

**UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF TEXAS  
TYLER DIVISION**

<b>EOLAS TECHNOLOGIES, INC.</b>	§	
	§	
<b>Plaintiff,</b>	§	
	§	
v.	§	<b>CIVIL ACTION NO. 6:09-CV-446 (LED)</b>
	§	
<b>ADOBE SYSTEMS, INC. ET AL.,</b>	§	
	§	
<b>Defendants.</b>	§	
	§	
	§	

**DEFENDANT YAHOO! INC.'S ANSWER, AFFIRMATIVE DEFENSES,  
AND COUNTERCLAIMS TO PLAINTIFFS' THIRD AMENDED PATENT  
INFRINGEMENT COMPLAINT**

Defendant Yahoo! Inc. (“Yahoo!”) responds to Plaintiffs Eolas Technologies, Incorporated’s (“Eolas”) and The Regents of the University of California (“University”) (together, “Plaintiffs”) Third Amended Complaint for Patent Infringement (“Complaint”) as follows:

**ANSWER**

**Parties**

1. Yahoo! denies that “[d]uring the last 15 years, Plaintiffs’ innovations have enabled corporations around the world to enhance their products and improve their customers’ website experiences by enabling browsers, in conjunction with servers, to act as platforms for fully interactive embedded applications” to the extent that Plaintiffs intend this allegation to apply to Yahoo!. As to the remaining allegations, Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 1 of the Complaint, and, on that basis, denies those allegations.

2. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 2 of the Complaint, and, on that basis, denies those allegations.

3. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 3 of the Complaint, and, on that basis, denies those allegations.

4. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 4 of the Complaint, and, on that basis, denies those allegations.

5. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 5 of the Complaint, and, on that basis, denies those allegations.

6. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 6 of the Complaint, and, on that basis, denies those allegations.

7. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 7 of the Complaint, and, on that basis, denies those allegations.

8. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 8 of the Complaint, and, on that basis, denies those allegations.

9. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 9 of the Complaint, and, on that basis, denies those allegations.

10. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 10 of the Complaint, and, on that basis, denies those allegations.

11. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 11 of the Complaint, and, on that basis, denies those allegations.

12. Yahoo! admits the allegations in Paragraph 12 of the Complaint.

13. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 13 of the Complaint, and, on that basis, denies those allegations.

#### Jurisdiction and Venue

14. Yahoo! incorporates its responses contained in Paragraphs 1–13 as though fully set forth here.

15. Yahoo! admits that this Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a). Yahoo! admits that the Complaint purports to be an action that arises under the patent laws of the United States, 35 U.S.C. § 1 *et seq*, but denies any wrongdoing or liability on its own behalf for the reasons stated herein. Except as so expressly admitted herein, Yahoo! denies the allegations in Paragraph 15 of the Complaint.

16. Yahoo! admits that the Complaint alleges that personal jurisdiction over defendants exists generally and specifically. Yahoo! admits that it operates a website, [www.yahoo.com](http://www.yahoo.com), that may be accessed from anywhere in the world, including the Eastern District of Texas. Yahoo! denies that it has committed any acts of infringement within this district and specifically denies any wrongdoing, infringement, inducement of infringement or contribution to infringement. Yahoo! lacks sufficient knowledge or information regarding the other defendants and on that basis denies the allegations of Paragraph 16 with respect to the other defendants. Except as so expressly admitted herein, Yahoo! denies the allegations in Paragraph 16 of the Complaint.

17. Yahoo! denies that venue is appropriate in this district and moved to transfer venue.

## Patent Infringement

18. Yahoo! incorporates its responses contained in Paragraphs 1–17 as though fully set forth here.

19. Yahoo! admits that U.S. Pat. No. 5,838,906 (“the ’906 patent”) is entitled “Distributed hypermedia method for automatically invoking external application providing interaction and display of embedded objects within a hypermedia document” and Yahoo! admits that U.S. Pat. No. 7,599,985 (“the ’985 patent”) is entitled “Distributed hypermedia method and system for automatically invoking external application providing interaction and display of embedded objects within a hypermedia document.” Yahoo! admits that the issue date on the face of the ’906 patent is November 17, 1998, and Yahoo! admits that the issue date on the face of the ’985 patent is October 6, 2009. Yahoo! denies that either the ’906 patent or the ’985 patent was “duly and legally issued.” Except as so expressly admitted, Yahoo! denies the allegations in Paragraph 19 of the Complaint.

20. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 20 of the Complaint, and, on that basis, denies those allegations.

21. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 21 of the Complaint, and, on that basis, denies those allegations.

22. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 22 of the Complaint, and, on that basis, denies those allegations.

23. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 23 of the Complaint, and, on that basis, denies those allegations.

24. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 24 of the Complaint, and, on that basis, denies those

allegations.

25. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 25 of the Complaint, and, on that basis, denies those allegations.

26. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 26 of the Complaint, and, on that basis, denies those allegations.

27. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 27 of the Complaint, and, on that basis, denies those allegations.

28. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 28 of the Complaint, and, on that basis, denies those allegations.

29. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 29 of the Complaint, and, on that basis, denies those allegations.

30. Yahoo! denies the allegations in Paragraph 30 of the Complaint.

31. Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 31 of the Complaint, and, on that basis, denies those allegations.

32. Yahoo! denies the allegations contained in Paragraph 32 of the Complaint as to Yahoo!. As to the other defendants, Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 32 of the Complaint, and, on that basis, denies those allegations.

33. Yahoo! denies the allegations contained in Paragraph 33 of the Complaint as to Yahoo!. As to the other defendants, Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 33 of the Complaint, and, on that

basis, denies those allegations.

34. Yahoo! denies the allegations contained in Paragraph 34 of the Complaint as to Yahoo!. As to the other defendants, Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 34 of the Complaint, and, on that basis, denies those allegations.

35. Yahoo! denies the allegations contained in Paragraph 35 of the Complaint as to Yahoo!. As to the other defendants, Yahoo! is without knowledge or information sufficient to form a belief as to the truth of the statements in Paragraph 35 of the Complaint, and, on that basis, denies those allegations.

#### Prayer For Relief

36. Yahoo! denies that Plaintiffs are entitled to any of the relief sought in their prayer for relief. Yahoo! has not directly or indirectly infringed any claims of the '906 or '985 patents, either literally or by the doctrine of equivalents, willfully or otherwise. Plaintiffs are not entitled to recover statutory damages, compensatory damages, enhanced damages, an accounting, injunctive relief, costs, fees, interest, or any other type of recovery from Yahoo!. Plaintiffs' prayer should, therefore, be denied in its entirety and with prejudice, and Plaintiffs should take nothing.

#### **AFFIRMATIVE DEFENSES**

Further answering Plaintiffs' complaint, Yahoo! asserts the following affirmative defenses, without assuming any burden of proof that it would not otherwise bear. Yahoo! reserves the right to amend its answer as additional information is obtained.

#### **Background and Facts**

37. Michael D. Doyle ("Doyle") is one of the named inventors of the '906 patent and the '985 patent.

38. The University is the owner and named assignee of the patents-in-suit, the '906 and '985 patents.

39. Charles E. Krueger ("Krueger") was the patent prosecutor for the patents-in-suit, the '906 and the '985 patents.

40. Doyle, as the named inventor, the University, as the owner, and Krueger, as the patent prosecutor, each had a duty of candor and good faith in dealing with the United States Patent and Trademark Office ("the Patent Office") during prosecution of the '906 and '985 patents.

41. Krueger's, the University's, and Doyle's duty of candor and good faith also existed during the reexaminations of the '906 patent.

42. The duty of candor and good faith owed by Krueger, Doyle, and the University included a duty to disclose to the Patent Office all information known to that individual to be material to patentability as defined in 37 C.F.R. § 1.56.

43. On information and belief, Doyle and the University had a financial incentive to deceive the Patent Office.

44. On information and belief, Doyle and the University had a financial incentive to deceive the Patent Office during prosecution of the '906 patent, during the reexaminations of the '906 patent, and during the prosecution of the '985 patent.

45. On information and belief, Doyle was the Director of the Center for Knowledge and Technology at the University's San Francisco campus when he allegedly conceived of the inventions claimed in the '906 and '985 patents. Importantly, while serving as Director for the University, Doyle became aware of a prior invention to the '906 and '985 patents by Pei Wei, a former University student. Nevertheless, Doyle and the University intentionally failed to disclose this information to the Patent Office when applying for the patent and, instead, ignored and buried the work of a former University student to advance their own financial interests

46. On information and belief, the '906 and '985 patents are owned by the University.

47. On information and belief, the University is entitled to receive royalties related to the '906 and/or '985 patents.

48. On information and belief, Doyle and his co-inventors are entitled to receive a portion of any royalties paid to the University related to the '906 and/or '985 patents.

49. On information and belief, Doyle is a founder of one of the plaintiffs in this action, Eolas.

50. After learning of Pei Wei's invention, on information and belief, Doyle quit his job at the University's San Francisco campus to found Eolas, and personally invested time and money in Eolas.

51. On information and belief, Doyle has had a financial interest in Eolas since at least August 21, 1995.

52. On information and belief, on or about August 21, 1995, Eolas acquired certain rights to the patent application that matured into the '906 patent from the University.

53. On information and belief, Doyle was personally involved in the prosecution of the '906 patent, the reexaminations of the '906 patent, and the prosecution of the '985 patent at the same time that he had a financial interest in Eolas and a financial interest in any royalties on the '906 and/or '985 patents paid to the University.

54. As explained in more detail below, on information and belief, Krueger, Doyle, and the University breached the duty of candor and good faith in dealing with the Patent Office. On information and belief, Krueger, Doyle, and the University failed to disclose material information and made affirmative misrepresentations of material facts. On information and belief, Krueger, Doyle, and the University did so with knowledge of the information withheld, with knowledge of the falsity of the misrepresentations, and with the specific intent to deceive the Patent Office. The circumstances of Krueger's, Doyle's, and the University's intentional contrived plan and actions confirm their specific intent to deceive the Patent Office.

55. As explained in more detail below, on information and belief, Krueger, Doyle, and the University breached the duty of candor and good faith in dealing with the Patent Office

by failing to disclose material information related to the ViolaWWW browser. On information and belief, Krueger, Doyle, and the University did so with knowledge of the information they withheld and with the specific intent to deceive the Patent Office. The circumstances of Krueger's, Doyle's, and the University's actions confirm an intent to deceive the Patent Office.

56. As explained in more detail below, on information and belief, the ViolaWWW browser was material to the patentability of all the claims of the '906 patent because it disclosed limitations that the Patent Office believed were missing in the prior art, including interactivity *embedded within* the webpage (as opposed to a separate window), *automatic* invocation of the interactivity (as opposed to requiring a mouse click to enable the interactivity), and use of a separate executable application (as opposed to a script). On information and belief, Krueger, Doyle, and the University knew that the ViolaWWW browser disclosed these limitations, yet they specifically and intentionally withheld this information from the Patent Office at the same time that they argued to the Patent Office that these limitations were missing from the prior art.

57. The application for the '906 patent was filed on October 17, 1994.

58. Thus the critical date for purposes of 35 U.S.C. § 102(b) was October 17, 1993. Any printed publication describing the claimed invention, or any public use of the claimed invention in the United States, before October 17, 1993, would be an absolute bar to patentability.

59. On information and belief, Doyle and the University knew before the application for the '906 patent was filed that a former University student who lived in Northern California named Pei Wei had developed a browser called "ViolaWWW" before the critical date of October 17, 1993.

60. On information and belief, Pei Wei was a student at the University of California, Berkley while he was developing ViolaWWW. While a student at the University's Berkley campus Pei Wei submitted ViolaWWW as his project to join a student organization at the University known as the eXperimental Computing Facility ("XCF"). Indeed, Pei Wei worked on and developed ViolaWWW at the XCF while attending the University's Berkeley campus. The

purpose of the XCF was to produce computer science projects that would be released to the public. The University encouraged the XCF students to develop these projects and to release them to the public. For example, Pei Wei posted numerous versions of ViolaWWW to a File Transfer Protocol (“FTP”) site hosted by the University of California, Berkeley (<ftp://xcf.berkeley.edu>), as such, these projects were known by the University.

61. On information and belief, on May 20, 1994, David Raggett sent an e-mail to Doyle, the Director of the University’s Center for Knowledge Management at the San Francisco campus. The e-mail concerned object level embedding in web browsers. In this email, Raggett advised Doyle that he “might want to look at Viola which [Raggett] seem[s] to remember takes advantage of the tk tool kit to provide a certain level of embedding.”

62. On information and belief, Raggett further advised Doyle that he could “find a pointer to Viola off the CERN WWW project page.”

63. On information and belief, on May 20, 1994, the same day that Raggett advised Doyle to look at Viola, David Martin, the Assistant Director of the University’s Center for Knowledge Management at the San Francisco campus, who reported to Doyle and who was ultimately named as an inventor on the ’906 patent, responded to a posting from Pei Wei on a publicly-accessible University of California e-mail distribution list. On information and belief, Pei Wei’s post had included the following statements: “In order to do better testings and support of ViolaWWW, I would like to solicit donations for guest accounts on the major Unix platforms. . . . So, if your organization has some CPU crunchies to spare, good network connectivity, don't have a firewall, want to help viola development, etc, please drop me a note. Based mostly on network connectivity, I'll select one (maybe two) offer(s) for each different platform.” On information and belief, David Martin’s response to Pei Wei included the following statements: “I am willing to discuss providing accounts on SGI IRIX 5.x, Solaris 2.x, Alpha OSF/1. Please let me know what you require in terms of disk space, compiler, utilities, etc...”

