

In the *Inter Partes* Review of:

U.S. Patent No. 9,561,439

For: GAME CONTROL METHOD,  
GAME CONTROL DEVICE, AND  
RECORDING MEDIUM

**DECLARATION OF EMMET J. WHITEHEAD, JR., Ph.D.  
IN SUPPORT OF PETITION FOR *INTER PARTES*  
REVIEW OF U.S. PATENT NO. 9,561,439**

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I, Emmet J. Whitehead, Jr., Ph.D., declare as follows:

## **I. INTRODUCTION**

1. I have been asked by the party requesting this review, Supercell Oy (“Petitioner”), to provide my expert opinions in support of the above-captioned petition for *inter partes* review of U.S. Patent No. 9,561,439 (the “‘439 patent” or the “challenged patent”), challenging the patentability of claims 1-7 of the ‘439 patent.

2. I currently hold the opinions set forth in this declaration.

3. In summary, it is my opinion that the references cited below render obvious the challenged claims of the ‘439 patent. My detailed opinions on the claims are set forth below.

## **II. BACKGROUND AND QUALIFICATIONS**

4. I earned a Bachelor of Science degree from Rensselaer Polytechnic Institute in 1989, and both a Master of Science in 1994 and Ph.D. in 2000 in Information and Computer Science from the University of California, Irvine.

5. I am currently a Professor in the Computational Media Department at the University of California, Santa Cruz (“UCSC”) in Santa Cruz, California. I am also the Associate Dean for Undergraduate Affairs for the Baskin School of Engineering at UCSC. I was the Chair of the Computational Media Department at UCSC from 2017-2019, and I was the Chair of the Computer Science Department at UCSC from 2010 to 2014. I have been a Full Professor at UCSC since 2011. I

began working as an Assistant Professor at UCSC in 2000 and became an Associate Professor in 2006.

6. My Ph.D. research included being the Founder and Chair of the Internet Engineering Task Force (IETF) Working Group on Web Distributed Authoring and Versioning (WEBDAV). WEBDAV is an extension to the core network protocol of the World Wide Web, the HyperText Transfer Protocol (HTTP) to support remote authoring and version control. WEBDAV is a client-server network protocol. The IETF is a leading standards development organization for Internet protocols.

7. In 2005-2006, I led efforts at UCSC to create the BS Computer Science: Computer Game Design degree, the first game design and development degree program in the University of California system. My classes have covered the areas of Computer Games, Web Engineering, and Software Engineering. Specific classes have covered topics of computer game design, programming and projects, procedural content generation for games, construction of database-backed web applications, and Internet protocol design, at both the undergraduate and graduate level. For thirteen years I have taught senior undergraduate game design students working on year-long game projects, and in this role, I have overseen the creation of over 120 computer games. I have also supervised both masters and doctoral students in the pursuit of their thesis work. Focuses of my research have included design of serious games and social network games, procedural content generation for games,

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