

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

**EOLAS TECHNOLOGIES, INC.**

*Plaintiff,*

v.

**ADOBE SYSTEMS, INC., ET AL.,**

*Defendants.*

**Civil Action No. 6:09-CV-446 LED**

**DEFENDANT ADOBE SYSTEMS INCORPORATED'S ANSWER TO PLAINTIFF'S  
SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT**

Pursuant to Rule 8 of the Federal Rules of Civil Procedure, Defendant Adobe Systems Incorporated (“Adobe”), by and through its undersigned counsel, hereby responds to the First Amended Complaint (“Complaint”) of Eolas Technologies, Inc. (“Eolas” or “Plaintiff”), on personal knowledge as to its own activities and on information and belief as to the activities of others, as follows.

Adobe denies each and every allegation contained in the Complaint that is not expressly admitted below. Any factual allegation admitted below is admitted only as to the specific admitted facts, not as to any purported conclusions, characterizations, implications, or speculations that may arguably follow from the admitted facts. Adobe denies that Plaintiff is entitled to the relief requested or any other.

**PARTIES**

1. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 1 and therefore denies the same.

2. Adobe admits that it is a Delaware corporation with its principal place of business at 345 Park Avenue, San Jose, California 95110-2704. Adobe admits that it is registered to do business in the State of Texas and that it does business in this judicial district and elsewhere. Adobe admits that it has appointed Corporation Service Company d/b/a CSC, 701 Brazos Street, Suite 1050, Austin, Texas 78701, as its agent for service of process.

3. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 3 and therefore denies the same.

4. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 4 and therefore denies the same.

5. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 5 and therefore denies the same.

6. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 6 and therefore denies the same.

7. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 7 and therefore denies the same.

8. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 8 and therefore denies the same.

9. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 9 and therefore denies the same.

10. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 10 and therefore denies the same.

11. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 11 and therefore denies the same.

12. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 12 and therefore denies the same.

13. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 13 and therefore denies the same.

14. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 14 and therefore denies the same.

15. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 15 and therefore denies the same.

16. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 16 and therefore denies the same.

17. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 17 and therefore denies the same.

18. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 18 and therefore denies the same.

19. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 19 and therefore denies the same.

20. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 20 and therefore denies the same.

21. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 21 and therefore denies the same.

22. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 22 and therefore denies the same.

23. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 23 and therefore denies the same.

### **JURISDICTION AND VENUE**

24. Adobe incorporates by reference the foregoing responses, inclusive, as though set forth in full herein.

25. Adobe admits that this Complaint purports to state a claim of alleged patent infringement and that this Court has subject matter jurisdiction over patent claims.

26. Adobe admits that this Court has personal jurisdiction over Adobe for purposes of this dispute. Adobe further admits that it is registered to do business in the State of Texas and that it does business in this judicial district and elsewhere. Adobe denies the remaining allegations of paragraph 26 with respect to Adobe. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 26 regarding other defendants and therefore denies the same.

27. Adobe admits that venue in this District is purportedly based on 28 U.S.C. §§ 1391(b), (c) and 1400(b), but denies that this District is the most convenient venue for adjudication of the claims raised by Eolas in this action.

### **PATENT INFRINGEMENT**

28. Adobe incorporates by reference the foregoing responses, inclusive, as though set forth in full herein.

29. Adobe admits that U.S. Patent 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 was issued by the United States Patent and Trademark Office on November 17, 1998. Adobe admits that U.S.

Patent 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” and was issued by the United States Patent and Trademark Office on October 6, 2009. Adobe denies that either the ’906 or ’985 patent (collectively “the Patents-in-Suit”) were duly and legally issued by the United States Patent and Trademark Office. Adobe denies the remainder of the allegations in paragraph 29.

30. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 30 and therefore denies the same.

31. Adobe admits that it maintains and controls servers located in and/or accessible from the United States. Adobe admits that it owns and operates [www.adobe.com](http://www.adobe.com) and [tv.adobe.com](http://tv.adobe.com). Adobe admits that Adobe Flash Player and Adobe Shockwave Player are Adobe software products. Adobe otherwise denies the allegations of paragraph 31.

32. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 32.

33. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 33 and therefore denies the same.

34. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 34 and therefore denies the same.

35. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 35 and therefore denies the same.

36. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 36 and therefore denies the same.

37. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 37 and therefore denies the same.

38. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 38 and therefore denies the same.

39. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 39 and therefore denies the same.

40. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 40 and therefore denies the same.

41. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 41 and therefore denies the same.

42. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 42 and therefore denies the same.

43. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 43 and therefore denies the same.

44. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 44 and therefore denies the same.

45. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 45 and therefore denies the same.

46. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 46 and therefore denies the same.

47. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 47 and therefore denies the same.

48. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 48 and therefore denies the same.

49. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 49 and therefore denies the same.

50. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 50 and therefore denies the same.

51. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 51 and therefore denies the same.

52. Adobe is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 52 and therefore denies the same.

53. Adobe denies the allegations of paragraph 53 to the extent they pertain to Adobe. Adobe otherwise is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 53 as they pertain to the other defendants and therefore denies the same

54. Adobe denies the allegations of paragraph 54 to the extent they pertain to Adobe. Adobe otherwise is without information or knowledge sufficient to form a belief as to the truth or falsity of the allegations of paragraph 54 as they pertain to the other defendants and therefore denies the same.

55. Adobe denies the allegations of paragraph 55 to the extent they pertain to Adobe and denies that Eolas is entitled to any of the requested relief from or with respect to Adobe.

56. Adobe denies the allegations of paragraph 56 to the extent they pertain to Adobe and denies that Eolas is entitled to any of the requested relief from or with respect to Adobe.

## ANSWER TO PRAYER FOR RELIEF BY EOLAS

57. Adobe states that Eolas' Prayer for Relief does not require a response.

58. Adobe denies that Eolas is entitled to any relief whatsoever from Adobe, as prayed for or otherwise.

59. Adobe denies each and every allegation of the Complaint not already admitted or denied and further denies that Eolas is entitled to any relief whatsoever from Adobe on the basis of any of the purported claims for relief contained in the Complaint.

## AFFIRMATIVE AND OTHER DEFENSES

60. By way of further answer, and as Affirmative Defenses to the Complaint, Adobe states as follows:

### **First Affirmative Defense (Failure to State a Claim)**

61. Eolas fails to state a claim upon which relief can be granted, at least because it has not met the pleading standards or requirements of *Ashcroft v. Iqbal*, 129 S.Ct. 1973 (U.S. 2009) and *Bell Atlantic Corp., et al. v Twombly et al.*, 548 U.S. 903 (2006) as interpreted and applied by this Court.

### **Second Affirmative Defense (Non-Infringement)**

62. Adobe and the use of Adobe's products do not infringe and have never infringed any claims of the '906 or '985 patents. Adobe has not and does not infringe, contribute to the infringement of, or actively induce others to infringe any valid, enforceable claim of the Patents-in-Suit, either directly, indirectly, literally or under the doctrine of equivalents. By asserting this affirmative defense, Adobe does not assume any burden of proof.



### **Third Affirmative Defense (Invalidity)**

63. The claims of the '906 and '985 patents are invalid because they fail to satisfy one or more of the conditions for patentability specified in Title 35 of the United States Code, including, *inter alia*, §§ 101, 102, 103, 112, and 132, and the rules, regulations, and laws pertaining thereto.

### **Fourth Affirmative Defense (Standing/Nonjoinder)**

64. Eolas lacks sufficient substantial rights in the Patents-in-Suit to assert and maintain claims of patent infringement. By asserting this affirmative defense, Adobe does not assume any burden of proof.

