UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.; and
SAMSUNG ELECTRONICS AMERICA, INC.
Petitioners

v.

IMAGE PROCESSING TECHNOLOGIES, LLC
Patent Owner

Patent No. 7,650,015

DECLARATION OF DR. JOHN C. HART
IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 7,650,015

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4. W. B. Schaming, *Adaptive Gate Multifeature Bayesian Statistical Tracker*, 359 Applications of Digital Image Processing IV 68 (1982) ("Schaming") (Ex. 1008) 45

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1. I, John C. Hart, declare as follows:

I. INTRODUCTION

2. I have been retained by Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (collectively, "Petitioner") as an independent expert consultant in this proceeding before the United States Patent and Trademark Office ("PTO").

3. I have been asked to consider whether certain references teach or suggest the features recited in Claim 6 of U.S. Patent No. 7,650,015 ("the '015 Patent") (Ex. 1001), which I understand is allegedly owned by Image Processing Technologies, LLC ("Patent Owner"). My opinions and the bases for my opinions are set forth below.

4. I am being compensated at my ordinary and customary consulting rate for my work.

5. My compensation is in no way contingent on the nature of my findings, the presentation of my findings in testimony, or the outcome of this or any other proceeding. I have no other interest in this proceeding.

II. BACKGROUND AND EXPERIENCE

A. Qualifications

6. I have more than 25 years of experience in computer graphics and image processing technologies. In particular, I have devoted much of my career to

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researching and designing graphics hardware and systems for a wide range of applications.

7. My research has resulted in the publication of more than 80 peer-reviewed scientific articles, and more than 50 invited papers, and talks in the area of computer graphics and image processing.

8. I have authored or co-authored several publications that are directly related to target identification and tracking in image processing systems. Some recent publications include:

- P.R. Khorrami, V.V. Le, J.C. Hart, T.S. Huang. A System for Monitoring the Engagement of Remote Online Students using Eye Gaze Estimation. Proc. IEEE ICME Workshop on Emerging Multimedia Systems and Applications, July 2014.
- V. Lu, I. Endres, M. Stroila and J.C. Hart. Accelerating Arrays of Linear Classifiers Using Approximate Range Queries. Proc. Winter Conference on Applications of Computer Vision, Mar. 2014.
- M. Kamali, E. Ofek, F. Iandola, I. Omer, J.C. Hart Linear Clutter Removal from Urban Panoramas. Proc. International Symposium on Visual Computing. Sep. 2011.

9. From 2008-2012, as a Co-PI of the $18M Intel/Microsoft Universal Parallelism Computing Research Center at the University of Illinois, I led the

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