

IN THE UNITED STATES COURT OF FEDERAL CLAIMS

E-NUMERATE SOLUTIONS, INC. and  
E-NUMERATE, LLC,

Plaintiffs,

v.

THE UNITED STATES,

Defendant.

No. 19-859 C

Judge Ryan T. Holte

**DECLARATION OF DR. DAVID MARTIN IN SUPPORT OF DEFENDANT’S  
PROPOSED PRELIMINARY CLAIM CONSTRUCTIONS**

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I, David Martin, declare and state as follows:

1. I am over the age of twenty-one, competent to make this declaration and have personal knowledge of the matters stated herein. I make this declaration in support of Defendant United States’ (“U.S.” or “Government”) preliminary claim constructions.

**I. Personal Qualifications**

2. I have over 40 years of professional experience with computer software. Following informal study in computer science at Iowa State University in the late 70s, I was first hired as a programmer in 1979. After high school in 1984, I worked for two startups as a software designer and programmer and delivered custom software to Lucasfilm Ltd. under contract. I have worked with the Internet and associated technologies since the late 1980s. I began using web browsers in 1993. I taught computer science to graduate and undergraduate computer science students for 10 years. I earned a Ph.D. in Computer Science from Boston University in 1999. My Ph.D. research was in the area of Internet security and privacy. I earned a Bachelor of Science degree with distinction in Computer Science and Mathematics from Iowa State University in 1993. I have worked at the University of Denver as an Assistant Professor, at Boston University as a Research Assistant Professor, and at the University of Massachusetts Lowell as an Assistant Professor. In

these positions, I performed research in the areas of computer security and privacy on the Internet. I am currently an independent software consultant.

3. My experience also includes teaching courses in Introduction to Object Oriented Programming (C++); Foundations of (Theoretical) Computer Science; Computer Security I: Principles of Cryptography and Network Security; Computer Security II: Applied Computer Security; Unix Software Tools; Computer Networking; Introduction to Computer Science II (C++); Introduction to Computer Science I (C++); Special Topics in Systems: Computer Security; Advanced Unix Programming; Formal Languages and Automata; Introduction to Computer Science (C).

4. I have received the following honors throughout my academic and professional career: Teaching Excellence Award for U. Mass Lowell Computer Science Department (2007); Teaching Excellence Award for U. Mass Lowell Computer Science Department (2004); One of four nominees for Outstanding Research in Privacy Enhancing Technology Award (2003); Outstanding Teaching Fellow, Department of Computer Science, Boston University (1996); University Graduate Fellowship, Boston University (1993-1994); Top Graduating Senior in Mathematics, Iowa State University, Spring (1993); Top Graduating Senior in Computer Science, Iowa State University, Spring (1993); Honorable Mention, National Science Foundation Graduate Fellowship (1993); Honorable Mention, Department of Defense Graduate Fellowship (1993); Phi Beta Kappa membership (liberal arts honor society) (1990); Phi Kappa Phi membership (engineering honor society) (1990); Pi Mu Epsilon (mathematics honor society) (1990); Upsilon Pi Epsilon (computer science honor society) (1990); Arthur Collins Foundation Scholarship, Spring (1992); Dio L. Holl Award for Outstanding Senior, Spring (1992); Shell Oil Foundation Scholarship, Spring (1991); Barry Goldwater Scholarship (1989-1990).

5. I have been a member of the following professional societies: the Association for Computing Machinery and the Institute for Electrical and Electronics Engineers.

6. I was first engaged as a software expert over 20 years ago. I have extensive experience analyzing software and descriptions of software. For example, I have analyzed source code from Amazon, Apple, Google, Microsoft, Samsung, Yahoo!, Zillow, and other companies, and have written expert reports and testified about their implementations.

7. In patent litigation, I have submitted expert reports at least 11 cases, I have testified in deposition in at least 10 cases, and have testified at trial at least 5 times. I have also testified in trade secret and anti-trust litigation.

8. I have done substantial work with XML. In *i4i Limited Partnership v. Microsoft Corporation*, I analyzed Microsoft Word's support for "custom XML" in its source code, wrote an expert report, and testified at trial. In August of 2021 I submitted an expert report describing products and their reliance on AJAX (Asynchronous JavaScript and XML) and XHR (XMLHttpRequest). I have written and used XML software variously in my own general computing work. As a computer science faculty member, I also regularly taught a formal languages course that explored the expressiveness and capabilities of computer languages specified by different kinds of grammars. A Document Type Definition (DTD) is a grammar intended to describe a certain set of XML documents conforming to that specification.

9. I am being compensated at my regular rate of \$600 per hour. No part of my compensation is dependent on the outcome of this proceeding or otherwise has any influence on my opinions in this proceeding. I have no other interest in this proceeding.

## **II. Scope of Opinion and Legal Standards**

10. This declaration does not set forth all my conclusions regarding the Patents-In-Suit or the claim terms found therein. However, my analysis is of the issues that appear most relevant based on the claim constructions proposed by the parties.

11. I have been instructed by counsel that claim construction is for the Court to decide as a matter of law. I understand that the claims of a patent are to be interpreted according to their plain and ordinary meaning as would be understood by a person of ordinary skill in the art at the timeframe of the claimed invention. I understand that claims should be construed based on intrinsic evidence such as the claim language, the patent's specification, and the patent's prosecution file history. I understand I am also free to consider extrinsic evidence to help interpret the meaning and construction of the claims, including but not limited to sources such as appropriate dictionaries, the general knowledge of one skilled in the art, treatises, white papers, relevant journals, etc., as long as that extrinsic evidence does not contradict the evidence intrinsic to the patent.

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