### **Fifth Affirmative Defense (Federal Government Use)**

65. Plaintiff's remedies are limited by the provisions of 28 U.S.C. § 1498.

### **Sixth Affirmative Defense (Laches/Estoppel)**

66. Plaintiff is barred or limited by the doctrine of laches and/or equitable estoppel from enforcing some or all of the asserted claims of the Patents-in-Suit against Adobe.

### **Seventh Affirmative Defense (Implied or Express License/Exhaustion)**

67. Eolas is barred by the doctrines of implied or express license and/or exhaustion from enforcing the Patents-in-Suit against Adobe. Eolas and/or its predecessors-in-interest have licensed the Patents-in-Suit to one or more of Adobe's suppliers, customers, and/or users. Under the doctrines of patent exhaustion, implied or express license, the use or sale of products supplied by these licensees cannot give rise to liability for infringement of such licensed patents. By asserting this affirmative defense, Adobe does not assume any burden of proof.

#### **Eighth Affirmative Defense (No Injunction)**

68. Eolas is not entitled to injunctive relief because any injury to it is not immediate or irreparable, and Eolas has an adequate remedy at law for any claims it can prove.

#### **Ninth Affirmative Defense (Failure To Mark)**

69. On information and belief, Eolas' purported claims for relief concerning the Patents-in-Suit are limited by failure to comply with the marking and notice requirements of 35 U.S.C. § 287(a). By asserting this affirmative defense, Adobe does not assume any burden of proof.

#### **Tenth Affirmative Defense (Limitation On Damages)**

70. Eolas' recovery for alleged infringement of the Patents-in-Suit, if any, is limited to any alleged infringement committed no more than six years prior to the filing of its complaint, pursuant to 35 U.S.C. § 286. By asserting this affirmative defense, Adobe does not assume any burden of proof.

#### **Eleventh Affirmative Defense (Prosecution History Estoppel)**

71. Eolas is estopped, based on statements, representations, and admissions made during prosecution of the patent application resulting in the Patents-in-Suit, from asserting any interpretation of any valid, enforceable claims of the Patents-in-Suit that would be broad enough to cover any of Adobe's products or services alleged to infringe the Patents-in-Suit, either literally or by application of the doctrine of equivalents. By asserting this affirmative defense Adobe does not assume any burden of proof.

#### **Twelfth Affirmative Defense (Costs)**

72. Eolas is barred by 35 U.S.C. § 288 from recovering any costs associated with this action.

### **Thirteenth Affirmative Defense (Waiver)**

73. Eolas' claims for relief are barred by the doctrine of waiver.

### **Fourteenth Affirmative Defense (Intervening Rights)**

74. Eolas' claims for relief are limited due to legal and/or equitable intervening rights under 35 U.S.C. §§ 252 and 307(b).

### **Fifteenth Affirmative Defense (Inequitable Conduct/Unclean Hands)**

75. Each and every claim of the '906 and '985 Patents is unenforceable due to inequitable conduct and/or Eolas's unclean hands.

#### **A. Overview**

##### **1. Doyle had a duty of candor and good faith in dealing with the Patent Office**

76. Michael D. Doyle ("Doyle") is one of the named inventors of the patents-in-suit, U.S. Patent Nos. 5,838,906 and 7,599,985.

77. Charles E. Krueger ("Krueger") was the patent prosecutor for the patents-in-suit, U.S. Patent Nos. 5,838,906 and 7,599,985.

78. Doyle, as a named inventor, 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.

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

80. The duty of candor and good faith owed by Doyle and Krueger 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.

## **2. Doyle had a financial incentive to deceive the Patent Office**

81. Doyle 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.

82. Doyle worked at the University of California, San Francisco when he allegedly conceived of the inventions claimed in the '906 and '985 patents.

83. The '906 and '985 patents are owned by The Regents of the University of California.

84. Doyle and his co-inventors are entitled to receive a portion of any royalties paid to The Regents of the University of California related to the '906 and/or '985 patents.

85. Doyle is a founder of the plaintiff in this action, Eolas Technologies Incorporated ("Eolas").

86. Doyle quit his job to found Eolas, and personally invested time and money in Eolas.

87. Doyle has had a financial interest in Eolas since at least August 21, 1995.

88. On or about August 21, 1995, Eolas acquired rights to the patent application that matured into the '906 patent.

89. 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 Regents of the University of California.

## **3. Doyle and Krueger breached the duty of candor and good faith with an intent to deceive the Patent Office**

90. As explained in more detail below, Doyle and Krueger breached the duty of candor and good faith in dealing with the Patent Office. Doyle and Krueger failed to disclose material information and made affirmative misrepresentations of material facts. Doyle and Krueger 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 Doyle and Krueger's actions confirm an intent to deceive the Patent Office.

**B. Doyle and Krueger failed to disclose material information related to the ViolaWWW browser**

91. As explained in more detail below, Doyle and Krueger breached his duty of candor and good faith in dealing with the Patent Office by failing to disclose material information related to the ViolaWWW browser. Doyle and Krueger did so with knowledge of the information withheld and with the specific intent to deceive the Patent Office. The circumstances of Doyle and Krueger's actions confirm an intent to deceive the Patent Office.

92. As explained in more detail below, 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). Doyle and Krueger knew that the ViolaWWW browser disclosed these limitations, yet he withheld this information from the Patent Office at the same time that he argued to the Patent Office that these limitations were missing from the prior art.

**1. Doyle knew about the ViolaWWW browser before the application for his '906 patent was filed on October 17, 1994**

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

94. 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.

95. Doyle knew before the application for the '906 patent was filed that an individual in Northern California named Pei Wei had developed a browser called "ViolaWWW" before the critical date of October 17, 1993.

96. On May 20, 1994, David Raggett sent an e-mail to Doyle regarding 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."

97. Raggett further advised Doyle that he could "find a pointer to Viola off the CERN WWW project page."

98. Later on the same day, May 20, 1994, David Martin, who was one of Doyle's colleagues at the University of California in San Francisco and who was also named as an inventor on the '906 patent, responded to a posting from Pei Wei on a publicly-accessible e-mail distribution list. Pei Wei's post had included the following statements: "In order to do better testings [sic] 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." 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...”

99. Thus by May 20, 1994 — several months before the application for the ’906 patent was filed — Doyle knew about Pei Wei’s ViolaWWW browser.

100. On information and belief, Doyle 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.

101. Doyle learned even more about the ViolaWWW browser before the application for the ’906 patent was filed.

102. 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.

103. 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.”

104. 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.”

105. The paper cited by Pei Wei was entitled “A Brief Overview of the VIOLA Engine, and its Applications.”

106. The paper cited by Pei Wei was dated August 16, 1994 — over two months before the application for the '906 patent was filed.

