Samuel R. Watkins (SBN 272162)
swatkins@thompsoncoburn.com
THOMPSON COBURN LLP
2029 Century Park East, Suite 1900
Los Angeles, California 90067
Tel: 310.282.9451/Fax: 310.282.2501

-and-

Jordan A. Sigale (Ill. ARDC No. 6210047) - *pro hac vice* pending
jsigale@dunlapcodding.com
Julie Langdon (Ill. ARDC No. 6291722) – pro hac vice pending
jlangdon@dunlapcodding.com
DUNLAP CODDING PC
225 West Washington St., Ste. 2200
Chicago, IL 60606
Tel: 312.651.6744

-and-

Douglas J. Sorocco (Okla. Bar No. 17347, Ill. ARDC No. 2381747) *pro hac vice* pending
dsorocco@dunlapcodding.com
Evan W. Talley (Okla. Bar No. 22923) *pro hac vice* pending
etalley@dunlapcodding.com
DUNLAP CODDING PC
609 West Sheridan Avenue
Oklahoma City, OK 73102
Tel: 405. 607.8600

Attorneys for Plaintiff BARBARO TECHNOLOGIES, LLC

UNITED STATES DISTRICT COURT
FOR THE CENTRAL DISTRICT OF CALIFORNIA
WESTERN DIVISION (LOS ANGELES)

BARBARO TECHNOLOGIES, LLC, a Delaware Limited Liability Company; Plaintiff, v. NIANTIC, INC., a Delaware Corporation; Defendant.	Case No. 2:18-cv-00773 **COMPLAINT**

Plaintiff, BARBARO TECHNOLOGIES, LLC, for its claims and relief against NIANTIC, INC. alleges:

NATURE OF THE ACTION

1. This action arises from Niantic, Inc.'s direct infringement of U.S. Patent Nos. 7,373,377 and 8,228,325 (collectively, "Barbaro Patents") and/or active and knowing inducement of its end users and others to infringe the '377 and '325 Patents by making, using, selling, and/or offering to sell within the United States computer systems and methods of integrating real-time information into a virtual thematic environment using a computer system associated with at least its Ingress and Pokémon Go augmented reality platforms.

THE PARTIES

2. Plaintiff Barbaro Technologies, LLC is a Delaware Limited Liability Company.

3. Defendant Niantic, Inc. is a Delaware corporation, with its principal place of business at 2 Bryant, Suite 220, San Francisco, California 94105.

JURISDICTION AND VENUE

4. This is an action for infringement of a United States Patent arising under 35 U.S.C. §§ 271(a)-(b), 281, and 284-85.

5. This Court has subject matter jurisdiction over the patent claims in this Complaint under 28 U.S.C. §1331 and 28 U.S.C. §1338(a).

6. Defendant Niantic, Inc. is subject to this Court's personal jurisdiction because it has a regular and established place of business in the Central District of California and has and continues to conduct substantial business within this Judicial District, including actions that constitute direct and indirect patent infringement. In particular, Defendant states on its website (https://nianticlabs.com/about) "[w]ith offices in San Francisco, Silicon Valley, Seattle, Los Angeles, and Tokyo, the Niantic team is pushing the limits of technology to invent the future of augmented reality." Niantic has also posted on its website positions currently open in its "Los Angeles" office for Game Development Engineer, Mobile Software Engineer, Server Infrastructure

Engineer, and Software Engineer-Server Infrastructure, for which Niantic, Inc. is currently accepting applications.

7. Under 28 U.S.C. §1400(b), venue is proper in this Judicial District over Niantic, Inc., where Niantic, Inc. has committed acts of patent infringement and has a regular and established place of business.

BACKGROUND

8. The managing member of Plaintiff Barbaro Technologies, LLC is Ms. Frances Barbaro.

9. In 2002, Ms. Barbaro, a former software specialist at Honeywell (1983-87) and a business manager at Adobe Systems (1987-97)), filed a U.S. patent application disclosing her vision of an interactive, multi-user computer environment.

10. By 2003, Ms. Barbaro established Plaintiff Barbaro Technologies, LLC with an aim to employ fellow Massachusetts-based former colleagues from Honeywell and Adobe, and other Massachusetts-based technologists and sales and marketing professionals to pursue Ms. Barbaro's technological vision.

11. In the meanwhile, Plaintiff Barbaro Technologies, LLC was developing a prototype based on Ms. Barbaro's virtual thematic environment more commonly referred today as an augmented reality ("AR") environment.

12. By 2004, at Barbaro Technologies, LLC Ms. Barbaro had further

developed her vision into an interactive computer system that integrated real-time information into a virtual thematic environment resulting in an augmented reality system having potential application in the entertainment, business, publishing, and gaming industries. These further developments were disclosed in a second patent application that issued into two U.S. Patents, Nos. 7,373,377 and 8,228,325.

13. As early as 2005, Barbaro Technologies was showing its working AR prototype at venture capital competitions in New York and San Francisco. Certain of the VCs in attendance at these competitions expressed interest in Ms. Barbaro's technology. However, the interested VCs made funding contingent on replacing Ms. Barbaro with a male chief executive and moving the company to the Bay Area.

14. Barbaro Technologies refused to move to the Bay Area and leave its Massachusetts technologists without high-tech jobs.

15. Barbaro Technologies also refused to ask its founder and chief-technologist to step into the background.

16. Instead, Barbaro Technologies spent several years looking for investors, development partners, educational institutions, and/or customers for whom it could implement Ms. Barbaro's technology. Ultimately, Barbaro Technologies was unsuccessful in finding the right opportunity.

17. By 2009, Barbaro Technologies was forced to wind down active operations and began looking for a second home for its technology and patent portfolio. At all times relevant to the infringement alleged, no patent marking would have been required for Barbaro Technologies, LLC to recover damages under 35 U.S.C. §287(a).

18. Licensing overtures were made on behalf of Barbaro Technologies, LLC to various companies, including Google, which were met mostly by silence.

19. In 2004, Google acquired Northern California-based, geospatial data visualization firm, Keyhole, Inc., which had been co-founded by serial technology entrepreneur John Hanke.

20. The Keyhole technology was ultimately transformed at Google into the applications commonly known today as Google Maps and Google Earth.

21. In 2010, Mr. Hanke was given the resources to build a gaming unit within Google to work on location-based games.

22. By 2012, Mr. Hanke's team, which would later form the core of Niantic, Inc., developed an augmented reality, location-based multiplayer game called Ingress.

23. Ingress was released for Android-based devices on or around November 2012, and for iOS-based devices on July 14, 2014. The Ingress client application (augmented reality platform) is downloaded onto an Android or iOS-

based device and, when launched by a user, allows the user—through their smart device—to play and interact with the location-based augmented reality game in which players capture "portals" generally found at historical or cultural locations. The user collects the portals, which appear on the screen of a user's smart device, as if those portals were actually at the same location as the user while walking in the real location in real time.