64. On information and belief, by May 20, 1994 — several months before the application for the ’906 patent was filed — Doyle and the University knew about the

ViolaWWW browser of Pei Wei, the former University student.

65. On information and belief, Doyle and/or the University did not disclose this information to Krueger or Charles J. Kulas (“Kulas”), the patent prosecutor that filed the ’906 patent application, prior to the filing of the application that lead to the ’906 patent.

66. On information and belief, Doyle, and the University as Doyle’s employer, learned even more about the ViolaWWW browser before the application for the ’906 patent was filed.

67. On information and belief, on August 30, 1994, at approximately 11:15 p.m. California time, Doyle posted a “Press Release” to the publicly-accessible VRML e-mail distribution list that included the following statements:

Researchers at the U. of California have created software for embedding interactive program objects within hypermedia documents. Previously, object linking and embedding (OLE) has been employed on single machines or local area networks using MS Windows -TM-. This UC software is the first instance where program objects have been embedded in documents over an open and distributed hypermedia environment such as the World Wide Web on the Internet.

68. On information and belief, on August 31, 1994, at approximately 6:52 p.m. California time, Pei Wei posted a response on the publicly-accessible VRML e-mail distribution list that included the following statements: “I don’t think this is the first case of program objects embedded in docs and transported over the WWW. ViolaWWW has had this capabilities for months and months now.”

69. On information and belief, Pei Wei’s response included a link to an FTP site where anyone “interested in learning more about how violaWWW does this embedded objects thing can get a paper on it.”

70. On information and belief, the paper cited by Pei Wei was entitled “A Brief Overview of the VIOLA Engine, and its Applications” (“August 1994 Viola Paper”).

71. On information and belief, the paper cited by Pei Wei was dated August 16, 1994

— over two months before the application for the '906 patent was filed.

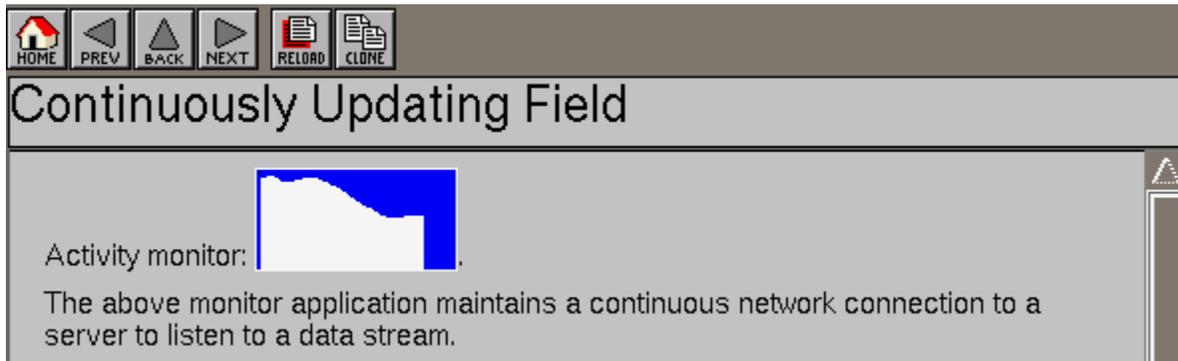
72. On information and belief, the paper cited by Pei Wei included the following statements and graphics:

### **Embedding mini applications**

Viola's language and toolkit allows ViolaWWW to render documents with embedded viola objects. Although the viola language is not part of the World Wide Web standard (yet?), having this capability provides a powerful extension mechanism to the basic HTML.

For example, if the HTML's input-forms do not do exactly what you want, you have the option to build a mini customized input-form application. And it could have special scripts to check for the validity of the entered data before even making a connection to the server.

Or, if your document needs to show data that is continuously updated, you could build a small application such as this which display the CPU load of a machine. Note that only the graph field is continuously updated, but not the rest of the document.



Other possible applications include front-ends to the stock market quotes, new wire updates, tele-video style service, etc.

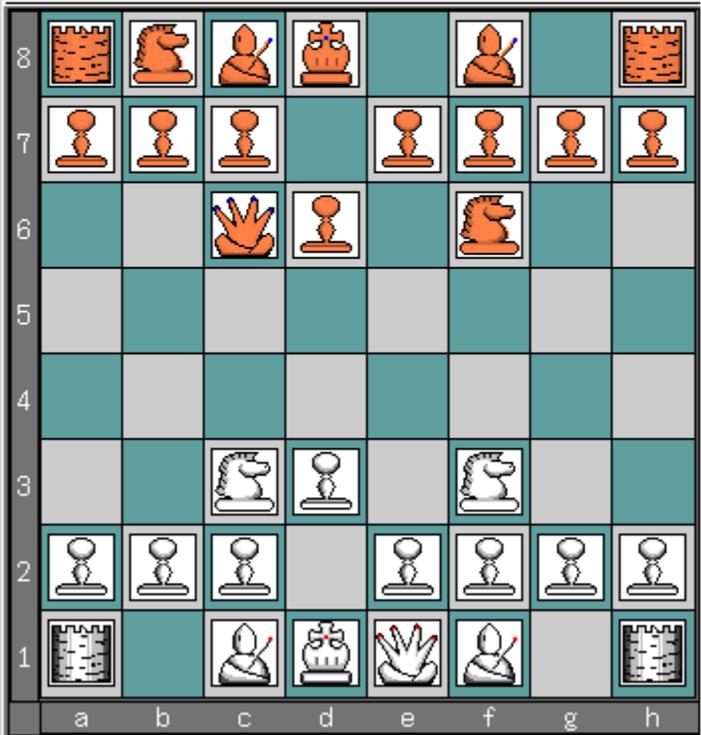
Here's another example of a mini interactive application that is embedded into a HTML document. It's a chess board in which the chess pieces are actually active and movable. And, illegal moves can be checked and denied straight off by the intelligence of the scripts in the application. Given more work, this chess board

application can front-end a chess server, connected to it using the socket facility in viola.

<http://xcf.berkeley.edu/ht/projects/viola/docs/vw/chessDemo.html>

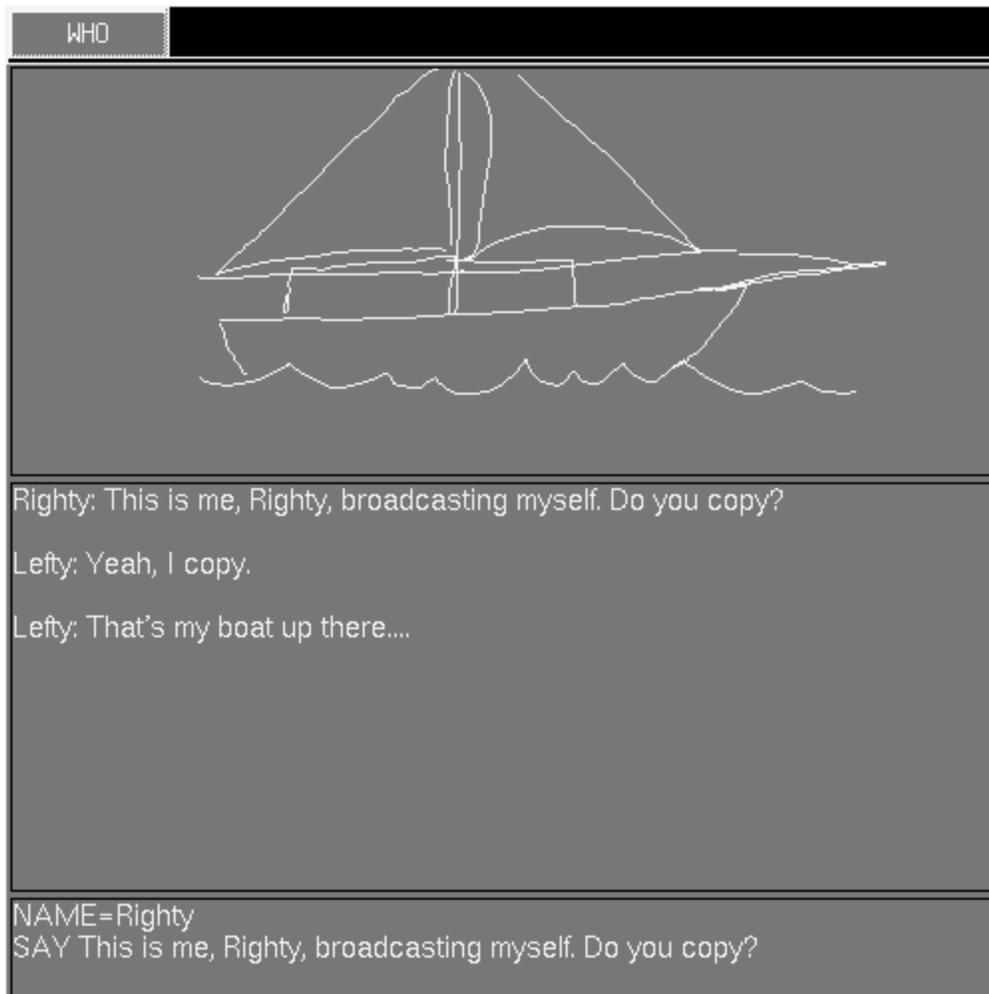
## A Chess Board

This is a demo a viola "application" (the chess board) being retrieved via HTTP, instantiated, and plugged into this HTML document.



What follows is a screendump of a demo of an embedded viola application that lets readers of this HTML page communicate by typing or drawing. Like the chess board application above, this chat application can stand-alone (and have nothing to do with the World Wide Web), or be embedded into a HTML document.

By the way, to make this possible, a multi-threaded/persistent server was written to act as a message relay (and to handle HTTP as well).



This next mini application front-ends a graphing process (on the same machine as the viola process). An important thing to note is that, like all the other document-embeddable mini applications shown, no special modification to the viola engine is required for ViolaWWW to support them. All the bindings are done via the viola language, provided that the necessary primitives are available in the interpreter, of course.

Put it another way, because of the scripting capability, the ViolaWWW browser has become very flexible, and can take on many new features dynamically. C-code patches and re-compilation of the browser can frequently be avoided.

This attribute can be very important for several reasons. It keeps the size of the core software small, yet can grow dynamically as less frequently used features are occasionally used, or as new accessories/components are added.

Such new accessories can be as simple as little applets that accompany documents, or conceivably as complicated as a news or mail reader. An analogy is how Emacs's programming environment allows that text editor to become much more than just a text editor.



Not only can mini applications be embedded inside of documents, they can even be plugged into the ViolaWWW's "toolbar".

The following picture shows a "bookmark tool" that acts as a mini table of contents for the page. In this case, the bookmark is linked to the document (by using the <LINK> tag of HTML 3.0), and the bookmark will appear and disappear with the document.



One can imagine many plug-in accessories/applets/tools possible with this facility. Like, a self guiding slideshow tool. Or, document set specific navigational tools/icons that are not pasted onto the page so that the navigational icons don't scroll away from view. Etc.

73. On information and belief, “Doyle downloaded and read the paper.” 399 F.3d 1325, 1330 (Fed. Cir. 2005).

74. On information and belief, on August 31, 1994, at approximately 9:06 p.m. California time, Doyle responded to Pei Wei’s statement at approximately 6:52 p.m. that “I don’t think this is the first case of program objects embedded in docs and transported over the WWW. ViolaWWW has had this capabilities for months and months now.” Doyle responded by asking Pei Wei, “How many months and months? We demonstrated our technology in 1993.”

75. On information and belief, on August 31, 1994, at approximately 11:16 p.m. California time, Pei Wei responded to the message that Doyle had sent at approximately 9:06 p.m. Pei Wei’s response included the following statements:

Definitely by May 8, 1993 we had demonstrated that plotting demo (the very one shown in the viola paper) to visitors from a certain computer manufacturer... This demo was memorable because someone and I at ORA had lost sleep the night before the meeting, in order to cook up that particular plotting demo :) We had to show something cool.

That demo wasn't very hard to do because by that time the basic capability was already in place for violaWWW to fetch viola objects over HTTP (or whatever) and plug them into documents. Of course, our wire-frame plotting demo isn't anywhere as

comprehensive as yours. But, the point was that there was a way to embed programmable & interactive objects into HTML documents.

76. On information and belief, when Pei Wei referred to the “plotting demo (the very one shown in the viola paper),” he was referring to the plot of the fighter jet shown above in the window titled “XPlot.”

77. On information and belief, when Pei Wei referred to a demonstration “by May 8, 1993” to “visitors from a certain computer manufacturer,” he was referring to a demonstration of the plotting demo to Karl Jacob and James Kempf from Sun Microsystems on May 7, 1993. This demonstration took place in Northern California. There was no limitation, restriction or obligation of secrecy on Karl Jacob or James Kempf.

78. The Federal Circuit has held that “Wei’s May 7, 1993 demonstration to two Sun Microsystems employees without confidentiality agreements was a public use under [35 U.S.C. § 102(b)].” 399 F.3d 1325, 1335 (Fed. Cir. 2005).