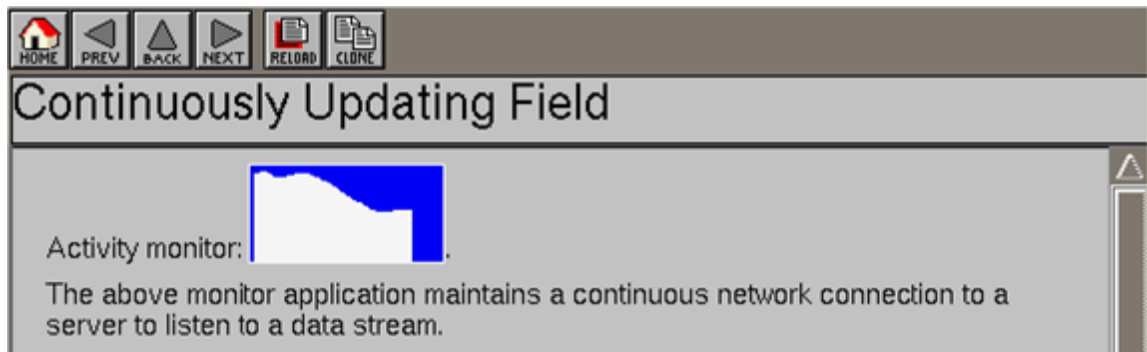
107. The paper cited by Pei Wei included the following statements and graphics:

**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.



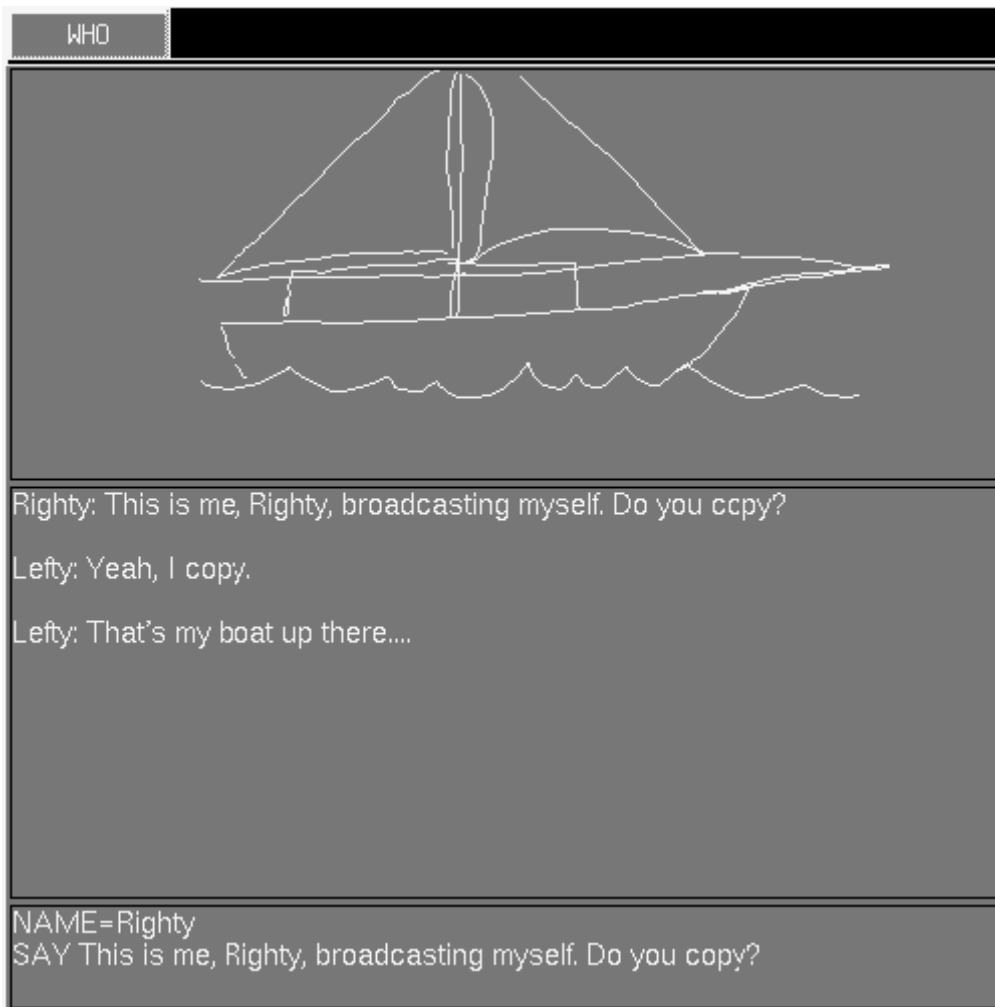
## A Chess Board

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).



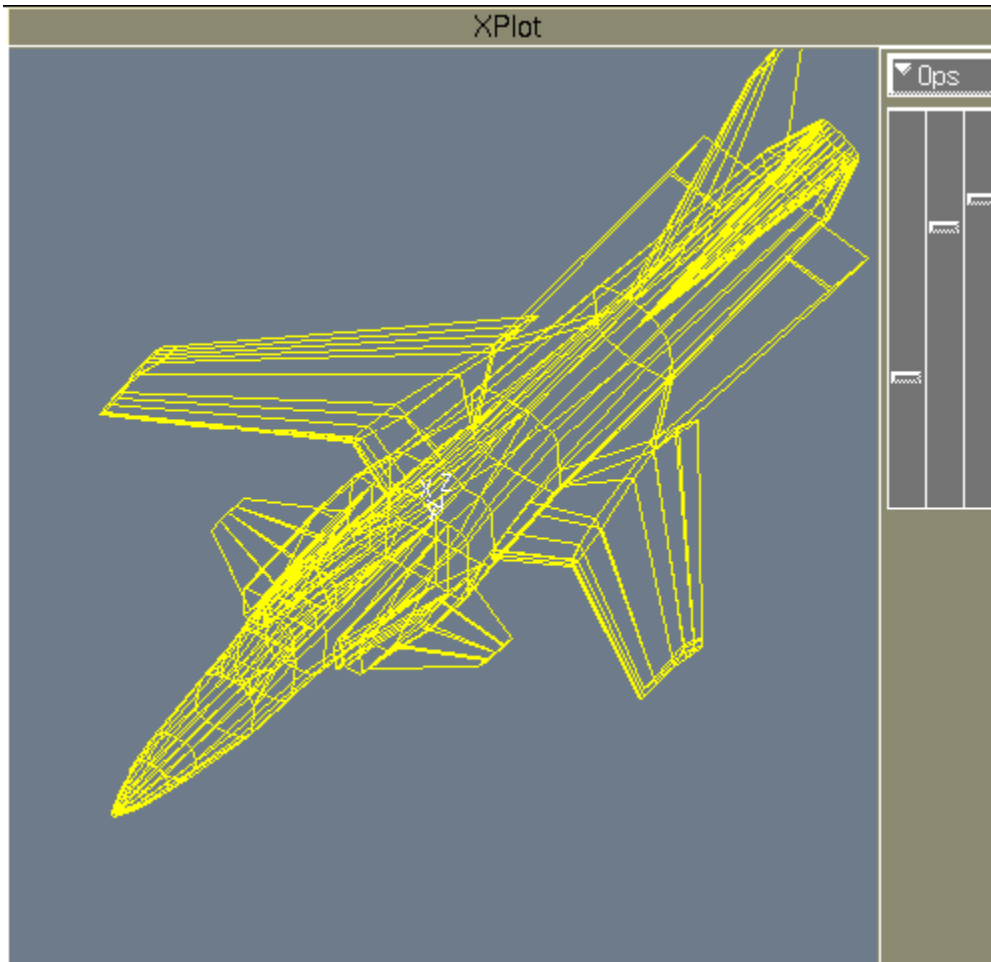
This next mini application front-ends a graphing process (on the same machine as the viola process). An important thing to note is that, like all the other document-embeddable mini applications shown, no special modification to the viola engine is required for ViolaWWW to support them. All the bindings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

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

109. 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.”

110. 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.

111. 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.” *See supra* ¶ 107.

112. 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.

113. 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).

114. On August 31, 1994, at approximately 11:13 p.m. California time, Doyle responded again to the message that Pei Wei had sent at approximately 6:52 p.m.

115. Doyle’s response was sent after Doyle had read Pei Wei’s paper about the ViolaWWW browser dated August 16, 1994 (described above, *supra* ¶¶ 104–107).

