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LG ELECTRONICS, INC., LG ELECTRONICS, U.S.A., LG ELECTRONICS  
MOBILECOMM U.S.A., INC.  
Petitioners

v.

CYPRESS SEMICONDUCTOR CORP.  
Patent Owner

**DECLARATION OF DR. PHILLIP WRIGHT**  
in Support of Petition for *Inter Partes* Review  
of U.S. Patent No. 8,004,497

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I, Dr. Phillip (Phil) Wright, hereby declare as follows:

## **I. INTRODUCTION**

1. I am currently the Founder and Managing Director of WRT Associates, LLC, which provides, among other services, engineering consulting.

2. I have been retained in this matter by Rothwell, Figg, Ernst & Manbeck, P.C. (“Rothwell Figg”) to provide various opinions regarding U.S. Patent No. 8,004,497 (the “‘497 patent”). I am being compensated for my work in this matter. My compensation in no way depends upon the outcome of this proceeding.

3. I have been advised that Rothwell Figg represents LG Electronics, Inc., LG Electronics U.S.A., Inc., and LG Electronics Mobilecomm U.S.A., Inc. in this matter. I have no financial interest in any of LG Electronics, Inc., LG Electronics U.S.A., Inc., or LG Electronics Mobilecomm U.S.A., Inc.

4. I have been advised that Cypress Semiconductor Corp. owns the ‘497 patent. I have no financial interest in the ‘497 patent.

## **II. QUALIFICATIONS**

5. I received a Bachelor of Science in Engineering from Purdue University, West Lafayette, Indiana in 1972.

6. I received a Master of Science in Electrical Engineering from the University of Illinois at Urbana Champaign, Illinois in 1975.

7. I received a Doctor of Philosophy degree in Electrical Engineering from the University of Illinois at Urbana Champaign, Illinois in 1977.

8. My Ph.D. research was supervised by Prof. Nick Holonyak. My Ph.D. dissertation was entitled *Near Infrared Indium Gallium Phosphide Arsenide Heterojunction Lasers*.

9. Since completing my graduate studies, I have worked at Fortune 500 and start-up companies on semiconductor, electronic, optical, information display and optoelectronic technology development. I have contributed to several industries including communications, consumer electronics, mobile handsets, displays, engineering services and defense electronics.

10. As a manager, I have led project teams that were granted more than 50 issued U.S. patents and related foreign filings. I have contributed as an inventor to 16 issued U.S. patents.

11. From 1977 to 1979, I was an engineer at Varian Associates, a Palo Alto, CA based company that developed, manufactured and sold semiconductor devices, high vacuum material processing equipment, semiconductor processing equipment, and medical diagnostic equipment among other products. My significant projects included research on crystal growth of semiconductor materials for light emitting diodes (LEDs) and semiconductor lasers.

12. From 1979-1984, I held positions as a member of technical staff and supervisor at Bell Telephone Laboratories, a Murray Hill, NJ company that was the research arm of the Bell System and the American Telephone and Telegraph Company (AT&T). In 1984 I was a district research manager of the newly formed Bell Communications Research (Bellcore). My significant projects included research and development of laser designs and fabrication processes for high reliability semiconductor lasers used in the first transatlantic optical communication system.

13. From 1984-1987, I was a founder and manager of Lytel Incorporated, a Branchburg, NJ firm that developed, manufactured and sold optoelectronic devices and modules for optical communications systems.

14. From 1987-1990, I was a manager at Ford Microelectronics, Inc., a Colorado Springs, CO company that designed electronic engine controllers for the parent Ford Motor Company and conducted independent research and development on behalf of Ford Aerospace Corporation. My significant projects included development of integrated circuit (IC) technology with performance at frequencies up to 80 GHz and analysis of the influence of transistor design parameters on device performance resulting in improved understanding and achievement of device performance at frequencies greater than 100 GHz.

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