# UNITED STATES PATENT AND TRADEMARK OFFICE

## BEFORE THE PATENT TRIAL AND APPEAL BOARD

Prime Focus Creative Services Canada Inc.,

Petitioner

v.

Legend3D, Inc.,

Patent Owner

U.S. Patent No. 7,907,793

Issued: March 15, 2011

Named Inventor: Barry Sandrew

Title: IMAGE SEQUENCE DEPTH ENHANCEMENT SYSTEM AND METHOD

CORRECTED DECLARATION OF DAVID FORSYTH, Ph.D. IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 7,907,793

IPR2016-01243

DOCKET

#### I. INTRODUCTION

 I have been asked by Prime Focus Creative Services Canada Inc.
(Petitioner) to provide my expert opinion in support of this petition for *inter partes* review (IPR) of U.S. Patent No. 7,907,793 ("the '793 Patent," Ex. 1001).

2. I am a U.S. citizen over eighteen years of age. I am fully competent to testify as to the matters addressed in this declaration. I currently hold the opinions set forth in this declaration. It is my opinion that the prior art references in the associated petition for IPR render all of the claims of the '793 Patent (*i.e.*, Claims 1 through 20) obvious. My detailed opinion is set forth below.

3. I am being compensated for my time by Petitioner at my standard rate of \$350 per hour (or \$450 per hour of testimony if deposed). If work requires travel, expenses are defrayed and I am compensated at my standard rate of \$1,000 for each 24 hours away from home, adjusted pro rata for shorter periods. This compensation is not contingent upon my performance, the outcome of this matter, or any issues involved in or related to this matter.

4. I have no personal, commercial, or financial interest in Petitioner, Patent Owner, or any other party related to this matter.

5. I have considered all of the exhibits attached to this IPR petition in forming my opinions.

6. I have been asked to assume, for my analysis, that the claims of the challenged '793 Patent have a priority date of August 17, 2009 (its filing date). To the extent that Patent Owner argues for a different priority date, I reserve the right to supplement my declaration to address those arguments.

7. I am aware of information generally available to, and relied upon by, persons of ordinary skill in the art at the relevant times, including technical dictionaries and technical reference materials (including, for example, textbooks, manuals, technical papers, articles, and relevant technical standards).

8. I understand that, due to procedural limitations for IPR proceedings, the grounds of invalidity discussed herein are based solely on prior art patents and other printed publications. I understand that Petitioner reserves all rights to assert at a later time other grounds for invalidity not addressed herein, for instance failure of the application to claim patentable subject matter under 35 U.S.C. § 101, failure to meet requirements under 35 U.S.C. § 112 (*e.g.*, lack of written description in support of the claims), and anticipation or obviousness under 35 U.S.C. § 102 and 103 not based solely on patents and printed publications (*e.g.*, evidence of prior use). Thus, the absence of discussion of such matters here should not be interpreted as indicating that there are no such additional grounds for invalidity of the '793 Patent. Similarly, absence of discussion of other printed prior art references here should not be interpreted as indicating that there are no other printed prior art references that either anticipate or render obvious the '793 Patent.

9. I reserve the right to supplement my opinions to address any information obtained, or positions taken, based on any new information that comes to light throughout this proceeding.

#### II. BACKGROUND

10. I am currently the Fulton-Watson-Copp Professor of Computer Science at the University of Illinois at Urbana-Champaign. My curriculum vitae is attached to the associated petition for IPR as Exhibit 1008. I believe that my background and expertise qualify me as an expert in the technical issues in this matter.

11. My education began in Cape Town, South Africa. I was an undergraduate at the University of the Witwatersrand, Johannesburg, and I hold a Bachelor of Science (1984) and Master of Science in Electrical Engineering from that University. I was awarded the Diocesan College Rhodes Scholarship in 1984 to attend Oxford University. I hold a Master of Arts by special election from Oxford University and a Doctorate of Philosophy in Engineering Science from Balliol College, Oxford. I was appointed Fellow by Examination of Magdalen College, Oxford in 1989. I was then appointed Assistant Professor of Computer Science at the University of Iowa in 1991; in 1994, I was promoted to Associate Professor of Computer Science, and went on leave of absence to take up an appointment as Assistant Professor of Computer Science at U.C. Berkeley. I was promoted to Associate Professor of Computer Science at U.C. Berkeley in 1996, and to Professor of Computer Science in 2002. I went on leave of absence from U.C. Berkeley to take up an appointment as Professor of Computer Science at the University of Illinois at Urbana-Champaign in 2004. I am currently the Fulton-Watson-Copp Professor of Computer Science at the University of Illinois at Urbana-Champaign.

12. I have studied Computer Vision since my final year as an undergraduate in 1984, when I engaged in an undergraduate project on the topic. My Ph.D. thesis treats a traditional problem in computer vision, known as "color constancy," and the paper that resulted from this work is still quite regularly cited. As a Fellow by Examination, I studied illumination and shading effects in vision, and geometric methods to recognize objects. I have published papers on a wide range of topics in computer vision, computer graphics, machine learning and human-computer interfaces. I have published about 160 refereed papers and 10 book chapters. I have published one textbook in two editions and four languages, and one research monograph. I have edited six volumes of collected papers. A reasonably complete list of my publications is contained in my curriculum vitae in Appendix A.

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