116. 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 . . . .”

117. 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?”

118. 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.

119. 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.

120. 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.

121. Doyle deleted from his computer his emails with Pei Wei on August 31 and September 1, 1994, and the copy of the Viola paper dated August 16, 1994, that he had downloaded and read. Doyle kept on his computer other emails from that timeframe, however.

122. Doyle was living in Northern California on August 31, 1994, when he exchanged messages with Pei Wei about the ViolaWWW browser.

123. Pei Wei was living in Northern California on August 31, 1994, when he exchanged messages with Doyle about the ViolaWWW browser.

124. 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.

125. There was no limitation, restriction or obligation of secrecy on the readers of Pei Wei's paper about the ViolaWWW browser dated August 16, 1994.

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

127. The application for the '906 patent discloses the Mosaic browser and the Cello browser, but not the ViolaWWW browser.

128. The application for the '906 patent included an information disclosure statement that identified several pieces of prior art, but not the ViolaWWW browser.

129. On November 22, 1994, Doyle 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."

130. No disclosure about the ViolaWWW browser was ever provided to the Patent Office during prosecution of application number 08/324,443, which matured into the '906 patent.

**2. Doyle was reminded about the ViolaWWW browser in 1995 during prosecution of the '906 patent**

131. Doyle was reminded about Pei Wei and the ViolaWWW browser in 1995, during prosecution of the '906 patent, but still no disclosure about the ViolaWWW browser was provided to the Patent Office.

132. 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."

133. 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."

134. 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."

135. 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.

136. 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.”  
*See supra* ¶ 107.

137. 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).

138. 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.

139. People attending the Wizards workshop included Tim Berners-Lee, Marc Andreessen, Eric Bina, Dale Dougherty, Scott Silvey, and Pei Wei.

140. Tim Berners-Lee and Dale Dougherty were the organizers of the Wizards workshop.

141. Dale Dougherty worked at O'Reilly & Associates in Northern California.

142. 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.

143. Scott Silvey worked with Pei Wei at O'Reilly & Associates in Northern California.

144. 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.

145. Tim Berners-Lee is the person generally considered to be the inventor of the World Wide Web.

146. 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.

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

148. 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.

149. There was no limitation, restriction or obligation of secrecy on anyone at the Wizards workshop.

150. 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).

151. Despite Pei Wei's communications to Doyle repeatedly providing evidence that the ViolaWWW browser was material prior art under 35 U.S.C. § 102(b), Doyle never disclosed

the ViolaWWW browser to the Patent Office during prosecution of application number 08/324,443, which matured into the '906 patent.

152. Instead, Doyle deleted from his computer his emails with Pei Wei on August 21, 1995. Doyle kept on his computer other emails from that timeframe, however.

**3. In 1998, during prosecution of the '906 patent, Doyle collected additional information about the ViolaWWW browser**

153. 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.

154. During prosecution of the '906 patent, Doyle maintained a folder called “Viola stuff.”

155. 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.” *See supra* ¶¶ 103–107.

156. 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?” *See supra* ¶ 117.

157. 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.”

158. “WWWizardsWorkshop” refers to the World-Wide Web Wizards Workshop held in Cambridge, Massachusetts on July 28–30, 1993, that Pei Wei attended. *See supra* ¶¶ 138–150.

159. 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.

160. 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.

161. The webpages for the Wizards workshop corroborate Pei Wei’s statement to Doyle on August 21, 1995, that the plotting demo described in the Viola paper dated August 16, 1994, 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. *See supra* ¶ 135.

162. 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.

163. 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.  
Pei Y. Wei  
wei@xcf.berkeley.edu

164. 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.”

