## UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE PATENT TRIAL AND APPEAL BOARD

Under Armour Inc.
Petitioner

v.

adidas AG, Patent Owner

Case No. IPR2015-00698

Patent No. 8,092,345

DECLARATION OF WILLIAM R. MICHALSON, PH.D.



I, William R. Michalson, declare as follows:

### I. Introduction

- 1. I have prepared this Declaration for consideration by the Patent Trial and Appeal Board in connection with the above-referenced *inter partes* review proceeding.
- 2. I am over eighteen years of age, and I would otherwise be competent to testify as to the matters set forth herein if I am called upon to do so.
- 3. I have written this Declaration at the request of and have been retained by Kilpatrick Townsend & Stockton LLP, which represents Patent Owner adidas AG.
- 4. I am being paid for my work in this matter at the rate of \$425.00 per hour, plus reimbursement of reasonable expenses. My compensation does not depend on the outcome of this matter and I have no financial interest in that outcome.
- 5. I have been asked to provide my opinion as to the validity of United States Patent No. 8,092,345 (the "'345 patent"). Specifically, I have been asked to evaluate the validity of claims 1-3, 6-11, 15-17, and 20 of the '345 patent.



#### II. Background & Qualifications

- 6. In forming my opinions expressed in this Declaration, I relied on my knowledge and experience in the field and on documents and information referenced in this Declaration.
- 7. I received my Ph.D. in Electrical Engineering from the Worcester Polytechnic Institute in 1989, my Master of Science in Electrical Engineering from the Worcester Polytechnic Institute in 1985, and my Bachelor of Science in Electrical Engineering from Syracuse University in 1981.
- 8. I was employed as an engineer at Raytheon Company from 1981 until 1991. During this period, I worked on a variety of projects that involved both hardware and software design and debugging. These projects involved developing computer systems and software for a variety of applications, including the following: air traffic display systems, signal and data processing systems, and communications systems. During this time period, I was involved in hardware and software development that included experience working with satellite, airborne, and ground-based systems for navigation and communications. From 1985 until 1988, I received a fellowship from Raytheon to pursue my Ph.D. degree, and I worked part-time during this period. I returned to Raytheon full-time from 1988 until 1991.



- 9. I have been a full-time faculty member at the Worcester Polytechnic Institute in Massachusetts since 1991. My emphasis at the Worcester Polytechnic Institute is on teaching and conducting research on navigation, communications, and computer system design.
- 10. I hold eight patents in the fields of audio signal processing, indoor geolocation devices, and handheld GPS (Global Positioning System) mapping devices. I have authored or co-authored over 100 original articles in the fields of communications networks, precision location systems, and GPS, including more than 15 journal papers and 90 conference papers. I have also authored one book chapter relating to optical interconnect networks for massively parallel computers. I am a Senior Member of the Institute of Electrical and Electronics Engineers.
- 11. I have worked in the field of computer architecture and computer systems since I began employment at Raytheon in 1981. In addition, I teach classes relating to computer architecture and design, and I also teach classes relating to embedded system designs, advanced system architectures, and real-time system designs, which relate to the design of computer systems, including real-time operating systems and programming. I have worked extensively in software programming, including during my employment at Raytheon and in a variety of projects relating to navigation and communications systems at the Worcester Polytechnic Institute.



- 12. GPS and GPS-related technologies have dominated the bulk of my research since 1992. I have been involved in numerous academic, consulting, and navigation, communications projects involving and technologies. Examples of my academic projects include a container tracking system in 2003 that explored the application of tracking and communications technologies to track shipping containers, an automotive-based system in 2000 that combined GPS and map data in an automotive environment, a remote hazard detection system in 1996 that combined GPS and radio communications to remotely identify hazards to the engineer operating a freight train, and a differential GPS system in 1995 that combined GPS and radio technologies to determine the precise path of vehicles operating off-road during forest operations. As a consultant, I have worked with the combination of GPS and radio communications in the context of space shuttle docking operations, transfer of traffic information to GPS devices in a vehicle, combinations of GPS and cellular communications for the tracking of individuals, and map-based handheld tracking devices.
- 13. I have extensive experience with the development and maintenance of the hardware and software associated with server computers, including server computers attached to the Internet. This experience includes the installation and maintenance of web servers and file servers, as well as the design, development,



# DOCKET

# 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.