24. In October 2015, Niantic, Inc. was spun out of Google.

25. In July 2016, Niantic released "Pokémon Go," for Android-based devices and iOS-based devices. The Pokémon Go client application (augmented reality platform) is downloaded onto an Android or iOS-based device, and when launched by a user, allows the user through their smart device to play and interact with the location-based augmented reality game in which the player locates, captures, battles, and trains virtual characters, which appear on the screen of a user's smart device as if those virtual characters were actually at the same location as the user.

26. By the end of 2016, Pokémon Go had proven to be one of the most successful mobile application launches ever.

27. By June 8, 2017, Niantic announced that Pokémon Go had been downloaded 750 million times.

28. As of January 2016, Niantic revealed that Ingress had over 14

million downloads since its release in 2012 and announced 254,184 individuals had attended its live events.

29. Niantic maintains game servers which connect with users of Ingress and Pokémon Go after launching the augmented reality platforms to enable Ingress and Pokémon Go to update in real time.

U.S. PATENT NO. 7,373,377

30. On May 13, 2008, the United States Patent and Trademark Office duly issued U.S. Patent No. 7,373,377, entitled "Interactive Virtual Thematic Environment" naming Frances Barbaro Altieri as the sole inventor. A true and correct copy of the Barbaro '377 Patent is attached as Exhibit 1.

31. Plaintiff Barbaro Technologies is the owner by assignment of the Barbaro '377 Patent, with all rights in and to that patent, including the right to collect past damages.

32. The Barbaro '377 Patent is a continuation-in-part of U.S. Patent Application No. 10/272,408, now U.S. Patent No. 8,458,028, filed on October 16, 2002.

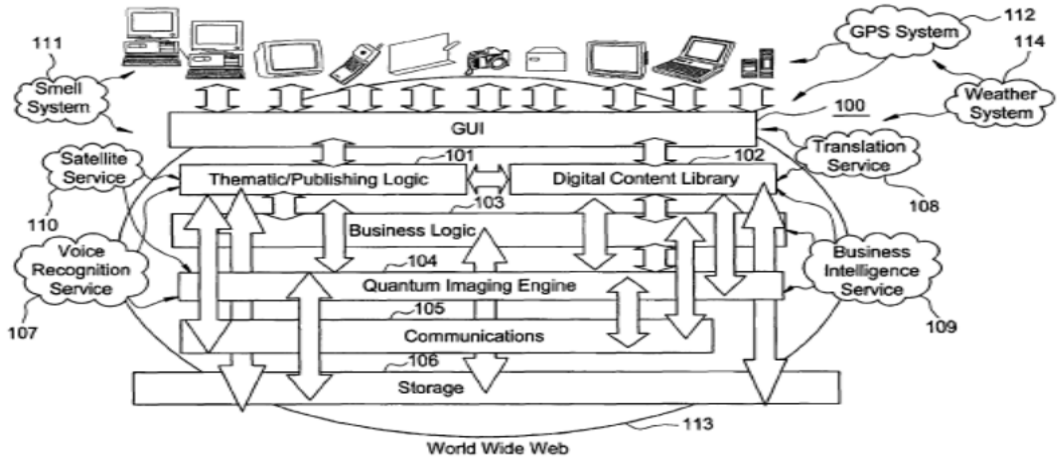
33. The Barbaro '377 Patent relates to "an interactive software application platform which can be used in entertainment, business, publishing, and other applications to provide a virtual and real world experience to the user by integrating audio, video, two dimensional (2D), and three dimensional (3D)

technology, and other applications or services." '377 patent, Col. 1, lines 18-23.

34. More particularly, the invention disclosed in the Barbaro '377 Patent is directed to an interactive software application platform which injects real time data into a virtual thematic environment which includes both audio and video, and integrates mini-applications into the virtual thematic environment, without a noticeable delay. See, Barbaro '377 Patent, Col. 6, lines 50-64.

35. Figure 1 of the '377 Patent is a schematic diagram reflecting one embodiment of the invention and the various equipment on which the patented invention may function.

FIG. 1



36. The '377 Patent describes Figure 1:

> The present invention is implemented in software which can be provided in a client, client and server environment, or in a distributed system over a computerized network (the physical architecture is described below), or embedded in a controller that activates both the computer system and/or other devices.
>
> In particular, the program of the present invention is in a

> Quantum Imaging Environment (QIE). Thus, the logical architecture of the virtual platform of the present invention is implemented on a 6-tier modular system (i.e., six layers), and at least six (6) service area modules, which are fully distributed across the internet (see FIG. 1).
>
> The six layers of the virtual platform include 1) a graphical user interface (GUI) 100, 2) a Thematic/Publishing Logic 101 and a Digital Content Library 102, 3) a Business Logic 103, 4) a thematic or zone application builder and interpreter (i.e., a Quantum Imaging Engine 104), 5) Communications 105, and 6) a Data Storage 106. Each level of the 6-tier system is designed around Open Source technologies, but can include custom software developed in an open standards environment. By using Open Source and proprietary technologies with generic APIs, the present invention is scalable as the numbers of users increase, and the advances can be programmed as Open Source technologies.
>
> The six service area modules of the logical architecture of the virtual platform include 1) voice recognition 107, 2) language translation services 108, 3) business intelligence 109, 4) satellite transmission 110, (5) a synthesized smell system 111, and (6) a GPS system 112, fully distributed across the world wide web (WWW) 113. A weather system 114, can also be provided as another service area module. Additional services are a subset of the Business Logic module, and include e-mail, chat, order entry, purchasing, billing, and sponsor fulfilment modules.
>
> The virtual platform of the present invention may use the support of PCs, or any other type of hardware that can support specific tasks at the Business Logic and Thematic Logic levels. This may take the form of Grid, Artificial Intelligence (AI), or other technology advanced servers, or the entire system may be hosted on a very high level supercomputing system that can calculate very complicated algorithms and manage all processes supporting well over millions of users simultaneously.

Barbaro '377 Patent at Col. 11, line 37 – Col. 12, line 12.

37. The Barbaro '377 patent particularly notes that virtual environments

were "increasingly of interest" in the period leading up to the filing of Ms. Barbaro's patents, but that those prior art "virtual environments, especially those present on the internet, for example, [had] not provided the user with a real world experience." Barbaro '377 patent, Col. 1, line 25 and Col 1, lines 32-34. The Barbaro '377 Patent solved this need in the art by disclosing an improvement in the functioning of computers, *viz.,* a computer system that teaches a logical software architecture preferably having logical software layers and service area modules that provide an end user with a real world environment, as reflected in the embodiment provided as an example above.