165. 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.
```

166. 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  
-----

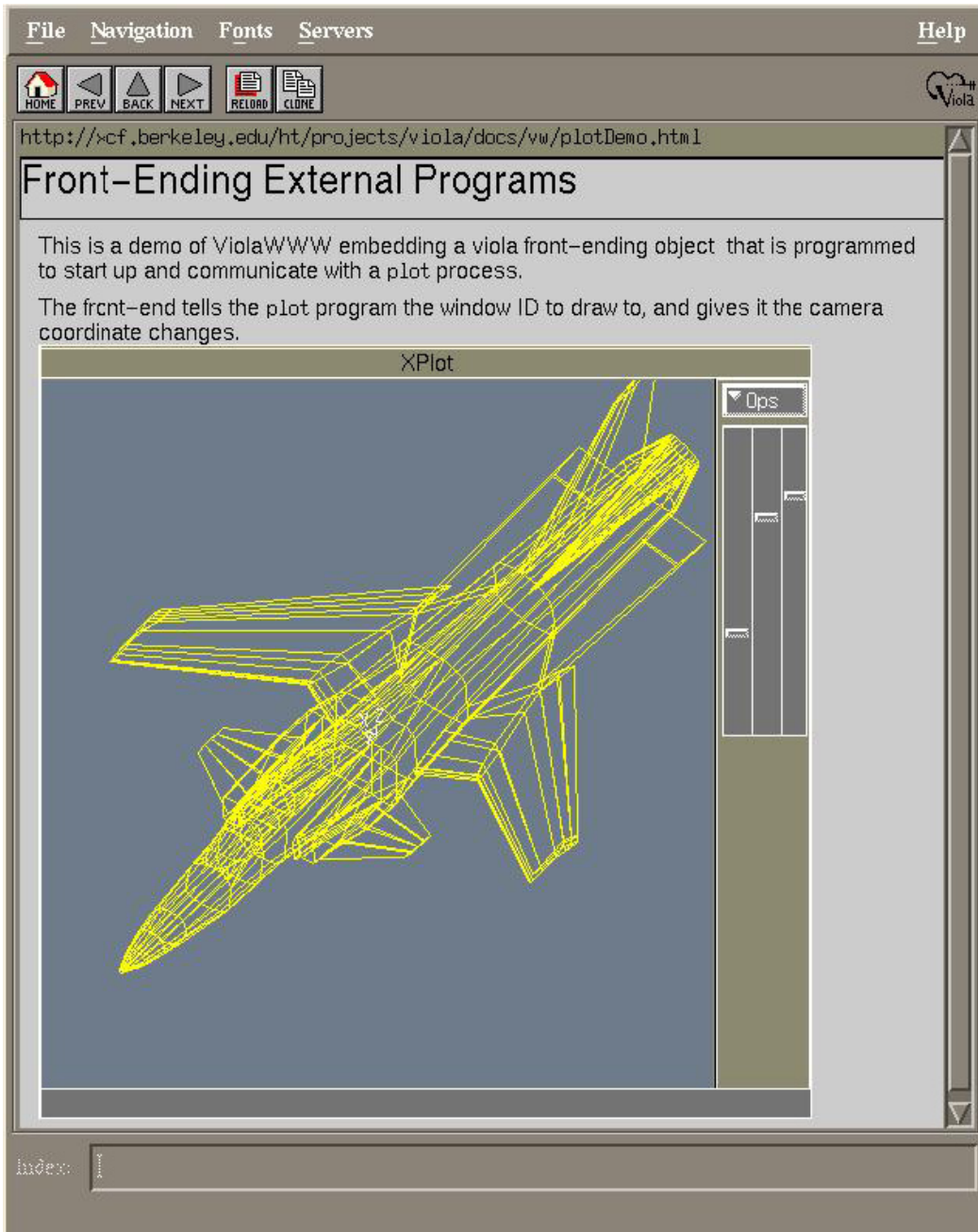
Source and binary can be found in ftp://ora.com/pub/www/viola. Sparc binary is supplied.

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

167. 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".

168. 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".

169. The following is a screenshot of the ViolaWWW browser after parsing the file plotDemo.html:



170. The files plotDemo.html and plot.v include code for the plotting demo described in the Viola paper dated August 16, 1994. *See supra* ¶ 107.

171. 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.

172. 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.” *See supra* ¶ 120.

173. Pei Wei had told Doyle on August 31, 1994, *see supra* ¶ 110, and again on August 21, 1995, *see supra* ¶ 135, that the plotting demo described in the Viola paper dated August 16, 1994, was the “very one” demonstrated “to visitors from a certain computer manufacturer” by May 8, 1993.

174. 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).

175. Thus, 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.

176. 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.

177. 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:

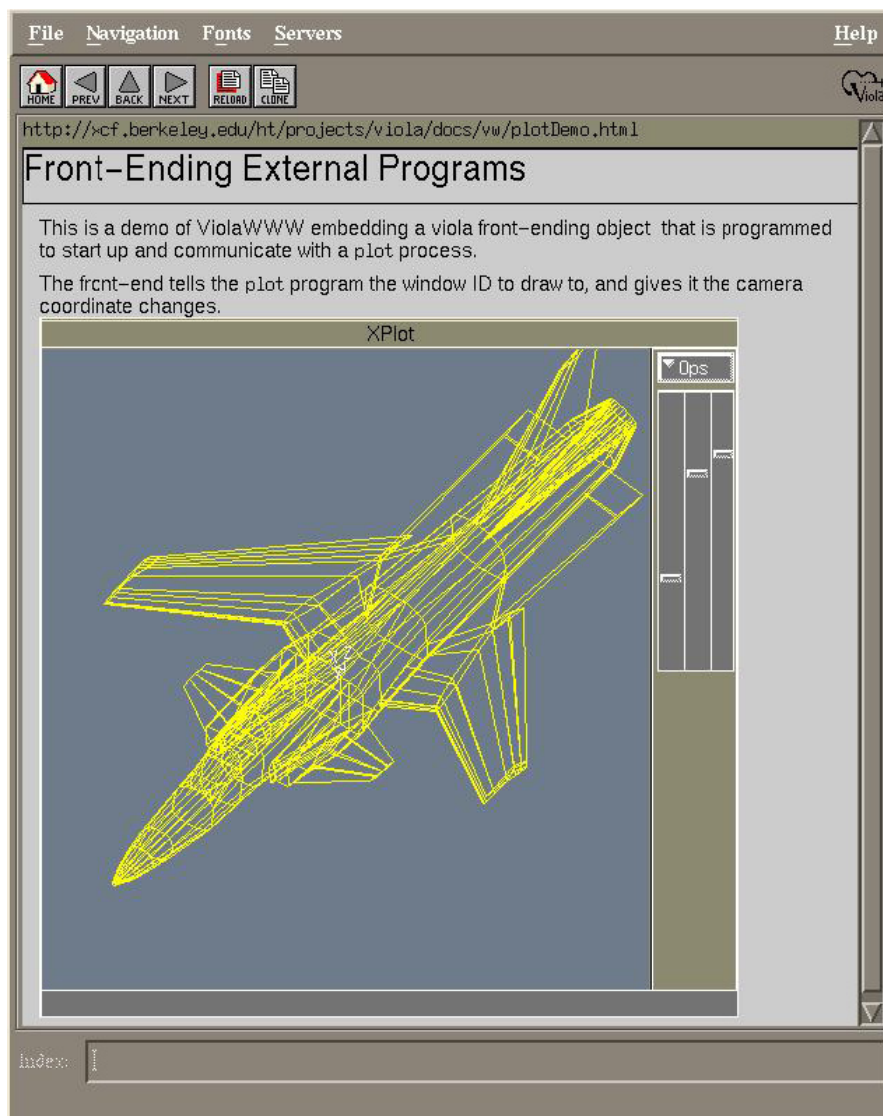
....

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.

....



178. There was no limitation, restriction or obligation of secrecy on anyone attending the talk that Pei Wei gave at Stanford University in September 1994.

179. The plotting demo described in the talk at Stanford University in September 1994 is the same plotting demo described in the Viola paper dated August 16, 1994. *See supra* ¶ 107.

180. Pei Wei had told Doyle on August 31, 1994, *see supra* ¶ 110, and again on August 21, 1995, *see supra* ¶ 135, that the plotting demo described in the Viola paper dated

August 16, 1994, was the “very one” demonstrated “to visitors from a certain computer manufacturer” by May 8, 1993.

181. 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).

182. Thus, 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.

183. 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.

184. 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.

185. Krueger was aware of Pei Wei's May 1993 demonstration of the ViolaWWW browser to Sun Microsystems employees without a confidentiality agreement.

186. 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.

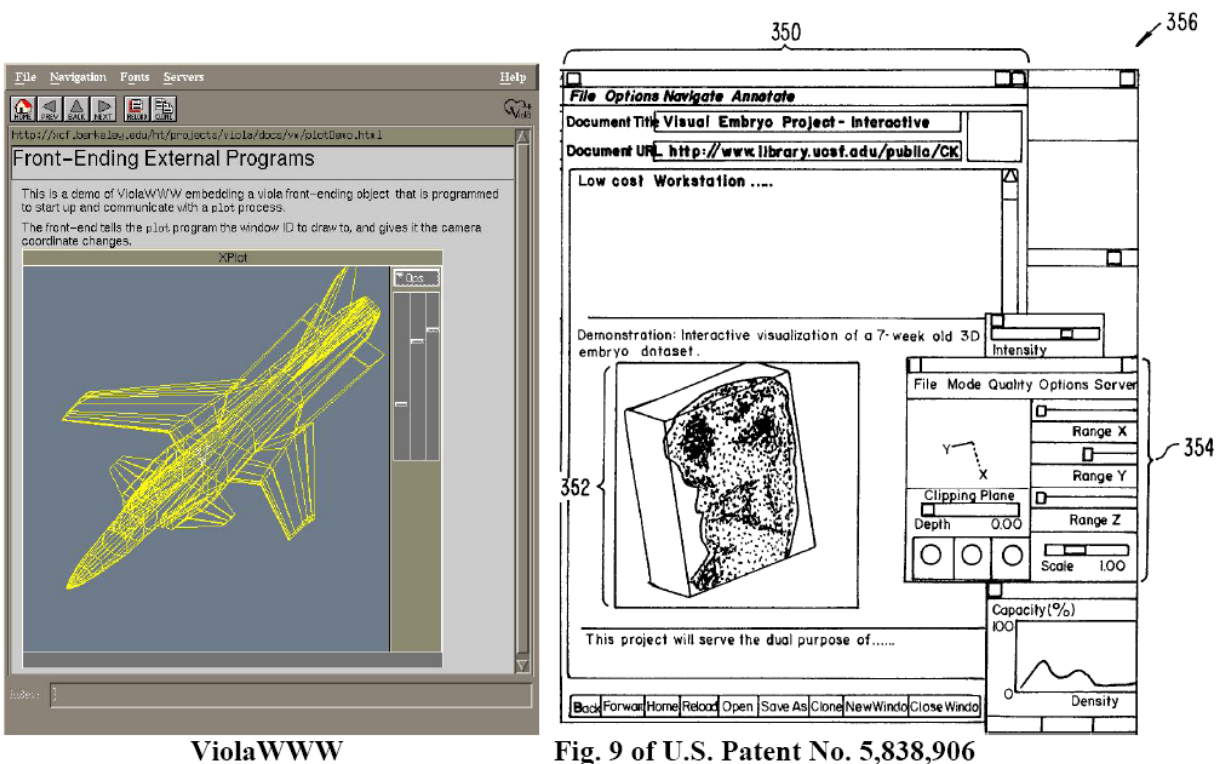
187. Krueger had no reason to disbelieve Pei Wei's statements regarding the May 1993 demonstration of the ViolaWWW browser to Sun Microsystems employees.

188. 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.

**4. The ViolaWWW browser was material to the patentability of the '906 patent**

189. The ViolaWWW browser was material to the patentability of the claimed inventions in the '906 patent.

190. 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

191. 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.

192. 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]

193. 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]

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

195. 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).

196. 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).

197. 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).

198. 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).

199. 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.

200. 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.

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

202. 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 Viola paper dated August 16, 1994, *see supra* ¶ 107.

203. Pei Wei had told Doyle on August 31, 1994, about the Viola paper dated August 16, 1994, *see supra* ¶¶ 104–107, and Doyle had downloaded and read that paper the same day, *see supra* ¶¶ 108, 114–116, yet Doyle never disclosed the Viola paper to the Patent Office during the original examination of the '906 patent.

204. Even if Doyle had conceived of the purported inventions claimed in the '906 patent before August 16, 1994, that would not have rendered the 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.

205. For example, the plotting demo described in the Viola paper dated August 16, 1994, 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. *See supra* ¶¶ 110–113.

206. None of the claimed inventions in the '906 patent was conceived before August 1993.

207. Thus, the ViolaWWW browser software that was described in the Viola paper dated August 16, 1994, 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).

208. 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).

209. 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).

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

211. 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.

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

**5. Doyle and Krueger intended to deceive the Patent Office during prosecution of the ’906 patent**

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

214. For example, Doyle failed to disclose the following material information: the message from Raggett about the ViolaWWW browser and embedded objects, *see supra* ¶¶ 96–98; 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, *see supra* ¶¶ 102–120; the Viola paper describing the ViolaWWW browser and the embedded interactive plotting demo that was in public use in May 1993, *see supra* ¶¶ 104–107; 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, *see supra* ¶¶ 132–150; 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, *see supra* ¶¶ 154–175; and Pei Wei’s talk at Stanford in September 1994 about the embedded interactive plotting demo that was in public use in May 1993, *see supra* ¶¶ 176–182.

215. Krueger failed to disclose a number of material references 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.

216. Doyle and Krueger withheld information about the ViolaWWW browser with the specific intent to deceive the Patent Office.

217. Doyle had a financial interest in the patentability of the claimed inventions in the ’906 patent. *See supra* ¶¶ 81–89.

218. The ViolaWWW browser threatened the patentability of the claimed inventions in the ’906 patent, and thus threatened Doyle’s financial interests.

219. Doyle was personally involved in the prosecution of application number 08/324,443, which matured into the ’906 patent.

220. 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. *See supra* ¶ 129.

221. 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.

222. 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.

223. 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.

224. 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.

225. 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.

226. 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.

227. Doyle personally reviewed and approved papers submitted to the Patent Office during prosecution of the '906 patent.

228. Despite Doyle 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.

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

230. For example, during prosecution of the '906 patent, Doyle made arguments for patentability that could not have been made if he had disclosed the ViolaWWW browser to the Patent Office.

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

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

233. Doyle personally reviewed and approved the response submitted to the Patent Office on or about August 6, 1996.

234. 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.

235. If Doyle or Krueger 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.”

236. 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.

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

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

239. 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.

240. If Doyle or Krueger 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.”

241. 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.

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

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

244. 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.