79. On information and belief, on August 31, 1994, at approximately 11:13 p.m. California time, Doyle, using a University computer, responded again to the message that Pei Wei had sent at approximately 6:52 p.m.

80. On information and belief, Doyle’s response was sent after Doyle had read Pei Wei’s August 1994 Viola paper.

81. On information and belief, Doyle’s response included the following statements: “Pei is mistaken on two counts, as I describe below. . . . As Pei’s paper on Viola states, that package did not support what it calls ‘embeddable program objects’ until 1994. . . . Furthermore, Viola merely implements an internal scripting language. . . .”

82. On information and belief, on August 31, 1994, at approximately 11:36 p.m. California time, Doyle responded to the message that Pei Wei had sent at approximately 11:16 p.m. Doyle’s response included the following statements: “Out of curiosity, did you publicly demonstrate this or publish any results before 1994?”

83. On information and belief, on September 1, 1994, at approximately 12:08 a.m. California time, Pei Wei responded to the message that Doyle had sent at approximately 11:13 p.m.

84. On information and belief, Pei Wei's message at approximately 12:08 a.m. was also responsive to the message that Doyle had sent at approximately 11:36 p.m.

85. On information and belief, Pei Wei's message to Doyle at 12:08 a.m. included the following statements:

Well. Viola's model was \*demonstrated\* in 1993, \*released\* freely in 1994. . . . And, as for the plotting demo, it actually is really just a front-end that fires up a back-end plotting program (and the point is that that back-end could very well be running on a remote super computer instead of the localhost). For that demo, there is a simple protocol such that the front-end app could pass an X window ID to the back-end, and the back-end draws the graphics directly onto the window violaWWW has opened for it.

86. On information and belief, Doyle deleted from his computer his emails with Pei Wei on August 31 and September 1, 1994, and the copy of the August 1994 Viola paper that he had downloaded and read. Doyle kept on his computer other emails from that timeframe, however. Indeed, on information and belief, all of Doyle's email exchanges were made by using the University's computers and were sent over University servers.

87. On information and belief, Doyle, as Director of the University's Center for Knowledge Management was living in Northern California on August 31, 1994, when he exchanged messages with Pei Wei about the ViolaWWW browser.

88. On information and belief, Pei Wei was living in Northern California on August 31, 1994, when he exchanged messages with Doyle about the ViolaWWW browser.

89. On information and belief, there was no limitation, restriction or obligation of secrecy on the recipients of Pei Wei's messages on August 31 and September 1, 1994, about the ViolaWWW browser.

90. On information and belief, there was no limitation, restriction or obligation of secrecy on the readers of Pei Wei's August 1994 Viola paper.

91. On October 17, 1994, the application for the '906 patent was filed. Doyle and Martin were among those named as inventors, and the University was the owner.

92. The application for the '906 patent discloses the Mosaic browser and the Cello browser, but fails to disclose the ViolaWWW browser, the browser developed by the University's former student, Pei Wei. Indeed, although known by the University and Doyle, the application wholly failed to mention any work of Pei Wei, the Viola WWW browser, the prior public demonstrations of the ViolaWWW browser, or Doyle's knowledge that Pei Wei was the prior inventor of the invention claimed by the application for the '906 patent. Instead, the University and Doyle chose to bury the work of Pei Wei, the University's student, in order to advance their own financial interests and causes in attempt to obtain a patent. The University and Doyle failed to disclose this material information to the Patent Office with the specific intent to deceive the Patent Office so that it would issue the patent.

93. The application for the '906 patent included an information disclosure statement that identified several pieces of prior art, but failed to identify the ViolaWWW browser. Indeed, although known by the University and Doyle, the information disclosure statement wholly failed to mention any work of Pei Wei, the Viola WWW browser, the prior public demonstrations of the ViolaWWW browser, or Doyle's knowledge that Pei Wei was the prior inventor of the invention claimed by the application for the '906 patent. Again, rather than candidly providing full disclosure, the University and Doyle failed to disclose the work of the University's own student in order to advance their own financial interests in attempting to obtain a patent. Indeed, Doyle and the University specifically buried Pei Wei's work and intended to deceive the Patent Office so that it would issue the patent to them.

94. On November 22, 1994, Doyle, as director of the University's Center for Knowledge Management, signed a declaration under penalty of perjury that included the following statements: "I believe I am. . . an original, first and joint inventor. . . of the subject

matter which is claimed and for which a patent is sought. . . the specification of which. . . was filed on October 17, 1994 as Application Serial No. 08/324,443. . . . I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56.”

95. On information and belief, neither Doyle nor the University ever disclosed the ViolaWWW browser, the prior public demonstrations of the ViolaWWW browser, or their knowledge that Pei Wei was the prior inventor of the invention claimed by the application for the ‘906 patent to the Patent Office during prosecution of application number 08/324,443, which matured into the ‘906 patent.

96. On information and belief, Doyle was reminded about Pei Wei and the ViolaWWW browser in 1995, during prosecution of the ‘906 patent. Nevertheless, Doyle and the University continued to secrete this information from the Patent Office and did not disclose the ViolaWWW browser to the Patent Office with the specific intent to deceive the Patent Office.

97. On information and belief, on August 21, 1995, at approximately 11:42 a.m. California time, Doyle posted a “Press Release” to the publicly-accessible WWW-talk e-mail distribution list. Doyle’s post included the following statements: “Eolas Technologies Inc. announced today that it has completed a licensing agreement with the University of California for the exclusive rights to a pending patent covering the use of embedded program objects, or ‘applets,’ within World Wide Web documents.”

98. On information and belief, on August 21, 1995, at approximately 12:54 p.m. California time, Pei Wei responded on the publicly-accessible WWW-talk e-mail distribution list to Doyle’s “Press Release.” Pei Wei’s response included the following statements: “[F]or the record, I just want to point out that the ‘technology which enabled Web documents to contain fully-interactive “inline” program objects’ was existing in ViolaWWW and was \*released\* to the public, and in full source code form, even back in 1993... Actual conceptualization and existence occurred before ‘93.”

99. On information and belief, on August 21, 1995, at approximately 1:14 p.m. California time, Doyle responded to the message Pei Wei had sent at approximately 12:54 p.m. Doyle's response included the following statements: "We've had this discussion before (last September, remember?). You admitted then that you did NOT release or publish anything like this before the Eolas demonstrations."

100. On information and belief, on August 21, 1995, at approximately 4:09 p.m. California time, Pei Wei responded to the message that Doyle had sent at approximately 1:14 p.m. Pei Wei's response included the following statements:

Please carefully re-read my letter to you... I said Viola was demonstrated in smaller settings, but before your demo. The applets stuff was demo'ed to whomever wanted to see it and had visited our office at O'Reilly & Associates (where I worked at the time).

This is what I wrote on the VRML list:

....

> Definitely by May 8, 1993 we had demonstrated that plotting demo  
> (the very one shown in the viola paper) to visitors from a certain  
> computer manufacturer... This demo was memorable because someone  
and I  
> at ORA had lost sleep the night before the meeting, in order to cook up  
> that particular plotting demo :) We had to show something cool.

That date (May 93), at least, predates your demo if I'm not mistaken. Then around August 93, it was shown to a bunch of attendees at the first Web Conference in Cambridge. . . .

....

If you're talking about interactive apps \*specifically\* on the web, ie applets in-lined into HTML documents etc., and with bi-directional communications, then look at ViolaWWW as it existed around late '92 early '93.

101. On information and belief, when Pei Wei referred to the "plotting demo (the very one shown in the viola paper)," he was referring to the plot of the fighter jet shown above in the

window titled “XPlot.”

102. On information and belief, when Pei Wei referred to a demonstration “by May 8, 1993,” he was referring to the demonstration of the plotting demo to two Sun Microsystems employees that the Federal Circuit has held “was a public use under [35 U.S.C. § 102(b)].” 399 F.3d 1325, 1335 (Fed. Cir. 2005).

103. On information and belief, when Pei Wei referred to the “first Web Conference in Cambridge” “around August 1993,” he was referring to the “World-Wide Web Wizards Workshop” held in Cambridge, Massachusetts on July 28–30, 1993.

104. On information and belief, people attending the Wizards workshop included Tim Berners-Lee, Marc Andreessen, Eric Bina, Dale Dougherty, Scott Silvey, and Pei Wei.

105. On information and belief, Tim Berners-Lee and Dale Dougherty were the organizers of the Wizards workshop.

106. On information and belief, Dale Dougherty worked at O’Reilly & Associates in Northern California.

107. On information and belief, in 1992, Dale Dougherty learned about Viola and recruited Pei Wei to join O’Reilly & Associates. Pei Wei’s job at O’Reilly & Associates was to continue developing the ViolaWWW browser.

108. On information and belief, Scott Silvey worked with Pei Wei at O’Reilly & Associates in Northern California.

109. On information and belief, when Pei Wei wrote “This demo was memorable because someone and I at ORA had lost sleep the night before the meeting, in order to cook up that particular plotting demo,” the other person he was referring to was Scott Silvey.

110. On information and belief, Tim Berners-Lee is the person generally attributed to be the inventor of the World Wide Web.

111. On information and belief, Marc Andreessen and Eric Bina were the authors of Mosaic, a popular browser for the World Wide Web created at the National Center for Supercomputing Applications (NCSA) at the University of Illinois at Urbana-Champaign.

112. On information and belief, Marc Andreessen and Eric Bina went on to found Netscape, the manufacturer of another popular browser for the World Wide Web.

113. On information and belief, Pei Wei and Scott Silvey demonstrated the ViolaWWW browser and its ability to automatically invoke interactive objects embedded within a webpage using the “VOBJF” tag to at least Marc Andreessen and Tim Berners-Lee at the Wizards workshop in Cambridge, Massachusetts in July 1993 — over one year before the application for the ’906 patent was filed.

114. On information and belief, there was no limitation, restriction or obligation of secrecy on anyone at the Wizards workshop.

115. On information and belief, Pei Wei’s demonstration at the Wizards workshop of the ViolaWWW browser and its ability to automatically invoke interactive objects embedded within a webpage using the “VOBJF” tag was a public use under 35 U.S.C. § 102(b).

116. On information and belief, despite Pei Wei’s communications to Doyle, the Director of the University’s Center for Knowledge Management, repeatedly providing evidence that the ViolaWWW browser was material prior art under 35 U.S.C. § 102(b), neither Doyle nor the University ever disclosed the ViolaWWW browser to the Patent Office during prosecution of application number 08/324,443, which matured into the ’906 patent.

117. Indeed, Chris McRae, a University employee for the Center for Knowledge Management at the San Francisco campus attended the Wizards workshop in July 1993. After the workshop, McRae returned to the University and told the University’s Assistant Director David Martin about the ViolaWWW browser and its capabilities. Although the University’s management knew of ViolaWWW, still it failed to advise the PTO of the ViolaWWW browser, the public demonstrations or the prior inventorship of Pei Wei of the invention claimed by the application for the ’906 patent.

118. On information and belief, Doyle instead deleted from his computer his emails with Pei Wei on August 21, 1995. Doyle kept on his computer other emails from that timeframe, however.

119. On information and belief, in 1998, during prosecution of the '906 patent, Doyle collected additional information about the ViolaWWW browser, but he still did not disclose any information about the ViolaWWW browser to the Patent Office, as explained in more detail below.

120. On information and belief, during prosecution of the '906 patent, Doyle maintained a folder called "Viola stuff."

121. On information and belief, the "Viola stuff" folder included a printout of Pei Wei's message to Doyle on August 31, 1994, at approximately 6:52 p.m. California time, in which Pei Wei told Doyle, "I don't think this is the first case of program objects embedded in docs and transported over the WWW. ViolaWWW has had this capabilities for months and months now."

122. On information and belief, the "Viola stuff" folder included a printout of Doyle's message to Pei Wei on August 31, 1994, at approximately 11:36 p.m. California time, in which Doyle asked Pei Wei, "Out of curiosity, did you publicly demonstrate this or publish any results before 1994?"

123. On information and belief, the "Viola stuff" folder included a printout from the URL <<http://www.w3.org/History/1994/WWW/WorkingNotes/>>. This webpage has a heading for the "WWWizardsWorkshop" "Cambridge, Mass, July 1993" and includes links to "Announcement," "Agenda," and "Photos of attendees."

124. On information and belief, "WWWizardsWorkshop" refers to the World-Wide Web Wizards Workshop held in Cambridge, Massachusetts on July 28–30, 1993, that Pei Wei attended.

125. On information and belief, the "Announcement" link links to a webpage at <[http://www.w3.org/History/1994/WWW/WorkingNotes/1993\\_Workshop/Announcement.html](http://www.w3.org/History/1994/WWW/WorkingNotes/1993_Workshop/Announcement.html)> that states that "Interactive objects" would be discussed at the Wizards workshop.

126. On information and belief, the "Agenda" link links to a webpage at <[http://www.w3.org/History/1994/WWW/WorkingNotes/1993\\_Workshop/Agenda.html](http://www.w3.org/History/1994/WWW/WorkingNotes/1993_Workshop/Agenda.html)> that

states that “Interactive objects” was on the agenda for discussion at the Wizards workshop.