38. More particularly, the claims of the Barbaro '377 Patent are directed to improvements in computer capabilities that provide virtual thematic environments, otherwise known as augmented or virtual reality. Standing alone, augmented and virtual reality systems are still no ordinary computer task today. On or about 2004 (the filing date of the Barbaro '377 Patent), the marrying of augmented and/or virtual reality with real-time information, and the additional combination of primary and secondary applications within the virtual thematic environment was previously unknown.

39. The Barbaro '377 Patent, further teaches that this virtual thematic environment can be geographic, in which case "the program would allow the user to move through the 2D and/or 3D and/or integrated graphical representation of

the actual real world environment and interact with it." Barbaro '377 Patent, Col. 7: Lines 24-26. One potential interaction disclosed in the Barbaro '377 Patent is with virtual storefronts, which the user may enter using standard computer entry techniques (such as a mouse click), which may redirect the user to a standard website associated with the virtual store front and provide a link (i.e. "an icon, URL, address, etc.) "so that the user can return to the virtual world when desired." Barbaro '377 Patent, Col. 7, lines 27-42. Similar interactivity is disclosed regarding products (or other objects) placed within the virtual environment. Barbaro '377 Patent, Col. 7, line 50 - Col. 8, line 5.

40. As disclosed in the Barbaro '377 Patent, "the virtual thematic environment can interface with a GPS system, which will show the user a map showing the user's (or any other) location, and provide details down to street and house. The program will allow the user to view either real world satellite maps/street photographs, etc., or a virtual representation of the same, showing buildings, grounds, landmarks etc." Barbaro '377 Patent, Col. 9, lines 19-25; see also, Barbaro '377 Patent, Col. 8, lines 37-51; Col. 10, lines 48-60.

41. The Barbaro '377 Patent further discloses with the systems and methods disclosed that players,

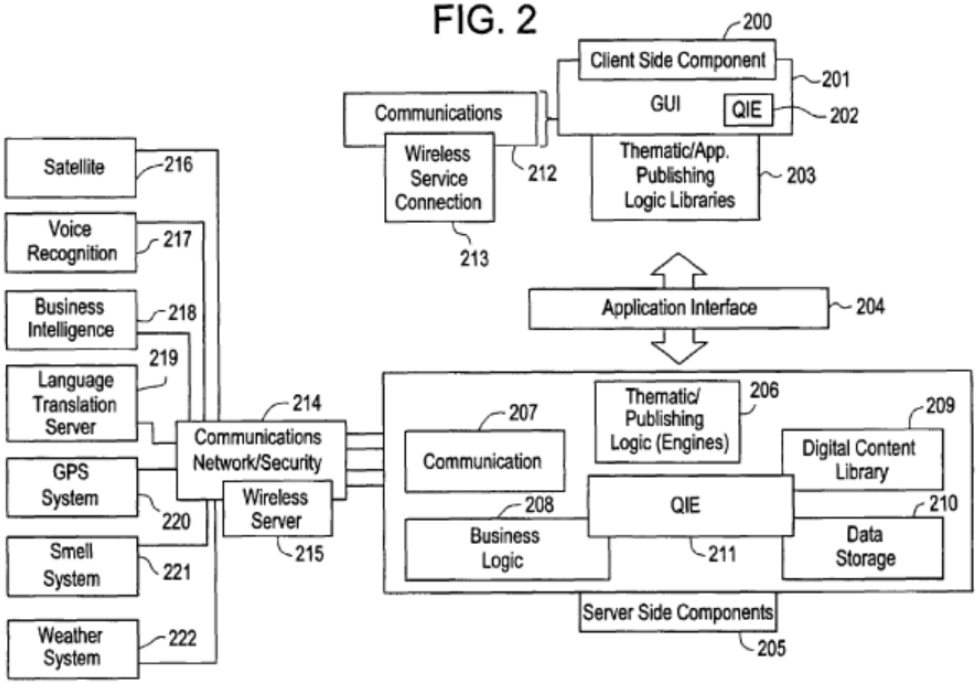
> can compete in real-time in a gaming environment, for example, with other players others around the world. All the players will have their own internet connections, be logged onto

> a world server or a set of servers with a unique account and password, and will be able to interact with one another in the thematic environment on a real-time basis. Each player will receive dynamic content (i.e., information in real time) based on the other players′ actions. For example, the other players may be directed to "pick someone's pocket" by "grabbing" an object from their competitor, and may gain points by getting to a certain location first, by opening and reading certain information first, or by "hot clicking" on an item first, to obtain points etc.
>
> The present invention also provides the feature of allowing "mini-applications" to be accessible within the virtual world such that the user can utilize word processing programs, e-mail, spreadsheets, attend and participate in an auction, etc. In addition, these mini-applications, such as e-mail, chat rooms, video messaging, are performed by the program in real time, without a noticeable delay to the user.

Barbaro '377 Patent, Col. 9, lines 47-67.

42. The invention disclosed in the Barbaro '377 Patent is implemented in software deployed at a client, across a client-server architecture, throughout a distributed system. Barbaro '377 Patent, Col. 11, lines 36-40. See also, Figure 2:

FIG. 2



43. Prior to Ms. Barbaro's invention, a user was unable to have a virtual real-world experience. In particular, prior to Ms. Barbaro's invention there was no way to "integrate audio, video, 2D and 3D technology to maximize the realworld experience for the user." Barbaro '377 Patent, Col. 1, lines: 25-36.

44. A person having ordinary skill in the art at the time of the inventions of the Barbaro '377 Patent (and the Barbaro '325 Patent discussed below) would not have understood that the inventions disclosed in Ms. Barbaro's disclosure could or would be performed solely in the human mind or using paper and pen. In other words, a human mind, paper, or pen would not have been able to generate a virtual environment, let alone seamlessly integrate that virtual environment with real-time information, as well as secondary applications within that virtual

thematic environment. Instead, a person of ordinary skill in the art would have recognized that the inventions disclosed in the Barbaro '377 Patent provided an unconventional solution of providing for real-time interactions within a virtual thematic environment.

U.S. PATENT NO. 8,228,325

45. On July 24, 2012, the United States Patent and Trademark Office duly issued U.S. Patent No. 8,228,325, entitled "Interactive Virtual Thematic Environment" naming Frances Barbaro Altieri as the sole inventor. A true and correct copy of the Barbaro '325 Patent is attached as Exhibit 2.

46. Plaintiff Barbaro Technologies is the owner by assignment of the '325 Patent, with all rights in and to that patent, including the right to collect past damages.

47. The Barbaro '325 Patent was filed as a divisional application of application No. 10/805,415, now the Barbaro '377 Patent, which was a continuation-in-part of application No. 10/272,408, now U.S. Patent No. 8,458,028, filed on October 16, 2002.

