

# **EXHIBIT A2**



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Doyle et al.

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(54) **DISTRIBUTED HYPERMEDIA METHOD FOR AUTOMATICALLY INVOKING EXTERNAL APPLICATION PROVIDING INTERACTION AND DISPLAY OF EMBEDDED OBJECTS WITHIN A HYPERMEDIA DOCUMENT**

5,146,553 A	9/1992	Noguchi et al.
5,202,828 A	4/1993	Vertelney et al.
5,204,947 A	4/1993	Bernstein et al.
5,206,951 A	4/1993	Khoyi et al.
5,274,821 A	12/1993	Rouquie
5,307,499 A	4/1994	Yin

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(Continued)

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### OTHER PUBLICATIONS

"How People Use Softcopy Documentation: A Case Study", Dave Hendry et al., Conference of the Centre for Advanced Studies on Collaborative Research (CASCON) 1991, pp. 77-93.\*

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### (57) ABSTRACT

A system allowing a user of a browser program on a computer connected to an open distributed hypermedia system to access and execute an embedded program object. The program object is embedded into a hypermedia document much like data objects. The user may select the program object from the screen. Once selected the program object executes on the user's (client) computer or may execute on a remote server or additional remote computers in a distributed processing arrangement. After launching the program object, the user is able to interact with the object as the invention provides for ongoing interprocess communication between the application object (program) and the browser program. One application of the embedded program object allows a user to view large and complex multi-dimensional objects from within the browser's window. The user can manipulate a control panel to change the viewpoint used to view the image. The invention allows a program to execute on a remote server or other computers to calculate the viewing transformations and send frame data to the client computer thus providing the user of the client computer with interactive features and allowing the user to have access to greater computing power than may be available at the user's client computer.

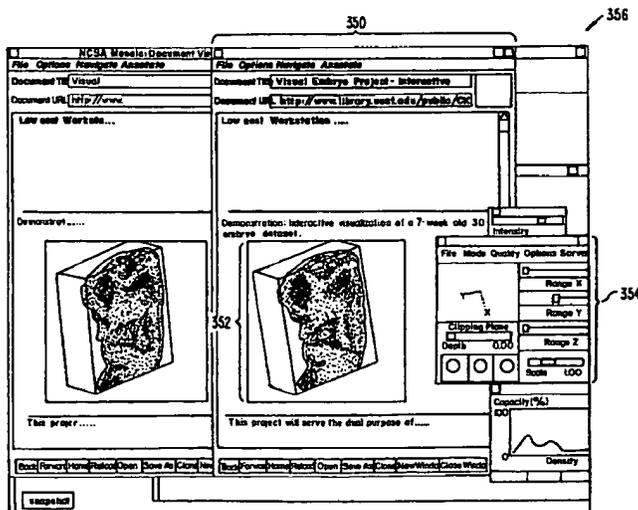
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**G06F 9/50** (2006.01)
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- (58) **Field of Classification Search** ..... None  
 See application file for complete search history.

### (56) References Cited

#### U.S. PATENT DOCUMENTS

- |             |         |                |
|-------------|---------|----------------|
| 4,815,029 A | 3/1989  | Barker et al.  |
| 4,847,604 A | 7/1989  | Doyle          |
| 4,949,248 A | 8/1990  | Caro           |
| 5,056,057 A | 10/1991 | Johnson et al. |



## U.S. PATENT DOCUMENTS

5,321,806	A	6/1994	Meinerth et al.
5,321,807	A	6/1994	Mumford
5,321,808	A	6/1994	Rupp et al.
5,347,632	A	9/1994	Filepp et al.
5,367,635	A	11/1994	Bauer et al.
5,390,314	A	2/1995	Swanson
5,418,908	A	5/1995	Keller et al.
5,425,141	A	6/1995	Gedye
5,499,369	A	3/1996	Atkinson
5,537,526	A	7/1996	Anderson et al.
5,544,320	A	8/1996	Konrad
5,581,686	A	12/1996	Koppolu et al.
5,606,493	A	2/1997	Duscher et al.
5,613,058	A	3/1997	Koppolu et al.
5,634,019	A	5/1997	Koppolu et al.
5,652,876	A	7/1997	Ashe et al.
5,754,175	A	5/1998	Koppolu et al.
5,801,701	A	9/1998	Koppolu et al.
5,812,862	A	9/1998	Smith et al.
6,055,514	A	4/2000	Wren

## OTHER PUBLICATIONS

- Bill Janssen, "Re: HTML+ support for eqn & Postscript," www-talk email list, 1 page (Jun. 14, 1993).
- Dave Raggett, "HTML+ support for eqn & Postscript," www-talk email list, 2 pages (Jun. 14, 1993).
- Marc Andreessen, "NCSA Mosaic for X 1.2 available," www-talk email list, 3 pages (Jun. 30, 1993).
- Anonymous, "xresources.h," 15 pages (1993). (Downloaded from "Index of /pub/mosaic/Unix/source/old" as part of the file "xmosaic-1.2.tar.z"; Exhibit E has 15 pages, including printouts for: (1) the web page for downloading "xmosaic-1.2.tar.z," (2) the contents of "xmosaic-1.2tar.z," and (3) the file "xresources.h" in "xmosaic-1.2.tar.z").
- Marc Andreessen, "NCSA Mosaic for X 2.0 pre-release 4 available," www-talk email list, 4 pages (Sep. 29, 1993).
- Anonymous, "Default File Extensions in Mosaic 2.0pre4," 1 page.
- Anonymous, "Default MIME Types in Mosaic 2.0pre4," 1 page.
- John Bradley, "xv, Interactive Image Display for the X Window System," 72 pages (1992). (Downloaded from "Index of /root/usr.local.src/xv-2.21" as part of the file "xv-2.21.tar.z"; Exhibit I has 77 pages, including printouts for: (1) the web page for downloading "xv-2.21.tar.z," (2) the contents of "xv-2.21.tar.z," and (3) the file "xvdocs.ps.z" in "xv-2.21.tar.z").
- John Bradley, "xv, Interactive Image Display for the X Window System," 105 pages (Apr. 26, 1993). (Downloaded from "Index of /pub/net/infosys/NCSA/Web/Mosaic/Unix/view" as part of the file "xv-3.00.tar.z"; Exhibit J has 110 pages, including printouts for: (1) the web page for downloading "xv-3.00.tar.z," (2) the contents of "xv-3.00.tar.z," and (3) the file "xvdocs.ps.z" in "xv-3.00-tar.z").
- Marc Andreessen, "xv 3.0' is out . . ." www-talk email list, 1 page (Apr. 30, 1993).
- Timothy Thiesen, "Ghostview(1) Unix Programmer's Manual," 14 pages (Jul. 1993). (Downloaded from "ftp://mirror.cs.wesc.edu/pub/mirrors/ghost/gnu/ghostview/" as part of the file "ghostview-1.5.tar.gz"; Exhibit L has 21 pages, including printouts for: (1) the FTP site for downloading "ghostview-1.5.tar.gz," (2) the contents of "ghostview-1.5.tar.gz," (3) the file "ghostview.ps" in "ghostview-1.5.tar.gz," and (4) the file "README" in "ghostview-1.5-tar.gz").
- Douglas Young, *The X Window System, Programming and Applications with Xt*, Prentice Hall, title page, copyright page, pp. i-x, 1-13, 123-166, 280-332, 520-533 (1990).
- Adrian Nye, *Xlib Programming Manual for Version 11*, O'Reilly & Associates, Inc., title page, copyright page, pp. i-xxxiii, 1-46, and index (1988).
- Anonymous, "gs.interface," 2 pages (Jul. 1993). (Downloaded from "ftp://mirror.cs.wesc.edu/pub/mirrors/ghost/gnu/ghostview/" as part of the file "ghostview-1.5.tar.gz").
- Doyle et al., "Processing Cross-sectional Image Data for Reconstruction of Human Developmental Anatomy from Museum Specimens," Newsletter of the Association for Computing Machinery Special Interest Group on Biomedical Computing, vol. 13, No. 1, ACM Press, cover page, table of contents, pp. 9-15 (Feb. 1993).
- "A Little History of the world Wide Web", n.pag. Online. Internet: available <http://www.w3.org/History.html> (retrieved Aug. 18, 2006).
- "NCSA Mosaic Version Information", n.pag. Online. Internet: available <http://www.ncsa.uiuc.edu/SDG/Software>.
- "The second phase of the revolution", Wired, Oct. 1994, pp. 116-152.
- Vetter, Ronald "Mosaic and the World-Wide Web," Computer Magazine, v.27, Iss. 10, pp. 49-57, Oct. 1994.
- Wynne et al. "Lean Management, Group Support Systems, and Hypermedia: a Combination Whose Time Has Come," System Sciences, 1993 Annual Hawaii Int'l Conf., pp. 112-121.
- Hansen, Wilfred "Andrew as a Multiparadigm Environment for Visual Languages," Visual Languages, 1993 IEEE Symposium, pp. 256-260.
- Moran, Patrick "Tele-Nicer-slicer-Dicer: A New Tool for the Visualization of Large Volumetric Data", NCSA Technical Report (TRO14), Aug. 1993.
- University of Southern California's Mercury Project—"USC Mercury Project:Interface", Project Milestones, USC Press Release—obtained from Internet, <http://www.usc.edu/dept/raiders/>.
- Hansen, Wilfred "Enhancing documents with embedded programs: How Ness extends in the Andrew Toolkit", IEEE Computer Language, 1990 International Conference.
- Tani, M., et al., "Object-Oriented Video—Interaction with Real-World Objects Through Live Video", May 1992, p. 593-598.
- Crowley, T., et al., "MMConf: An Infrastructure for Building Shared Multimedia Applications", CSCW 90 Proceedings, Oct. 1990, p. 329-342.
- Davis, H., et al., "Towards An Integrated Information Environment With Open Hypermedia System", ACM ECHT Conference, Dec. 1992, pp. 181-190.
- Ferrara, F., "The KIM Query System", Abstract, SIGCHI Bulletin, vol. 6, No. 3, Jul. 1994, pp. 30-39.
- Gibbs, S., "Composite Multimedia and Active Objects", OOPSLA '91, pp. 97-112.
- Davis, H., et al., "Microcosm: An Open Hypermedia System", Interchi '93, Apr. 1993, p. 526.
- Vaziri, A., "Scientific Visualization in High-Speed Network Environments", Computer Networks and ISDN Systems 22, 1991, pp. 111-129.
- Cullen, J., et al., "The Use of FTAM to access graphical pictures across wide area networks", Computer Networks and ISDN Systems, 1992, pp. 337-383.