127. On information and belief, the webpages for the Wizards workshop corroborate Pei Wei’s statement to Doyle on August 21, 1995, that the plotting demo described in the August 1994 Viola paper was “shown to a bunch of attendees at the first Web Conference in Cambridge” “around August 93” — over one year before the application for the ’906 patent was filed.

128. On information and belief, the “Viola stuff” folder included a printout of a webpage with a link to the source code for viola-2.1.2, archived on September 2, 1993 — over one year before the application for the ’906 patent was filed

129. On information and belief, the “Viola stuff” folder included a printout of a webpage with the “README” file for viola-2.1.2. The date at the top of the “README” file is July 27, 1992. The “README” file includes instructions for building the binary code for the “viola” program, and instructions for running the ViolaWWW browser. The “README” file states at the bottom:

Comments and questions:

Please send WWW specific bugs to [www-bugs@info.cern.ch](mailto:www-bugs@info.cern.ch), general comments to [www-talk@info.cern.ch](mailto:www-talk@info.cern.ch), and anything to [wei@xcf.Berkeley.EDU](mailto:wei@xcf.Berkeley.EDU).

Pei Y. Wei  
[wei@xcf.berkeley.edu](mailto:wei@xcf.berkeley.edu)

130. On information and belief, the “Viola stuff” folder included a printout of a message that Pei Wei had sent to the publicly-accessible WWW-talk e-mail distribution list on January 28, 1994, that included the following statements: “Right now, the ViolaWWW that is under development can embed viola objects/applications inside of HTML documents.”

131. On information and belief, the “Viola stuff” folder included a printout of a message that Pei Wei had sent to the publicly-accessible WWW-talk e-mail distribution list on February 25, 1994, that included the following statements:

The new ViolaWWW is now available for ftp'ing. It's beta and feedback is very welcomed. The README file follows...

```
=====
ViolaWWW, Version 3.0 Beta                      Feb 23 1994
=====
```

ViolaWWW is an extensible World Wide Web hypermedia browser for XWindows.

....

Notable features in the new ViolaWWW

-----

....

\* Embeddable in-document and in-toolbar programmable viola objects. A document can embed mini viola applications (ie: a chess board), or can cause mini apps to be placed in the toolbar.

....

Availability

-----

Source and binary can be found in <ftp://ora.com/pub/www/viola>. Sparc binary is supplied.

....

Pei Y. Wei (wei@ora.com)  
O'Reilly & Associates, Inc.

132. The "Viola stuff" folder included a printout from the URL <<http://xcf.berkeley.edu/ht/projects/viola/>>. The printout included the following statements:

```
=====
ViolaWWW, Version 3.1 Beta                      Mar 23 1994
=====
```

ViolaWWW is an extensible World Wide Web hypermedia browser for XWindows.

....

## Notable features in the new ViolaWWW

-----

....

\* Embeddable in-document and in-toolbar programmable viola objects. A document can embed mini viola applications (ie: a chess board), or can cause mini apps to be placed in the toolbar.

....

## Availability

-----

Source and binary can be found in <ftp://ora.com/pub/www/viola>. Sparc binary is supplied.

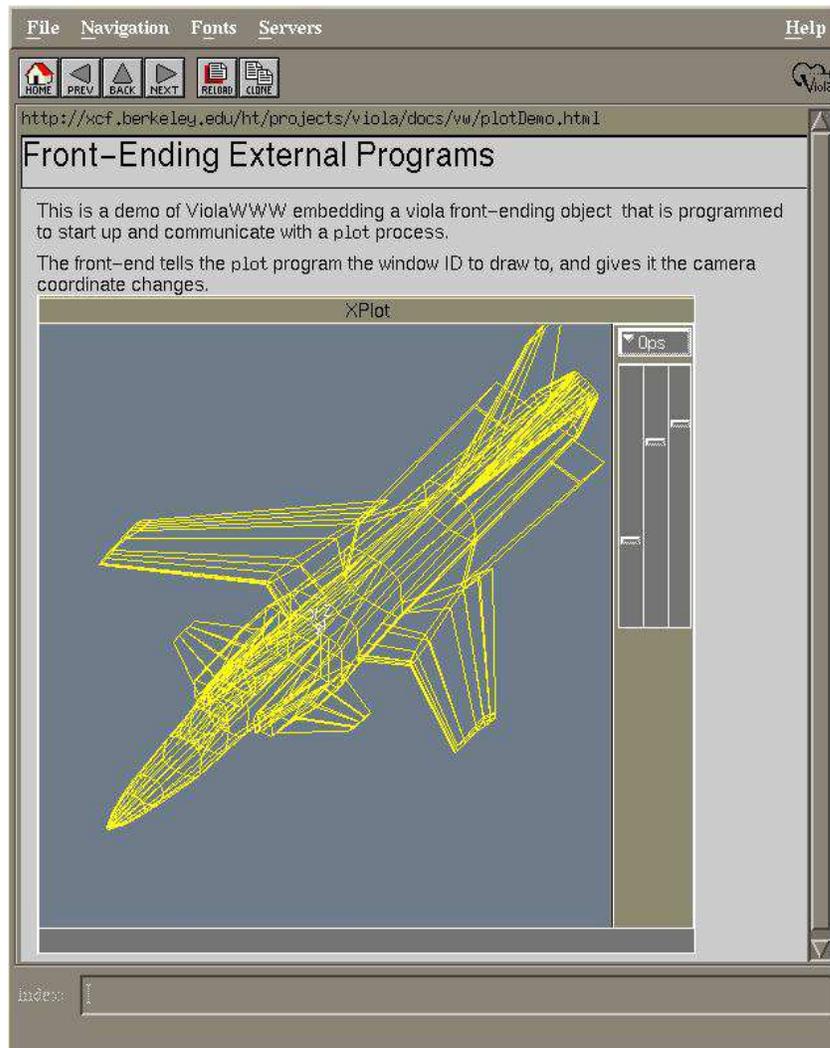
....

Pei Y. Wei ([wei@ora.com](mailto:wei@ora.com))  
O'Reilly & Associates, Inc.

133. On information and belief, the “Viola stuff” folder included a printout from the URL <http://xcf.berkeley.edu/ht/projects/viola/docs/viola/>. One of the files listed in the printout is named “plotDemo.html”.

134. On information and belief, the “Viola stuff” folder included a printout from the URL <http://xcf.berkeley.edu/ht/projects/viola/docs/objs/>. One of the files listed in the printout is named “plot.v”.

135. On information and belief, the following is a screenshot of the ViolaWWW browser after parsing the file plotDemo.html:



136. On information and belief, the files plotDemo.html and plot.v include code for the plotting demo described in the August 1994 Viola paper .

137. On information and belief, the file plotDemo.html specifies the location of the file plot.v, which in turn specifies the location of a separate executable application named vplot.

138. On information and belief, Pei Wei had told Doyle on August 31, 1994 how the plotting demo worked: “[A]s for the plotting demo, it actually is really just a front-end that fires up a back-end plotting program (and the point is that that back-end could very well be running on a remote super computer instead of the localhost). For that demo, there is a simple protocol such that the front-end app could pass an X window ID to the back-end, and the back-end draws the graphics directly onto the window violaWWW has opened for it.”

139. On information and belief, Pei Wei had told Doyle on August 31, 1994, and again on August 21, 1995 that the plotting demo described in the August 1994 Viola paper was the “very one” demonstrated “to visitors from a certain computer manufacturer” by May 8, 1993.

140. On information and belief, when Pei Wei referred to a demonstration “by May 8, 1993,” he was referring to the demonstration of the plotting demo to two Sun Microsystems employees that the Federal Circuit has held “was a public use under [35 U.S.C. § 102(b)].” 399 F.3d 1325, 1335 (Fed. Cir. 2005).

141. On information and belief, during prosecution of the ’906 patent, Doyle knew about Pei Wei’s demonstration of the plotting demo that the Federal Circuit has held was a “public use” under 35 U.S.C. § 102(b); Doyle knew how the plotting demo worked; and Doyle had access to the code for that plotting demo.

142. On information and belief, during prosecution of the ’906 patent, Doyle printed webpages containing information about a talk that Pei Wei gave at Stanford University in Northern California in September 1994.

143. On information and belief, the webpages that Doyle printed included the following statements and graphic:

WWW Browsers: Extensibility Issues

Pei Wei, O’Reilly & Associates

Stanford Computer Forum WWW Workshop - September 20-21,  
1994

....

Extensibility in WWW Browsers

The WorldWideWeb is a powerful medium which has many applications beyond just publishing static documents. It is certainly an interface to the space of “documents.” But already, with established features such as input-forms and server-side scripting, we see that the web is also increasingly becoming an interface to the space of what is traditionally called “applications.”

....

In this talk I'll describe a few possible approaches for a browser to gain more flexibility, and to briefly describe one particular approach as implemented by a system known as ViolaWWW.

....

#### Possible Ways to Extend Browsers

We already do "extend" browsers with things like "external viewers." But there's not a very good integration with the browser. Ideally those external viewers should be rendering in-place inside the document, and be working together with the browser, be tightly integrated with the browser and other parts...

....

#### Work at O'Reilly & Associates: VIOLA-WWW

....

This is the Viola system that is being developed at O'Reilly and Associates. This system has the following interesting characteristics:

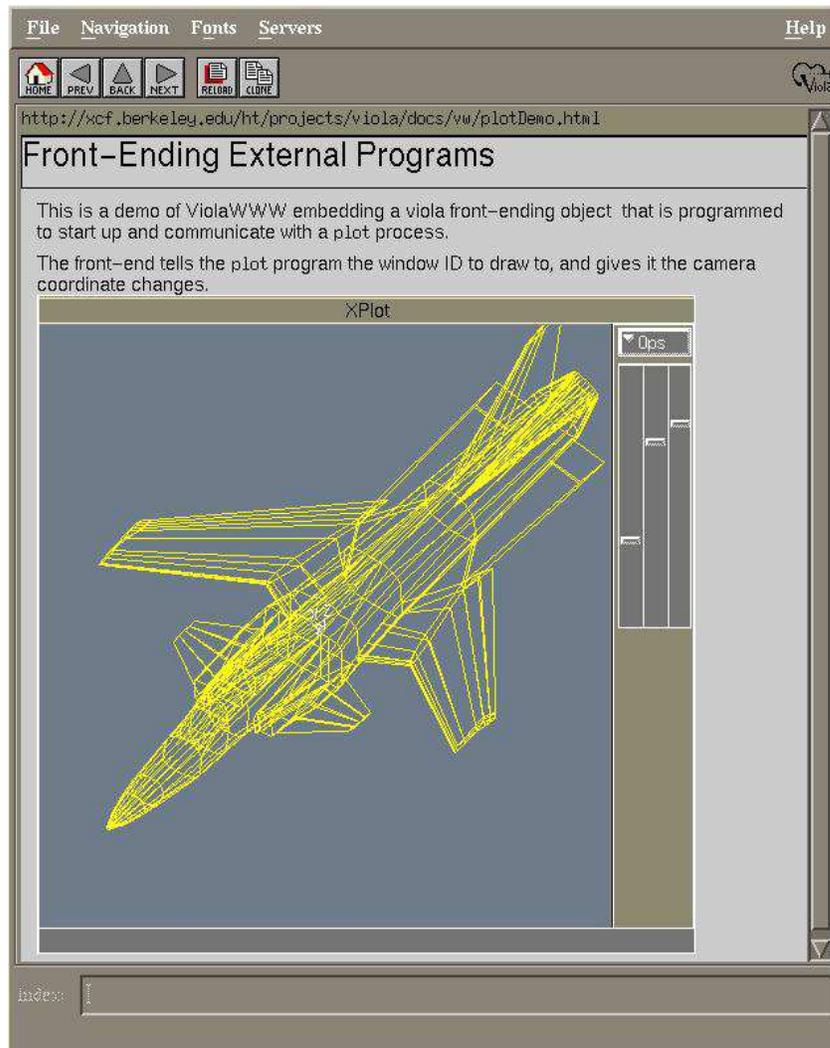
....

Three, program objects can be embedded into documents and the toolbar. . . .

....

The next example is a front-end application to a backend. And the back-end is what actually does the computation and the drawing.

....



144. On information and belief, there was no limitation, restriction or obligation of secrecy on anyone attending the talk that Pei Wei gave at Stanford University in September 1994.

145. On information and belief, the plotting demo described in the talk at Stanford University in September 1994 is the same plotting demo described in the August 1994 Viola paper.

146. On information and belief, Pei Wei had told Doyle on August 31, 1994, and again on August 21, 1995 that the plotting demo described in the August 1994 Viola paper was the “very one” demonstrated “to visitors from a certain computer manufacturer” by May 8, 1993.

147. On information and belief, when Pei Wei referred to a demonstration “by May 8,

1993,” he was referring to the demonstration of the plotting demo to two Sun Microsystems employees that the Federal Circuit has held “was a public use under [35 U.S.C. § 102(b)].” 399 F.3d 1325, 1335 (Fed. Cir. 2005).

148. On information and belief, during prosecution of the '906 patent, Doyle was repeatedly confronted with evidence that the ViolaWWW browser was material prior art under 35 U.S.C. § 102(b), yet Doyle never disclosed the ViolaWWW browser to the Patent Office during prosecution of application number 08/324,443, which matured into the '906 patent.