48. Thus, the Barbaro '325 Patent also relates to "an interactive software application platform which can be used in entertainment, business, publishing, and other applications to provide a virtual and real world experience to the user by integrating audio, video, two dimensional (2D), and three dimensional (3D)

technology, and other applications or services." Barbaro '325 Patent, Col. 1, lines 17-23.

49. Thus, the Barbaro '325 Patent discloses the same technology as that disclosed in the Barbaro '377 Patent, but the claims of the Barbaro '325 Patent are directed to a different inventive aspect disclosed by Ms. Barbaro to the United States Patent Office in 2004. Specifically, the claims of the Barbaro '325 Patent are directed to a computer system for providing a virtual thematic environment, comprising: at least one memory having at least one program comprising the steps of: retrieving information for utilization with a three-dimensional virtual thematic environment, from external sources over the internet, said information including a real-world geographic location of a user within said three-dimensional virtual thematic environment; and integrating said information into the three-dimensional virtual thematic environment, such that the three-dimensional virtual thematic environment includes said real-world geographic location displayed to the user as said three-dimensional virtual thematic environment; wherein the user interacts with the three-dimensional virtual thematic environment as a simulated real-world interaction, depending on the user's geographical three-dimensional movement through the three-dimensional virtual thematic environment; and at least one processor for running the program. Barbaro '325 patent, Col. 42, lines 36-58.

50. Because the invention disclosed in the Barbaro '325 Patent solves the same types of problems as the Barbaro '377 Patent, Plaintiff's allegations set forth above in paragraph numbers 33 to 44 apply equally to the Barbaro '325 Patent; specifically, a person having ordinary skill in the art at the time of the invention of the Barbaro '325 Patent (i.e., 2004) would not have understood that the inventions disclosed in Ms. Barbaro's disclosure could or would be performed solely in the human mind or using paper and pen. In other words, a human mind, paper, or pen would not have been able to generate a virtual environment, let alone seamlessly integrate that virtual environment with real-time information, as well as secondary applications within that virtual thematic environment. Instead, a person of ordinary skill in the art would have recognized that the inventions disclosed in the Barbaro '325 Patent provided an unconventional solution of providing for real-time interactions within a virtual thematic environment.

COUNT I
DIRECT INFRINGEMENT OF THE '377 PATENT

51. Plaintiff incorporates and realleges paragraphs 1-50 herein by reference.

52. This cause of action arises under the patent laws of the United States and, in particular, 35 U.S.C. § 271(a).

53. The Barbaro '377 Patent is valid and enforceable under United States

Patent Laws.

54. Defendant is directly infringing the Barbaro '377 Patent either literally or under the doctrine of equivalents. Defendant is thus liable for direct infringement of the Barbaro '377 Patent pursuant to 35 U.S.C. § 271(a).

55. In particular, Defendant, without authority, has at least made, used and continues to make and use a client-server computer system that integrates real time information into a virtual thematic environment that meets each and every limitation of at least Claims 1-3, 6-12, 15-17, 19, and 24-25 of the Barbaro '377 Patent, either literally or under the Doctrine of Equivalents, in this Judicial District and elsewhere in the United States.

56. As an example of one claim infringed by Defendant's actions, Claim 15 of the Barbaro '377 Patent recites:

> A method of integrating information into a virtual thematic environment using a computer system including a client and a server, comprising: providing a graphics user interface (GUI) module for use in the client system; providing a quantum imaging environment (QIE) module in one of the client or the server system; providing a digital logic library in one of the client or the server system; providing a primary application for use in the client system; accessing a database that stores at least first real-time information and second real-time information downloaded from the world wide web; retrieving at least the first real-time information and the second real-time information from said database; accessing the primary application; inserting the first real-time information into the primary application; providing access to the first real-time information within the virtual thematic environment via a first user interface; providing

> at least one secondary application within the primary application; downloading second real-time information into the at least one secondary application; and enabling a user to control the at least one secondary application via a second user interface.

57. Defendant, without authority, directly infringes at least Claim 15 of the Barbaro '377 Patent. Defendant made and uses a network of specially configured servers and applications, such as Ingress and Pokémon Go, which it distributed and continues to distribute to end users such that Defendant's specially configured servers, in combination with Defendant's applications running on smart devices, provide each and every element of the client-server computer system claimed in at least Claim 15 of the Barbaro '377 Patent and, in so doing, Defendant provides end users with the ability to enter a virtual world based on the user's current real-world location by integrating at least location information into a virtual thematic environment.

58. Additionally, in regards to Claim 15, by making, using and ultimately providing access to the specially configured servers and to distributed software, Defendant provides: (i) a graphics user interface module for use on the user's smart device; (ii) a quantum imaging environment (QIE) module in one of the server or a user's smart device to allow a virtual thematic environment to be rendered; (iii) a digital logic library in one of the server or a user's smart device; and (iv) a primary application (e.g., the primary gameplay of Ingress and

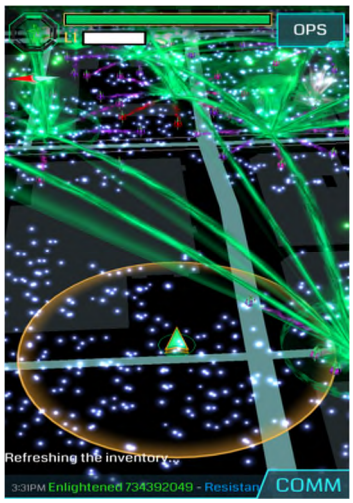
Pokémon Go) which can be used on a user's smart device.

59. Additionally, in regard to Claim 15, to enable the virtual thematic environment provided by accessing its specially configured servers and software, Defendant accesses a database that has first-time real information, such as a user's current GPS location, and second real-time information, such as a variety of up-to-date game-related information associated with or for use in the primary application. Defendant retrieves those first and second pieces of real-time information from the database.

60. Further, in regard to Claim 15, Defendant accesses its primary applications via its specially configured servers and software, inserts the first real-time information into its primary application on the user's smart device (e.g., GPS information into the map), and provides access to the first real-time information within the virtual thematic environment as displayed via a first user interface generated by the graphical user interface in conjunction with the QIE and digital logic library.

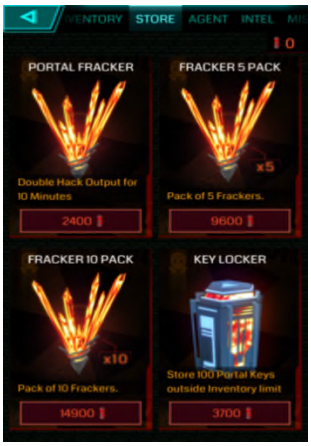
61. Further, in regard to Claim 15, Defendant provides at least one secondary application (e.g., instant messaging application or photo capture) via the primary application, downloads second real-time information into the secondary application, and enables the user to use and control the second application through a second user interface within the primary application.