245. If Doyle or Krueger 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.”

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

247. 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.

248. 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.” 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.

249. 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 nonobviousness 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.*

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

251. Doyle 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 an intent to deceive the Patent Office, especially given Doyle's belief that Viola was similar to Java and that Java embodied the claimed invention.

**6. Between 1999 and 2003, Doyle learned about additional Viola prior art, and learned that an expert in the field believed that the plotting demo for the ViolaWWW browser anticipated the asserted claims of the '906 patent**

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

253. Doyle personally guided Eolas through the litigation concerning the validity of the '906 patent.

254. Throughout the litigation, the third party asserted that the plotting demo involving the ViolaWWW browser anticipated the asserted claims of the '906 patent.

255. 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, *see supra* ¶¶ 103–113, 133–136, 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, *see supra* ¶¶ 167–182.

256. 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.

257. For example, 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.

258. Similarly, 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.

259. Pei Wei also testified at the trial in 2003 about the ViolaWWW browser and the plotting demo.

260. At the trial, exhibit DX34 included source code for the ViolaWWW browser dated May 12, 1993.

261. At the trial, exhibit DX37 included source code for the ViolaWWW browser dated May 27, 1993.

262. DX34 contains the code for the plotting demo that Pei Wei demonstrated to Sun Microsystems on May 7, 1993, in Northern California.



263. DX37 contains code for a plotting demo similar to the plotting demo in DX34.

264. On May 31, 1993, Pei Wei posted DX37 on a publicly-accessible Internet site and notified an engineer at Sun Microsystems that DX37 was available for downloading.

265. Under 35 U.S.C. § 102(b), DX37 was a “printed publication” over one year before the application for the '906 patent was filed.

266. 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.

267. 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).

268. 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.

269. For example, Dr. Kelly never discussed clock.v during the trial in July and August 2003.

270. Doyle attended the trial involving the third party held in July and August 2003.

271. By the end of the trial in August 2003, Doyle 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.

272. By the end of the trial in August 2003, Doyle 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 and notified an engineer at Sun Microsystems that DX37 was available for downloading.

**7. During the 2003 reexamination of the '906 patent, Doyle and Krueger concealed material information about the ViolaWWW plotting demo that Pei Wei and an expert had repeatedly contended anticipated the '906 patent**

273. 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.

274. During the 2003 reexamination, Doyle withheld information about the ViolaWWW browser with the specific intent to deceive the Patent Office.

275. Doyle had a financial interest in the patentability of the claimed inventions in the '906 patent. *See supra* ¶¶ 81–89.

276. The ViolaWWW browser threatened the patentability of the claimed inventions in the '906 patent, and thus threatened Doyle's financial interests.

277. Doyle and Krueger were personally involved in the 2003 reexamination of the '906 patent.

278. For example, 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. 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.

279. 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.

280. 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.

Doyle gave the examiner a presentation supported by approximately 36 slides, none of which discussed DX37 or the ViolaWWW browser.

281. 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 he 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. 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.

282. 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.

283. 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.

284. 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.

285. DX34 and DX37 contained source code for the ViolaWWW browser.

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

287. 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.

288. 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 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.

289. 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.

290. 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.

291. The full contents of DX34 and DX37 were not submitted in their entirety until the Invention Disclosure Statement filed on November 1, 2006.

292. For example, during the 2003 reexamination, Doyle and Krueger did not disclose to the Patent Office the trial testimony of Pei Wei, who testified about the plotting demo in DX34 and DX37, *see supra* ¶¶ 259–265; Doyle and Krueger 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, *see supra* ¶¶ 258, 266; and Doyle and Krueger 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, *see supra* ¶ 256.

293. 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).

294. Even after the Federal Circuit's decision, however, Doyle and Krueger 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 VOBJS tag, the plot.v file, and the vplot executable application.

295. 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.

296. The examiner's statement never discussed the plotting demo that Dr. Kelly had testified anticipated the asserted claims of the '906 patent.

297. 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.

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

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

300. Doyle knew precisely what to look for, but he never told the examiner. 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.

301. 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.

302. The file clock.v is a script file that displays the image of a clock. The clock application does not involve any separate executable application. It just involves a webpage and the clock.v script file.

303. 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.

304. The ViolaWWW source code teaches two ways of creating interactive webpages using embedded applications. One way is by using a simple script file, such as clock.v. All that is required is a webpage (such as violaApps.html) and the script file (such as clock.v). No binary executable application is involved. 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). 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.

305. 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 bytecode representations) are not "executable applications" . . . .

306. The examiner's reasoning overlooked the fact that the plotting demo in DX37 does use a separate executable application: vplot.

307. Doyle and Krueger 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.

308. Doyle and Krueger knew that the plotting demo used a separate executable application for at least the following reasons:

- The Viola paper dated August 16, 1994, 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.” *See supra* ¶¶ 106–107.
- 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 frontend 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.” *See supra* ¶ 120.
- 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.” *See supra* ¶¶ 167–169.

- 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.” 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.” *See supra* ¶ 177.
- The trial testimony of Pei Wei. *See supra* ¶ 259.
- The expert opinion of Dr. Kelly. *See supra* ¶¶ 257–258, 266.

309. Doyle and Krueger’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 and Krueger’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.