149. On information and belief, the ViolaWWW browser, including the August 1994 Viola paper, was disclosed to Krueger in August of 1998, after the Notice of Allowance for the '906 patent issued but before the '906 patent issued, when he received a fax containing a number of references regarding the ViolaWWW browser.

150. On information and belief, the fax sent to Krueger in August of 1998 was to allow him to analyze whether the ViolaWWW browser, including the August 1994 Viola paper, should be submitted to the Patent Office.

151. On information and belief, Krueger was aware of Pei Wei's May 1993 demonstration of the ViolaWWW browser to Sun Microsystems employees without a confidentiality agreements.

152. On information and belief, Krueger considered Pei Wei's statements regarding the May 1993 demonstration of the ViolaWWW browser to Sun Microsystems employees when he analyzed whether to disclose the ViolaWWW browser to the Patent Office.

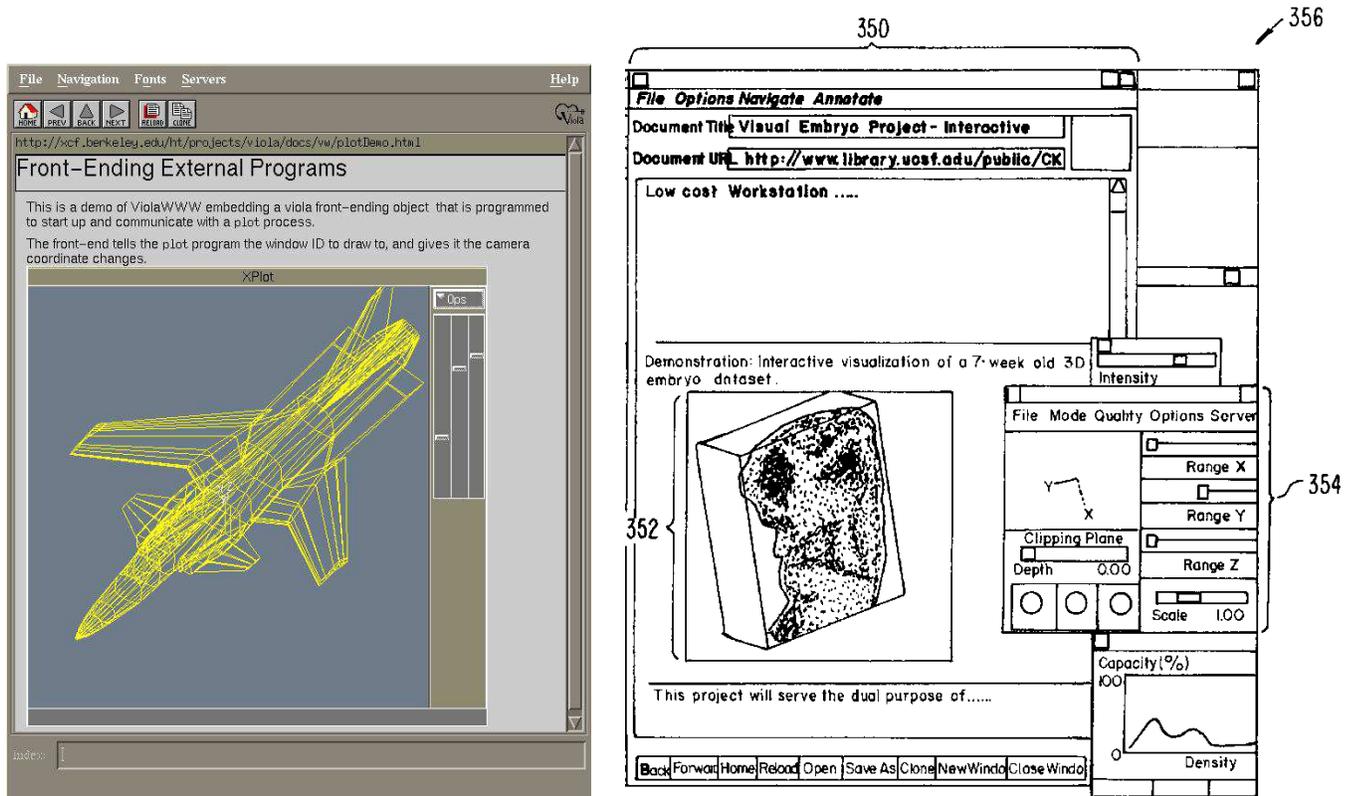
153. On information and belief, Krueger had no reason to disbelieve Pei Wei's statements regarding the May 1993 demonstration of the ViolaWWW browser to Sun Microsystems employees.

154. On information and belief, Krueger made the determination, prior to the issuance of the '906 patent, to not disclose to the PTO the information he received regarding the ViolaWWW browser.

155. On information and belief, the ViolaWWW browser was material to the

patentability of the claimed inventions in the '906 patent.

156. On information and belief, there is a remarkable similarity between the ViolaWWW browser and the preferred embodiment of the '906 patent:



**ViolaWWW**

**Fig. 9 of U.S. Patent No. 5,838,906**

Both the ViolaWWW browser (on the left) and the preferred embodiment of the '906 patent (on the right) enabled a user to interact with a 3-dimensional image embedded in the middle of a webpage. In the ViolaWWW screenshot above, there are three slide controls to the right of the embedded image that move up and down; these rotate the embedded image on the X, Y, and Z axes. Similarly, in the preferred embodiment of the '906 patent shown above, box 354 has three slide controls to the right of the embedded image that rotate the image on the X, Y, and Z axes. Thus, ViolaWWW, like the '906 patent, teaches a browser capable of displaying embedded interactive objects.

157. The Manual of Patent Examining Procedure in force at the time the application for the '906 patent was filed included the following statements:

Materiality is defined in 37 CFR 1.56(b) and discussed herein at MPEP § 2001.05. In addition to prior art such as patents and publications, 37 CFR 1.56 includes, for example, information on ***possible prior public uses***, sales, offers to sell, derived knowledge, ***prior invention by another***, inventorship conflicts, and the like. [emphasis in bold added]

158. The Manual of Patent Examining Procedure in force today contains similar language:

Materiality is defined in 37 CFR 1.56(b) and discussed herein at MPEP § 2001.05. In addition to prior art such as patents and publications, 37 CFR 1.56 includes, for example, information on >enablement,< ***possible prior public uses***, sales, offers to sell, derived knowledge, ***prior invention by another***, inventorship conflicts, and the like. >“Materiality is not limited to prior art but embraces *any* information that a reasonable examiner would be substantially likely to consider important in deciding whether to allow an application to issue as a patent.” *Bristol-Myers Squibb Co. v. Rhone-Poulenc Rorer, Inc.*, 326 F.3d 1226, 1234, 66 USPQ2d 1481, 1486 (Fed. Cir. 2003) (emphasis in original) (finding article which was not prior art to be material to enablement issue).< [emphasis in bold added]

159. The Federal Circuit has confirmed that the ViolaWWW browser was material to the patentability of the claimed inventions in the '906 patent.

160. The Federal Circuit held that a reasonable jury could find at least claims 1 and 6 of the '906 patent anticipated by the ViolaWWW browser under 35 U.S.C. § 102(a), (b), and/or (g). *See* 399 F.3d 1325, 1329, 1332–35 (Fed. Cir. 2005).

161. The Federal Circuit held that “Wei’s May 7, 1993 demonstration to two Sun Microsystems employees without confidentiality agreements was a public use under [35 U.S.C. § 102(b)].” 399 F.3d 1325, 1335 (Fed. Cir. 2005).

162. The Federal Circuit held that a reasonable jury could find at least claims 1 and 6 of the '906 patent obvious in light of the ViolaWWW browser. *See* 399 F.3d 1325, 1335 (Fed. Cir. 2005).

163. The Federal Circuit held that a district court could find that Doyle had committed

inequitable conduct by failing to disclose the ViolaWWW browser to the Patent Office. *See* 399 F.3d 1325, 1336 (Fed. Cir. 2005).

164. On information and belief, Krueger was aware that the Federal Circuit confirmed that the ViolaWWW browser was material to the patentability of the claimed invention in the '906 patent, but he still did not discuss the ViolaWWW browser further with Doyle.

165. On information and belief, even after Krueger was aware that the Federal Circuit confirmed that the ViolaWWW browser was material to the patentability of the claimed invention in the '906 patent he did not disclose any additional information to help the Patent Office consider ViolaWWW browser.

166. The Patent Office has also confirmed that the ViolaWWW browser was material to the patentability of the claimed inventions in the '906 patent.

167. On or about July 30, 2007, during the 2005 reexamination of the '906 patent, the Patent Office rejected all claims of the '906 patent as being anticipated by DX95, which includes a copy of the text found in Pei Wei's August 1994 Viola paper.

168. On information and belief, Pei Wei had told Doyle on August 31, 1994, about the August 1994 Viola paper and Doyle had downloaded and read that paper the same day, yet Doyle never disclosed the Viola paper to the Patent Office during the original examination of the '906 patent.

169. On information and belief, the fact that Doyle may have conceived of the inventions claimed in the '906 patent before August 16, 1994, does not render the August 1994 Viola paper immaterial, because the Viola paper describes features of the ViolaWWW browser that existed before the invention date for the '906 patent and/or over one year before the application for the '906 patent was filed.

170. On information and belief, the plotting demo described in the August 1994 Viola paper was part of the ViolaWWW browser software that was demonstrated to Sun Microsystems on May 7, 1993 — over one year before the application for the '906 patent was filed.

171. On information and belief, none of the claimed inventions in the '906 patent was

conceived before August 1993.

172. On information and belief, the ViolaWWW browser software that was described in the August 1994 Viola paper and demonstrated to Sun Microsystems on May 7, 1993, also corroborates anticipation of the claimed inventions in the '906 patent under 35 U.S.C. § 102(g).

173. Neither reexamination of the '906 patent considered whether the claimed inventions were anticipated by “Wei’s May 7, 1993 demonstration to two Sun Microsystems employees without confidentiality agreements” which the Federal Circuit has held was a “public use under [35 U.S.C. § 102(b)].” 399 F.3d 1325, 1335 (Fed. Cir. 2005).

174. In an *ex parte* reexamination, “[r]ejections will not be based on matters other than patents or printed publications, such as public use.” *See* Manual of Patent Examining Procedure (MPEP) § 2258(I).

175. On information and belief, Krueger knew that the Patent Office could not consider public use art during an *ex parte* reexamination.

176. The Patent Office had the authority during the original examination of the '906 patent to issue a rejection based on the “public use” provision of 35 U.S.C. § 102(b), but Doyle and, Krueger never disclosed to the Patent Office during that examination the evidence they had in their possession that the ViolaWWW browser was in “public use” more than one year before the application for the '906 patent was filed.

177. On information and belief, the Patent Office would not have allowed the claims of the '906 patent if Doyle, Krueger, or the University had not engaged in inequitable conduct and instead had fulfilled their duty of candor and good faith in dealing with the Patent Office.

178. During prosecution of application number 08/324,443, which matured into the '906 patent, Doyle, Krueger, and the University withheld extensive evidence about the ViolaWWW browser.

179. On information and belief, Doyle and the University failed to disclose the following material information: the message from Raggett about the ViolaWWW browser and embedded objects; the communications with Pei Wei in 1994 about the ViolaWWW browser and

the embedded interactive plotting demo that was in public use in May 1993; the August 1994 Viola paper describing the ViolaWWW browser and the embedded interactive plotting demo that was in public use in May 1993; the communications with Pei Wei in 1995 about the ViolaWWW browser and the embedded interactive plotting demo that was in public use in May 1993 and again at the Wizards conference in July 1993; the contents of the “Viola stuff” folder that Doyle maintained, which included information about the Wizards conference in July 1993 and links to the ViolaWWW browser software, including source code for the embedded interactive plotting demo that was in public use in May 1993; and Pei Wei’s talk at Stanford in September 1994 about the embedded interactive plotting demo that was in public use in May 1993.

180. On information and belief, Krueger failed to disclose a number of material references and other prior art regarding the ViolaWWW browser including at least the August 1994 Viola paper, Doyle’s communications with Pei Wei in 1994 about the ViolaWWW browser and the embedded interactive plotting demo that was in public use in May 1993; the Viola paper describing the ViolaWWW browser and the embedded interactive plotting demo that was in public use in May 1993; and the contents of the “Viola stuff” folder that Doyle maintained and was faxed to Krueger in August of 1998, which included information about the Wizards conference in July 1993 and links to the ViolaWWW browser software, including source code for the embedded interactive plotting demo that was in public use in May 1993.

181. On information and belief, the University failed to disclose the following material information: ViolaWWW code written on computers in the XCF lab and posted to the University’s FTP sites, the message between David Martin and Pei Wei in May 1994 about ViolaWWW, the ViolaWWW browser including at least the August 1994 Viola paper, the prior public demonstrations of the ViolaWWW browser, and the emails asserting that Pei Wei was the prior inventor of the invention claimed by the application for the ‘906 patent. On information and belief, Doyle, Krueger, and the University withheld information about the ViolaWWW browser with the specific intent to deceive the Patent Office.

182. On information and belief, Doyle and the University had a financial interest in the

patentability of the claimed inventions in the '906 patent.

183. On information and belief, the ViolaWWW browser threatened the patentability of the claimed inventions in the '906 patent, and thus threatened Doyle's and the University's financial interests.