- Lashkari, Y.Z., et al., "PLX: A Proposal to Implement a General Broadcasting Facility in a Distributed Environment Running X Windows", *Comput. & Graphics*, vol. 16, No. 2, pp. 143-149, 1992.
- Kirste, T., "Spacepicture—An Interactive Hypermedia Satellite Image Archival System", *Comput. & Graphics*, vol. 17, No. 3, pp. 251-260, 1993.
- Coulson, G., et al., "Extensions to ANSA for Multimedia Computing", *Computers Networks and ISDN Systems* 25, 1992, pp. 305-323.
- Huynh, Duong Le, et al., "PIX: An Object-Oriented Network Graphics Environment", *Comput. & Graphics*, vol. 17, No. 3, pp. 295-304, 1993.
- Berners-Lee, T.J., et al., "The World-Wide Web, *Computer Networks and ISDN Systems* 25, 1993, pp. 454-459.
- Shackelford, D.E., et al., "The Architecture and Implementation of a Distributed Hypermedia Storage System", *Hypertext '93 Proceedings*, Nov. 1993, pp. 1-13.
- Labriola, D., "Remote Possibilities", *PC Magazine*, Jun. 14, 1994, pp. 223-228.
- Udell, J., "Visual Basic Custom Controls Meet OLE", *Byte Magazine*, Mar. 1994, pp. 197-200.
- Sarna, D.E., et al., "OLE Gains Without (Much) Pain", *Data-mation Magazine*, Jun. 15, 1994, pp. 31 and 113.
- Rizzo, J., "What's OpenDoc?", *MacUser magazine*, Apr. 1994, pp. 119-123.
- Fogarty, K., et al., "Microsoft's OLE can be Network Trojan Horse", *Network World Magazine*, Jun. 27, 1994, vol. 11, No. 26, pp. 1 and 75.
- "Cello WWW Browser Release 1.01a", Article obtained from the Internet, <ftp.law.cornell.edu/pub/L11/Cello> no DDE, Mar. 16, 1994, pp. 2-9.
- "OLE 2.0: Death to Monoliths", *Byte Magazine*, Mar. 1994, p. 122.
- Duncan, Ray, "Advanced MSDOS Programming," *Microsoft Press*, 1986 pp. 390, 391, 486, 487.
- Lin, Jin-Kun, "Virtual Screen: A Framework for Task Management," *The X Resource*, Issue 1, Winter 1992—Proceedings of the 6th Annual X Technical Conference, pp. 191-198, 1992.
- Lin, Jin-Kun, "A Multimedia and Multisource Document Editor of an Open Architecture," Dept. of Computer Science, University of N.C. at Chapel Hill, ACM 089791-533-X/92/0010/0057, pp. 57-62, 1992.
- Berners-Lee T., et al., *Hypertext Markup Language (HTML)*, Internet Draft IETF (Jun. 1993).
- Toye, G., et al., *SHARE: A Methodology and Environment for Collaborative Product Development*, Proceedings, Second Workshop on Enabling Technologies: Infrastructure for Collaborative Enterprises, 1992, IEEE, pp. 33-47, Apr. 22, 1993.
- Lin, J. *MediaMosaic—A Multimedia Editing Environment*, Proc. Of the 5th Annual ACM Symposium on User Interface Software and Technology, ACM Press, pp. 135-141, 1992.
- Halasz, F., *Reflections on NoteCards: Seven Issues for the Next Generation of Hypermedia Systems*, *ACM Journal on Computer Documentation*, vol. 25, No. 3, pp. 71-87, Aug. 2001, reprinting article published in 1988.
- Feiner, S., et al., *An Experimental System for Creating and Presenting Interactive Graphical Documents*, *ACM Transactions on Graphics*, vol. 1, No. 1, pp. 59-77, Jan. 1982.
- Engelbart, D., *Knowledge-Domain Interoperability and an Open Hyperdocument System*, Proc. Of the 1990 ACM Conference on Computer Supported Cooperative Work, ACM Press, pp. 143-156, 1990.
- Meyrowitz, N., *Intermedia: The Architecture and Construction of an Object-Oriented Hypermedia System and Applications Framework*, Proc. Of the Conf. on Object Oriented Programming Systems, Languages, and Applications, ACM Press, pp. 186-201, 1986.
- Wiil, U., *Issues in the Design of EHTS: A Multiuser Hypertext System for Collaboration*, Proc. Of the 25th Hawaii Int'l. Conf. on Systems Sciences, vol. 2, pp. 629-639, Jan. 1992.
- Celentano, A., et al., *A Multiple Presentation Document Management System*, Proc. Of the 10th Annual Int'l Conf. on Systems Documentation, ACM Press, pp. 63-71, 1992.
- Garg, P. et al., *A Hypertext System to Manage Life Cycle Documents*, Proc. Of the 25th Annual Hawaii Int'l Conf. on System Sciences, 1988, IEEE, vol. 2, pp. 337-346, Jan. 1988.
- Kahn, P., *Webs, Rees, and Stacks: How Hypermedia System Design Effect Hypermedia Content, Designing and Using Human-Computer Interfaces and Knowledge Based Systems*, Elsevier Science Publishers, pp. 443-449, 1989.
- Streitz, N. et al., *Hypertext: Concepts, Systems, and Applications*, Cambridge Univ. Press, pp. 1-12, 356-359, 367-369, 1990.
- Stotts, P., et al., *Hyperdocuments as Automata: Trace-based Browsing Property—Verification*, UNC CS Technical Report, TR92-038, [citeseer.ist.psu.edu/stotts92hyperdocument.html](http://citeseer.ist.psu.edu/stotts92hyperdocument.html), p. 1, 1992.
- Adie, C., *Network, Access to Multimedia Information*, 2nd ed., RARE Project OBR(93)015, RARE, pp. 1-53, Feb. 4, 1994.
- Reichard, K., et al., *X11R96: the Rumored Changes (Release 6 of the X Window System)*, *UNIX Review*, vol. 11, No. 5, p. 101 (pp. 1-4 as printed) (May 1993).
- Cox, B., *Object Oriented Programming: An Evolutionary Approach*, Addison-Wesley, pp. 1-12, 1987.
- Solaris OpenWindows: Introduction to the ToolTalk Service—A White Paper*, Sun Microsystems, Inc., pp. 1-16, 1991.
- Tool Inter-Operability: A Hands On Demonstration—A Simple Demonstration of How the ToolTalk Service Works*, Sun Microsystems, Inc., pp. 1-24, 1992.
- Designing and Writing a ToolTalk Procedural Protocol—A White Paper*, Sun Microsystems, Inc. pp. 1-24, 1992.
- Fresco Frequently Asked Questions*, [www.i.h.kyoto-u.ac.jp/~shom/doc.org/fresco/FAQ.html](http://www.i.h.kyoto-u.ac.jp/~shom/doc.org/fresco/FAQ.html), pp. 1-14, Apr. 13, 1995.
- Palay, A., *Andrew Toolkit: An Overview*, Tech Rept., Carnegie-Mellon University Information Technology Center, pp. 1-15, 1988.
- Dettmer, R., *X-Windows—the great integrator*, *IEE Review*, vol. 36, No. 6, pp. 219-222 (Jun. 1990).
- The Andrew View*, Carnegie Mellon Univ., [www-2.cs.cmu.edu/People/AUIS/ftp/NEWSLETTERS/ASCII/93Jun.ascii](http://www-2.cs.cmu.edu/People/AUIS/ftp/NEWSLETTERS/ASCII/93Jun.ascii), vol. 2, no. (pp. 1-12 as printed) (Jun. 1993).
- The X Window System and Broadway*, [www.broadwayinfo.com/bwwhitesbroadwayhct.htm](http://www.broadwayinfo.com/bwwhitesbroadwayhct.htm), Humminbird Communications Ltd., pp. 1-11 (1987).