62. Thus, in one instance, Defendant directly infringes Claim 15 of the Barbaro '377 Patent by distributing the Ingress Software it made and uses with its network of servers that Defendant also made and uses to provide users with the ability to enter a virtual world based on the user's current real-world location. The images below reflect the virtual thematic environment that the user accesses through their smart device launching the Ingress application provided by Defendant. The images below illustrate, the green triangle apparent in the right-hand image below indicates the user's current real-world location as well as second real-time information obtained and utilized by Defendant's infringing system.



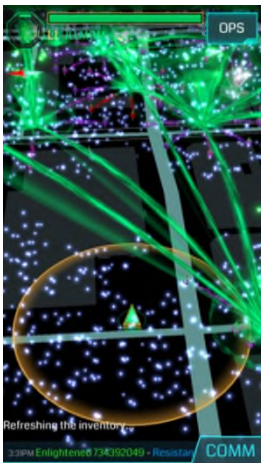
63. By providing access to the specially configured servers Defendant made and uses and providing the Ingress Application (Defendant also made and uses), Defendant provides a graphical user interface on the user's smart device (as shown in the images above), which reflects the user's real-time location

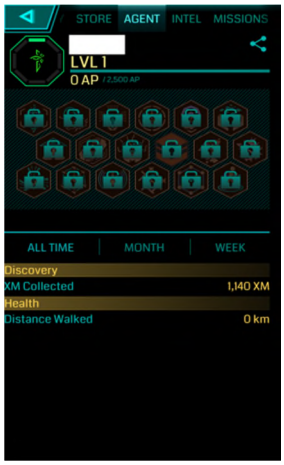
information. Additionally, Defendant provides a quantum imaging environment (QIE) module to allow content (such as graphics) to be rendered on clients (i.e., devices) and thus, the Ingress Application can operate on different types of devices, such as Android and iOS-based smart devices, among others. Defendant also provides a library of information (digital logic library) and a database including information such as exotic matter (XM) collected, distance walked, and inventory of objects available to the user in the game via the smart device. The image below reflects one example of the library of information available to the user upon launch of Defendant's Ingress Application, and during the Ingress game.



64. By providing access to its specially configured servers and Ingress Application, Defendant accesses a database having first-time real information, which for example, is the user's GPS location which is used to map the user's current location, and accesses the same database having second real-time

information from the world wide web including information such as up-to-date information on the user's hacks, XM collected, portals visited. Defendant retrieves the first and second real-time information from the database, as is reflected by the information being available through the graphical user interface associated with the user's smart device.





65. By providing access to its specially configured servers and Ingress application, Defendant also accesses the primary application, inserts the user's real-time GPS location information into the primary application, and provides each user of the Ingress Application their real-time location information via the virtual thematic environment displayed by the graphical user interface. This is shown in the image above this paragraph.

66. By providing access to its specially configured servers and Ingress Application, Defendant accesses at least two secondary applications (e.g., messaging and worldwide game statistics) via the primary application. Referring

only to the secondary messaging application, the Defendant downloads the real-time communication feed in the secondary messaging application, which enables users of the Ingress Application to use and control the second messaging application within the secondary application through a messenger interface separate from the primary application interface. The image below reflects the secondary application, which Defendant launches from within the primary application by touching the "COMM" tab provided by Defendant within the primary application:

67. Thus, by providing access to the specially configured servers and providing its Ingress Application for users to run on smart devices, Defendant meets each and every limitation of at least Claim 15 of the Barbaro '377 Patent.

68. In another example, Defendant directly infringes Claim 15 of the

Barbaro '377 Patent by distributing the Pokémon Go Application it made and uses with its network of servers (also made and used by Defendant) to provide users with the ability to enter a virtual world based on the user's current real-world location. The images below reflect the virtual thematic environment the user accesses through their smart device launching the Pokémon Go Application provided by Defendant. The image below illustrates the avatar within Defendant's system that reflects the user's current real-world location in the virtual thematic environment.

69. By providing access to the specially configured servers Defendant made and uses and providing the Pokémon Go Application Defendant also made and uses, Defendant provides a graphical user interface on the user's smart device (as shown in the image above), which reflects the user's real-time location information. Also, Defendant provides a quantum imaging environment (QIE)

module to allow content (such as graphics) to be rendered on clients (i.e. devices), and thus, the Pokémon Go application is able to operate on different types of devices, such as Android and iOS-based smart devices, among others. Defendant also provides a library of information (digital logic library) and a database including information such as a variety of items that will either be provided to the user from the start, found in the virtual thematic environment by visiting Poke Stops, or available for purchase at the in-game shop. The image below reflects an example of the library of information available to the user within Defendant's Pokémon Go Application.

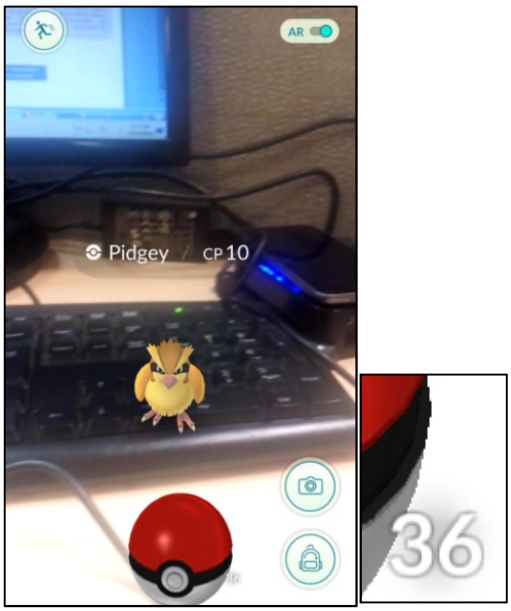
70. Additionally, by providing access to its specially configured servers and Pokémon Go Application, Defendant accesses a database having first-time real information, which for example, is the user's GPS location, which is used by

the system to map the user's current location, and accesses the same database having second real-time information from the world wide web including information such as up to date information on the user's remaining Poke Balls within their instance of the Pokémon Go Application. Defendant retrieves the first and second real-time information from the database, as is reflected by the information being available through the graphical user interface associated with the user's smart device.

71. Further, by providing access to its specially configured servers and Pokémon Go Application, Defendant also accesses the primary application, inserts the user's real-time GPS location information into the primary application, and provides each user of the Pokémon Go Application their real-time location information via the virtual thematic environment displayed by the graphical user interface. This is shown in the image immediately above.

