DECLARATION OF ROBERT STEVENSON, Ph.D.

I, Robert Stevenson, Ph.D., hereby declare that:

1.   I reside at 50631 Glenshire Ct., Granger, IN, and I am a citizen of the United States of America.

2.   My findings, as explained below, are based on my education, experience, and background in the fields discussed above. This declaration relates to U.S. Pat. No. 7,365,871 (Ex. 1001, "the '871 patent"). As detailed below, I believe the '871 patent sets forth subject matter that was well known long before the priority date of the '871 patent.

3.   I am being compensated at my normal consulting rate of $600 per hour. My compensation is not contingent upon the outcome of this proceeding.

I.   QUALIFICATIONS

4.   I have a Bachelor's degree in Electrical Engineering from the University of Delaware and a Ph.D. degree in Electrical Engineering from Purdue University. My Ph.D. research was on communications and signal processing.

5.   I am presently a Professor in the Department of Electrical Engineering and in the Department of Computer Science and Engineering at the University of Notre Dame. I first joined the faculty at the University of Notre Dame as an Assistant Professor in the Department of Electrical Engineering in 1990. I was

granted tenure and promoted to the rank of Associate Professor in August 1996. I attained the rank of Professor in the Department of Electrical Engineering in August 2002, and I continue to serve in that capacity. I have served concurrently as a Professor in the Department of Computer Science and Engineering at the University of Notre Dame since January 2003.

6.   Since 2013 I have served as an Associate Chair of the Department of Electrical Engineering. I also serve as the Director of Undergraduate Studies in Electrical Engineering. In this role I oversee the department's undergraduate program in Electrical Engineering.

7.   For the past 20 years my work has focused on the design of techniques, hardware, and software for the processing of digital signals using digital computing devices. Several leading computing companies, including Intel®, Sun Microsystems®, Apple® Computer, and Microsoft®, have supported my research at Notre Dame.

8.   As an academic researcher I attempt to develop novel ideas for systems, then publish and present those ideas to the technical community. My success as an academic is directly related to the insights and techniques that provide the basis for new generations of products. My early work on digital techniques for printing and image capture devices led to significant interaction

with companies developing desktop computers products in the early 1990's as they tried to incorporate those ideas into their products.

9.   My interaction with Apple's Imaging Group focused on various imaging devices such as digital cameras, scanners, and printers and how to best support those devices on desktop computers. At Intel, I worked in Intel's Architecture Lab at the time the MMX multimedia instructions were being incorporated into the Pentium processor. My work there dealt with developing video compression techniques for CD-ROM's and network communications that were well matched to the Pentium architecture. I also gave a series of talks on how advanced communication and video processing techniques could be better supported on the Pentium platform. Similarly, my interaction with Sun Microsystem's group examined how advanced signal processing techniques could be best implemented using Sun's new Visual Instruction Set on the Sparc architecture.

10.   I have also received significant support for my research from several U.S. Department of Defense Agencies. The Air Force Research Laboratory has funded my work to develop advanced parallel processing algorithms that exploited an ad-hoc network of mixed computers to achieve signification computational advantages over their previously implemented techniques. Other Department of Defense agencies have supported my work in image and video enhancement.

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11.   During the past 20 years, I have published over 100 technical papers related to the field of image processing and digital systems. In total, I have published over 150 papers in international journals and international conferences.

12.   I am a member of the Institute of Electronics and Electrical Engineers, The International Society for Optical Engineering, and the Society for Imaging Science and Technology. I am a member of the academic honor societies Eta Kappa Nu, Tau Beta Pi, and Phi Kappa Phi.

13.   I am an inventor of U.S. Patent No. 6,081,552, "Video Coding Using a Maximum A Posteriori Loop Filter," June 27, 2000.

14.   Additional information concerning my background, qualifications, publications, conferences, honors, and awards are described in my Curriculum Vitae, a copy of which is attached with this Report as Exhibit A.

II.   STATEMENT OF LEGAL PRINCIPLES

A.   Claim Construction

15.   I understand that in an *inter partes* review proceeding, the claims of a patent are to be given their broadest reasonable meaning as they would be understood by one of ordinary skill in the art, consistent with the specification of the patent.

B.   Anticipation

16.   I understand that if each and every element of a claim is disclosed in a single prior art reference, then the claimed invention is anticipated and not patentable under pre-AIA 35 U.S.C. § 102. In order for the invention to be anticipated, each element of the claimed invention must be described or embodied, either expressly or inherently, in a single prior art reference. I also understand that a reference inherently discloses a claim limitation when that claim limitation is necessarily present in the reference. I also understand that a prior art reference must be enabling in order to anticipate a patent claim.

C.   **Obviousness**

17.   I have been informed that a patent claim is invalid as "obvious" under pre-AIA 35 U.S.C. § 103 in light of one or more prior art references if it would have been obvious to one of ordinary skill in the art, taking into account (1) the scope and content of the prior art, (2) the differences between the prior art and the claims, (3) the level of ordinary skill in the art, and (4) any so called "secondary considerations" of non-obviousness, which include: (i) "long felt need" for the claimed invention, (ii) commercial success attributable to the claimed invention, (iii) unexpected results of the claimed invention, and (iv) "copying" of the claimed invention by others. For purposes of my analysis above, I have applied a date of January 12, 1998, as the date of invention in my obviousness analyses, although in

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