- Neuendorffer, T., ADEW: A Multimedia Interface Builder for Andrew, Proceedings Multi-Media Communications, Applications, and Technology Workshop, pp. 1-19 (Jul. 1991).
- Letter from America Online, Inc., Microsoft Corp., and Macromedia, Inc. (Oct. 14, 2003) and Letter from Adobe Systems Inc. re: Potential Director-Ordered Reexamination of U.S. Patent No. 5,838,906 pursuant to 35 U.S.C. § 303(a) (Oct. 15, 2003) (with cover letter from Sidley, Austin, Brown & Wood LLP) (including attachments).
- Anonymous Facsimile re: possible interference (Oct. 16, 2005).
- Letter from Stephen Wren (discussing relevance of U.S. Pat. No. 6,055,514 to U.S. Pat. No. 5,838,906) (Feb. 22, 2005).
- Letter from Pennie & Edmonds, LLP on behalf of the WWW Consortium, re: Citation of Prior Art Under 35 U.S.C. §301 and 37 C.F.R. 1.501 in Relation to U.S. Patent No. 5,838,906 (Oct. 24, 2003).
- Festa, Paul, CNET News.com "Rivalries set Aside in Defense of Internet Explorer" (Sep. 25, 2003) ([http://news.com.com/2009-1023\\_3-5082004.html](http://news.com.com/2009-1023_3-5082004.html)).
- Roberts, Paul, "Microsoft's Patent Loss Rattles Tech Community" (Sep. 3, 2003) ([http://www.infoworld.com/article/03/09/03/Hnrmicrosoft'sloss\\_1.html](http://www.infoworld.com/article/03/09/03/Hnrmicrosoft'sloss_1.html)).
- Fest, Paul, CNET News.com "Eolas Files Motion to Enjoin IE" (Oct. 8, 2003) ([http://news.com.com/2100-1028\\_3-5088349.html?tag=st+pop](http://news.com.com/2100-1028_3-5088349.html?tag=st+pop)).
- Lynch, Stephen, "Microsoft Rivals Join Patent Fight; M' Soft Rivals Join to Wage Patent Fight" N.Y. Post (Oct. 9, 2003).
- O'Reilly Network, Patent List (Jul. 10, 2003).
- Ray Ozzie, "Saving the Browser," Weblog entry (2003) (discussing Lotus Notes R3 relevance to the patent).
- "Microsoft's OLE can be network Trojan horse," Network World Magazine, vol. 11, No. 26, Jun. 27, 1994.
- Object linking and Embedding OLE 2.01 Design Specification (Sep. 27, 1993).
- Programming for Windows with Object Linking and Embedding 2.0 (Mar. 1, 1993).
- Extensible Compound Document Architecture Client and Server API specification (no date).
- Pei Y. Wei, "X Browser" (e-mail to www-talk discussion list) (Dec. 13, 1991).
- Pei Y. Wei, "X Browser" (e-mail to www-talk discussion list) (Dec. 13, 1994).
- Dale Dougherty, "WWW Developer's Conference" (e-mail to www-talk discussion list) (Jun. 19, 1993).
- Pei Wei, "Re: Universal network graphics language" (e-mail to www-talk discussion list) (Jan. 28, 1994).
- Pei Wei, "Re: Universal network graphics language" (e-mail to www-talk discussion list) (Jan. 28, 1994).
- Pei Wei, "Viola WWW beta release is available" (e-mail to www-talk discussion list) (Feb. 25, 1994).
- Pei Wei, "Viola WWW beta release is available" (e-mail to www-talk discussion list) (Feb. 25, 1994).
- Pei Wei, "Viola WWW beta release is available" (e-mail to www-talk discussion list) (Feb. 25, 1994).
- Pei Wei, "Re: World Wide Web and Viola" (e-mail to www-talk discussion list) (May 13, 1992).
- Pei Wei, "A Brief Overview of the VIOLA Engine, and its applications" (MSET 0009788-0009801)(no date).
- Pei Wei, "A Brief Overview of the VIOLA Engine, and its applications" (InterNIC details for <http://www.viola.org>) (retrieved from <http://www.internicdomainnames.com>).
- Pei Wei, "A Brief Overview of the VIOLA Engine, and its applications" (TT05417-05433) (1994) (retrieved on Aug. 4, 1998 from <http://scam.xcf.berkeley.edu/~wei/viola/violaIntro.html>).
- Pei Wei, "A Brief Overview of the VIOLA Engine, and its applications" (E0714-021725) (1994) (retrieved from <http://scam.xcf.berkeley.edu/~wei/viola/violaIntro.html>).
- Pei Wei, "A Brief Overview of the VIOLA Engine, and its applications" (TT 05441-05600) (1994) (inculding "Viola in a Nutshell: the Viola World Wide Web Toolkit" from <http://scam.xcf.berkeley.edu/~wei/viola/book>).
- Pei Wei, "A Brief Overview of the VIOLA Engine, and its applications" ((MSET 0000026-0000036) (retrieved from <http://scam.xcf.berkeley.edu/~wei/viola/violaIntro.html>).
- Pei Wei, "Re: FYI . . . press release," (e-mail to www-vrml@wired.com) (Aug. 31, 1994).
- Pei Wei, "Re: FYI . . . press release" (e-mail to www-talk discussion list) (Aug. 31, 1994).
- Pei Wei, "RE: FYI . . . press release" (e-mail to mddoyle@netcom.com) (Sep. 1, 1994).
- Michael Doyle, "Re: More RE: FYI . . . Press release" (e-mail to Pei Wei) (Sep. 1, 1994).
- Pei Wei, "Re: FYI . . . press release" (e-mail to vrml discussion list) (Sep. 1, 1994).
- Michael Doyle, "Scripts vs APIs" (e-mail to vrml discussion list) (Sep. 1, 1994).
- Pei Wei "WWW Browsers Extensibility Issues," Stanford Computer Forum WWW Workshop—Sep. 20-21, 1994.
- Pei Wei, "Extensibility in WWW Browsers" Stanford Computer Forum WWW Workshop—Sep. 20-21, 1994.
- Michael Doyle, "Re: Hot Java is here! And it \*rocks\*" (e-mail to www-talk discussion list) (Mar. 27, 1995).
- Pei Wei, "Re: Eolas Acquires Milestone Internet Software Patent" (e-mail to www-talk discussion list) (Aug. 21, 1995).
- Pei Wei, "Re: Eolas Acquires Milestone Internet Software Patent" (e-mail to www-talk discussion list) (Aug. 21, 1995).
- Time Berners-Lee, Press Release: "The World Wide Web—past, present and future" (Jul. 17, 1996) (retrieved from <http://www.bcs.org.uk/news/timbl.htm>).
- Pei Wei, "Re: Universal network graphics language" (e-mail to www-talk discussion list) (Jan. 28, 1994).
- Microsoft Product Support Services Application Note (Text File) GC0165:Rich-Text Format (RTF) Specification (Jun. 1992).
- Tim Berners-Lee, "HTML + DTD in <ftp://info.cern.ch/pub/www/dev/htmlplus.dtd>" (e-mail to www-talk discussion list) (Jun. 2, 1993).
- Dave Raggett, "HTML + support for eqn & Postscript" (e-mail to www-talk discussion list) (Jun. 14, 1993).
- Dave Raggett, "HTML + support for eqn & Postscript" (e-mail to www-talk discussion list) (Jun. 14, 1993).
- Christopher J. McRae, "Re: Xmosaic and Xv" (e-mail to www-talk discussion list) (Jun. 26, 1993).
- Dave Raggett, "HTML + (Hypertext markup language)" (Jul. 23, 1993).
- William Perry, "Re: Interest in HTML Conformance?" (e-mail to www-talk discussion list) (Apr. 17, 1994).
- William Perry, "Presentation Tags, etc." (e-mail to Tony Jebson) (May 5, 1994).
- William Perry, "Re: Where can I find doc on embedding X windows in Lemacs buffers?" (e-mail to help-lucid-emacs) (May 28, 1994).