310. 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 and Krueger had not engaged in inequitable conduct and instead had fulfilled their duty of candor and good faith in dealing with the Patent Office.

**8. Doyle and Krueger's inequitable conduct during the 2003 reexamination infected the 2005 reexamination**

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

312. 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.

313. Doyle had a financial interest in the patentability of the claimed inventions in the '906 patent. *See supra* ¶¶ 81–89.

314. The ViolaWWW browser threatened the patentability of the claimed inventions in the '906 patent, and thus threatened Doyle's financial interests.

315. Doyle and Krueger were personally involved in the 2005 reexamination of the '906 patent.

316. 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.

317. 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.

318. 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.

319. 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.

320. Doyle and Krueger's inequitable conduct during the 2003 reexamination infected the 2005 reexamination.

321. 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.

322. For example, Doyle and Krueger disclosed the Viola paper dated August 16, 1994, to the Patent Office on or about August 21, 2006.

323. This was the first time Doyle or Krueger had disclosed the Viola paper dated August 16, 1994 to the Patent Office.

324. Doyle knew about the Viola paper no later than August 31, 1994, *see supra* ¶¶ 104–108, 115, but Doyle waited over 10 years — and two prosecutions of the '906 patent — to disclose that paper to the Patent Office.

325. 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

326. Shortly after Doyle and Krueger disclosed the Viola paper dated August 16, 1994, to the Patent Office during the 2005 reexamination, the Patent Office rejected all claims of the '906 patent.

327. 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 Viola paper dated August 16, 1994, *see supra* ¶ 107.

328. The rejection based on the Viola paper dated August 16, 1994, confirms that the ViolaWWW browser was material prior art.

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

330. In response to Doyle's declaration, the examiner withdrew the rejection based on the Viola paper dated August 16, 1994.

331. 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.

332. The conclusions about DX37 reached in the 2003 reexamination were erroneous due to Doyle and Krueger's inequitable conduct during that reexamination. *See supra* ¶¶ 278–310.

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

**C. Doyle submitted false statements about the secondary considerations of non-obviousness**

334. 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.

335. 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.

336. 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.”

337. 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 . . . .”

338. This statement was false. 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.

339. 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.

340. 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 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.”

341. 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 nonobviousness, a factor to be considered in determining whether an alleged invention is patentable over the prior art. 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.

342. 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. 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.

343. 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.

344. Because of Doyle and Krueger inequitable conduct during the prosecution and reexamination of the '906 patent, 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).

**D. Doyle and Krueger's Inequitable Conduct Also Renders the '985 Patent Unenforceable**

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

346. Adobe incorporates by reference the allegations contained in Paragraphs 76 to 343 of its Counterclaims.

347. The actions of Doyle and Krueger demonstrate a broad pattern of inequitable conduct that infected the prosecution of the '906 patent, the reexaminations of the '906 patent, and the prosecution of the '985 patent.

348. The application that matured into the '985 patent was filed on August 9, 2002.

349. The application number for the '985 patent was 10/217,955. This application was a continuation of a continuation of the application that had matured into the '906 patent.

350. Eolas had and still has rights to the patent application that matured into the '985 patent.

351. Doyle was personally involved in the prosecution of the '985 patent at the same time that he had a financial interest in Eolas.

352. Doyle knew that Eolas could assert the '985 patent in litigation to seek substantial settlements and/or damage awards, and thus the prosecution of the '985 patent was relevant to Doyle's financial interest in Eolas.

353. Doyle and his co-inventors are entitled to receive a portion of any royalties paid to The Regents of the University of California related to the '985 patent, and for this reason as well the prosecution of the '985 patent was relevant to Doyle's financial interests.

354. The claims at issue during prosecution of the '985 patent were similar to the claims at issue during the reexaminations of the '906 patent.

355. Accordingly, the information that Doyle and Krueger withheld during prosecution of the '906 patent was material to the patentability of the claims at issue during prosecution of the '985 patent for the same reasons previously stated.

356. As a result of the similarity between the claims at issue during prosecution of the '985 patent, and the claims of the '906 patent, the Patent Office issued a "double patenting"

rejection during prosecution of the '985 patent. The rejection was issued on or about July 20, 2004.

357. To overcome the “double patenting” rejection during prosecution of the '985 patent, a terminal disclaimer was filed on or about March 7, 2005. As a result of the terminal disclaimer, the '985 patent may be in force up until November 17, 2015, the date on which the '906 patent will expire.

358. For at least this reason, Doyle and Krueger's inequitable conduct during the prosecution of the '906 patent infected the prosecution of the '985 patent.

359. On or about May 5, 2005, the Patent Office suspended prosecution of the '985 patent in light of the 2003 reexamination of the '906 patent. The Patent Office determined that the outcome of the 2003 reexamination had a material bearing on the patentability of the claims at issue during prosecution of the '985 patent.

360. For at least this reason, Doyle and Krueger's inequitable conduct during the 2003 reexamination of the '906 patent infected the prosecution of the '985 patent.

361. On or about January 18, 2006, the Patent Office suspended prosecution of the '985 patent in light of the 2005 reexamination of the '906 patent. The Patent Office determined that the outcome of the 2005 reexamination had a material bearing on the patentability of the claims at issue during prosecution of the '985 patent.

362. For at least this reason, Doyle and Krueger's inequitable conduct during the 2005 reexamination of the '906 patent infected the prosecution of the '985 patent.

363. On or about April 11, 2008, the claims at issue during prosecution of the '985 patent were amended to claim substantially the same subject matter claimed in the '906 patent.

364. Accordingly, the Patent Office did not undertake a separate substantive examination of the patentability of the claims in the '985 patent. Instead, the Patent Office simply applied the results of the prosecution of the '906 patent (including the results of the two reexaminations of the '906 patent) to the '985 patent.

365. For at least this reason, Doyle and Krueger's inequitable conduct during the prosecution and reexaminations of the '906 patent infected the prosecution of the '985 patent.

366. On or about November 13, 2008, a request was filed to lift the stay on the prosecution of the '985 patent in light of the completion of the 2005 reexamination of the '906 patent.

367. On or about March 20, 2009, the Patent Office allowed the claims in the '985 patent for the same reasons set forth by the Patent Office during the reexaminations of the '906 patent.