72. By providing access to its specially configured servers and Pokémon

Go Application, Defendant accesses at least one secondary application (e.g., the camera) via the primary application, which is used by users of the Pokémon Go Application to capture any Pokémon in the real-world vicinity. The Defendant downloads real-time information (e.g., the number of Pokeballs used to capture the Pokémon) in the secondary camera application (as reflected on the camera screen), and enables the user of the Pokémon Go Application to use and control the secondary camera application within the secondary camera application through a second user interface (e.g., camera touch-screen based interface) separate from the primary application interface. Specifically, the Defendant provides users of the Pokémon Go Application with functionality within the second user interface for a variety of options (e.g. deploy a Pokeball, turn "AR" off/on, return to primary application). As shown below, the second user interface may be used by the user to deploy of a Pokeball so that the user can virtually capture a Pokémon co-located at the real-world location information provided by the Pokémon Go Application to the system, at which time the Defendant's computer system updates the Pokeball count (i.e. real-time information) in association with the world wide web:



73. Thus, by providing access to the specially configured servers and providing its Pokemon Go Application for user to run on smart devices, Defendant meets each and every limitation of Claim 15 of the Barbaro '377 Patent.

74. As will be shown after a reasonable opportunity for discovery, Defendant has been aware of the Barbaro '377 Patent at all times relevant to Defendant's alleged acts of infringement. Specifically, the Plaintiff sent notice of the patent publication, with a copy of the patent publication that led to the issuance of the Barbaro '377 Patent to Google, Inc.'s Deputy General Counsel on October 26, 2006. Google, Inc. responded to that notice on November 29, 2006, with an acknowledgement of Plaintiff's letter but refused to discuss the matter before the patent issued. Following the issuance of the Barbaro '377 Patent,

Plaintiff caused to be sent notice of the Barbaro '377 Patent to Google.

75. As the predecessor to Defendant Niantic, Inc. was still part of Google, Inc. at the time of the foregoing notices, Barbaro Technologies believes that Defendant had constructive as well as actual knowledge that its acts would constitute infringement of the Barbaro '377 Patent and yet, elected, without authority, to pursue the actions described herein in wanton and willful disregard of the Plaintiff's exclusive rights.

76. Moreover, this Complaint will serve as notice to Defendant of the Barbaro '377 Patent and Defendant's direct infringement thereof, should Defendant contend that it did not previously have knowledge thereof.

77. Additional allegations regarding Defendant's knowledge of the Barbaro '377 Patent and Defendant's willful infringement will likely have evidentiary support after a reasonable opportunity for discovery.

78. Plaintiff has been substantially and irreparably harmed by Defendant's infringing conduct and will continue to be irreparably damaged as a result of such injurious conduct. Defendant's actions complained of herein will continue unless and until Defendant is enjoined by this Court. Thus, Plaintiff is entitled to an injunction prohibiting Defendant from continuing its infringing acts.

79. Defendant is liable to Plaintiff in an amount that adequately compensates Plaintiff for the Defendant's infringement of the Barbaro '377

Patent, which, by law, cannot be less than reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

80. As a result of Defendant's intentional and willful infringement of the Barbaro '377 Patent, Plaintiff is further entitled to an award of attorneys' fees and up to treble damages from Defendant under 35 U.S.C. § 285.

COUNT II
DIRECT INFRINGEMENT OF THE '325 PATENT

81. Plaintiff incorporates and realleges paragraphs 1-80 herein by reference.

82. This cause of action arises under the patent laws of the United States, and in particular, 35 U.S.C. § 271(a).

83. The Barbaro '325 Patent is valid and enforceable under United States Patent Laws.

84. Defendant is directly infringing the Barbaro '325 Patent either literally or under the doctrine of equivalents. Defendant is thus liable for direct infringement of the Barbaro '325 Patent pursuant to 35 U.S.C. § 271(a).

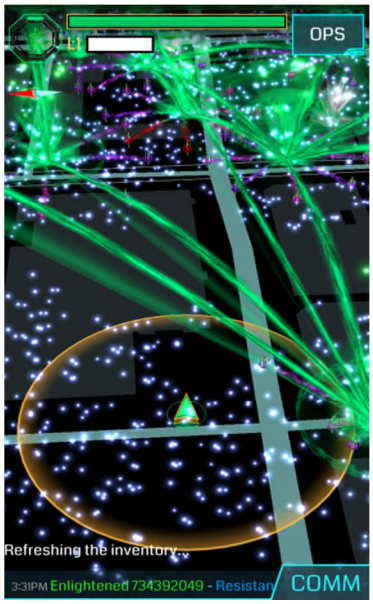
85. In particular, Defendant, without authority, has at least made, used and continues to make and use a computer system for providing a virtual thematic environment that meets each and every limitation of at least Claims 1-3, and 5 of the Barbaro '325 Patent, either literally or under the Doctrine of Equivalents, in this Judicial District and elsewhere in the United States.

86. As an example of one claim infringed by Defendant's actions, Claim 1 of the Barbaro '325 Patent recites:

> A computer system for providing a virtual thematic environment, comprising: at least one memory having at least one program comprising the steps of: retrieving information for utilization with a three-dimensional virtual thematic environment, from external sources over the internet, said information including a real-world geographic location of a user within said three-dimensional virtual thematic environment; and integrating said information into the three-dimensional virtual thematic environment, such that the three-dimensional virtual thematic environment includes said real-world geographic location displayed to the user as said three-dimensional virtual thematic environment; wherein the user interacts with the three-dimensional virtual thematic environment as a simulated real-world interaction, depending on the user's geographical three-dimensional movement through the three-dimensional virtual thematic environment; and at least one processor for running the program.

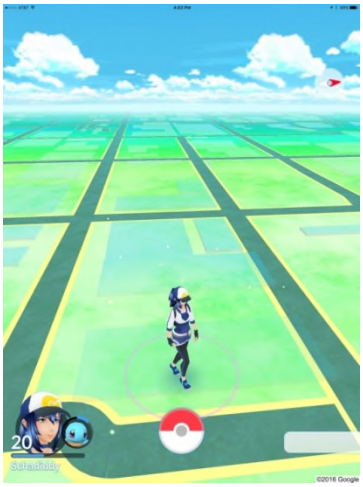
87. Defendant, without authority, directly infringes at least Claim 1 of the Barbaro '325 Patent. Defendant made and uses a network of specially configured servers and applications, such as Ingress and Pokémon Go, which it distributed and continues to distribute to end users such that memory and processors operably associated with Defendant's specially configured servers in combination with Defendant's applications running on smart devices provide each and every element of the computer system claimed in at least Claim 1 of the Barbaro '325 Patent. In so doing, Defendant made and used a computer system that includes memory containing a computer program that retrieves information

for utilization with a three-dimensional virtual thematic environment, from external sources over the internet, including the real-world geographic location of a user and integrating the information into the three-dimensional virtual thematic environment such that the three-dimensional virtual thematic environment includes the real-world geographic location displayed to the user such that the user interacts with the three-dimensional virtual thematic environment as a simulated real-world interaction dependent upon the user's geographical three-dimensional movement through the virtual thematic environment.