- Jeff Sparkes, "Re: Where can I find doc on embedding X windows in Lemacs buffers?" (e-mail to help-ludic-emacs) (May 31, 1994).
- Daniel Connolly, "Re: HTML 2.0 specification" e-mail to wmperry@spry.com. (Sep. 2, 1994).
- NCSA Software Development Group, "Introducing NCSA Mosaic" (Dec. 1993).
- Kraig Brockschmidt, Programming for Windows with Object Linking and Embedding (OLE) 2.0 Draft (no date).
- Kraig Brockschmidt, "Inside OLE 2.0" Microsoft Press (Oct. 1993).
- ECDA extensible Compound Document Architecture (Jul. 10, 1990).
- Microsoft Corporation, "Information At Your Fingertips Backgrounder" (Dec. 1990).
- Microsoft Corporation, Object Landing & embedding—Extensible Application Protocols (Apr. 8, 1991).
- Microsoft Corporation, "OLE 2.0 Design Summary" (Jul. 5, 1991).
- Microsoft Corporation, "OLE 2.0 Architecture and Protocol Proposal" (Jul. 9, 1991).
- Microsoft Corporation, "OLE 2.0 Design Specification" (Apr. 15, 1993).
- Microsoft Corporation, "Microsoft OLE 2.0 Developers Conference Previews Applications Using Object Technology for Windows" (May 3, 1993).
- Microsoft Corporation, "Windows Objects: Object Linking & Embedding 2.0 Developers Conference" (May 3, 1993).
- Stuart J. Johnston and Vance McCarthy, "Developers get hands on complex but vital OLE 2.0", Info World, vol. 15, issue 19 (May 10, 1993).
- Kraig Brockschmidt, "Programming for Windows with Object Linking and Embedding 2.0" Preliminary Draft (Apr. 19, 1993).
- Microsoft Corporation, OLE 2.01 Design Specification.
- Microsoft Corporation, "Microsoft OLE Controls—Specification Overview" (Jan. 1994).
- Microsoft Corporation, "Microsoft Multimedia View Publishing Toolkit" 1 of 3 volumes: Getting Started, "Authoring Guide" and "Technical Reference" (1993).
- Microsoft Corporation, "Microsoft Multimedia View Publishing Toolkit" 2 of 3 volumes: Getting Started, "Authoring Guide" and "Technical Reference" (1993).
- Microsoft Corporation, "Microsoft Multimedia View Publishing Toolkit" 3 of 3 volumes: Getting Started, "Authoring Guide" and "Technical Reference" (1993).
- Microsoft Corporation, "Microsoft Multimedia View Publishing Toolkit" compact disc, Getting Started, "Authoring Guide" and "Technical Reference" (1993).
- E-mail From Ang Re: Plan (Oct. 8, 1994).
- Bert Bos, "Re: Structured text v. page descriptions" (e-mail to David C. Martin) (Nov. 3, 1994).
- Microsoft Windows Win32 Professional Developers Conference Information Packet including a Microsoft Non-Disclosure Agreement (Oct. 18, 1993).
- Maritz, P—Microsoft Letter to Microsoft Win32 Professional Developers Conference Attendees (Nov. 8, 1993).
- Kraig Brockschmidt, "A Primer on Designing Custom Controls," Microsoft System Journal, Mar.–Apr. 1992.
- Microsoft Corporation, "Object Linking and Embedding Backgrounder" (Dec. 1990).
- Microsoft Corporation, "Compound Documents Backgrounder" (Dec. 1990).
- Rude Q&A OLE.
- Microsoft Corporation, "OLE Controls Architecture" Version 0.6 (Sep. 1, 1993).
- Kraig Brockschmidt, "OLE 2.0: implementing Visual Editing (In-Place Activation)" (Nov. 1993).
- Kraig Brockschmidt, "Chapter One: OLE Controls Architecture" (Nov. 10, 1993).
- Microsoft Corporation, "OLE Controls Architecture" Version 0.7 (Nov. 17, 1993).
- Microsoft Corporation, "OLE Controls Architecture" Version 0.2 (May 15, 1993).
- Kraig Brockschmidt, "Network DDE in Windows for Workgroups 3.1 Bridges Programs Between PCs", Microsoft Systems Journal, Jan. 1993.
- Microsoft Corporation, "Object Linking & Embedding Version 2.0 Programmer's Reference" (Apr. 15, 1993).
- Moeller, Michael, et al., "Microsoft Maps New OCX Plan; ActiveX Seen as Web content Platform," PC Week vol. 13, No. 10, p. 1 (Mar. 11, 1996).
- MaroVaC, Nenad et al., "Hypernet: A Tool to Choreograph Worldwide Distributed Hypermedia Documents," Comput & Graphics vol. 16, No. 2, pp. 197–202 (1992).
- Netscape Communications Corp., Press Release: "Netscape Communications Offers New Network Navigator Free on the Internet" (1998).
- Sackman, Gleason, "WWW> Telerobotics via the Web(fwd)" (e-mail to comp.infosystems discussion list) (Sep. 7, 1994).
- "The Pattern in the Mosaic: An Interview with Jim Clark and Marc Andreessen," Network Computing, p. 44 (Jan. 15, 1994).
- Oliver, Dick, "Netscape Unleashed" (1996).
- "Reply by Third Party Requester Under C.F.R. 1.535" (May 5, 2006).
- "WWW-Talk Electronic Mailing List Contributors from Jan. 1993 Through Jun. 1993".
- "World-Wide Web Mailing Lists," retrieved from <http://www.bilkent.edu.tr/pub/WWW/Mail/Lists.html> (May 2, 2006).
- Hughes, Kevin, "Entering the World-Wide Web: A Guide to Cyberspace" (Oct. 1993) (<http://w3.cib.unibo.it/intro/www-guide/www.guide.html>).
- Thomas, Eric, "LISTSERV for the Non-Technical User" (Sep. 18, 1993).
- Andreessen, Marc, "NCSA Mosaic Technical Summary" (May 8, 1993).
- Weber, Jay C., "Protest of Patent # 5,838,906, under 37 CFR 1.291, and Citation of Prior Art for #5,838,906 under 37 CFR 1.502" (including attachments) (Feb. 6, 2004).
- Defendant's Trial Exhibit 273: Information Regarding Microsoft OLE 2.01 SDK (CD).
- File Tree Printout of Defendant's Trial Exhibit 273: Information Regarding Microsoft OLE 2.01 SDK.
- Defendant's Trial Exhibit 258: Information Regarding Microsoft OLE 2.0 Toolkit Program (CD).
- File Tree Printout of Defendant's Trial Exhibit 258: Information Regarding Microsoft OLE 2.0 Toolkit Program.
- MS-ET 0166172: Information Regarding Microsoft OLE 2.01 SDK (CD).
- File Tree Printout of MS-ET 0166172: Information Regarding Microsoft OLE 2.01 SDK.
- MS-ET 0189860: First Companion Disk for "Inside OLE 2" by Kraig Brockschmidt (CD).
- File Tree Printout of MS-ET 0189860: First Companion Disk for "Inside OLE 2" by Kraig Brockschmidt.

