

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ALERTUS TECHNOLOGIES, LLC
Petitioner,

v.

DESKTOP ALERT INC.
Patent Owner.

Case IPR2024-00363
Patent No. 9,172,765

DECLARATION OF DAVID H. CROCKER

I, David H. Crocker, declare that all statements made here on my own knowledge are true and that all statements made contain information and belief are believed to be true, and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 1001 or Title 18 of the United States Code.

Date: 3 January 2024_____

/s/ David H. Crocker
David H. Crocker

I, David Crocker, do hereby declare as follows:

I. INTRODUCTION

1. I have been retained on behalf of Alertus Technologies, LLC (“Petitioner”) as an expert. I understand that Petitioner will submit this declaration (“Declaration”) in connection with IPR2024-00363 (“Proceeding”), which I have been informed is an *inter partes* review (“IPR”) proceeding before the Patent Trial and Appeal Board challenging the patentability of claims 1-13 of the U.S. Patent No. 9,172,765 Patent.

2. I have been asked to provide my opinion about the publication status of several Request for Comments (“RFC”) documents. My opinions in this declaration are informed by my substantial background and expertise in the RFC development and publication process, as well as the specific RFC documents I discuss below and the other evidence I cite in this declaration.

3. Although I am being compensated for my time in preparing this declaration, the opinions herein are my own. I am personally knowledgeable about the matters stated herein and am competent to make this declaration. I have no financial interest in the Petitioner or the ’765 Patent, and my compensation is not dependent on the outcome of this Proceeding. The opinions I present are based on my own judgment.

4. I am a principal at Brandenburg InternetWorking (“Brandenburg”), which I founded in 1991, and I have participated in the development of technical specifications for the Internet and its predecessor, the Advanced Research Projects Agency Network (“ARPANET”), since 1972. I understand that my CV will be filed as EX-1024. All “EX-10XX” cites herein are to exhibits that will be submitted by Petitioner in this Proceeding.

II. THE INTERNET ENGINEERING TASK FORCE (“IETF”)

5. The principal Internet technical standards body is the Internet Engineering Task Force (“IETF”). The IETF produces technical documents relating to the design, use, and management of the Internet. The IETF has no formal membership or membership requirements, and all participants and managers are volunteers; it has a very small paid support staff.

6. Prior to 1997, the IETF was entirely or partially supported by the U.S. government. Since then, the IETF has been independently funded by participants and through its association with the Internet Society, which is an international membership-based non-profit organization.

7. The IETF comprises working groups that are organized into areas by subject matter. Each IETF area is overseen by an Area Director. The Area Directors, together with the IETF Chair, form the Internet Engineering Steering Group (“IESG”), which is responsible for the overall operation of the IETF. I was the first

Area Director for the area of Network Management. I served as an Area Director for six years, from 1989 to 1995.

8. Until 2020, the IETF had an Administrative Oversight Committee (“IAOC”), comprising ten members and providing logistical and administrative support for the IETF. I served on the IAOC for two years, from 2011 to 2013. The IETF reorganized administrative arrangements in 2020.

9. The IETF Nominating Committee (“NomCom”) comprises ten voting members and is vested with the power to nominate members of the IESG and two related groups, the Internet Architecture Board (“IAB”) and the IETF Administrative Support Activity. Until 2020 the NomCom also nominated members of the IAOC. I served on the NomCom for a total of five one- year terms between 1995 and 2013.

10. IETF working groups comprise experts and other individuals interested in the working group topic. Each working group has a chairperson who is appointed by the Area Director. I have chaired several working groups, including Fax (facsimile over email) and EDI (electronic data interchange).

III. REQUESTS FOR COMMENTS (“RFCs”)

A. Overview and History

11. The IETF oversees the development and publication of standards and related documents. These are published as RFCs, which are documents that describe methods, procedures, protocols, specifications, administration, operations, and

similar concepts related to the Internet or Internet-connected systems. RFCs are widely considered by the Internet technical community to be the official documents for the standards that govern the design, use, and management of core Internet services. RFCs are maintained as part of a single document series. The RFC document series was established by my brother, Dr. Stephen D. Crocker, in 1969.

12. The RFC document series has been well-known throughout the Internet technical community since 1969. Anyone working in the areas of the Internet or Internet-connected systems would have been aware of the RFC document series, would have considered RFCs widely publicly accessible, and would have known where and how to find copies of RFCs. My opinion is informed by my numerous experiences evaluating, discussing, and retrieving RFCs with other members of the Internet technical community around the world.

