

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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UNIFIED PATENTS, LLC,  
Petitioner,

v.

INTERDIGITAL VC HOLDINGS, INC.,  
Patent Owner.

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Case No. IPR2021-00102  
U.S. Patent No. 8,363,724

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**DECLARATION OF ROBERT LOUIS STEVENSON, PH.D. REGARDING  
PATENT OWNER PRELIMINARY RESPONSE FOR *INTER PARTES*  
*REVIEW* OF U.S. PATENT NO. 8,363,724**

Interdigital Exhibit 2001  
Unified Patents v. Interdigital

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I, Dr. Robert Louis Stevenson, hereby declare as follows:

## **I. Introduction**

1. My name is Robert Louis Stevenson. I have been retained in the above-referenced *inter partes* review proceeding by InterDigital VC Holdings, Inc., to evaluate United States Patent No. 8,363,724 (the “’724 patent”) against certain references that are presented by the Petitioner. As detailed in this report, it is my opinion that the Petition does not establish that of the challenged claims are anticipated or rendered obvious by the references presented by the Petitioner. If requested by the Patent Trial and Appeal Board, I am prepared to testify at trial about my opinions expressed herein.

## **II. Qualifications**

2. I have over thirty-five years of experience in the field of electrical engineering, spanning a variety of positions in academia and industry. For the past thirty years I have held a faculty position in the Department of Electrical Engineering at the University of Notre Dame. I am presently the Associate Chair of the department. In my work and research, I have researched and written about video coding, multimedia compression, video enhancement, and other topics in video and image processing.

3. I studied electrical engineering at the University of Delaware and Purdue University. I received my B.S.E.E. in 1986, and my Ph.D. in 1990. In 1990

I joined the faculty of the University of Notre Dame. From 1990 to present I held a number of positions there, beginning as an Assistant Professor and then being promoted to Associate Professor, Professor and ultimately Associate Chair of the Department. During this time I also held a Professorship in the Department of Computer Science and Engineering.

4. I have authored or co-authored dozens of publications in the areas of multimedia coding and compression, multimedia communications, and video and image processing including articles in technical journals and referenced conference presentations. My publications and patents are listed on my curriculum vitae, which is attached hereto as EX2004.

5. As a result of my background in multimedia coding and compression, I have extensive knowledge regarding the state of the technical art in this area at the time of the filing of the '724 patent. I wrote many papers on video and image coding and multimedia systems.

6. One of my papers was cited and relied upon by Petitioner and its declarant LeGall. (Pet., 7-9; EX1005, 26-28) Specifically, I am a co-author of Ex. 1008, an article titled "Error Resilient Video Coding Using Virtual Reference Picture" which was published in the Proceedings of the SPIE/IS&T Conference on Image and Video Communications and Processing 2005, San Jose, CA, at pp. 896–903.

### III. Materials Considered

7. In preparing this declaration, I have reviewed the specification and claims of U.S. Patent No. 8,363,724 (“’724 patent” (EX1001)) and the file history of the ’724 patent (EX1013). I understand that the ’724 patent was issued on January 29, 2013 from U.S. Patent Application No. 12/309,066, which is a national stage application of International Application No. PCT/US2007/015719, which claims priority to U.S. Provisional Application No. 60/830,195, which was filed on July 11, 2006. (EX1001).

8. I have also reviewed the Petition, declaration of Didier J. LeGall (EX1005), and all publications and exhibits cited in the Petition and declaration of Didier J. LeGall including:

- US. Patent Application Publication No. 2006/0146138 (“Xin” (EX1003));
- Didier Legall, “MPEG: A Video Compression Standard for Multimedia Applications,” Communications of the ACM, vol. 34, no. 4, April 1991 (“LeGall” (EX1004));
- European Patent 2278816 (“Lim” (EX1006));
- U.S. Patent Application Publication No. 2002/0071485 (“Calgar” (EX1007));

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