- MS-ET 0189861: Second Companion Disk for "Inside OLE 2" by Kraig Brockschmidt (CD).
- File Tree Printout of MS-ET 0189861: Second Companion Disk for "Inside OLE 2" by Kraig Brockschmidt.
- Defendant's Trial Exhibit 326: Information Regarding Multimedia Viewer (CD).
- File Tree Printout of Defendant's Trial Exhibit 326: Information Regarding Multimedia Viewer.
- Defendants Trial Exhibit 215: Information Regarding Emacs (CD).
- File Tree Printout of Defendants Trial Exhibit 215: Information Regarding Emacs.
- E 021700: Information Regarding WebRouser (CD).
- File Tree Printout of E 021700: Information Regarding WebRouser.
- E 027693: Information Regarding Distributed Hypermedia Object Embedding (DHOE) (CD).
- File Tree Printout of E 027693: Information Regarding Distributed Hypermedia Object Embedding (DHOE).
- Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626, 2003 U.S. Dist. Lexis 11476 (N.D. Ill. Jul. 2, 2003).
- Eolas Techs., Inc. v. Microsoft Corp.*, 270 F.Supp.2d 997 (N.D. Ill., Jul. 1, 2003).
- Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626, 2003 U.S. Dist. Lexis 6322 (N.D. Ill. Apr. 16, 2003).
- Eolas Techs., Inc. v. Microsoft Corp.*, 65 U.S.P.Q.2d 1090 (N.D. Ill. Oct. 18, 2002).
- Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626, 2000 U.S. Dist. Lexis 18886 (N.D. Ill. Dec. 28, 2000).
- Complaint and Demand for Jury Trial, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Feb. 2, 1999).
- Answer, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Mar. 24, 1999).
- Microsoft Corporation's Submission Regarding Claim Construction Issues and Scheduling, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Sep. 7, 1999).
- First Amended Answer and Counterclaim, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Sep. 7, 1999).
- Plaintiff's Reply to Microsoft's First Amended Counterclaim, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Oct. 27, 1999).
- Defendant Microsoft Corporation's Initial Brief on Claim Construction Issues, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill Mar. 24, 1999) (Oct. 14, 2000).
- Plaintiff Eolas Techs., Inc. Memorandum in Support of Claim Construction (N.D. Ill Oct. 14, 2000).
- Defendant Microsoft Corporation's Reply Brief on Claim Construction Issues, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill, Oct. 23, 2000).
- Plaintiff Eolas Technologies' Reply Memorandum in Support of Claim Construction, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill Oct. 23, 2000).
- Memorandum Opinion and Order, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill, Dec. 28, 2000).
- Plaintiff Eolas Technologies' First Amended Complaint and Demand for Jury Trial, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill, Apr. 6, 2001) (Apr. 9, 2001).
- Defendant Microsoft Corporation's Answer to First Amended Complaint and Second Amended Counterclaim, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Apr. 18, 2001).
- Plaintiff Eolas Technologies' Reply to Defendant's Second Amended Counterclaim, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill May 2, 2001).
- Plaintiff Eolas Technologies' Second Amended Complaint and Demand for Jury Trial, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill, Aug. 31, 2001) (Aug. 31, 2001).
- Defendant Microsoft Corporation's Answer to Second Amended Complaint and Third Amended Counterclaim, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Sep. 17, 2001).
- Plaintiff's Proposed Jury Instructions Regarding Claim Construction, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Jan. 27, 2003).
- Plaintiff's Proposed Preliminary and Final Jury Instructions, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Apr. 25, 2003).
- Memorandum of Microsoft Corporation in Support of its Motion to Clarify the Court's In Limine Ruling with Respect to Communications about the Viola WWW Browser involving Michael Doyle, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Jul. 2, 2003).
- Plaintiff's Motion to Exclude Extrinsic Evidence of Claimed Pei Wei Invention beyond that Disclosed in the Precise Reference Asserted as Anticipating Prior Art, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Jul. 22, 2003).
- Microsoft's Response to Plaintiffs' Motion to Exclude Extrinsic Evidence of Claimed Pei Wei Invention Beyond that Disclosed in the Precise Reference Asserted as Anticipating Prior Art, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Jul. 23, 2003).
- Microsoft's Motion to Preclude Plaintiffs from Arguing that the Prior Art Lacks Elements not Found in the Claims of the '906 Patent, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Jul. 28, 2003).
- Plaintiffs' Memorandum in Further Support of Their Motion to Exclude Extrinsic Evidence of Claimed Pei Wei Invention, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Jul. 29, 2003).
- Microsoft's Offer of Proof Regarding Viola Prior Art, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Aug. 5, 2003).
- Plaintiffs' Memorandum in Opposition to Microsoft's Offer of Proof Regarding the "Viola Prior Art", *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill, Aug. 11, 2003) (Aug. 7, 2003).
- Microsoft's Post-Trial Brief on Inequitable Conduct, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Aug. 18, 2003).
- Plaintiffs' Post-Trial Brief on Microsoft's Inequitable Conduct Claims, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Aug. 22, 2003).
- Microsoft's Response to Plaintiffs' Post-Trial Brief on Inequitable Conduct, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Aug. 26, 2003).
- Plaintiffs' Objections to Microsoft's Offer of Proof Regarding Viola Prior Art, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Sep. 3, 2003).
- Defendant Microsoft's Motion for Judgment as a Matter of Law and a New Trial, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Oct. 6, 2003).
- Eolas Techs., Inc. v. Microsoft Corp.*, 1:99-CV-00626 (Fed. Cir. Jun. 20, 2005).
- Microsoft's Motion for Revision of Claim Construction and Summary Judgment of Non-Infringement, *Eolas Tech., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Dec. 15, 2005).

