

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,
SAMSUNG ELECTRONICS AMERICA, INC., and APPLE INC.,
Petitioner,

v.

SMART MOBILE TECHNOLOGIES LLC,
Patent Owner.

Case IPR2022-01249
Patent 9,019,946

EXHIBIT 2019

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

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. QUALIFICATIONS	1
III. BASES OF OPINIONS	5
IV. APPLICABLE LEGAL STANDARDS.....	9
A. Level Of Ordinary Skill In The Art.....	9
B. My Understanding Of Legal Standards.....	11
V. CLAIMS-AT-ISSUE	13
VI. OPINIONS.....	13
A. “Multiplexed Signals” (Claim 1).	13
1. Opinions Offered in First Declaration	14
a. Bernard’s “Decoder/Multiplexer 112.”	15
b. Petitioner’s Proposed Combination Of Yegoshin And Bernard.....	19
2. Additional Opinions.....	26
a. Yegoshin’s Alleged Teachings.....	26
b. Petitioner’s Proposed Yegoshin-Bernard Combination	34
c. Motivation To Combine Yegoshin And Bernard.....	48
B. “Combin[ing] The Data Paths Into A Single Transmission Interface To One Or More Applications” (Claims 6, 17).	52
C. Multiple IP Addresses Or Interfaces	63
1. Yegoshin’s Device And Two IP Addresses.....	64
2. Reasonable Expectation Of Success	67

D.	Simultaneous Use of Multiple Network Paths (Claims 14, 17).....	73
E.	“Two Network Paths” Connected To The Same “Remote Server” And Use of the Second Network Path “In Response To A Change In The Signal Strength And/Or Connectivity” (Claim 27).....	84
1.	Two Network Paths Connected to the Same “Remote Server”	84
2.	The Second Wireless Transmit and Receive Unit Communicating to the Remote Server In Response to a Change in Signal Strength or Connectivity.....	91
F.	Claim 2	96
G.	Claim 10	97
VII.	CONCLUSION.....	98

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 Professor of Electrical and Computer Engineering at Purdue University in Fort Wayne, Indiana. At the same institution since 2008, I have served in several faculty and administrative positions, including as the Director of the Wireless Technology Center, ITT Associate Professor of Wireless

Communication and Applied Research, and later as Harris Professor of Wireless Communication and Applied Research.

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.

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.