

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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SONY CORPORATION  
Petitioner

v.

STRAIGHT PATH IP GROUP, INC.  
(FORMERLY KNOWN AS INNOVATIVE COMMUNICATIONS  
TECHNOLOGIES, INC.)  
Patent Owner

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*INTER PARTES* REVIEW OF U.S. PATENT NO. 6,108,704  
Case IPR No.: *To Be Assigned*

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**DECLARATION OF MARK E. CROVELLA, PH.D.**

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I, Mark E. Crovella, Ph.D., declare:

1. I have been retained by Wolf, Greenfield & Sacks, P.C., counsel for Petitioner Sony Corporation (“Sony”), to submit this declaration in connection with Sony’s Petition for *Inter Partes* Review of Claims 1, 11-12, 19, 22-23, and 30 of U.S. Patent No. 6,108,704 (“the ‘704 patent”). I am being compensated for my time at a rate of \$450 per hour, plus actual expenses. My compensation is not dependent in any way upon the outcome of Sony’s Petition.

**I. PERSONAL AND PROFESSIONAL BACKGROUND**

2. I am Professor and Chair of the Department of Computer Science at Boston University. I received an undergraduate degree in Biology from Cornell University in 1982. I received a master’s degree in Computer Science from the University of Buffalo in 1989. I received a Ph.D. in Computer Science from the University of Rochester in 1994. The subject of my Ph.D. thesis was “Performance Prediction and Tuning of Parallel Programs.”

3. From 1982 to 1984 I worked as a computer programmer for the State of Colorado. From 1984 to 1994 I was employed at Calspan Corporation, a research and development firm in Buffalo, NY, where I rose to the level of Senior Computer Scientist. My work at Calspan focused on development of experimental software and large-scale simulation software in support of contracts between Calspan and the U.S. Department of Defense.

4. In 1994, I joined the faculty of Boston University as an Assistant Professor of Computer Science. I was promoted to the rank of Associate Professor in 2000 and became a full Professor in 2006. Since 2013, I have served as Chair of the Department of Computer Science.

5. I have been pursuing research in the area of computer networking since 1994. I have conducted research in a variety of areas related to the Internet and the World Wide Web. Among other areas, I have studied the efficient design of Web servers and content distribution systems; I have studied the statistical properties of Internet traffic; and I have made extensive measurements of Internet and corporate intranet infrastructure and the behavior of Internet and other network protocols. From 2007 to 2009 I was the Chair of ACM SIGCOMM (the Special Interest Group in Computer Communication), the main professional organization for scientists in the field of computer networking.

6. I am co-author of *Internet Measurement: Infrastructure, Traffic, and Applications* (Wiley Press, 2006), and I am the author of over one hundred research papers on computer networks. I hold eight patents derived from my Internet-related research. I am an editor or past editor of the principal journals in the field of networking: *Computer Communication Review*, *IEEE/ACM Transactions on Networking*, *Computer Networks*, and *IEEE Transactions on Computers*.

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