- Declaration of Munir R. Meghjee in Support of Plaintiffs' Memorandum of Law in Opposition to Microsoft Corporation's Motion for Revision of Claim Construction and Summary Judgment of Non-Infringement, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Jan. 12, 2006).
- Plaintiffs' Memorandum of Law in Opposition to Microsoft's Motion for Revision of Claim Construction and Summary Judgment of Non-Infringement, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Jan. 12, 2006).
- Plaintiffs' Local Rule 56.1(b)(3) Response to Microsoft Corporation's Statement of Undisputed Facts in Support of Its Motion for Revision of Claim Construction and Entry of Summary Judgment of Non-Infringement, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Jan. 12, 2006).
- Declaration of Laura L. Donoghue in Support of Microsoft's Reply Memorandum in Support of its Motion for Revision of Claim Construction and Summary Judgment of Noninfringement, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Jan. 31, 2006).
- Plaintiffs' Sur-Reply in Opposition to Microsoft's Motion for Revision of Claim Construction and Summary Judgment of Non-Infringement, *Eolas Techs., Inc. v. Microsoft Corp.*, No. 99-C-626 (N.D. Ill) (Feb. 27, 2006).
- Defendants' Sur-Rebuttal in Support of its Motion for Revision of Claim Construction and Summary Judgment of Non-Infringement, No. 99-C-626 (N.D. Ill) (Mar. 6, 2006).
- Expert Report of Dr. John P.J. Kelly (Dec. 14, 2001).
- Rebuttal Expert Report of Edward W. Felten Regarding Validity (Jan. 18, 2002).
- Supplemental Expert Report of Dr. John P.J. Kelly (Feb. 1, 2002).
- Expert Report of Kraig Brockschmidt (Dec. 12, 2001).
- Rebuttal Report of Kraig Brockschmidt.
- Expert Report of Robert L. Harmon Regarding Claim Construction.
- Rebuttal Expert Report of Robert L. Harmon Pursuant to Rule 26(a)(2)(B). F.R.C.P.
- Expert Report of Robert L. Harmon Pursuant to Rule 26(a)(2)(B). F.R.C.P.
- Berners-Lee, Tim "HTML, HMML, and HyperTeX" post to WWW-Talk E-mail List (Apr. 21, 1993).
- Raggett, Dave, "Standardizing new HTML features" post to WWW-Talk E-mail List (Apr. 27, 1993).
- Janssen, Bill, "Re: Standardizing new HTML features" post to WWW-Talk E-mail List (Apr. 27, 1993).
- Andreessen, Marc, "Re: Standardizing new HTML features" post to WWW-Talk E-mail List (Apr. 27, 1993).
- Janssen, Bill, "Re: Standardizing new HTML features" post to WWW-Talk E-mail List (Apr. 27, 1993).
- Janssen, Bill, "Re: Standardizing new HTML features" post to WWW-Talk E-mail List (Apr. 29, 1993).
- Janssen, Bill, "Re: Standardizing new HTML features" post to WWW-Talk E-mail List (Apr. 29, 1993).
- Sanders, Tony, "Re: Standardizing new HTML features" post to WWW-Talk E-mail List (Apr. 29, 1993).
- Janssen, Bill, "Re: Standardizing new HTML features" post to WWW-Talk E-mail List (Apr. 29, 1993).
- Sanders, Tony, "Re: Standardizing new HTML features" post to WWW-Talk E-mail List (Apr. 29, 1993).
- Janssen, Bill, "Re: Standardizing new HTML features" post to WWW-Talk E-mail List (Apr. 29, 1993).
- Fine, Thomas A., "More than just HTML (was Re: Poetry and Maths)," post to WWW-Talk E-mail List (May 25, 1993).
- Raggett, Dave, "Re: More than just HTML (was Re: Poetry and Maths)" post to WWW-Talk E-mail List (May 27, 1993).
- Abbey, Jonathan, "Re: Keeping HTML Simple & Format negotiation between Browser & Server" post to WWW-Talk E-mail List (May 27, 1993).
- Raggett, Dave, "Re: Keeping HTML Simple & Format negotiation between Browser & Server" post to WWW-Talk E-mail List (Jun. 1, 1993).
- Bernes-Lee, Tim, "HTML+DTD in ftp://info.cern.ch/pub/www/dev/htmlplus.dtd" post to WWW-Talk E-mail List (Jun. 2, 1993).
- Raggett, Dave, "HTML+ support for eqn & Postscript" post to WWW-Talk E-mail List (Jun. 14, 1993).
- Janssen, Bill, "Re: HTML+ support for eqn & Postscript" post to WWW-Talk E-mail List (Jun. 14, 1993).
- Altis, Kevin, "Re: HTML+ support for eqn & Postscript" post to WWW-Talk E-mail List (Jun. 18, 1993).
- Sanders, Tony, "Re: launching executables through HTML" post to WWW-Talk E-mail List (Jun. 19, 1993).
- Andreessen, Marc, "Re: launching executables through HTML" post to WWW-Talk E-mail List (Jun. 20, 1993).
- Perry, William M., "New Version of The Emacs Browser For W3 (.04b)" post to WWW-Talk E-mail List (Apr. 13, 1993).
- Perry, William M., "New Version of WWW Browser For Emacs" post to WWW-Talk E-mail List (Jun. 18, 1993).
- Phillips, George Perry, "Re: launching executables through HTML files" post to WWW-Talk E-mail List (Jun. 20, 1993).
- Montulli, Lou, "Re: launching executables through HTML files" post to WWW-Talk E-mail List (Jun. 22, 1993).
- Raisch, Rob, "Re: Suggestion for a new URL type" post to WWW-Talk E-mail List (Jun. 26, 1993).
- VanHeyningen, Marc, "Re: Suggestion for a new URL type" post to WWW-Talk E-mail List (Jun. 26, 1993).
- Andreessen, Marc, "Re: Suggestion for a new URL type" post to WWW-Talk E-mail List (Jun. 26, 1993).
- Phillips, George, "Re: browser execution" post to WWW-Talk E-mail List (Jun. 28, 1993).
- Andreessen, Marc, "browser execution" post to WWW-Talk E-mail List (Jun. 29, 1993).
- Sanders, Tony, "Re: browser execution" post to WWW-Talk E-mail List (Jun. 29, 1993).
- McRae, Christopher, "Xmosaic and Xv" post to WWW-Talk E-mail List (Jun. 26, 1993).
- Deposition Transcript of Pei Wei (Oct. 27, 1999 and Oct. 28, 1999).
- Trial Transcript of Dave Raggett, pp. 1804-1897 (Jul. 23, 2003).
- Trial Transcript of Pei Wei, pp. 2244-2469 (Jul. 28-29, 2003).
- WWW-Talk Archive 1993 Q2 and 1993 Q3 (Apr. to Oct. 1993) (available at <http://ksi.cpsc.ucalgary.ca/archives/WWW-TALK/>).
- Missing Messages 0982-0999 from WWW-Talk Archive 1993Q2 and 1993Q3 (Apr. to Oct. 1993) (retrieved from <http://1997.webhistory.org/www.lists/www-talk.1993q2/> and <http://1997.webhistory.org/www.lists/www-talk.1993q3/>).
- Defendant's Trial Exhibit 37 (includes "viola.TOGO.tar.Z" and other Viola information) [Compact Disc].