88. The image above illustrates the three-dimensional virtual thematic environment produced by Defendant's Ingress Application. In particular, the raised green triangle appearing in the above image reflects the real-time, real-world geographic location of a user within the three-dimensional virtual thematic environment. The green "spikes" in the above image represent portals within the

virtual thematic environment that the user can walk towards within the three-dimensional virtual thematic environment to collect. The white lights in the above image represent exotic matter (XM) which the user can also collect at their real locations. As the user walks towards the real locations of the portals or XM, the user's location on the three-dimensional virtual thematic environment changes depending upon the user's geographical three-dimensional movement through the virtual thematic environment, and the user is able to simulate real world interactions. The system receives information for utilization with the three dimensional virtual thematic environment from external sources over the internet, including the real-world location of the user and integrates that information into the virtual thematic environment to achieve the operations discussed in the foregoing sentences of this paragraph.



89. The image above illustrates the graphical user interface of the three-dimensional virtual thematic environment produced by Defendant's Pokémon Go

Application. In particular, the avatar appearing in the above image reflects the real-time, real-world geographic location of a user with the three-dimensional virtual thematic environment. The street map grid (x,y) axis in the image above reflects the area around the user. As the user "walks towards" a Pokémon in the virtual thematic environment to capture the Pokémon, the user visits PokeStops, PokeGyms, or causes other simulated interactions with the three-dimensional virtual thematic environment, the user's location within the three-dimensional virtual thematic environment changes with the user's current geographical location and thus the system simulates real world interaction between the user and the three-dimensional virtual thematic environment.

90. Upon information and belief, and as will be shown after a reasonable opportunity for discovery, Defendant was aware of the Barbaro '325 Patent. Specifically, the Plaintiff sent notice of the patent publication of the Barbaro '377 Patent, with a copy of the patent publication that led to the issuance of the Barbaro '377 Patent to Google, Inc.'s Deputy General Counsel on October 26, 2006. Google, Inc. responded to that notice on November 29, 2006, with an acknowledgement of Plaintiff's letter but refused to discuss the matter before the patent issued. The disclosure of the Barbaro '325 Patent was contained in the patent application. Following the issuance of the Barbaro '325 Patent, Plaintiff caused to be sent notice of the Barbaro '325 Patent to Google.

91. As the predecessor to Defendant Niantic, Inc. was still part of Google, Inc. at the time of the foregoing notices, Barbaro Technologies believes that Defendant had constructive as well as actual knowledge that its acts would constitute infringement of the Barbaro '325 Patent and yet, elected to pursue the actions described herein in wanton and willful disregard of the Plaintiff's exclusive rights.

92. Moreover, this Complaint will serve as notice to Defendant of the '325 Patent and Defendant's direct infringement thereof, should Defendant contend it did not previously have knowledge thereof.

93. Additional allegations regarding Defendant's knowledge of the '325 Patent and willful infringement will likely have evidentiary support after a reasonable opportunity for discovery.

94. Plaintiff has been substantially and irreparably harmed by Defendant's infringing conduct and will continue to be irreparably damaged as a result of such injurious conduct. Defendant's actions complained of herein will continue unless Defendant is enjoined by this Court. Thus, Plaintiff is entitled to an injunction prohibiting Defendant from continuing its infringing acts.

95. Defendant is liable to Plaintiff in an amount that adequately compensates Plaintiff for the Defendant's infringement of the Barbaro '325 Patent, which, by law, cannot be less than reasonable royalty, together with

interest and costs as fixed by this Court under 35 U.S.C. § 284.

96. As a result of Defendant's intentional and willful infringement of the Barbaro '325 Patent, Plaintiff is further entitled to an award of attorneys' fees and up to treble damages from Defendant under 35 U.S.C. § 285.

INDUCEMENT TO INFRINGE BARBARO '377 PATENT

97. Plaintiff incorporates and realleges paragraphs 1 through 96 herein by reference.

98. If it is determined that Defendant has not directly infringed any of the asserted claims of the Barbaro '377 Patent, Defendant is infringing those claims of the Barbaro '377 Patent under 35 U.S.C. § 271(b) in this Judicial District and elsewhere in the United States, by actively inducing the end users of the Defendant's applications, such as the Ingress and Pokémon Go Applications, to directly infringe the claims of the Barbaro '377 Patent.

99. As will be shown after a reasonable opportunity for discovery, Defendant, at all times relevant hereto, was aware of the Barbaro '377 Patent and yet, with knowledge that its action would cause end users to infringe the '377 Patent or by deliberately avoiding the opportunity to learn about such infringement, induced end users to infringe the Barbaro '377 Patent by using Defendant's applications in association with Defendant's specially configured servers.

100. Moreover, this Complaint will serve as notice to Defendant of the '377 Patent and infringement thereof, should Defendant contend it did not previously have knowledge of such infringement.

101. Additional allegations regarding Defendant's knowledge of the '377 Patent will likely have evidentiary support after a reasonable opportunity for discovery.

102. Thus, Defendant has knowingly and actively assisted in direct infringement of the Barbaro '377 Patent.

103. With full knowledge of the Barbaro '377 Patent, Defendant intentionally encourages and aids others to use Defendant's applications, such as its Pokémon Go and Ingress Applications, in association with Defendant's specially configured servers to provide each and every element of the client-server computer system claimed in at least Claim 15 of the Barbaro '377 Patent and in so doing Defendant provides end users with the ability to enter a virtual world based on the user's current real-world location by integrating at least location information into a virtual thematic environment.

104. Also, with full knowledge of the Barbaro '377 Patent, Defendant intentionally encourages and aids others to use Defendant's Applications, such as its Pokémon Go and Ingress Applications in association with Defendant's specially configured servers to provide each and every element of the client-

server computer system claimed in at least Claim 15 of the Barbaro '377 Patent and in so doing Defendant provides end users with the ability to enter a virtual world based on the user's current real-world location by integrating at least location information into a virtual thematic environment.

105. Specifically, Defendant provides instructions and information regarding its applications, including how to use its Ingress Application (e.g. https://support.ingress.com/hc/en-us) and its Pokémon Go Application (e.g. https://support.pokemongo.nianticlabs.com/hc/en-us) to enable end users to use the applications in association with Defendant's computer system in a directly infringing manner.

106. The end users of the Ingress and Pokémon Go Applications directly infringe by using the method and/or computer system claimed in the Barbaro '377 Patent in their intended manners.

