

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

VIRTUAL IMMERSION  
TECHNOLOGIES LLC,

Plaintiff,

v.

CATERPILLAR INC.,

Defendant.

Civil Action No. \_\_\_\_\_

**JURY TRIAL DEMANDED**

**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Virtual Immersion Technologies LLC (“VIT” or “Plaintiff”), for its Complaint against Defendant Caterpillar Inc., (“Caterpillar” or “Defendant”) alleges the following:

**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 is a Limited Liability Company organized under the laws of the State of Texas.

3. Upon information and belief, Caterpillar is a corporation organized and existing under the laws of Delaware, with a place of business at 100 NE Adams Street, Peoria, IL 61629, and can be served through its registered agent The Corporation Trust Company, Corporation Trust Center, 1209 Orange St. Wilmington, DE 19801. Upon information and belief, Caterpillar sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services into the stream of commerce that incorporate

infringing technology knowing that they would be sold in this judicial district and elsewhere in the United States.

### **JURISDICTION AND VENUE**

4. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.

5. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

6. Venue is proper in this judicial district under 28 U.S.C. § 1400(b). On information and belief, Defendant is incorporated in the State of Delaware.

7. On information and belief, Defendant is subject to this Court's general and specific personal jurisdiction because Defendant has sufficient minimum contacts within the State of Delaware and this District, pursuant to due process and/or the Delaware Long Arm Statute because Defendant purposefully availed itself of the privileges of conducting business in the State of Delaware and in this District, because 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 Defendant's business contacts and other activities in the State of Delaware and this District. Further, this Court has personal jurisdiction over Defendant because it is incorporated in Delaware and has purposely availed itself of the privileges and benefits of the laws of the State of Delaware.

### **COUNT I – INFRINGEMENT OF U.S. PATENT NO. 6,409,599**

8. The allegations set forth in the foregoing paragraphs 1 through 7 are incorporated into this First Claim for Relief.

9. On June 25, 2002, U.S. Patent No. 6,409,599 ("the '599 patent"), entitled "Interactive Virtual Reality Performance Theater Entertainment System," was duly and legally

issued by the United States Patent and Trademark Office. A true and correct copy of the '599 patent is attached as Exhibit 1.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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.

15. The claims of the '599 patent do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claims of the '599 patent recite one or more inventive concepts that are rooted in computerized virtual reality technology, and overcome problems specifically arising in the realm of computerized virtual reality technologies.

16. 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.

17. 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.

18. 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.

19. Plaintiff is the assignee and owner of the right, title and interest in and to the '599 patent, including the right to assert all causes of action arising under said patents and the right to any remedies for infringement of them.

20. Upon information and belief, Defendant has and continues to indirectly infringe at least claims 1, 2, 8, and 9 of the '599 patent by making, using, selling, importing and/or

providing and causing to be used an interactive, real time, virtual reality system (the “Accused Instrumentalities”).

21. 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 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.

22. Use of the Accused Instrumentalities by Defendant’s partners, customers, and/or end users infringes claim 1 of the ’599 patent through a combination of features which collectively practice each limitation of claim 1. (*See, e.g.*, <http://www.caterpillar.com/en/news/caterpillarNews/innovation/a-whole-new-reality.html>; <http://www.equipmentworld.com/tag/caterpillar-vr/>; <https://www.youtube.com/watch?v=CZ7b49NqWy4>; <https://www.iot-now.com/2016/06/11/48399-cat-shows-how-ptcs-augmented-and-virtual-reality-technology-impacts-on-industrial-iot/>; <http://www.forconstructionpros.com/construction-technology/article/12280821/caterpillar-shows-how-virtual-reality-is-improving-job-site>; <http://xmreality.com/hardware/>; <http://xmreality.com/main-functionalities/>; <http://xmreality.com/user-setups/>; <http://www.prnewswire.com/news-releases/scope-ar-and-caterpillar-deliver-first-augmented-reality-based-remote-support-platform-for-heavy-industry->