- Printout of readable contents of Defendant's Trial Exhibit 37.
- Defendant's Trial Exhibit 34 (Information regarding Viola including Viola 930512.tar.gz.zip) [Compact Disc].
- Printout of readable contents of Defendant's Trial Exhibit 34.
- PW 1130 (Viola related material similar to Defendant's Trial Exhibit 34 but with a different file structure) [Compact Disc].
- MS Supp 1205\_001 (Viola related material) [Compact Disc].
- MS Supp 1205\_002 (Viola related material) [Compact Disc].
- MS-ET 0009786 (viola TOGO.tar.Z) [Compact Disc].
- MS-ET 9706 (information regarding Viola similar to PW 1130) [Compact Disc].
- MS-ET 0153301 (information regarding Viola similar to PW 1130) [Compact Disc].
- Defendant's Trial Exhibit 37 File Tree Printout.
- PW 1130 File Tree Printout.
- Defendant's Trial Exhibit 34 File Tree Printout.
- MS Supp 1205\_001 File Tree Printout.
- MS Supp 1205\_002 File Tree Printout.
- MS-ET 0009786 File Tree Printout.
- MS-ET 9706 File Tree Printout.
- MS-ET 0153301 File Tree Printout.
- OLE 2.0 PDC Questions and Answers (no date).
- Stephen Le Hunte, "<EMBED>—Embedded Objects", HTML Reference Library—HTMLIB v2.1, 1995; n.pag. Online. Internet.
- Andreessen, M., "Re: Let's keep the web together", Dec. 1, 1992 post to WWW Talk Mailing list.
- In re Srinivasa Koppolu, et al., Appeal No. 2005-1431, U.S. App. No. 09/442,070 for reissue of Patent 5,801,701 (B.P.A.I. Nov. 14, 2005).
- Notice of Lodging of Deposition Testimony Played in Plaintiffs Case in Chief (Jul. 22, 2003) (Koppolu Testimony).
- Expert Witness Report of Larry S. Nixon Pursuant to Fed. R. Civ. P. Rule 26(a)(2)(B) (Dec. 14, 2001).
- WWW-Talk Archive 1991 printout (retrieved from <http://ksi.cpsc.ucalgary.ca/archives/WWW-TALK/www-talk-1991.index.html>).
- WWW-Talk Archive 1992 printout (retrieved from <http://ksi.cpsc.ucalgary.ca/archives/WWW-TALK/www-talk-1992.index.html>).
- WWW-Talk Archive 1993 Q1 printout (retrieved from <http://ksi.cpsc.ucalgary.ca/archives/WWW-TALK/www-talk-1993q1.index.html>).
- WWW-Talk Archive 1993 Q4 printout (retrieved from <http://ksi.cpsc.ucalgary.ca/archives/WWW-TALK/www-talk-1993q4.index.html>).
- WWW-Talk Archive 1994 Jan. 1 to Jan. 27 printout (retrieved from <http://ksi.cpsc.ucalgary.ca/archives/WWW-TALK/www-talk-1994q1.index.html>).
- Microsoft's Offer of Proof and Motion to Reconsider Regarding Revision of Claim Construction (1:99-cv-00626) (N.D. Ill. Apr. 26, 2007).
- Declaration of Dr. John P. J. Kelly in Support of Microsoft's Offer of Proof of Non-infringement (1:99-cv-00626) (N.D. Ill. Apr. 26, 2007).
- Reply Brief of Defendant-Appellant Microsoft Corporation (04-1234) (Fed. Cir. Aug. 16, 2004).
- Brief of Defendant-Appellant Microsoft Corporation (04-1234) (Fed. Cir. Jun. 3, 2004).
- Transcript of Trial Testimony of John Kelly, pp. 2640-2862 (1:99-cv-00626) (N.D. Ill. Jul. 31, 2003).
- Supplemental Expert Witness Report or Larry S. Nixon Pursuant to Fed. R. Civ. P. Rule 26(a)(2)(B) (1:99-cv-00626) (N.D. Ill. May 21, 2007).
- Plaintiff's Memorandum of Law in opposition to Microsoft Corporation's Offer of Proof and Motion to Reconsider Regarding Revision of Claim Construction (1:99-cv-00626) (N.D. Ill. May 21, 2007).
- Plaintiff's Statement of Undisputed Facts in Support of Their Motion for Summary Judgment on Inequitable Conduct (1:99-cv-00626) (N.D. Ill. May 21, 2007).
- Plaintiff's Memorandum of Law in Support of Their Motion for Summary Judgment on Inequitable Conduct and Plaintiffs' Opposition to Defendant's Motion for Leave to Amend its Answer and Counterclaim (1:99-cv-00626) (N.D. Ill. May 21, 2007).
- Supplemental Expert Report of Dr. John P.J. Kelly Regarding Invalidity of United States Patent No. 5,838,906 (1:99-cv-00626) (N.D. Ill. May 21, 2007).
- Corrected Supplemental Expert Witness Report of Larry S. Nixon Pursuant to Fed. R. Civ. P. Rule 26(a)(2)(B) (1:99-cv-00626) (N.D. Ill. May 22, 2007).
- Plaintiffs' Sur-Reply Memorandum of Law in Opposition to Defendant's Motion for Leave to Amend its Answer and Counterclaim (1:99-cv-00626) (N.D. Ill. May 30, 2007).
- Plaintiffs' Status Statement for May 31, 2007 Hearing (1:99-cv-00626) (N.D. Ill. May 30, 2007).
- Microsoft's Status Report for May 31, 2007 Hearing (1:99-cv-00626) (N.D. Ill. May 29, 2007).
- Defendant Microsoft's Motion to Continue Trial Pending Newly-Declared Interference in the PTO Between the '906 Patent and Microsoft's Koppolu Patent (1:99-cv-00626) (N.D. Ill. May 29, 2007).
- Defendant Microsoft's Reply Memorandum in Support of its Motion for Leave to Amend its Answer and Counterclaim (1:99-cv-00626) (N.D. Ill. May 25, 2007).
- Plaintiff's Memorandum of Law in Opposition to Microsoft Corporation's Motion to Continue Trial (1:99-cv-00626) (N.D. Ill. May 30, 2007).
- Eolas v. Microsoft* Combined Petition of Microsoft Corporation for Rehearing and Rehearing En Banc (Appeal No. 04-1234 in the U.S. Court of Appeals for the Federal Circuit—Mar. 16, 2005).

\* cited by examiner

**1**  
**EX PARTE**  
**REEXAMINATION CERTIFICATE**  
**ISSUED UNDER 35 U.S.C. 307**

THE PATENT IS HEREBY AMENDED AS  
INDICATED BELOW.

Matter enclosed in heavy brackets [ ] appeared in the patent, but has been deleted and is no longer a part of the patent; matter printed in italics indicates additions made to the patent.

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT:

Claims 1, 4, 5, 6, 9 and 10 are determined to be patentable as amended.

Claims 2, 3, 7 and 8, dependent on an amended claim, are determined to be patentable.

New claims 11-14 are added and determined to be patentable.

1. A method for running an application program in a computer network environment, comprising:  
 providing at least one client workstation and one network server coupled to said network environment, wherein said network environment is a distributed hypermedia environment;  
 executing, at said client workstation, a browser application, that parses a first distributed hypermedia document to identify text formats included in said distributed hypermedia document and for responding to predetermined text formats to initiate processing specified by said text formats; utilizing said browser to display, on said client workstation, at least a portion of a first hypermedia document received over said network from said server, wherein the portion of said first hypermedia document is displayed within a first browser-controlled window on said client workstation, wherein said first distributed hypermedia document includes an embed text format, located at a first location in said first distributed hypermedia document, that specifies the location of at least a portion of an object external to the first distributed hypermedia document, wherein said object has type information associated with it utilized by said browser to identify and locate an executable application external to the first distributed hypermedia document, and wherein said embed text format is parsed by said browser to automatically invoke said executable application to execute on said client workstation in order to display said object and enable [interactive processing of] *an end-user to directly interact with* said object within a display area created at said first location within the portion of said first distributed hypermedia document being displayed in said first browser-controlled window.

4. [The ] A method [of claim 3.] for running an application program in a computer network environment, comprising:  
 providing at least one client workstation and one network server coupled to said network environment, wherein said network environment is a distributed hypermedia environment;  
 executing, at said client workstation, a browser application, that parses a first distributed hypermedia

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document to identify text formats included in said distributed hypermedia document and for responding to predetermined text formats to initiate processing specified by said text formats; utilizing said browser to display, on said client workstation, at least a portion of a first hypermedia document received over said network from said server, wherein the portion of said first hypermedia document is displayed within a first browser-controlled window on said client workstation, wherein said first distributed hypermedia document includes an embed text format, located at a first location in said first distributed hypermedia document, that specifies the location of at least a portion of an object external to the first distributed hypermedia document, wherein said object has type information associated with it utilized by said browser to identify and locate an executable application external to the first distributed hypermedia document, and wherein said embed text format is parsed by said browser to automatically invoke said executable application to execute on said client workstation in order to display said object and enable interactive processing of said object within a display area created at said first location within the portion of said first distributed hypermedia document being displayed in said first browser-controlled window;

wherein said executable application is a controllable application and further comprising the step of:  
 interactively controlling said controllable application on said client workstation via inter-process communications between said browser and said controllable application;

wherein the communications to interactively control said controllable application continue to be exchanged between the controllable application and the browser even after the controllable application program has been launched; and

wherein additional instructions for controlling said controllable application reside on said network server, wherein said step of interactively controlling said controllable application includes the following substeps:  
 issuing, from the client workstation, one or more commands to the network server;  
 executing, on the network server, one or more instructions in response to said commands;  
 sending information from said network server to said client workstation in response to said executed instructions; and processing said information at the client workstation to interactively control said controllable application.