107. Plaintiff has been substantially and irreparably harmed by Defendant's infringing conduct and will continue to be irreparably damaged as a result of the induced infringing activities. Defendant's actions complained of herein will continue unless Defendant is enjoined by this court. Thus, Plaintiff is entitled to an injunction prohibiting Defendant from continuing its infringing acts.

108. Defendant is, therefore, liable to Plaintiff in an amount that adequately compensates for the Defendant's induced infringement of the Barbaro

'377 Patent, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

109. As a result of the Defendants' intentional and willful infringement of the '377 Patent, Plaintiff is further entitled to an award of attorneys' fees and up to treble damages from Defendant under 35 U.S.C. § 285.

INDUCEMENT TO INFRINGE BARBARO '325 PATENT

110. Plaintiff incorporates and realleges paragraphs 1 through 109 herein by reference.

111. If it is determined that Defendant has not directly infringed any of the asserted claims of the Barbaro '325 Patent, Defendant is infringing those claims of the Barbaro '377 Patent under 35 U.S.C. § 271(b), in this Judicial District and elsewhere in the United States, by actively inducing the end users of Defendant's applications, such as the Ingress and Pokémon Go Applications, to directly infringe the asserted claims of the Barbaro '325 Patent.

112. As will be shown after a reasonable opportunity for discovery, Defendant was aware of the Barbaro '325 Patent and yet, with knowledge that its action would cause end users to infringe the Barbaro '325 Patent or by deliberately avoiding the opportunity to learn about such infringement, induced end users to infringe the Barbaro '325 Patent by using Defendant's applications in association with Defendant's specially configured servers.

113. Moreover, this Complaint will serve as notice to Defendant of the '325 Patent and its infringement thereof, should Defendant contend it did not previously have knowledge of such infringement.

114. Additional allegations regarding Defendant's knowledge of the '325 Patent will likely have evidentiary support after a reasonable opportunity for discovery.

115. Thus, Defendant knowingly and actively assisted in direct infringement of the Barbaro '325 Patent.

116. With full knowledge of the Barbaro '325 Patent, Defendant intentionally encourages and aids others to use the Defendant's applications, such as its Pokémon Go and Ingress Applications in association with Defendant's specially configured servers to provide each and every element of the computer system of at least Claim 1 of the Barbaro '325 Patent and in so doing Defendant provides end users with a computer system that includes memory containing a computer program that retrieves information for utilization with a three-dimensional virtual thematic environment, from external sources over the internet, including the real-world geographic location of a user and integrating the information into the three-dimensional virtual thematic environment such that the three-dimensional virtual thematic environment includes the real-world geographic location displayed to the user such that the user interacts with the

three-dimensional virtual thematic environment as a simulated real-world interaction dependent upon the user's geographical three-dimensional movement through the virtual thematic environment.

117. Specifically, Defendant provides instructions and information on its applications, including how to use its Ingress Application (e.g. https://support.ingress.com/hc/en-us) and its Pokémon Go Application (e.g. https://support.pokemongo.nianticlabs.com/hc/en-us) to enable end users to use Defendant's applications in association with Defendant's specially constructed servers in a directly infringing manner.

118. The end users of the Ingress and Pokémon Go applications directly infringe by using the computer system claimed in the Barbaro '325 Patent in its intended manner.

119. Plaintiff has been substantially and irreparably harmed by Defendant's infringing conduct and will continue to be irreparably damaged as a result of the induced infringing activities. Defendant's actions complained of herein will continue unless Defendant is enjoined by this court. Thus, Plaintiff is entitled to an injunction prohibiting Defendant from continuing its infringing acts.

120. Defendant is, therefore, liable to Plaintiff in an amount that adequately compensates for the Defendant's induced infringement of the Barbaro '325 Patent, which, by law, cannot be less than a reasonable royalty, together with

interest and costs as fixed by this Court under 35 U.S.C. § 284.

121. As a result of the Defendants' intentional and willful infringement of the '325 Patent, Plaintiff is further entitled to an award of attorneys' fees and up to treble damages from Defendant under 35 U.S.C. § 285.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter:

A. a judgment and decree that the Barbaro '377 Patent and the Barbaro '325 Patent are each valid and enforceable;

B. a judgment in favor of Plaintiff that Defendant infringed and continues to infringe one or more claims of each of the Barbaro '377 Patent and the Barbaro '325 Patent under 35 U.S.C. §§ 271(a) and/or 271(b);

C. a judgment and order requiring Defendant to pay to Plaintiff damages, costs, expenses, and prejudgment and post-judgment interest for Defendant's infringement of the Barbaro '377 Patent and the Barbaro '325 Patent, and increasing such damages as provided under 35 U.S.C. § 284 because of the willful and intentional nature of Defendant's conduct, and an accounting of ongoing post-judgment infringement;

D. a permanent injunction enjoining Defendant and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in active concert therewith from continued acts of

infringement, inducing the infringement of, or contributing to the infringement of the Barbaro '377 Patent and the Barbaro '325 Patent, or such other equitable relief the Court determines is warranted;

E. a judgement finding that this is an exceptional case and awarding attorneys' fees pursuant to 35 U.S.C. § 285; and

F. any and all other relief, at law or equity, to which Plaintiff may show itself to be entitled.

DEMAND FOR A JURY TRIAL

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

DATED: January 30, 2018.

Respectfully submitted,

/s/ Samuel R. Watkins

Samuel R. Watkins (SBN 272162)
THOMPSON COBURN LLP
swatkins@thompsoncoburn.com
2029 Century Park East, Suite 1900
Los Angeles, California 90067
Telephone: (310)282-9451

-and-

Jordan A. Sigale, Illinois ARDC No. 6210047
(*pro hac vice* pending)
E-mail: jsigale@dunlapcodding.com
Julie Langdon, Illinois ARDC No. 6291722
(*pro hac vice* pending)
E-mail: jlangdon@dunlapcodding.com
DUNLAP CODDING PC
225 West Washington St., Ste. 2200
Chicago, IL 60606
Telephone: (312) 651-6744
Facsimile: (312) 546-6284

-and-

Douglas J. Sorocco, Okla. Bar No. 17347; Illinois ARDC No. 2381747 (*pro hac vice pending)*
E-mail: dsorocco@dunlapcodding.com
Evan W. Talley; Okla. Bar No. 22923 (*pro hac vice pending)*
E-mail: etalley@dunlapcodding.com
DUNLAP CODDING PC
609 West Sheridan Avenue
Oklahoma City, OK 73102
Telephone: (405) 607-8600
Facsimile: (405) 607-8686
ATTORNEYS FOR PLAINTIFF BARBARO TECHNOLOGIES, LLC.