184. On information and belief, Doyle was personally involved in the prosecution of application number 08/324,443, which matured into the '906 patent.

185. For example, Doyle signed a declaration on or about November 22, 1994, stating that he was an inventor and acknowledging his duty of candor and good faith in dealing with the Patent Office.

186. On or about January 2, 1997, Doyle signed a declaration that was submitted to the Patent Office in an effort to establish an earlier date of invention for the claims of the '906 patent application.

187. On or about February 24, 1997, Doyle and Krueger participated in an examiner interview in an effort to secure allowance of the claims of the '906 patent application.

188. On or about May 27, 1997, Doyle signed a 28-page declaration (including an appendix) that was submitted to the Patent Office in an effort to establish himself as an "expert" in the subject matter of the claimed invention and to overcome various obviousness rejections to the claims of the '906 patent application.

189. On or about October 29, 1997, Doyle signed another declaration that was submitted to the Patent Office in an effort to establish an earlier date of invention for the claims of the '906 patent application.

190. On or about November 6, 1997, Doyle and Krueger participated in another examiner interview in an effort to secure allowance of the claims of the '906 patent application.

191. On information and belief, Krueger lacked a technical degree in computer science or electrical engineering, and thus he relied on Doyle to understand and describe the subject matter of the claimed invention and the prior art.

192. On information and belief, Doyle personally reviewed and approved papers

submitted to the Patent Office during prosecution of the '906 patent.

193. Despite Doyle's and Krueger's extensive personal involvement in the prosecution of application number 08/324,443, which matured into the '906 patent, Doyle and Krueger never disclosed the ViolaWWW browser to the Patent Office during that prosecution.

194. The circumstances of Krueger's and Doyle's actions demonstrate an intent to deceive the Patent Office.

195. On information and belief, during prosecution of the '906 patent, Doyle and Krueger made arguments for patentability that could not have been made if they had disclosed the ViolaWWW browser to the Patent Office.

196. On or about May 6, 1996, the Patent Office rejected several claims as being anticipated by the University of Southern California's "Mercury Project."

197. On or about August 6, 1996, a response to this rejection was submitted to the Patent Office.

198. On information and belief, Doyle personally reviewed and approved the response submitted to the Patent Office on or about August 6, 1996.

199. The response submitted on or about August 6, 1996, included the following statements:

The claimed combination is fundamentally different from the Mercury Project. In the claimed combination, the external object and executable object are embedded by reference in the HTML document and the object is displayed and processed within the same window where a portion of the original document is displayed. In the Mercury Project information is passed back to the server and a new document is generated and displayed. There is no display and processing the external object within the window in which a portion of the original document is displayed.

200. If Doyle, Krueger, or the University had disclosed the ViolaWWW prior art to the Patent Office, it would not have been possible to distinguish the claims of the '906 patent over the prior art on the basis that the prior art failed to disclose "display[ing] and processing the

external object within the window in which a portion of the original document is displayed.”

201. On or about March 26, 1997, the Patent Office rejected several claims as being obvious in light of “Khoyi et al. US Patent 5,206,951” in combination with other prior art.

202. On or about June 2, 1997, a response to this rejection was submitted to the Patent Office.

203. Doyle and Krueger personally reviewed and approved the response submitted to the Patent Office on or about June 2, 1997.

204. The response submitted on or about June 2, 1997, included the following statements:

[T]here is no suggestion in Khoyi of modifying Mosaic so that an external application . . . is invoked to display and interactively process the object within the document window while the document is displayed by Mosaic in the same window.

205. On information and belief, if Doyle, Krueger, or the University had disclosed the ViolaWWW prior art to the Patent Office, it would not have been possible to distinguish the claims of the '906 patent over the prior art on the basis that the prior art failed to disclose “an external application [that] is invoked to display and interactively process the object within the document window while the document is displayed by [the browser] in the same window.”

206. On or about August 25, 1997, the Patent Office rejected several claims as being obvious in light of “Koppolu et al. US Patent 5,581,686” in combination with other prior art.

207. On or about December 23, 1997, a response to this rejection was submitted to the Patent Office.

208. On information and belief, Doyle and Krueger personally reviewed and approved the response submitted to the Patent Office on or about December 23 1997.

209. The response submitted on or about December 23, 1997, included the following statements:

[T]here is no disclosure or suggestion in Mosaic or Koppolu of automatically invoking an external application when an embed text

format is parsed. Each of those references require user input, specifically clicking with a mouse pointer, to activate external applications to allow display and interaction with an external object.

210. On information and belief, if Doyle, Krueger, or the University had disclosed the ViolaWWW prior art to the Patent Office, it would not have been possible to distinguish the claims of the '906 patent on the basis that the prior art failed to disclose “automatically invoking an external application when an embed text format is parsed.”

211. On information and belief, Doyle’s and Krueger’s repeated use of arguments that could not have been made if Doyle, Krueger, or the University had disclosed the ViolaWWW prior art demonstrates an intent to deceive the Patent Office.

212. On information and belief, Doyle’s intent to deceive the Patent Office is also demonstrated by comparing what he told an audience of web developers on or about March 27, 1995, to what he told the Patent Office on or about May 27, 1997.

213. On information and belief, on or about March 27, 1995, Doyle responded to a post on the publicly-accessible WWW-talk e-mail distribution list in which another author had written, under the heading “HotJava is here! And it \*rocks\*,” “It’s the most exciting thing to happen to the Web since viola.” On information and belief, Doyle’s response included the following statements:

If you take a close look at Java, you’ll realize that it bears a close similarity to Viola, since the “applets” must be coded from a predefined language, downloaded and locally interpreted.

214. On information and belief, on or about May 27, 1997, Doyle signed a declaration that was submitted to the Patent Office. Doyle’s declaration included the following statements:

The three exemplary products which incorporate the features of the claimed invention include Netscape Navigator 2.0 (or newer versions), Java, from Sun Microsystems, and ActiveX, from Microsoft. . . . [T]he success of these products is directly attributable to the claimed features of the invention.

....

A good indicator that Sun Microsystems felt that enabling interactivity in Web pages was the key feature of Java is given in the first chapter of “Hooked on Java,” which was written by members of the original Java development team. They say, “With applets written in the Java programming language, Web users can design Web pages that include animation, graphics, games, and other special effects. **Most important, Java applets can make Web pages highly interactive.**”

This statement shows that the developers of Java felt that the most important feature of the Java technology was the ability of Java to allow an embed text format (the applet tag) within a Web document to be parsed by a Web browser to automatically invoke an external executable application to execute on the client workstation in order to display an external object and enable interactive processing of that object within a display window created at the applet tag’s location within the hypermedia document being displayed in the browser-controlled window. The book’s authors further emphasize the novelty and non-obviousness of this technology when they say, “Quite simply, Java-powered pages are Web pages that have Java applets embedded in them. They are also the Web pages with the coolest special effects around .... Remember, **you need a Java-compatible Web browser such as HotJava to view and hear these pages and to interact with them; otherwise, all you'll access is static Web pages** minus the special effects.”

....

The above citations, as well as the additional details given in Appendix A, provide ample evidence of the commercial success of products incorporating features of the claimed invention, as well as evidence of the widespread acclaim that these products have garnered for the technical innovations which the features of the claimed invention allowed them to provide. They further show that the successes of these products was a direct result of the features of the claimed invention, which they incorporated *through implementation of an embed text format that is parsed by a Web browser to automatically invoke an external executable application to execute on the client workstation in order to display an external object and enable interactive processing of that object within a display window created at the embed text format’s location within the hypermedia document being displayed in the browser-controlled window.*

215. The declaration Doyle signed on or about May 27, 1997, made no mention of Viola or the ViolaWWW browser.

216. On information and belief, Doyle's and Krueger's disclosure of Java for purposes of commercial success, but not the ViolaWWW browser which Doyle knew was prior art that existed over one year before the application for the '906 patent was filed, demonstrates a specific intent to deceive the Patent Office, especially given Doyle's belief that Viola was similar to Java and that Java embodied the claimed invention.

217. Between 1999 and 2003, a third party disputed the validity of the '906 patent.

218. On information and belief, Doyle personally guided Eolas through the litigation concerning the validity of the '906 patent.

219. On information and belief, throughout the litigation, the third party asserted that the plotting demo involving the ViolaWWW browser anticipated the asserted claims of the '906 patent.

220. On information and belief, the plotting demo relied on by the third party to prove anticipation of the asserted claims of the '906 patent was the same plotting demo that Pei Wei had repeatedly described to Doyle, and which the Federal Circuit has held was a "public use" on May 7, 1993, 399 F.3d 1325, 1335 (Fed. Cir. 2005), and which Doyle himself came across from his own research into Viola.

221. On information and belief, in its contentions that the plotting demo involving the ViolaWWW browser anticipated the asserted claims of the '906 patent, the third party specifically identified the VOBJF tag, the plot.v file, and the vplot executable application.

222. On information and belief, on or about December 14, 2001, the third party served an expert report by Dr. John P.J. Kelly, that included the following statements:

When ViolaWWW encountered the tag <VOBJF>/usr/work/viola/apps/plot.v</VOBJF>, an embed text format specifying the location of an object, it looked in the specified path for at least part of the object, parsed the path, and automatically loaded the object into the program. The file (plot.v)

also contained type information associated with the object, such as the name and location of an external executable application, vplot, that also was automatically invoked to enable display of and user interaction with the object at a location within a display area within the document being displayed in the browser-controlled window corresponding to the location of the embed text format in the document. Subsequently, when the user interacted with the object, ViolaWWW sent messages to vplot based on the user input and received output from vplot, thus updating the display of the object.

223. On information and belief, at a trial in 2003 concerning the validity of the '906 patent, Dr. Kelly testified that the plotting demo involving the ViolaWWW browser anticipated the asserted claims of the '906 patent, and he specifically identified the VOBJF tag, the plot.v file, and the vplot executable application for purposes of his anticipation analysis.

224. On information and belief, Pei Wei also testified at the trial in 2003 about the ViolaWWW browser and the plotting demo.

225. On information and belief, at the trial, exhibit DX34 included source code for the ViolaWWW browser dated May 12, 1993.

226. On information and belief, at the trial, exhibit DX37 included source code for the ViolaWWW browser dated May 27, 1993.

227. On information and belief, DX34 contains the code for the plotting demo that Pei Wei demonstrated to Sun Microsystems on May 7, 1993, in Northern California.

228. On information and belief, DX37 contains code for a plotting demo similar to the plotting demo in DX34.

229. On information and belief, on May 31, 1993, Pei Wei posted DX37 on a publicly-accessible Internet site hosted by the University of California (xcf.berkeley.edu) and notified an engineer at Sun Microsystems that DX37 was available for downloading.

230. On information and belief, under 35 U.S.C. § 102(b), DX37 was a "printed publication" over one year before the application for the '906 patent was filed.

231. On information and belief, Dr. Kelly testified that the plotting demo in DX34 and DX37 anticipates the asserted claims of the '906 patent. Dr. Kelly specifically identified the

VOBJF tag, the plot.v file, and the vplot executable application for purposes of his anticipation analysis of DX37.

232. The Federal Circuit has held that Dr. Kelly's testimony would allow a reasonable jury to conclude that DX37 anticipates at least claims 1 and 6 of the '906 patent. *See* 399 F.3d 1325, 1335 (Fed. Cir. 2005).

233. On information and belief, neither Dr. Kelly nor the third party ever relied on anything other than the plotting demo involving plot.v and vplot to prove anticipation by the ViolaWWW browser.

234. On information and belief, Dr. Kelly never discussed clock.v during the trial in July and August 2003.

235. On information and belief, Doyle and the University attended the trial involving the third party held in July and August 2003.

236. On information and belief, by the end of the trial in August 2003, Doyle and the University knew about and understood the third party's contention that the plotting demo involving the ViolaWWW browser in DX37 anticipated the asserted claims of the '906 patent.

237. On information and belief, by the end of the trial in August 2003, Doyle and the University knew about and understood Pei Wei's testimony that on May 31, 1993 — over one year before the application for the '906 patent was filed — he posted DX37 on a publicly-accessible Internet site hosted by the University of California (xcf.berkeley.edu) and notified an engineer at Sun Microsystems that DX37 was available for downloading.

238. On or about October 30, 2003, the Director of the Patent Office initiated a reexamination of the '906 patent. The control number for this reexamination was 90/006,831.

239. On information and belief, during the 2003 reexamination, Doyle, the University, and Krueger withheld information about the ViolaWWW browser with the specific intent to deceive the Patent Office.

240. On information and belief, Doyle and the University had a financial interest in the patentability of the claimed inventions in the '906 patent.

241. On information and belief, the ViolaWWW browser threatened the patentability of the claimed inventions in the '906 patent, and thus threatened Doyle's and the University's financial interests.

242. On information and belief, Doyle and Krueger were personally involved in the 2003 reexamination of the '906 patent.

243. On information and belief, on or about April 27, 2004, Doyle and Krueger participated in an examiner interview in an effort to confirm the patentability of the claims of the '906 patent application. On information and belief, Doyle gave the examiner a presentation supported by approximately 22 slides prepared by Doyle and Krueger, none of which discussed DX37 or the ViolaWWW browser. On information and belief, neither Doyle nor Krueger mentioned the ViolaWWW browser during the interview.

