

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SERVICENOW, INC.
Petitioner

v.

BMC SOFTWARE, INC.
Patent Owner

Case IPR 2015- 01176
Patent No. 5,978,594
Filed March 6, 1997
Issued November 2, 1999

Title: System for managing computer resources across a distributed computing environment by first reading discovery information about how to determine system resources presence

Filed electronically via the Patent Review Processing System (PRPS) on August 18, 2015

DECLARATION OF DR. BEN BEDERSON IN SUPPORT OF PATENT OWNER'S RESPONSE

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BMC EXHIBIT 2022
ServiceNow v. BMC
IPR2015-01176

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INTRODUCTION AND QUALIFICATIONS

1. I have been retained on behalf of Patent Owner BMC Software, Inc. (“BMC”) to provide expert opinions in connection with this case.

2. I obtained a Ph.D. in Computer Science from New York University in 1992. Prior to that, I obtained my M.S. in Computer Science from New York University in 1989, and received my B.S. in Computer Science from Rensselaer Polytechnic Institute in 1986, with an undergraduate minor in Electrical Engineering. I received the Janet Fabri Memorial Award for Outstanding Doctoral Dissertation in connection with my Ph.D. work.

3. I have since 1998 been a Professor of Computer Science at the University of Maryland (“UMD”), where I have joint appointments at the Institute for Advanced Computer Studies and the College of Information Studies (Maryland’s “iSchool”). I am also Associate Provost of Learning Initiatives and Executive Director of the Teaching and Learning Transformation Center. I am a member and previous director of the Human-Computer Interaction Lab (“HCIL”), the oldest and one of the best known Human-Computer Interaction research groups in the country. I was from 2006-2014 also co-founder and Chief Scientist of Zumobi, Inc., a Seattle-based startup that is a publisher of content applications and advertising platforms for smartphones. I am co-founder and Chief Technology Officer of Hazel Analytics, a company that manages food safety risk through data

analytics. I am also co-founder and co-director of the International Children's Digital Library ("ICDL"), a web site providing the world's largest collection of freely available online children's books from around the world with an interface aimed to make it easy for children and adults to search and read children's books online.

4. Before becoming a Professor at UMD, from 1995 to 1997 I was an Assistant Professor in the Computer Science Department at University of New Mexico. From 1992 to 1994 I was a Research Scientist at Bell Communication Research. From 1993 to 1994 I was also a Visiting Research Scientist at New York University ("NYU"). From 1990 to 1992 I was a Research Scientist at Vision Applications, Inc. From 1988 to 1990 I was a Teaching Assistant at NYU.

5. In addition, I have since 1993 consulted for numerous companies in the area of user interfaces, including Microsoft, the Palo Alto Research Center, Sony, Lockheed Martin, and NASA Goddard Space Flight Center.

6. For more than 25 years, I have studied, designed, and worked in the field of computer science and human-computer interaction. My experience includes 25 years of teaching and research, with research interests in human-computer interaction and the software and technology underlying today's computing world. This includes the design and implementation of user interfaces on client-server systems for querying data systems.

7. At UMD, my research is in the area of Human-Computer Interaction (“HCI”), a field that relates to the development and understanding of computing systems to serve users’ needs. Researchers in this field are focused on making universally usable, useful, efficient, and appealing systems to support people in their wide range of activities. My approach is to balance the development of innovative technology that serves people’s practical needs. Example systems following this approach that I have built include PhotoMesa (software for end users to browse personal photos), DateLens (software for end users to use their mobile devices to efficiently access their calendar information), SpaceTree (software for end users to efficiently browse very large hierarchies), ICDL (as described above), and StoryKit (an iPhone app for children to create stories).

8. At Zumobi, I was responsible for investigating new software platforms and developing new user interface designs that provide efficient and engaging interfaces to permit end users to access a wide range of content on mobile platforms (including the iPhone and Android-based devices). For example, I designed and implemented software called “Ziibii,” a “river” of news for iPhone, software called “ZoomCanvas,” a zoomable user interface for several iPhone apps, and iPhone apps including “Inside Xbox” for Microsoft and Snow Report for REI.

9. At the International Children’s Digital Library (ICDL), I have since 2002 been the technical director responsible for the design and implementation of

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