13. The formal process of preparing, publishing, and widely distributing RFCs is an important part of the Internet technical community's culture, which promotes development of standards in an open and transparent process. It is also important to the adoption of these standards and the stability and functionality of the Internet for developers to adhere to standards and evolving best practices.

14. I have authored more than 65 RFCs and have contributed to the development of many others. I have been involved with the development of RFCs

since 1972. I consider myself an expert with respect to RFC development and their publication process.

B. RFC Approval Process

15. RFCs are developed through several activity streams, one of which is pursuant to the IETF's Internet Standards Process. The formal Internet Standards Process has been in existence since the late 1980s, although its essential characteristics date back to the Internet's inception. The Internet Standards Process was formally documented in the RFC series in March of 1992 as RFC 1310. It was revised in March of 1994 as RFC 1602 and again in October of 1996 as RFC 2026. The purpose of formally publishing the Internet Standards Process as an RFC was to keep the Internet technical community informed as to the current status of policies and procedures for work related to Internet standards.

16. Internet Standards are typically developed through IETF working groups. IETF working groups are open to all who want to participate; anyone may observe and contribute to discussions. A majority of a working group's discussions are held via a mailing list for the group, to which anyone may subscribe. Some working group discussions are held in person, and anyone may attend those meetings. The date and location for an in-person meeting is announced via the working group's mailing list, and more widely.

17. In developing specifications, working groups generally seek to explore competing views and select among them based on technical superiority. Rather than formal voting, working group decisions are made through a “rough consensus” process, where the “strongly dominant” sense of the group is assessed.

18. Some working group documents (*e.g.*, draft specifications) are eventually published as RFCs. The process to publish a working group document as approved and published as an RFC is initiated when the working group makes a recommendation to its cognizant Area Director. The Area Director then presents the recommendation to the IESG, which circulates the document to the wider IETF community, for comment, and then decides whether to publish the document as an RFC.

C. Publication and Dissemination of RFCs

19. The RFC Editor is the official source for RFCs on the Internet and is responsible for publishing RFCs, from the different activity streams, including the IETF stream. If the IESG approves a draft specification for publication as an RFC, the RFC is transferred to the RFC Editor for editorial refinement. After any necessary editorial work is completed, the RFC Editor publishes the document for distribution on the Internet. It has been the IETF’s standard practice since at least the 1980s to publish RFCs as soon as possible following final approval for publication.

20. The publication date of each RFC is typically on every page of the document, and the cover page of each RFC typically lists the title of the RFC, the RFC's authors, and the working group through which the RFC was developed.

21. The publication of RFCs is announced through a mailing list to which anyone may subscribe. The existence of the mailing list, and the process for signing up to receive mailing list announcements, has been well-known to members of the Internet technical community since the late 1980s. Anyone with an interest in Internet and Internet-connected technologies would have been able to locate this mailing list, subscribe, and then receive announcements of new RFCs. A similar mechanism existed within the earlier Internet research and development community.

22. Published RFCs are widely distributed without any restrictions. All published RFCs are available publicly through "anonymous FTP" login and through the World Wide Web from a number of Internet hosts. The RFC Editor also maintains its own database of RFCs that is regularly updated with new RFCs.

23. The RFC Editor periodically publishes an "Internet Official Protocol Standards" RFC, which summarizes the status of all Internet protocol and service specifications. These RFCs are made publicly available pursuant to the standard RFC publication process.

24. In the 1990s, a summary of published RFCs appeared in each issue of the Internet Society's newsletter. The Internet Society's newsletter was well-known

to members of the Internet technical community as a source for a summary of published RFCs.

D. RFC Editor's Official Repository

25. Almost any published RFC can be retrieved from the RFC Editor's website: <https://www.rfc-editor.org>. Specific RFCs can be retrieved directly from the RFC Editor's website by entering a standard URL form that includes the host name "www.rfc-editor.org" followed by the file path "/rfc/rfc[NUMBER].txt," where "[NUMBER]" is the specific RFC number to be retrieved. For example, RFC 1602 can be retrieved by entering the following URL: <https://www.rfc-editor.org/rfc/rfc1602.txt>.