300359664.html; <http://www.scopear.com/products/remote-ar/>;  
<https://www.youtube.com/watch?v=S8jMgBimuxg>;  
<https://www.youtube.com/watch?v=VGtCQWROytw>;  
<https://www.youtube.com/watch?v=e8AirvNicNs>; <http://3dvrcentral.com/2017/02/18/caterpillar-augmented-reality-inspection-demo/>; <http://www.enr.com/articles/37988-caterpillars-tech-manager-john-carpenter-talks-virtual-reality>;  
<https://www.youtube.com/watch?v=0DaDEIci1Aw>; <https://blog.orbcomm.com/from-caterpie-to-caterpillar-iot-raises-augmented-virtual-reality-beyond-childs-play/>.)

23. 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.

24. Use of the Accused Instrumentalities by Defendant's partners, customers, and/or end users infringes claim 2 of the '599 patent through a combination of features which collectively practice each limitation of claim 2. (*See, e.g.*,  
<http://www.caterpillar.com/en/news/caterpillarNews/innovation/a-whole-new-reality.html>;  
<http://www.equipmentworld.com/tag/caterpillar-vr/>;  
<https://www.youtube.com/watch?v=CZ7b49NqWy4>; <https://www.iot-now.com/2016/06/11/48399-cat-shows-how-ptcs-augmented-and-virtual-reality-technology-impacts-on-industrial-iot/>; <http://www.forconstructionpros.com/construction-technology/article/12280821/caterpillar-shows-how-virtual-reality-is-improving-job-site>;  
<http://xmreality.com/hardware/>; <http://xmreality.com/main-functionalities/>;

<http://xmreality.com/user-setups/>; <http://www.prnewswire.com/news-releases/scope-ar-and-caterpillar-deliver-first-augmented-reality-based-remote-support-platform-for-heavy-industry-300359664.html>; <http://www.scopear.com/products/remote-ar/>;  
<https://www.youtube.com/watch?v=S8jMgBimuxg>;  
<https://www.youtube.com/watch?v=VGtCQWROytw>;  
<https://www.youtube.com/watch?v=e8AirvNicNs>; <http://3dvrcentral.com/2017/02/18/caterpillar-augmented-reality-inspection-demo/>; <http://www.enr.com/articles/37988-caterpillars-tech-manager-john-carpenter-talks-virtual-reality>;  
<https://www.youtube.com/watch?v=0DaDEIci1Aw>; <https://blog.orbcomm.com/from-caterpie-to-caterpillar-iot-raises-augmented-virtual-reality-beyond-childs-play/>.)

25. 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.

26. Use of the Accused Instrumentalities by Defendant's partners, customers, and/or end users infringes claim 8 of the '599 patent through a combination of features which

collectively practice each limitation of claim 8. (*See, e.g.*,  
<http://www.caterpillar.com/en/news/caterpillarNews/innovation/a-whole-new-reality.html>;  
<http://www.equipmentworld.com/tag/caterpillar-vr/>;  
<https://www.youtube.com/watch?v=CZ7b49NqWy4>; <https://www.iot-now.com/2016/06/11/48399-cat-shows-how-ptcs-augmented-and-virtual-reality-technology-impacts-on-industrial-iot/>; <http://www.forconstructionpros.com/construction-technology/article/12280821/caterpillar-shows-how-virtual-reality-is-improving-job-site>;  
<http://xmreality.com/hardware/>; <http://xmreality.com/main-functionalities/>;  
<http://xmreality.com/user-setups/>; <http://www.prnewswire.com/news-releases/scope-ar-and-caterpillar-deliver-first-augmented-reality-based-remote-support-platform-for-heavy-industry-300359664.html>; <http://www.scopear.com/products/remote-ar/>;  
<https://www.youtube.com/watch?v=S8jMgBimuxg>;  
<https://www.youtube.com/watch?v=VGtCQWROytw>;  
<https://www.youtube.com/watch?v=e8AirvNicNs>; <http://3dvrcentral.com/2017/02/18/caterpillar-augmented-reality-inspection-demo/>; <http://www.enr.com/articles/37988-caterpillars-tech-manager-john-carpenter-talks-virtual-reality>;  
<https://www.youtube.com/watch?v=0DaDEIci1Aw>; <https://blog.orbcomm.com/from-caterpie-to-caterpillar-iot-raises-augmented-virtual-reality-beyond-childs-play/>.)

