

UNITED STATES PATENT AND TRADEMARK OFFICE

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**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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SAMSUNG ELECTRONICS CO. LTD.; SAMSUNG ELECTRONICS  
AMERICA, INC.; SAMSUNG TELECOMMUNICATIONS AMERICA, LLC;  
AND SAMSUNG AUSTIN SEMICONDUCTOR, LLC;  
Petitioner

v.

REMBRANDT WIRELESS TECHNOLOGIES, LP  
Patent Owner

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Case IPR2014-00518  
Patent 8,023,580

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**DECLARATION OF DAVID GOODMAN**

**IN SUPPORT OF  
PETITION FOR *INTER PARTES* REVIEW  
OF U.S. PATENT NO. 8,023,580**

Samsung Ex. 1220 (Samsung v. Rembrandt)
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Annex Exhibit 1124

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I, David Goodman, declare:

## **I. INTRODUCTION**

1. My name is David J. Goodman. I am currently a Professor Emeritus in the Department of Electrical and Computer Engineering of New York University (NYU).

2. I have been retained by Samsung Electronics Co. Ltd., Samsung Electronics America, Inc., Samsung Telecommunications America, LLC, and Samsung Austin Semiconductor, LLC (“Petitioners”) to provide my expert opinions regarding U.S. Patent No. 8,023,580 (“the `580 patent”). More specifically, I have been asked to give my opinion about the meanings of certain terms of the `580 Patent claims, and to compare the `580 Patent claims to prior patents and publications. I submit this declaration in support of Petitioner’s petition for inter partes review of the `580 Patent.

3. I am being compensated for my work in this matter. My compensation in no way depends upon the outcome of this proceeding.

## **II. EXPERT QUALIFICATIONS AND CREDENTIALS**

4. My qualifications are set forth in my curriculum vitae, a copy of which is attached as Appendix A to this declaration, including lists of lists of my journal publications, books I have authored or edited, and my patents.

5. I received a Bachelor’s degree at Rensselaer Polytechnic Institute in 1960, a Master’s degree at New York University in 1962, and a Ph.D. at Imperial College, University of London in 1967, all in electrical engineering.

6. From 1967 to 1988, I was at Bell Laboratories, where I eventually became head of the Radio Research Department. In 1988, I moved to Rutgers, the State University of New Jersey where I was a Professor of Electrical and Computer Engineering and Chairman of the Department of Electrical and Computer Engineering. In 1989, I founded the Wireless Information Network Laboratory (WINLAB) at Rutgers University. WINLAB was the first center of excellence at a United States university focused on wireless telecommunications. In 1991, WINLAB was designated the National Science Foundation Industry/University Cooperative Research Center for Wireless Information Networks.

7. In 1999, I joined NYU as Professor of Electrical and Computer Engineering and Head of the Department of Electrical and Computer Engineering. I was also Director of the Wireless Internet Centre for Advanced Technology (WICAT), with sites at NYU, University of Virginia, Auburn University, and Virginia Tech. WICAT was a National Science Foundation Industry/University Cooperative Research Center. In May 2008, I retired from my position of Professor of Electrical and Computer Engineering at NYU and was awarded my present title of Professor Emeritus.

8. In 1995, I was a Research Associate at the Program on Information Resources Policy at Harvard University. In 1997, I was Chairman of the National Research Council Committee studying “The Evolution of Untethered Communications.” In 2006 and 2007, I was a Program Director at the National Science Foundation. From 2011 until October 2013, I was a member of the

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