performance of some method known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claims of the '599 patent recite inventive concepts that are rooted in computerized virtual reality technology, and overcome problems specifically arising in the realm of computerized virtual reality technologies.
- 74. The claims of the '599 patent recite an invention that is not merely the routine or conventional use of computerized communication technology. Instead, the invention makes it possible to interact with one or more live performers and/or participants in a virtualized environment, which does not require the physical presence of either the one or more performers, or participants in order for such interactions to take place. The '599 patent claims thus specify how communication input, output, and system devices are manipulated to yield a virtual, interactive experience controlled in part by one or more participants.
- 75. The technology claimed in the '599 patent does not preempt all ways of using interactive communications technology, nor preempt the use of any well-known communications technology, nor preempt any other well-known or prior art technology.
- 76. The '599 patent claims are not directed to any "method of organizing human activity," "fundamental economic practice long prevalent in our system of commerce," nor are any of the claims "a building block of the modern economy."
- 77. The '599 patent does not take a well-known or established business method or process and "apply it to a general purpose computer." Instead, the specific systems and

processes described in the '599 patent have no direct corollary to a process that predates the advent of the Internet.

- 78. The '599 patent claims are directed toward a solution rooted in computer technology and uses technology, unique to computers and networks, to overcome a problem specifically arising in the realm of computerized virtual reality technologies.
- 79. The '599 patent claims are not directed at a mere mathematical relationship or formula.
- 80. The '599 patent claims cannot be performed by a human, in the human mind, or by pen and paper.
- 81. Accordingly, each claim of the '599 patent recites a combination of elements sufficient to ensure that the claim in practice amounts to significantly more than a patent on an ineligible concept.
- When the State of Defendant directly infringes and continues to directly infringe at least claims 1, 2, 8 and 9 of the '599 patent, in the State of Delaware or elsewhere in the United States, under 35 U.S.C. § 271(a) by making, using, selling, offering to sell, importing and/or providing and/or causing to be used an interactive, real time, virtual reality systems (*See* "Looking Smart: Augmented Reality Is Seeing Real Results In Industry" at https://www.ge.com/reports/looking-smart-augmented-reality-seeing-real-results-industry-today/), along with related systems and software for access and use of such systems (the "Accused Instrumentalities") as in claims 1, 2, 8 and 9 of the '599 patent. (*See* VIT's Claim Chart for claims 1, 2, 8 and 9 of the '599 patent, Ex. B at 1-11.)
- 83. On information and belief, Defendant GEC is a for-profit organization with revenues of approximately \$122 billion U.S.D. per year, which includes the revenue of all

subsidiaries, including the other named Defendants. Moreover, each Defendant, their employees and/or agents make, use, sell, offer to sell, import and/or provide and/or cause to be used the Accused Instrumentalities for Defendant's customers, leading to direct or indirect revenues and profit. As one example of indirect profit, Defendant GEC will frequently offer the Accused Instrumentalities as an inducement to attract and maintain customers who have bought GEC's merchandise with the understanding that augmented reality services will be utilized by Defendant GEC in servicing the purchased merchandise after sale. On information and belief, without the availability of infringing tools such as the Accused Instrumentalities, Defendants would be at a disadvantage in the marketplace and would generate less revenue overall.

- 84. In particular, claim 1 of the '599 patent generally recites a virtual reality system for one or more performers and participants comprising an immersive virtual reality environment, one or more performer input and output devices in electronic communication with the virtual environment, one or more participant input and output devices in electronic communication with the virtual environment, wherein the virtual environment includes a video image of one or more live performers with audio communication between one or more live performers and one or more participants, wherein one or more participants interacts with one or more live performers and the virtual environment resulting in an experience partially controlled by one or more participants using an input device. (*Id.* at 1-5.)
- 85. Each Defendant provides virtual reality systems for participants and performers, and includes an immersive reality environment. (*Id.* at 1-2.)
- 86. Each Defendant's systems also include one or more performer input and output devices in electronic communication with the virtual environment and one or more participant

input and output devices, also in electronic communication with the virtual environment. (*Id.* at 2-4.)

