

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent of: Mamiko Yamaguchi *et al.*  
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Title: PHASE CORRECTION CIRCUIT FOR TRANSISTOR USING  
HIGH-FREQUENCY SIGNAL

**DECLARATION OF DR. SAYFE KIAEI**

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I, Dr. Sayfe Kiaei, of Scottsdale, AZ, declare that:

**I. ASSIGNMENT**

1. I have been retained on behalf of Apple Inc., LG Electronics, Inc., and Samsung Electronics Co., Ltd. (collectively "Petitioners") and asked to review and provide my opinion on the patentability of claims 1 and 2 of U.S. Patent No. 6,603,343 ("the '343 Patent"). I understand that Petitioners are requesting that the Patent Trial and Appeal Board ("PTAB" or "Board") institute an *inter partes* review ("IPR") proceeding of the '343 Patent.

2. I have been asked to provide my independent analysis of the '343 Patent based on the prior art publications cited in this declaration.

3. I am a professor at Arizona State University. I am being compensated for my work as an expert on an hourly basis. My compensation is not dependent on the outcome of these proceedings or the content of my opinions.

**II. QUALIFICATIONS**

4. I am over the age of 18 and am competent to write this declaration. I have personal knowledge, or have developed knowledge of these technologies based upon education, training, or experience, of the matters set forth herein.

5. A detailed description of my professional qualifications, including a listing of my specialties/expertise and professional activities, is contained in my curriculum vitae, a copy of which is provided as EX-1004. In what follows, I

provide a short summary of my professional qualifications.

6. In terms of my background and experiences that qualify me as an expert in this case, I earned a Ph.D. in 1987 from Washington State University in Electrical, Computer, and Energy Engineering.

7. Since 2001 I have held the position of Motorola Endowed Chair Professor in Analog and Radio Frequency Integrated Circuitry at the School of Electrical, Computer, and Energy Engineering at Arizona State University in Tempe, Arizona. I am also the Director of the National Science Foundation Center, Connection One. Connection One is an industry/university cooperative research center with over thirty industrial members and five university members focused on developing communication system and networking technologies.

8. I have graduated over 100 MS and PhD students working under my supervision on their thesis, and many of them are professors in academia, or have senior positions in the industry. Currently, I have 8 MS, PhD, and postdoc students working with in my lab on research related to communication and networking systems, wireless and wireline systems, RF, and integrated circuits. My research is funded by various sources, including industry, federal agencies including NSF, DARPA, ONR, DOE, and other, with an average total research funding of \$1M per year.

9. I have been involved with wireline systems, cellular systems, RF

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