244. On or about May 6, 2004, Doyle signed a declaration that was submitted to the Patent Office in an effort to confirm the patentability of the claims of the '906 patent application. This declaration made no mention of DX37 or the ViolaWWW browser.

245. On information and belief, on or about August 18, 2005, Doyle and Krueger participated in an examiner interview in an effort to confirm the patentability of the claims of the '906 patent application. On information and belief, Doyle gave the examiner a presentation supported by approximately 36 slides, none of which discussed DX37 or the ViolaWWW browser.

246. On information and belief, during the 2003 reexamination, Doyle and Krueger submitted selected information from the litigation with the third party concerning the validity of the '906 patent, but they withheld information that would have identified for the examiner the key features of the prior art ViolaWWW browser and how they matched up to the asserted claims of the '906 patent. On information and belief, this proved critical during the 2003 reexamination because when the examiner decided to look at the source code for the ViolaWWW browser, he missed the key points.

247. On information and belief, on or about December 30, 2003, Doyle and Krueger

submitted to the Patent Office a CD containing two compressed zip files, one for the “DX34” version of the ViolaWWW source code dated May 12, 1993, and the other for the “DX37” version of the ViolaWWW source code dated May 27, 1993.

248. On information and belief, the compressed zip file for DX34 that Doyle and Krueger submitted to the Patent Office was named `viola930512.tar.gz.zip`. When unzipped, it contained 1,027 files in 35 folders consisting of 8 total megabytes in size.

249. On information and belief, the compressed zip file for DX37 that Doyle and Krueger submitted to the Patent Office was named `violaTOGO.tar.Z.zip`. When unzipped, it contained 1,030 files in 34 folders consisting of 7.7 total megabytes in size.

250. On information and belief, DX34 and DX37 contained source code for the ViolaWWW browser.

251. Source code cannot be executed by a computer. Source code must be compiled into binary code before it can be executed by a computer.

252. On information and belief, without the compiled binary code, and without a suitable computer capable of executing that binary code (such as a Sun SPARCstation from the early 1990s), the Patent Office had no practical way to see the ViolaWWW browser in operation.

253. On information and belief, given the voluminous nature of the contents of DX34 and DX37, and the practical inability of the Patent Office to run the ViolaWWW browser on a computer, it was especially important for Doyle and Krueger to be candid with the Patent Office about the contents of DX34 and DX37 so that the Patent Office could focus on the relevant files.

254. On information and belief, the University, Doyle and Krueger were not candid and instead withheld material information that would have assisted the Patent Office in understanding the contents of DX34 and DX37 with the specific intent to deceive the Patent Office and to advance their own financial gain.

255. On information and belief, the University, Doyle and Krueger did not disclose the full contents of DX34 and DX37 in their entirety to the Patent Office during the first reexamination of the ‘906 patent.

256. On information and belief, the full contents of DX34 and DX37 were not submitted in their entirety until the Invention Disclosure Statement filed during the second reexamination on November 1, 2006.

257. On information and belief, during the 2003 reexamination, neither Doyle, Krueger, or the University disclosed to the Patent Office the trial testimony of Pei Wei, who testified about the plotting demo in DX34 and DX37; did not disclose the trial testimony of Dr. Kelly, who testified that the plotting demo in DX34 and DX37 anticipated the asserted claims of the '906 patent; and did not disclose that Dr. Kelly specifically identified the VOBJF tag, the plot.v file, and the vplot executable application for purposes of his anticipation analysis.

258. On March 2, 2005 — while the 2003 reexamination was still pending — the Federal Circuit held that Dr. Kelly's testimony would allow a reasonable jury to conclude that DX37 anticipates at least claims 1 and 6 of the '906 patent. 399 F.3d 1325, 1335 (Fed. Cir. 2005).

259. Even after the Federal Circuit's decision, however, Doyle, Krueger, and the University still did not disclose Dr. Kelly's testimony to the Patent Office during the 2003 reexamination, nor did they disclose to the Patent Office that Dr. Kelly's anticipation analysis relied upon the VOBJF tag, the plot.v file, and the vplot executable application.

260. On or about September 27, 2005, the examiner issued a statement for reasons of patentability in which the examiner confirmed the patentability of claims 1–10 of the '906 patent.

261. On information and belief, the examiner's statement never discussed the plotting demo that Dr. Kelly had testified anticipated the asserted claims of the '906 patent.

262. On information and belief, when the examiner considered DX37, the examiner did not know where to look or what to look for. There were too many files in DX37 for the examiner to read himself. Thus the examiner was forced to resort to running text searches across all the files in DX37 in the hope of stumbling across relevant information.

263. The examiner used the “dtSearch” program to index and text search all DX37 files that contained textual content. See <http://www.dtsearch.com/>.

264. It is unclear what words the examiner searched for or how he came up with his search terms.

265. On information and belief, Doyle knew precisely what to look for, but he never told the examiner. On information and belief, for example, if Doyle or Krueger had told the examiner to look for plot.v, the examiner’s text searches would have quickly found the plotting demo that Dr. Kelly had testified anticipated the asserted claims of the ’906 patent.

266. On information and belief, the examiner’s text searches did not lead him to the plotting demo, but instead led him to a clock application that used the file clock.v.

267. On information and belief, the file clock.v is a script file that displays the image of a clock. On information and belief, the clock application does not involve any separate executable application. On information and belief, it just involves a webpage and the clock.v script file.

268. The examiner reasoned that a script file like clock.v does not satisfy the “executable application” requirement of the claims of the ’906 patent, and thus the examiner concluded that DX37 does not anticipate the asserted claims of the ’906 patent.

269. On information and belief, the ViolaWWW source code teaches two ways of creating interactive webpages using embedded applications. On information and belief, one way is by using a simple script file, such as clock.v. On information and belief, all that is required is a webpage (such as violaApps.html) and the script file (such as clock.v). On information and belief, no binary executable application is involved. On information and belief, the other way taught by the ViolaWWW source code does use a binary executable application (such as vplot) in addition to a webpage and a file that contains the object (such as plot.v). On information and belief, the examiner did not consider this second way during the 2003 reexamination; he only considered the first way, and thus erroneously confirmed the patentability of the asserted claims of the ’906 patent.

270. The examiner's reasons for patentability included the following statements:

The Viola system uses "C-like" Viola scripts that must be INTERPRETED by the browser and then TRANSLATED or CONVERTED into binary native executable machine code that can be understood by the CPU. Alternately, the Viola script is precompiled into intermediate byte-code form and the byte-code is interpreted (i.e., translated) into binary native executable machine code at runtime. This extra step of translation results in an unavoidable performance penalty, as interpreted applications run much slower than compiled native binary executable applications.

Accordingly, the "C-like" Viola scripts (or corresponding byte-code representations) are not "executable applications" . . . .

271. On information and belief, the examiner's reasoning overlooked the fact that the plotting demo in DX37 does use a separate executable application: vplot.

272. On information and belief, Doyle, Krueger, and the University knew that the plotting demo used a separate executable application, but Doyle and Krueger did not bring this fact to the examiner's attention and instead allowed the examiner to confirm the patentability of the claims of the '906 patent on the basis of an incomplete understanding of DX37.

273. On information and belief, Doyle, Krueger, and the University knew that the plotting demo used a separate executable application for at least the following reasons:

- On information and belief, the August 1994 Viola paper, which states "This next mini application front-ends a graphing process (on the same machine as the viola process)" and which shows the plot of a fighter jet in a window titled "XPlot."
- On information and belief, Pei Wei's message to Doyle on September 1, 1994, which included the following statements: "[A]s for the plotting demo, it actually is really just a front-end that fires up a back-end plotting program

(and the point is that that back-end could very well be running on a remote super computer instead of the localhost). For that demo, there is a simple protocol such that the front-end app could pass an X window ID to the back-end, and the back-end draws the graphics directly onto the window violaWWW has opened for it.”

- On information and belief, the source code listed in the “Viola stuff” file included the file plotDemo.html, which states, “This is a demo of ViolaWWW embedding a viola front-ending object that is programmed to start up and communicate with a plot process. The front-end tells the plot program the window ID to draw to, and gives it the camera coordinate changes.” When the file plotDemo.html is parsed, it shows the plot of a fighter jet in a window titled “XPlot.”
- On information and belief, Pei Wei’s presentation at Stanford in September 1994, which included the following statements: “The next example is a front-end application to a backend. And the back-end is what actually does the computation and the drawing.” On information and belief, included with the presentation was a screenshot of the ViolaWWW browser after parsing the file plotDemo.html. The screenshot shows the plot of a fighter jet in a window titled “XPlot.” The text in the webpage states, “This is a demo of ViolaWWW embedding a viola front-ending object that is programmed to start up and communicate with a plot process. The front-end tells the plot program the window ID to draw to, and gives it the camera coordinate changes.”

- On information and belief, the trial testimony of Pei Wei.
- On information and belief, the expert opinion of Dr. Kelly.

274. On information and belief, Doyle's, Krueger's, and the University's failure to tell the examiner about the vplot and plot.v files, and failure to disclose documents from the litigation that identified how Dr. Kelly matched up the plotting demo in DX37 with the claims of the '906 patent, both alone and in combination with Doyle's, Krueger's, and the University's prior failure to disclose the ViolaWWW browser during the original prosecution of the '906 patent, constituted a knowing and intentional violation of their duty of candor and good faith in dealing with the Patent Office.

275. On information and belief, the Patent Office would not have confirmed the patentability of the claims of the '906 patent that were the subject of the 2003 reexamination if Doyle, Krueger, and the University had not engaged in inequitable conduct and instead had fulfilled their duty of candor and good faith in dealing with the Patent Office.

276. On or about December 22, 2005, a third party filed a request to reexamine the '906 patent.

277. On or about February 9, 2006, the Patent Office granted the request to reexamine the '906 patent. The control number for this reexamination was 90/007,858.

278. On information and belief, Doyle and the University had a financial interest in the patentability of the claimed inventions in the '906 patent.

279. On information and belief, the ViolaWWW browser threatened the patentability of the claimed inventions in the '906 patent, and thus threatened Doyle's and the University's financial interests.

280. On information and belief, Doyle and Krueger were personally involved in the 2005 reexamination of the '906 patent.

281. For example, on or about September 6, 2007, Doyle and Krueger participated in an examiner interview in an effort to confirm the patentability of the claims of the '906 patent

application.

282. On or about October 1, 2007, Doyle submitted a declaration to the Patent Office in an effort to establish an earlier date of invention for the claims of the '906 patent application.

283. On or about May 9, 2008, Doyle and Krueger participated in another examiner interview in an effort to confirm the patentability of the claims of the '906 patent application.

284. On or about June 3, 2008, Doyle and Krueger participated in another examiner interview in an effort to confirm the patentability of the claims of the '906 patent application.

285. On information and belief, Doyle's and Krueger's inequitable conduct during the 2003 reexamination infected the 2005 reexamination.

286. On information and belief, although Doyle and Krueger disclosed material information about the ViolaWWW browser to the Patent Office during the 2005 reexamination, by that time it was too late.

287. On information and belief, Doyle and Krueger disclosed the August 1994 Viola paper to the Patent Office on or about August 21, 2006.

288. On information and belief, this was the first time Doyle and Krueger had disclosed the August 1994 Viola paper to the Patent Office.

289. On information and belief, Doyle knew about the Viola paper no later than August 31, 1994, but Doyle waited over 10 years — and two prosecutions of the '906 patent — to disclose that paper to the Patent Office.

290. On information and belief, Krueger knew about the August 1994 Viola paper no later than August of 1998, but waited 8 years – and two prosecutions of the '906 patent – to disclose that paper to the Patent Office.

291. On information and belief, shortly after Doyle and Krueger disclosed the August 1994 Viola paper to the Patent Office during the 2005 reexamination, the Patent Office rejected all claims of the '906 patent.

292. On information and belief, in particular, on or about July 30, 2007, the Patent Office rejected all claims of the '906 patent as being anticipated by DX95, which includes a copy

of the text found in Pei Wei's August 1994 Viola paper.

293. On information and belief, the rejection based on the August 1994 Viola confirms that the ViolaWWW browser was material prior art.

294. Doyle and Krueger did not respond to the merits of the rejection based on the August 1994 Viola paper, however. Instead Doyle filed a declaration asserting that his date of invention was before August 16, 1994.

295. In response to Doyle's declaration, the examiner withdrew the rejection based on the August 1994 Viola paper.

296. On information and belief, the 2005 examiner could have entered a new rejection based on DX37, which was a printed publication before the alleged conception of the inventions claimed in the '906 patent, but the 2005 examiner did not independently examine DX37 because the 2003 examiner had already concluded that DX37 did not invalidate the asserted claims of the '906 patent.

297. On information and belief, the conclusions about DX37 reached in the 2003 reexamination were erroneous due to Doyle's, Krueger's, and the University's inequitable conduct during that reexamination.

298. Thus, Doyle's, Krueger's, and the University's inequitable conduct during the 2003 reexamination infected the 2005 reexamination.

299. During the original prosecution of the '906 patent, Doyle submitted a declaration to the Patent Office containing false and misleading statements in an effort to obtain allowance of the claims.

300. Specifically, on or about June 2, 1997, Doyle submitted to the Patent Office a sworn declaration executed on or about May 27, 1997, for the purpose of overcoming the examiner's rejection on March 26, 1997.