368. The examiner's reasons for allowance patent included the following statement: "[T]he claims [of the '985 patent] are allowable as the claims contain the subject matter deemed allowable in both Re exam 90/006,831 [the 2003 reexamination of the '906 patent] and Re exam 90/007,838 [the 2005 reexamination of the '906 patent] for the same reasons as set forth in the NIRC of the two Re exams."

369. The examiner's reasons for allowance of the '985 patent confirm that Doyle and Krueger's inequitable conduct during the prosecution and reexaminations of the '906 patent infected the prosecution of the '985 patent.

370. Eolas filed the complaint in this action on October 6, 2009, the same day that the '985 patent issued.



371. As a result of Doyle and Krueger's pattern of inequitable conduct, Eolas came to this Court with unclean hands.

372. As a result of Doyle and Krueger's inequitable conduct, and the unclean hands of Eolas, the '906 and '985 patents are unenforceable.

#### **Sixteenth Affirmative Defense (Reservation of Defenses)**

373. Adobe expressly reserves the right to allege and assert additional defenses.

374. Adobe expressly incorporates by reference herein all defenses pled by co-defendants in this action in their respective Answers to Eolas' Complaint.

### **COUNTERCLAIMS**

#### **The Parties**

375. Counterclaim Plaintiff Adobe Systems Incorporated ("Adobe"), is a Delaware corporation and has a principal place of business in California.

376. On information and belief based solely on Paragraph 1 of the Complaint as pled by Eolas, Eolas is a Texas corporation with its principal place of business located in Tyler, Texas.

#### **Jurisdiction**

377. This counterclaim arises under the patent laws of the United States, Title 35, United States Code. The jurisdiction of this Court is proper under at least 35 U.S.C. § 271 *et seq.* and 28 U.S.C. §§ 1331, 1338, 1367, and 2201-02.

378. Venue is proper in this District pursuant to at least 28 U.S.C. §§ 1391 and 1400. Venue is further proper in the Tyler Division.

## Count I

### Declaratory Relief Regarding Non-infringement

379. Based on Eolas' filing of this action and Adobe's Second Defense, an actual controversy has arisen and now exists between the parties as to whether Adobe infringes the '906 Patent.

380. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. §2201 *et seq.*, Adobe requests a declaration by the Court that it does not infringe any claim of the '906 Patent under any theory (including directly (whether individually or jointly) or indirectly (whether contributorily or by inducement)).

381. Based on Eolas' filing of this action and Adobe's Second Defense, an actual controversy has arisen and now exists between the parties as to whether Adobe infringes the '985 Patent.

382. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. §2201 *et seq.*, Adobe requests a declaration by the Court that it does not infringe any claim of the '985 Patent under any theory (including directly (whether individually or jointly) or indirectly (whether contributorily or by inducement)).

## Count II

### Declaratory Relief Regarding Invalidity

383. Based on Eolas' filing of this action and Adobe's Third Defense, an actual controversy has arisen and now exists between the parties as to the validity of the claims of the '906 Patent.

384. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. §2201 *et seq.*, and 35 U.S.C. § 100 *et seq.*, Adobe requests a declaration by the Court that the claims of the ‘906 Patent are invalid.

385. Based on Eolas’ filing of this action and Adobe’s Third Defense, an actual controversy has arisen and now exists between the parties as to the validity of the claims of the ‘985 Patent.

386. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. §2201 *et seq.*, and 35 U.S.C. § 100 *et seq.*, Adobe requests a declaration by the Court that the claims of the ‘985 Patent are invalid.

### **Count III**

#### **Declaratory Relief of Unenforceability of U.S. Patent No. 5,838,906**

387. Based on Eolas’ filing of this action and Adobe’s Fifteenth Defense, an actual controversy has arisen and now exists between the parties with respect to the unenforceability of the ‘906 Patent.

388. Adobe repeats and realleges the allegations of paragraphs 76–344 as if separately set forth herein.

389. Although Eolas alleges in its Complaint that the ‘906 Patent was duly and legally issued by the United States Patent and Trademark Office after full and fair examination, each and every claim of the ‘906 Patent is unenforceable due to inequitable conduct before the United States Patent and Trademark Office.

390. A judicial determination of the respective rights of the parties with respect to the unenforceability of the claims of the ‘906 Patent is now necessary and appropriate under 28 U.S.C. § 2201.

#### **Count IV**

##### **Declaratory Relief of Unenforceability of U.S. Patent No. 7,599,985**

391. Based on Eolas' filing of this action and Adobe's Fifteenth Defense, an actual controversy has arisen and now exists between the parties with respect to the unenforceability of the '985 Patent.

392. Adobe repeats and realleges the allegations of paragraphs 76–372 as if separately set forth herein.

393. Although Eolas alleges in its Complaint that the '985 Patent was duly and legally issued by the United States Patent and Trademark Office after full and fair examination, each and every claim of the '985 Patent is unenforceable due to inequitable conduct before the United States Patent and Trademark Office.

394. A judicial determination of the respective rights of the parties with respect to the unenforceability of the claims of the '985 Patent is now necessary and appropriate under 28 U.S.C. § 2201.

#### **COUNT V**

##### **Exceptional Case**

395. Adobe repeats and realleges paragraphs 76–372 as if separately set forth herein.

396. Because of, inter alia, Doyle's inequitable conduct, this is an exceptional case warranting an award of attorneys' fees to Adobe under 35 U.S.C. §285.

#### **PRAYER**

Adobe respectfully requests a judgment against Eolas as follows:

- A. A declaration that Adobe does not infringe, under any theory, any valid claim of the '906 Patent that may be enforceable;

- B. A declaration that Adobe does not infringe, under any theory, any valid claim of the '985 Patent that may be enforceable;
- C. A declaration that the asserted claims of the '906 Patent are invalid;
- D. A declaration that the asserted claims of the '985 Patent are invalid;
- E. A declaration that the asserted claims of the '906 Patent are unenforceable;
- F. A declaration that the asserted claims of the '985 Patent are unenforceable;
- G. A declaration that Eolas take nothing by its Complaint;
- H. Judgment against Eolas and in favor of Adobe;
- I. Dismissal of the Complaint with prejudice;
- J. An award to Adobe of its costs and attorneys' fees incurred in this action; and
- K. Further relief as the Court may deem just and proper.

**JURY DEMAND**

397. Pursuant to Local Rule CV-38.1 and Fed. R. Civ. P. 38, Adobe hereby demands a trial by jury on all issues relating to Eolas so triable in this action.

**Dated:** August 1, 2011.

Respectfully submitted,

**By:** David J. Healey

David J. Healey

E-mail: [Healey@fr.com](mailto:Healey@fr.com)

**FISH & RICHARDSON P.C.**

1 Houston Center

1221 McKinney Street, Suite 2800

Houston, TX 77010

713-654-5300 (Telephone)

713-652-0109 (Facsimile)

OF COUNSEL:

Frank E. Scherkenbach

E-mail: [Scherkenbach@fr.com](mailto:Scherkenbach@fr.com)

**FISH & RICHARDSON P.C.**

225 Franklin Street

Boston, MA 02110-2804

617-542-5070 (Telephone)

617-542-8906 (Facsimile)

Joseph P. Reid

E-mail: [Reid@fr.com](mailto:Reid@fr.com)

Jason W. Wolff

E-mail: [Wolff@fr.com](mailto:Wolff@fr.com)

**FISH & RICHARDSON P.C.**

12390 El Camino Real

San Diego, CA 92130

858-678-5070 (Telephone)

858-678-5099 (Facsimile)

Counsel for Defendant

ADOBE SYSTEMS INCORPORATED

**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that a true and correct copy of the above and foregoing document has been served on August 1, 2011, to all counsel of record who are deemed to have consented to electronic service via the Court's CM/ECF system per Local Rule CV-5(a)(3).

*/s/ David J. Healey*

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David J. Healey