

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

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STARBUCKS CORPORATION ET AL.

Petitioners

v.

FALL LINE PATENTS, LLC

Patent Owner

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CASE IPR2019-00610

PATENT 9,454,748

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DECLARATION OF DR. SAMUEL RUSS UNDER 37 C.F.R. § 1.68  
IN OPPOSITION TO DECISION GRANTING *INTER PARTES* REVIEW OF  
U.S. PATENT NO. 9,454,748 (CLAIMS 1,2,5,7 AND 19-22)

## TABLE OF CONTENTS

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I.	INTRODUCTION .....	3
II.	QUALIFICATIONS AND COMPENSATION.....	3
III.	BACKGROUND .....	6
IV.	PERSON OF ORDINARY SKILL .....	7
V.	DISCUSSION OF THE '748 PATENT .....	8
VI.	THE STATE OF THE ART IN TELECOMMUNICATIONS DEVICES IN 2002 .....	10
VII.	DISCUSSION OF THE PRIOR ART .....	20
VIII.	CONCLUSIONS .....	34

I, Dr. Samuel H. Russ, hereby declare the following:

## I. INTRODUCTION

1. I have been retained by Fall Line Patents, LLC (“Patent Owner,” hereinafter), the owner of the subject matter of the above-identified patent, i.e., U.S. Patent 9,454,748 (the “ ‘748 patent”), to offer testimony with respect to the subject matter at issue herein (the “*IPR*” hereinafter).
2. I am being compensated on an hourly basis for the time I spend in connection with this proceeding. My compensation is not dependent in any way on the substance of my opinions or in the outcome of this proceeding.

## II. QUALIFICATIONS AND COMPENSATION

3. My qualifications for forming the opinions set forth in this declaration are summarized here and explained in more detail in my curriculum vitae, which is attached as an Appendix. The Appendix also includes a list of my publications and the cases in which I have testified at deposition, hearing, or trial during the past four years.
4. I received a Bachelor’s degree in Electrical Engineering from the Georgia Institute of Technology (“Georgia Tech”) in 1986 and a Ph.D. in Electrical Engineering from Georgia Tech in 1991.
5. From 2007 to the present, I have been a member of the faculty of the University of South Alabama as an Assistant and Associate Professor in the

Department of Electrical and Computer Engineering. During that time, I have won awards for excellent teaching and have been actively publishing research in home networking and digital video recording (DVR) technologies. I am active in the Institute of Electrical and Electronic Engineers (IEEE) and am a Distinguished Lecturer for the IEEE Consumer Electronics Society. As a consultant, I have conducted briefings for members of the financial community on technology trends in the cable, satellite, and IPTV sectors.

6. From 2000 to 2007, I worked for Scientific-Atlanta (now Cisco's Service Provider Video Tech. Group), where I managed a cable set-top box (STB) design group that designed four STB models, including the Explorer 4200 (nonDVR) and 8300 (DVR) models. Both models sold several million units. As design-group manager, I was responsible for managing the design and prototyping activities of the group and for interfacing with other groups (especially integrated-circuit design, procurement, software developers, the factory where prototypes were built, and product managers) and for maintaining the hardware and mechanical development schedule. Since the products were produced in extremely high volumes, the projects had very high visibility in the company, and therefore carried a great deal of responsibility.

7. Also while at Scientific-Atlanta, I became a staff expert in home networking, conducting demonstrations of wireless video technology and managing a group

that developed a new coaxial home networking system. The coaxial system won a Technology and Engineering Emmy® Award in 2013. I became a staff expert in DVR reliability, and led a team that improved the software, hardware, repair, and manufacturing processes. I am a named inventor on fifty-one (51) patent applications that were filed while I was at Scientific-Atlanta, twenty-eight (28) of which have issued as U.S. patents as of the writing of this report.

8. From 1999 to 2000, I was a Staff Electrical Engineer and then Matrix Manager at IVI Checkmate (now Ingenico), where I managed the hardware design team that completed the design of the e<sup>N</sup>-Touch 1000 payment terminal. This terminal was in widespread use, for example, at the self-checkout at Home Depot.

9. I also served on the faculty of Mississippi State University from 1994 to 1999 as an Assistant Professor in the Department of Electrical & Computer Engineering where I taught circuit board design and two-way interactive video classes, among other things.

10. I have also authored 32 journal articles and conference papers. A recent conference paper on digital video recording won second place in a “best paper” competition at the 2011 International Conference on Consumer Electronics in Las Vegas, NV.

11. My curriculum vitae, which includes a more detailed summary of my background and experience, as well as a complete list of my publication, is

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