26. The RFC Editor's site is well-known to persons in the Internet networking industry. Since the early 1990s, the RFC Editor repository has been freely accessible to the general public with no login, password, or membership requirement, and was similarly available to the Internet technical community since the 1970s. The RFC Editor's website is the authoritative source page for RFCs on the Internet.¹

¹ "Below are links to RFCs, as available from ietf.org and from rfc-editor.org. Note that there is a brief time period when the two sites will be out of sync. When in doubt, **the RFC Editor site is the authoritative source page.**" <http://ietf.org/rfc.html> (emphasis added).

27. Visitors to the RFC Editor's website may search, browse, and download any RFC without restriction. The website's search function allows visitors to search by numerous fields, including RFC number, title/keyword, publication date, area, and author surname. In addition to the RFC Editor, many publicly accessible sites maintain informal copies of the RFC archive, for example, <http://rfc-archive.org> and <http://www.faqs.org/rfcs/>.

IV. PUBLICATION OF SPECIFIC RFCS

A. RFC 1945: Hypertext Transfer Protocol – HTTP/1.0

28. As RFC 1945 acknowledges, RFC 1945 specification makes heavy use of Augmented BNF and generic constructs defined in RFC 822. EX-1010, §13. I authored RFC 822 in August 1982.

29. RFC 1945 was published in May 1996 pursuant to the process described above, as indicated by the date on the top right corner of the document. EX-1010 (RFC 1945). As explained above, this is the date it was released for public distribution on the Internet.

30. RFC 1945 has been available for anonymous FTP and web access from a number of Internet hosts since its publication date. Anyone involved with the Internet technical community during the 2008-2010 time period would have known where and how to obtain a copy of RFC 1945.

31. RFC 1945 has been maintained by the RFC Editor since its publication date, in accordance with the process described above. RFC 1945 is publicly available via the following URL: <https://www.rfc-editor.org/rfc/rfc1945.txt>. This is where one would expect to find RFC 1945 if it was published by the RFC Editor pursuant to standard publication process described above. I downloaded RFC 1945 from this URL and compared it to EX-1010. Except for pagination, they are the same document.

32. I am personally familiar with RFC 1945 based on my research and experience in the area of Internet systems, and I can confirm that it was widely publicly available during the 2008-2010 time period.

B. RFC 2616: Hypertext Transfer Protocol – HTTP/1.1

33. As RFC 2616 acknowledges, RFC 2616 specification makes heavy use of Augmented BNF and generic constructs defined in RFC 822. EX-1011m, §16. I authored RFC 822 in August 1982.

34. RFC 2616 was published in June 1999 pursuant to the process described above, as indicated by the date on the top right corner of the document. EX-1011 (RFC 2616). As explained above, this is the date it was released for public distribution on the Internet.

35. RFC 2616 has been available for anonymous FTP and web access from a number of Internet hosts since its publication date. Anyone involved with the

Internet technical community during the 2008-2010 time period would have known where and how to obtain a copy of RFC 2616.

36. RFC 2616 has been maintained by the RFC Editor since its publication date, in accordance with the process described above. RFC 2616 is publicly available via the following URL: <https://www.rfc-editor.org/rfc/rfc2616.txt>. This is where one would expect to find RFC 2616 if it was published by the RFC Editor pursuant to standard publication process described above. I downloaded RFC 2616 from this URL and compared it to EX-1011. They are the same document.

37. I am personally familiar with RFC 2616 based on my research and experience in the area of Internet systems, and I can confirm that it was widely publicly available during the 2008-2010 time period.

C. RFC 5322: Internet Message Format

38. RFC 5322 is derived from RFC 822, which I authored. I was personally acknowledged as contributing to RFC 5322. EX-1012, Appendix C.

39. RFC 5322 was published in October 2008 pursuant to the process described above, as indicated by the date on the top right corner of the document. EX-1012 (RFC 5322). As explained above, this is the date it was released for public distribution on the Internet.

40. RFC 5322 has been available for anonymous FTP and web access from a number of Internet hosts since its publication date. Anyone involved with the

Internet technical community during the October 2008-2010 time period would have known where and how to obtain a copy of RFC 5322.

41. RFC 5322 has been maintained by the RFC Editor since its publication date, in accordance with the process described above. RFC 5322 is publicly available via the following URL: <https://www.rfc-editor.org/rfc/rfc5322.txt>. This is where one would expect to find RFC 5322 if it was published by the RFC Editor pursuant to standard publication process described above. I downloaded RFC 5322 from this URL and compared it to EX-1012. They are the same document.

42. I am personally familiar with RFC 5322 based on my direct participation in developing it, as well as my research and experience in the area of Internet systems, and I can confirm that it was widely publicly available during the October 2008-2010 time period.