- 87. Each Defendant's systems provide a virtual environment, which includes a video image of one or more live performers with audio communication between the one or more live performers and one or more participants. (*Id.* at 4-5.)
- 88. In each Defendant's systems, the one or more participants interact with the one or more live performers and the virtual environment resulting in an experience partially controlled by the one or more participants using an input device. (*Id.* at 4-5.)
- 89. Claim 2 of the '599 patent generally recites the system of claim 1 wherein the immersive virtual reality environment comprises a processing device, system data, output data and a network which connects the processing device, performer and participant input and output devices in electronic communication, thereby transmitting the system and output data to the live performer and participant.
- 90. In each Defendant's systems, the virtual reality environment includes a processing device, system data, output data and a network which connects the processing device, performer and participant input and output devices in electronic communication, thereby transmitting the system and output data to the live performer and participant. (*Id.* at 6-8.)
- 91. Claim 8 of the '599 patent generally recites a system which interacts with participants and performers comprising an immersive virtual reality environment, said environment further comprising a processing device, system data, output data and a network; participant and performer input and output devices in electronic communication with the immersive virtual reality environment; wherein at least one participant interacts with at least one live performer and the immersive virtual reality environment resulting in an experience in part

controlled by the participant and participant input device; the network connecting the processing, performer and participant input and output devices in electronic communication, thereby transmitting the system and output data to the live performer and participant; and the network connecting the immersive virtual reality environment and participant input and output devices across the Internet.

- 92. In each Defendant's systems, the virtual reality environment includes an immersive virtual reality environment, said environment further comprising a processing device, system data, output data and a network; participant and performer input and output devices in electronic communication with the immersive virtual reality environment; wherein at least one participant interacts with at least one live performer and the immersive virtual reality environment resulting in an experience in part controlled by the participant and participant input device; the network connecting the processing, performer and participant input and output devices in electronic communication, thereby transmitting the system and output data to the live performer and participant; and the network connecting the immersive virtual reality environment and participant input and output devices across the Internet. (*Id.* at 8-9.)
- 93. Claim 9 of the '599 patent generally recites a method of providing interactive communications between participants and performers comprising the steps of providing an immersive virtual reality environment; providing performer and participant input and output devices in communication with the immersive virtual reality environment; having the live performer interact with the participant and immersive virtual reality environment by including a live or prerecorded image of the live performer and audio communication between the live performer and the participant or between the participant and live performer or both; having the

participant interact with the live performer producing an experience controlled by the participant and participant input device.

- 94. Each Defendant provides methods of providing interactive communications between participants and performers, the method including the steps of providing an immersive virtual reality environment; providing performer and participant input and output devices in communication with the immersive virtual reality environment; having the live performer interact with the participant and immersive virtual reality environment by including a live or prerecorded image of the live performer and audio communication between the live performer and the participant or between the participant and live performer or both; having the participant interact with the live performer producing an experience controlled by the participant and participant input device. (*Id.* at 10-11.)
- 95. Each Defendant's systems offer a service to users (that are using a computing device) in Delaware or the United States to interact with an immersive virtual reality environment via the systems as well as with participants and performers as recited in claim 1 of the '599 patent.
- 96. Users in Delaware or the United States have used and interacted with each Defendant's systems as recited in claim 1 of the '599 patent.
- 97. Upon information and belief, since at least the time it received notice by this Complaint, each Defendant has induced and continues to induce others to infringe claims of the '599 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to each Defendant's partners and customers, whose use of or reliance upon the Accused instrumentalities constitutes direct infringement of claims of the '599 patent.

- 98. In particular, each Defendant's actions that aid and abet others such as their partners and customers to infringe include advertising and/or providing support services to customers or distributing the Accused instrumentalities and providing instruction materials. training, and services regarding the Accused instrumentalities. Upon information and belief, each Defendant has engaged in such actions with specific intent to cause infringement or with conscious blindness to the resulting infringement because each Defendant has had actual knowledge of the '599 patent and that its acts were inducing the infringement of the '599 patent since at least the date each Defendant received notice by this Complaint that such activities infringed the '599 patent.
- 99. Use of the Accused Instrumentalities by each Defendant's partners, customers, and/or end users infringes each of claims 1, 2, 8 and 9 of the '599 patent through a combination of features which collectively practice each limitation of claims 1, 2, 8 and 9. (See, e.g., Sources: https://www.ge.com/reports/looking-smart-augmented-reality-seeing-real-results-industrytoday/; https://au.pcmag.com/news/51346/upskill-is-the-coolest-ar-startup-you-havent-heard-ofyet; https://upskill.io/landing/ge-reports-video-augmented-reality/;

