UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ASUSTEK COMPUTER, INC. and ASUS COMPUTER INTERNATIONAL, Petitioners

v.

AVAGO TECHNOLOGIES GENERAL IP (SINGAPORE) PTE. LTD., Patent Owner

Case: IPR2016-00646

U.S. Patent No. 5,870,087

PETITIONER'S EXHIBIT NO. 1003 DECLARATION OF RICHARD KRAMER UNDER 37 C.F.R. § 1.68



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- I, Richard Kramer, declare:
- 1. I am making this declaration at the request of ASUSTeK Computer, Inc. and ASUS Computer International in the matter of the *Inter Partes* Review of U.S. Patent No. 5,870,087 ("the 087 Patent") to Chau.
- **2.** I am being compensated for my work in this matter. My compensation in no way depends upon the outcome of this proceeding.
 - **3.** In the preparation of this declaration, I have studied:
 - a. The 087 Patent, Ex. 1001;
 - b. The prosecution history of the 087 Patent, Ex. 1002;
 - c. U.S. Patent No. 5,960,474 ("Lam"), Ex. 1004
 - d. U.S. Patent No. 5,898,695 ("Fujii"), Ex. 1005
 - e. U.S. Patent No. 5,847,771 ("Cloutier"), Ex. 1006
 - **4.** In forming the opinions expressed below, I have considered:
 - a. The documents listed above,
 - b. The relevant legal standards, including the standard for obviousness provided in *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007),
 - c. The relevant state of the art at the time of the invention, including Exhibits 1007-1011, and
 - d. My knowledge and experience based upon my work in this



area, as described below.

I. Qualifications and Professional Experience

- **5.** My qualifications are set forth in my curriculum vitae, a copy of which is attached as Exhibit A to this declaration. As set forth in my curriculum vitae:
- I received a Bachelor's of Science degree in Electrical Engineering 6. from the University of Toledo in 1984. I have over 30 years of experience successfully developing and launching commercially-implemented software and hardware products and systems, including 19 years in the video industry developing commercially successful products related to subscriber television systems, IP networking, cable and satellite TV systems and equipment, cable TV set-top boxes, remote controls, video networking, software, and other technologies relevant to the subject matter of the 087 Patent. The cable TV video, video surveillance and IP network video products and systems that I have developed have been successfully launched under respected brands such as General Electric and Scientific-Atlanta (now Cisco). My experience also included the development of new technologies within pioneering high-tech start-up companies like Ivex Corporation (acquired in 2001 by Axcess, Inc.), where we developed one of the first IP network Video Streaming Appliances (called the "VSA") for the video surveillance industry. I hold two patents.



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