

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

GUI GLOBAL PRODUCTS, LTD.,
Patent Owner.

Case IPR2021-00472
Patent 10,562,077 B2

**DECLARATION OF ROBERT STILLERMAN REGARDING APPLE'S
PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO.
10,562,077**

Apple v. GUI Global Products
IPR2021-00472
GUI EX. 2001

TABLE OF CONTENTS

I.	Introduction and Qualifications	1
II.	Assignment	9
III.	Legal Principles	12
IV.	Methodology	20
V.	Technology Overview.....	22
	A. Magnets/Magnetism.....	22
	B. Headsets, Headphones, Earphones.....	23
	C. Battery Charging: Conductive and Inductive.....	24
	D. Speakers/headsets.....	35
VI.	Overview of the ‘077 Patent	37
VII.	Overview of Gundlach and Lee	42
	A. Gundlach	43
	B. Lee.....	49
VIII.	Analysis of the Cooperstock Declaration	54
	A. A POSITA Would Not Have the Skills Needed Nor Would the POSITA Have Been Motivated to Combine Gundlach and Lee.....	54
	B. ‘077 Patent Claim Analysis of Cooperstock	80
IX.	Summary of My Opinions	95
X.	Amendments and Modifications	96

I. INTRODUCTION AND QUALIFICATIONS

1. My name is Robert Stillerman. I have been retained by counsel for GUI Global Products, Ltd. (“Gwee” or “Patent Owner”) as a technical expert in this case. I have been asked by counsel for the Patent Owner to provide my opinions with respect to the petition by Apple, Inc. (“Apple” or “Petitioner”) for instituting an *Inter Partes* Review of U.S. Patent No. 10,562,077 (“the ‘077 Patent”). In particular, I have been asked to review the opinions in a document entitled, “Declaration of Dr. Jeremy Cooperstock,” dated the 5th day of February 2021 (“Cooperstock Declaration” or “Cooperstock”)

2. My background and qualifications are set forth in my curriculum vitae attached as Ex. 2002. In summary, I have a Bachelor of Science degree in Electrical Engineering, a Master of Science degree in Electrical Engineering and Computer Science, and a Master of Business Administration degree. I have over 40 years of experience in the design, use and application of electronic devices and systems. This includes extensive experience with communications devices and systems and switching equipment. I have experience with wireless systems for use in a number of applications, including cellular communications, point-to-point communications, point-to-multipoint communications, radio frequency identification (RFID), voice and data. I have experience with networking products,

such as switches and routers. I have designed, developed, and managed the design and development of computer and communications software, hardware and systems. I have experience with the delivery of services to enterprises and consumers via different technologies and communications systems. I have experience with devices used for voice and data communication for consumers and network services providers. I have extensive experience in call centers and call center operation. I have been involved with and designed processes for use in project management, change management, client onboarding and training, and installation and configuration of systems.

3. During my career, I have worked for a number of communications equipment suppliers. I worked for Bell Telephone Laboratories designing hardware and software for an electronic switching system for toll network applications. At Bell Telephone Laboratories, I worked with the proprietary signals between controllers and peripheral equipment. I was a Member of Technical Staff and part of a development team working on hardware and software development. I worked for ITT as a development manager. In that position, I designed hardware and software for an electronic, class 5 central office switching system, and worked on analog line and trunk test panels, all of which are part of the infrastructure for the public telephone network. I worked for BNR Inc., a subsidiary of Bell Northern

Research (part of Northern Telecom), designing hardware and software for an Electronic Private Branch Exchange (PBX) system, which is a switching system for telephones, and working on the specification of an “office of the future system.” I worked for IBM/ROLM Systems, designing and testing portions of its Electronic PBX, voicemail systems and phones, as well as devices such as analog and digital line and trunk circuit interfaces, and applications such as Automatic Call Distribution, Call Monitoring and other applications used in call centers. At ROLM, I was a section manager, being responsible for multiple development projects consisting of both hardware and software, including early projects involving computer-telephony integration, a capability now used widely in call center operations. At ROLM, I also supervised a group of Product Managers involved in product development. I participated in the creation of ROLM’s Product Development Process, which was a methodology that the company applied to development activities in order to manage and track product development, including the formal development of documents and specifications used in the development process. I also have experience in installation of electronic and wireless equipment, including outside plant and indoor wiring.

4. I worked for Unisys Corporation where I was involved with computer-based industrial and commercial applications, including electronic document

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.