https://upskill.io/landing/upskill-and-ge/;

http://www.autonews.com/article/20180602/RETAIL05/180609999/porsche-dealers-get-adeeper-look-with-smart-glasses; https://www.marketscreener.com/news/Porsche-Tech-Live-Look-Pioneers-Augmented-Reality-In-U-S-Auto-Repairs--26675055/;

https://www.youtube.com/watch?v=LnAad7OA95w;

https://www.techrepublic.com/article/upskill-releases-next-generation-of-skylight-platform-forenterprise-ar-devices/; https://upskill.io/skylight/functions/field-service/; and https://www.youtube.com/watch?v=s5pcF22IKAA, all last accessed on February 25, 2019.)

- 100. Upon information and belief, the Accused Instrumentalities are used marketed, provided to, and/or used by or for each Defendant's partners, clients, customers and end users across the country, including some in this District.
- 101. Upon information and belief, since at least the time each Defendant received notice, each Defendant has induced and continues to induce others to infringe the claims of the '599 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or conscious blindness, actively aiding and abetting others to infringe, including but not limited to each Defendant's partners, clients, customers, and end users, whose use of the Accused Instrumentalities constitutes direct infringement of the claims of the '599 patent.
- 102. In particular, each Defendants' actions that aid and abet others such as its partners, customers, clients, and end users to infringe include advertising and distributing the Accused Instrumentalities and providing instruction materials, training, and services regarding the Accused Instrumentalities. For example, on information and belief, GEC utilizes the Accused Instrumentalities when reviewing merchandise or inventories of their products after they are sold to their customers. (*See* "Looking Smart: Augmented Reality Is Seeing Real Results In Industry" at Source: https://www.ge.com/reports/looking-smart-augmented-reality-seeing-real-results-industry-today/, last accessed on February 25, 2019.)
- 103. On information and belief, each Defendant has engaged in such actions with specific intent to cause infringement or with conscious blindness to the resulting infringement because each Defendant has had actual knowledge of the '599 patent and knowledge that its acts were inducing infringement of the '599 patent since at least the date each Defendant received notice that such activities infringed the '599 patent.

- 104. Upon information and belief, each Defendant is liable as a contributory infringer of the '599 patent under 35 U.S.C. § 271(c) by offering their services related to or involving the augmented reality systems (*See* "Looking Smart: Augmented Reality Is Seeing Real Results In Industry" at https://www.ge.com/reports/looking-smart-augmented-reality-seeing-real-results-industry-today/) in the United States including software and/or interfaces to be especially made or adapted for use in an infringement of the '599 patent.
- 105. The Accused Instrumentalities are a material component for use in practicing the '599 patent claims and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.
- 106. Each Defendant was made aware of the '599 patent and its infringement thereof at least as early as the filing and service of this Complaint. Despite Plaintiff's notice to each Defendant by this Complaint regarding the '599 patent, each Defendant continues to infringe the '599 patent.
- 107. Upon information and belief, since at least the time it received notice by this Complaint, each Defendant's infringement has been and continues to be willful.
- 108. Plaintiff VIT has been harmed by each Defendant's infringing activities with respect to the '599 patent.
- 109. VIT reserves the right to modify its infringement theories as discovery progresses in this case. It shall not be estopped for purposes of its infringement contentions or its claim constructions by the claim charts it provides with this Complaint. VIT intends the claim chart (Exhibit B) for the '599 patent to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure. The claim chart is not VIT's preliminary or final infringement contentions or preliminary or final claim construction positions.

JURY DEMAND

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff demands a trial by

jury on all issues triable as such.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff demands judgment for itself and against each Defendant as

follows:

A. An adjudication that each Defendant has infringed the '599 patent;

B. An award of damages to be paid by each Defendant adequate to compensate

Plaintiff for that Defendant's past infringement of the '599 patent, and any continuing or future

infringement through the date such judgment is entered, including interest, costs, expenses and

an accounting of all infringing acts including, but not limited to, those acts not presented at trial;

C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of

Plaintiff's reasonable attorneys' fees; and

D. An award to Plaintiff of such further relief at law or in equity as the Court deems

just and proper.

Dated: March 1, 2019

DEVLIN LAW FIRM LLC

/s/ Timothy Devlin

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