301. On page 12 of the declaration, Doyle asserted that his claimed invention would not have been obvious over the cited prior art in view of "secondary considerations, including, in part, commercial success of products incorporating features of the claimed invention and

industry recognition of the innovative nature of these products.”

302. In support of his assertion, Doyle declared to the Patent Office that Sun Microsystems and Netscape had incorporated his invention into their Java software and Navigator Web browser, respectively. He stated: “Approximately 12 to 18 months after the applicants initially demonstrated the first Web plug-in and applet technology to the founders of Netscape and engineers employed by Sun Microsystems in November and December of 1993, as described in reference #4 from Appendix A (Dr. Dobb’s Journal, 2/96), both Netscape and Sun released software products that incorporated features of the claimed invention. . . .”

303. On information and belief, this statement was false. On information and belief, neither Doyle nor any of the other named inventors of the ’906 patent demonstrated Web plug-in technology to any of the founders of Netscape in November or December of 1993.

304. On information and belief, when Doyle made these statements under oath, he also did not know whether any engineer employed by Sun Microsystems ever saw any of his demonstrations in November or December of 1993.

305. On information and belief, Doyle made these same false assertions in slides that he prepared and presented to the examiner in a personal interview on or about February 24, 1997. On information and belief, on a slide entitled “Relevant History of DHOE” (Doyle’s name for his invention), Doyle included as a bullet point: “1993 Demos to Sun & Netscape’s Founders.”

306. On information and belief, Doyle’s false statements in his declaration were material to the patentability of the pending claims. These statements purported to provide evidence of copying by others and thus objective evidence of non-obviousness, a factor to be considered in determining whether an alleged invention is patentable over the prior art. On information and belief, without these false assertions, Doyle had no support for his argument that Netscape and Sun copied his alleged invention or that his technology was responsible for their commercial success.

307. On information and belief, by making these false statements under oath to the Patent Office, Doyle intended to mislead the Patent Office to believe that responsible persons at

Netscape and Sun saw his alleged invention, appreciated its supposed merits, and therefore incorporated it into the Navigator browser and Java. On information and belief, moreover, by making these false statements, Doyle was trying to convince the Patent Office that the Netscape and Sun products succeeded because they incorporated his alleged invention.

308. On information and belief, Doyle's submission of false statements under oath in his declaration to the Patent Office constituted a knowing and intentional violation of his duty of candor and good faith in dealing with the Patent Office.

309. Because Doyle, Krueger, and the University committed inequitable conduct during prosecution reexamination of the '906 patent (reexamination application number 90/006,831), every claim of the '906 patent is unenforceable in its entirety. The inequitable conduct also renders unenforceable all claims that issue as a result of any reissue and reexamination proceedings, including claims that issued from the reexaminations of the '906 patent (reexamination application numbers 90/006,831 and 90/007,858).

310. The '985 patent is likewise unenforceable in its entirety due to Doyle's, Krueger's, and the University's inequitable conduct during the prosecution of the application that issued as the '906 patent and Doyle's, Krueger's, and the University's inequitable conduct during the first reexamination of the '906 patent (reexamination application number 90/006,831).

311. Doyle's, Krueger's, and the University's inequitable conduct during prosecution of the application that issued as the '906 patent relates, both immediately and necessarily, to the claims of the '985 patent.

312. Doyle's, Krueger's, and the University's inequitable conduct during the first reexamination of the '906 patent (reexamination application number 90/006,831) relates, both immediately and necessarily, to the claims of the '985 patent.

313. The '985 patent issued from an application that was a continuation application of a continuation application of the application that issued as the '906 patent, and the '985 patent claims priority to the '906 patent. The '906 patent and the '985 patent share the same specification.

314. On July 20, 2004, the PTO determined that the claims pending in the application that issued as the '985 patent were identical in scope to or were obvious variations of the then-issued claims of the '906 patent, which were confirmed in the first reexamination of the '906 patent (reexamination application number 90/006,831) on June 6, 2006. Accordingly, the PTO rejected the pending claims under the doctrines of statutory double-patenting and obviousness-type double-patenting.

315. On March 11, 2005, to overcome the double-patenting rejections, the owner of the '985 patent cancelled one pending claim and filed a terminal disclaimer for the remaining claims. It was not argued that the pending claims were patentably distinct from the then-issued claims of the '906 patent.

Based upon the foregoing background and facts, Yahoo!'s affirmative defenses are alleged below:

#### **Failure To State A Claim**

316. The Complaint fails to state a claim upon which relief can be granted.

#### **Non-Infringement**

317. Yahoo! does not and has not directly or indirectly infringed any valid claims of the '906 patent or the '985 patent, either literally or under the doctrine of equivalents, willfully or otherwise.

#### **Invalidity**

318. The claims of the '906 patent and the '985 patent are invalid for failure to comply with the requirements of Title 35 of the United States Code, including but not limited to Sections 101, 102, 103, and/or 112.

#### **Inequitable Conduct**

319. Yahoo! restates its responses set forth above in Paragraph 1 through 318 as if separately set forth herein.

320. Although Plaintiffs allege in the Complaint that both the '906 and '985 patents were duly and legally issued by the United States Patent and Trademark Office after full and fair examination, each and every claim of both the '906 and '985 patents are unenforceable due to the Plaintiffs' inequitable conduct before, and fraud upon, the Patent Office.

321. If the University, Doyle and/or Krueger had submitted the material information regarding the ViolaWWW browser to the Patent Office during the initial examination of the '906 patent, neither the '906 nor the '985 patent would have issued. As such, information concerning the printed publication, prior public use, and/or prior inventorship of the Viola browser and system was material invalidating prior art.

322. Doyle, Krueger and the University possessed a specific intent to deceive the Patent Office into issuing the '906 and '985 patents.

323. The University is a government institution, and therefore, held to a higher standard of conduct. As a government institution, the University's intentional secreting of material invalidating prior art evidence in order to advance its ability to obtain exclusive rights for its own financial gain to the detriment of any University student is untenable. Further, under these specific facts, the University's request for exclusive right from another governmental institution should not be allowed. As such, each claim of the '906 and '985 patents should be held invalid and unenforceable.

#### **Laches**

324. Plaintiffs' claims for relief are barred in whole or in part by the doctrine of laches.

#### **Statute Of Limitations**

325. To the extent Plaintiffs seek damages for alleged infringement more than six years prior to filing of this action, the relief sought by Plaintiffs is barred by 35 U.S.C. §§ 286 and/or 287.

#### **License**

326. Plaintiffs' claims against Yahoo! are barred to the extent that any of the allegedly infringing products are directly or indirectly provided to Yahoo! from or by an entity, including

without limitation Microsoft Corp. and/or Apple, Inc., that has an express or implied license to the '906 patent or the '985 patent.

#### **Intervening Rights**

327. Plaintiffs' claims are improper to the extent that Plaintiffs assert infringement of claims that are subject to the intervening rights of Yahoo!.

#### **Patent Exhaustion**

328. Plaintiffs' claims against Yahoo! are barred by the doctrine of patent exhaustion to the extent Plaintiffs have already relinquished their rights to the '906 patent or the '985 patent.

#### **Third-Party Beneficiary**

329. Plaintiffs' claims against Yahoo! are barred to the extent that Yahoo! is a third-party beneficiary to a license/agreement granting rights to the '906 patent or the '985 patent.

#### **Equitable Estoppels**

330. Plaintiffs' claims against Yahoo! are barred by the doctrines of equitable estoppel, unclean hands and/or waiver.

#### **Limitation of Damages**

331. Plaintiffs' claims for damages, if any, against Yahoo! for alleged infringement of the asserted patents are limited by 35 U.S.C. §§ 286, 287, and 288.

### **COUNTERCLAIMS**

#### **Parties**

332. Yahoo! is a corporation organized under the laws of the State of Delaware and having a principal place of business at 701 1st Avenue, Sunnyvale, California 94089.

333. Eolas alleges that it is a corporation organized and existing under the laws of Texas and having a principal place of business at 313 East Charnwood Street, Tyler, Texas 75701.

334. The University alleges that it is organized and existing under the laws of the California, pursuant to Article IX § 9 of the California Constitution.

## Jurisdiction and Venue

335. These counterclaims arise under Title 35 of the United States Code. The Court has subject matter jurisdiction over these counterclaims pursuant to 28 U.S.C. §§ 1331, 1338(a), 2201, and 2202.

336. Plaintiffs are subject to personal jurisdiction in this district because Plaintiffs filed this action in this district.

337. Venue is not is appropriate in this district and Yahoo! filed a motion to transfer venue. However, Plaintiffs claim that venue is proper in this judicial district under 28 U.S.C. § 1391 because Plaintiffs filed this action in this district and Eolas purports to have a place of business in this district.

### **First Counterclaim: Declaratory Judgment (Non-Infringement)**

338. Yahoo! restates its responses and allegations set forth above in Paragraphs 1 through 337 as if separately set forth herein.

339. Yahoo! counterclaims against Plaintiffs pursuant to the patent laws of the United States, Title 35 of the United States Code, and the Declaratory Judgments Act, 28 U.S.C. §§ 2201 and 2202.

340. An actual and justiciable controversy exists between Yahoo! and Plaintiffs with respect to the non-infringement of the '906 patent and/or the '985 patent because Plaintiffs have brought this action against Yahoo! alleging that Yahoo! is now and has been directly and/or indirectly infringing the '906 patent and/or the '985 patent and that the '906 and '985 patents are valid, enforceable and were "duly and legally issued." Yahoo! denies this allegation. Absent a declaration of non-infringement, Plaintiffs will continue to wrongfully assert the '906 patent and/or the '985 patents against Yahoo!, and thereby cause Yahoo! irreparable injury and damage.

341. Yahoo! has not directly or indirectly infringed, contributed to or induced infringement of any claim of the '906 patent or the '985 patent either directly or indirectly,

literally or under the doctrine of equivalents, willfully, or otherwise. Yahoo! is therefore entitled to a declaratory judgment to that effect pursuant to 28 U.S.C. §§ 2201-2202

**Second Counterclaim: Declaratory Judgment  
(Invalidity)**

342. Yahoo! restates its responses and allegations set forth above in Paragraphs 1 through 341 as if separately set forth herein.

343. Yahoo! counterclaims against Plaintiffs pursuant to the patent laws of the United States, Title 35 of the United States Code, and the Declaratory Judgments Act, 28 U.S.C. §§ 2201 and 2202.

344. An actual and justiciable controversy exists between Yahoo! and Plaintiffs with respect to the invalidity of the '906 patent and/or the '985 patent because Plaintiffs have brought this action against Yahoo! alleging that it infringes the '906 patent and/or the '985 patent, and Yahoo! denies this allegation and asserts that the '906 patent and/or the '985 patent are invalid. The '906 patent and the '985 patent are invalid for failing to meet the conditions of patentability as set forth in 35 U.S.C. §§ 101, 102, 103, and 112. The '906 patent and the '985 patent are also unenforceable due to inequitable conduct as alleged in paragraphs 319-323 above, which are incorporated here by reference. Absent a declaration of invalidity, Plaintiffs will continue to wrongfully assert the '906 patent and the '985 patent against Yahoo!, and thereby cause Yahoo! irreparable injury and damage

345. Yahoo! is therefore entitled to judgment that the '906 patent or the '985 patents are invalid, and that both patents are unenforceable pursuant to 28 U.S.C. §§ 2201-2202.

**Exceptional Case**

351. This is an exceptional case warranting an award of attorneys' fees to Defendant under 35 U.S.C. § 285.

**Demand For Jury Trial**

352. Defendant Yahoo! hereby demands a jury trial as to all issues triable by jury.

## RELIEF REQUESTED

Yahoo! respectfully requests the following relief be granted on Plaintiffs' Complaint and on Yahoo!'s Answer, Affirmative Defenses, and Counterclaims:

- A. That Plaintiffs' Complaint be dismissed with prejudice and that Plaintiffs take nothing;
- B. That judgment be entered in favor of Yahoo! against Plaintiffs;
- C. For entry of a Judgment declaring each and every claim of the '906 patent and the '985 patent invalid, unenforceable, and/or not infringed by Yahoo! or by the use of its products or services;
- D. That pursuant to 35 U.S.C. § 285 and/or other applicable laws, Plaintiffs' conduct be found to render this an exceptional case and that Yahoo! be awarded its attorneys' fees in connection with this action;
- E. That Plaintiffs and each of its officers, employees, agents, alter egos, attorneys and any persons in active concert or participation with them be restrained from further prosecuting or instituting any action against Yahoo! claiming that the '906 and '985 patents are valid, enforceable, or infringed, or from representing that Yahoo!'s products or services, or that the use thereof, infringes the '906 or '985 patents; and
- F. That Yahoo! be awarded such other and further relief as the Court may deem just and proper.

Respectfully submitted,

/s/ Jennifer H. Doan

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**ATTORNEYS FOR DEFENDANT  
YAHOO!, INC.**

**CERTIFICATE OF SERVICE**

The undersigned certifies that the foregoing document was filed electronically in compliance with Local Rule CV-5(a). All other counsel of record not deemed to have consented to electronic service were served with a true and correct copy of the foregoing by certified mail, return receipt requested, on this the 11th day of October, 2011.

/s/ Jennifer H. Doan  
Jennifer H. Doan