27. 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.

28. Use of the Accused Instrumentalities by Defendant's partners, customers, and/or end users infringes claim 9 of the '599 patent through a combination of features which collectively practice each limitation of claim 9. (*See, e.g.,*

<http://www.caterpillar.com/en/news/caterpillarNews/innovation/a-whole-new-reality.html>;

<http://www.equipmentworld.com/tag/caterpillar-vr/>;

<https://www.youtube.com/watch?v=CZ7b49NqWy4>; <https://www.iot->

[now.com/2016/06/11/48399-cat-shows-how-ptcs-augmented-and-virtual-reality-technology-](http://www.now.com/2016/06/11/48399-cat-shows-how-ptcs-augmented-and-virtual-reality-technology-impacts-on-industrial-iot/)

[impacts-on-industrial-iot/](http://www.forconstructionpros.com/construction-); [\[technology/article/12280821/caterpillar-shows-how-virtual-reality-is-improving-job-site\]\(http://www.technology/article/12280821/caterpillar-shows-how-virtual-reality-is-improving-job-site\);](http://www.forconstructionpros.com/construction-</a></p></div><div data-bbox=)

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[300359664.html](http://www.scopear.com/products/remote-ar/); <http://www.scopear.com/products/remote-ar/>;

<https://www.youtube.com/watch?v=S8jMgBimuxg>;

<https://www.youtube.com/watch?v=VGtCQWROytw>;

<https://www.youtube.com/watch?v=e8AirvNicNs>; [http://3dvrcentral.com/2017/02/18/caterpillar-](http://3dvrcentral.com/2017/02/18/caterpillar-augmented-reality-inspection-demo/)

[augmented-reality-inspection-demo/](http://www.augmented-reality-inspection-demo/); [http://www.enr.com/articles/37988-caterpillars-tech-](http://www.enr.com/articles/37988-caterpillars-tech-manager-john-carpenter-talks-virtual-reality)

[manager-john-carpenter-talks-virtual-reality](http://www.manager-john-carpenter-talks-virtual-reality);

<https://www.youtube.com/watch?v=0DaDEIci1Aw>; <https://blog.orbcomm.com/from-caterpie-to-caterpillar-iot-raises-augmented-virtual-reality-beyond-childs-play/>.)

29. On information and belief, these Accused Instrumentalities are used marketed, provided to, and/or used by or for each of Defendant's partners, clients, customers and end users across the country and in this District.

30. Defendant was made aware of the '599 patent and its infringement thereof at least as early the filing of this Complaint.

31. Upon information and belief, since at least the time Defendant received notice, Defendant has induced and continues to induce others to infringe at least one claim 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 of Defendant's partners, clients, customers, and end users, whose use of the Accused Instrumentalities constitutes direct infringement of at least one claim of the '59 patent.

32. In particular, Defendant's 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. On information and belief, Defendant has engaged in such actions with specific intent to cause infringement or with willful blindness to the resulting infringement because 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 Defendant received notice that such activities infringed the '599 patent.

33. Upon information and belief, Defendant is liable as a contributory infringer of the '599 patent under 35 U.S.C. § 271(c) by offering to sell, selling and importing into the United

States computerized trading platforms to be especially made or adapted for use in an infringement of the '599 patent. The Accused Instrumentalities are a material component for use in practicing the '599 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.

34. Since the filing of the Complaint, Defendant's infringement has been willful.

35. Plaintiff has been harmed by Defendant's infringing activities.

### **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 Defendant as follows:

- A. An adjudication that Defendant has infringed the '599 patent;
- B. An award of damages to be paid by Defendant adequate to compensate Plaintiff for 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: October 31, 2017

DEVLIN LAW FIRM LLC

*/s/ Timothy Devlin*

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