

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., and APPLE INC.,  
Petitioner,

v.

SMART MOBILE TECHNOLOGIES LLC,  
Patent Owner.

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Case IPR2022-01249  
Patent 9,019,946

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**DECLARATION OF PROFESSOR TODOR V. COOKLEV, PH.D.**

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## I. INTRODUCTION

1. My name is Todor V. Cooklev. I have been retained as an expert witness to provide my independent opinion in regard to the matters at issue in *inter partes* review of U.S. Patent No. 9,019,946 (“the ’946 patent”) in IPR2022-01249. I have been retained by Smart Mobile Technologies LLC (“Smart Mobile”), the Patent Owner in the above proceedings. Petitioners are Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Apple Inc. (collectively “Petitioner”).

2. I am being compensated \$400 per hour for my time spent working in connection with this case. My compensation is in no way related to the outcome of this litigation. If called as a witness, I would testify as to the statements and opinions contained in this report.

3. I am not a legal expert and offer no opinions on the law. However, I have been informed by counsel of the various legal standards that apply, and I have applied those standards in arriving at my conclusions.

## II. QUALIFICATIONS

4. I am currently the Harris Professor of Wireless Communication and Applied Research at Purdue University in Fort Wayne, Indiana in the Department of Electrical and Computer Engineering. I have served in that endowed professorship role since 2016. Prior to receiving that endowed professorship, I was

an ITT Associate Professor of Wireless Communication and Applied Research at Purdue University. Since 2008, I have served as the Director of the Wireless Technology Center at Purdue University.

5. I graduated from the Technical University of Sofia, Bulgaria in 1988 with a Diploma of Engineering in the field of Electrical Engineering. I graduated from Tokyo Institute of Technology in Tokyo, Japan in 1995 with a Doctor of Philosophy (Ph.D.) degree in Electrical Engineering.

6. In 1997-1999, I was an engineer at 3Com Corp. where I worked on software and firmware development. At that time, 3Com was a leading computer networking and data communication company. Palm Computing, which had developed the PalmPilot, widely recognized as the first personal digital assistant (PDA), was a division of 3Com. Additionally, I participated in the Bluetooth Special Interest Group (SIG) on behalf of 3Com.

7. In 2007-2008 I served as Principal Investigator of a National Science Foundation grant awarded to the IEEE. This grant supported a number of undergraduate and graduate students to work on hardware and software projects incorporating the IEEE standards. A significant number of software applications and hardware devices, connected to other devices and/or the Internet using wireless local or personal area networking standards were developed as a result of this funding.

8. I have contributed to the development of several major standards for communication systems and numerous amendments, including Bluetooth, DSL, Wi-Fi, cellular, and military radio systems. I have participated in many meetings of standards committees and prepared, submitted, and presented documents relating to technical matters considered by these committees. I have also drafted liaison letters among different standards committees. I have chaired some committee meetings and served in other leadership roles. For example, I have been a Voting Member of the IEEE 802.11 Working Group and served as Chairman of the IEEE Standards in Education Committee. I received an award from IEEE Standards Association in 2012.

9. My additional involvement with IEEE includes being elected to serve on the Board of Governors of the IEEE Standards Association in 2020 for one term beginning January 2021. The Board of Governors provides overall leadership of the IEEE Standards Association. Also, I am the Series Editor for Wireless and Radio Communications for the IEEE Communications Standards Magazine (which is the premier journal in the field of communication standards) and have held that position since 2017.

10. My current research interests include most aspects of modern wireless systems, including hardware and software architectures. A significant part of my research is specifically focused on standards-related issues. I have received a

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