5. [The ] A method [of claim 4.] for running an application program in a computer network environment, comprising:

providing at least one client workstation and one network server coupled to said network environment, wherein said network environment is a distributed hypermedia environment;

executing, at said client workstation, a browser application, that parses a first distributed hypermedia document to identify text formats included in said distributed hypermedia document and for responding to predetermined text formats to initiate processing specified by said text formats; utilizing said browser to display, on said client workstation, at least a portion of a first hypermedia document received over said network from said server, wherein the portion of said first

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hypermedia document is displayed within a first browser-controlled window on said client workstation, wherein said first distributed hypermedia document includes an embed text format, located at a first location in said first distributed hypermedia document, that specifies the location of at least a portion of an object external to the first distributed hypermedia document, wherein said object has type information associated with it utilized by said browser to identify and locate an executable application external to the first distributed hypermedia document, and wherein said embed text format is parsed by said browser to automatically invoke said executable application to execute on said client workstation in order to display said object and enable interactive processing of said object within a display area created at said first location within the portion of said first distributed hypermedia document being displayed in said first browser-controlled window;

wherein said executable application is a controllable application and further comprising the step of: interactively controlling said controllable application on said client workstation via inter-process communications between said browser and said controllable application;

wherein the communications to interactively control said controllable application continue to be exchanged between the controllable application and the browser even after the controllable application program has been launched;

wherein additional instructions for controlling said controllable application reside on said network server, wherein said step of interactively controlling said controllable application includes the following substeps: issuing, from the client workstation, one or more commands to the network server; executing, on the network server, one or more instructions in response to said commands; sending information from said network server to said client workstation in response to said executed instructions; and processing said information at the client workstation to interactively control said controllable application; and

wherein said additional instructions for controlling said controllable application reside on said client workstation.

6. A computer program product for use in a system having at least one client workstation and one network server coupled to said network environment, wherein said network environment is a distributed hypermedia environment, the computer program product comprising:

a computer usable medium having computer readable program code physically embodied therein, said computer program product further comprising:

computer readable program code for causing said client workstation to execute a browser application to parse a first distributed hypermedia document to identify text formats included in said distributed hypermedia document and to respond to predetermined text formats to initiate processes specified by said text formats;

computer readable program code for causing said client workstation to utilize said browser to display, on said client workstation, at least a portion of a first hypermedia document received over said network from said server, wherein the portion of said first hyper-

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media document is displayed within a first browser-controlled window on said client workstation, wherein said first distributed hypermedia document includes an embed text format, located at a first location in said first distributed hypermedia document, that specifies the location of at least a portion of an object external to the first distributed hypermedia document, wherein said object has type information associated with it utilized by said browser to identify and locate an executable application external to the first distributed hypermedia document, and wherein said embed text format is parsed by said browser to automatically invoke said executable application to execute on said client workstation in order to display said object and enable [interactive processing of] an end-user to directly interact with said object within a display area created at said first location within the portion of said first distributed hypermedia document being displayed in said first browser-controlled window.

9. [The ] A computer program product [of claim 8.] for use in a system having at least one client workstation and one network server coupled to said network environment, wherein said network environment is a distributed hypermedia environment, the computer program product comprising:

a computer usable medium having computer readable program code physically embodied therein, said computer program product further comprising:

computer readable program code for causing said client workstation to execute a browser application to parse a first distributed hypermedia document to identify text formats included in said distributed hypermedia document and to respond to predetermined text formats to initiate processes specified by said text formats;

computer readable program code for causing said client workstation to utilize said browser to display, on said client workstation, at least a portion of a first hypermedia document received over said network from said server, wherein the portion of said first hypermedia document is displayed within a first browser-controlled window on said client workstation, wherein said first distributed hypermedia document includes an embed text format, located at a first location in said first distributed hypermedia document, that specifies the location of at least a portion of an object external to the first distributed hypermedia document, wherein said object has type information associated with it utilized by said browser to identify and locate an executable application external to the first distributed hypermedia document, and wherein said embed text format is parsed by said browser to automatically invoke said executable application to execute on said client workstation in order to display said object and enable interactive processing of said object within a display area created at said first location within the portion of said first distributed hypermedia document being displayed in said first browser-controlled window;

wherein said executable application is a controllable application and further comprising:

computer readable program code for causing said client workstation to interactively control said controllable application of said client workstation via inter-process communications between said browser and said controllable application;

wherein the communications to interactively control said controllable application continue to be exchanged

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*between the controllable application and the browser even after the controllable application program has been launched; and*

wherein additional instructions for controlling said controllable application reside on said network server, wherein said [step of interactively controlling said controllable application] *computer readable program code for causing said client workstation to interactively control said controllable application on said client workstation* includes:

computer readable program code for causing said client workstation to issue, from the client workstation, one or more commands to the network server;

computer readable program code for causing said network server to execute one or more instructions in response to said commands;

computer readable program code for causing said network [server] *server* to send information to said client workstation in response to said executed instructions; and

computer readable program code for causing said client workstation to process said information at the client workstation to interactively control said controllable application.

10. [The ] A computer program product [of claim 9.] *for use in a system having at least one client workstation and one network server coupled to said network environment, wherein said network environment is a distributed hypermedia environment, the computer program product comprising:*

a computer usable medium having computer readable program code physically embodied therein, said computer program product further comprising:

computer readable program code for causing said client workstation to execute a browser application to parse a first distributed hypermedia document to identify text formats included in said distributed hypermedia document and to respond to predetermined text formats to initiate processes specified by said text formats;

computer readable program code for causing said client workstation to utilize said browser to display, on said client workstation, at least a portion of a first hypermedia document received over said network from said server, wherein the portion of said first hypermedia document is displayed within a first browser-controlled window on said client workstation, wherein said first distributed hypermedia document includes an embed text format, located at a first location in said first distributed hypermedia document, that specifies the location of at least a portion of an object external to the first distributed hypermedia document, wherein said object has type information associated with it utilized by said browser to identify and locate an executable application external to the first distributed hypermedia document, and wherein said embed text format is parsed by said browser to automatically invoke said executable application to execute on said client workstation in order to display said object and enable interactive processing of said object within a display area created at said first location within the portion of said first distributed hypermedia document being displayed in said first browser-controlled window;

wherein said executable application is a controllable application and further comprising:

computer readable program code for causing said client workstation to interactively control said controllable application on said client workstation via inter-process communications between said browser and said controllable application;

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*wherein the communications to interactively control said controllable application continue to be exchanged between the controllable application and the browser even after the controllable application program has been launched;*

wherein additional instructions for controlling said controllable application reside on said network server, wherein said computer readable program code for causing said client workstation to interactively control said controllable application on said client workstation includes:

computer readable program code for causing said client workstation to issue, from the client workstation, one or more commands to the network server;

computer readable program code for causing said network server to execute one or more instructions in response to said commands;

computer readable program code for causing said network server to send information to said client workstation in response to said executed instructions; and

computer readable program code for causing said client workstation to process said information at the client workstation to interactively control said controllable application; and

wherein said additional instructions for controlling said controllable application reside on said client workstation.

11. The method of claim 3, wherein additional instructions for controlling said controllable application reside on said network server, wherein said step of interactively controlling said controllable application includes the following substeps:

issuing, from the client workstation, one or more commands to the network server;

executing, on the network server, one or more instructions in response to said commands;

sending information from said network server to said client workstation in response to said executed instructions; and processing said information at the client workstation to interactively control said controllable application.

12. The method of claim 11, wherein said additional instructions for controlling said controllable application reside on said client workstation.

13. The computer program product of claim 8, wherein additional instructions for controlling said controllable application reside on said network server, wherein said computer readable program code for causing said client workstation to interactively control said controllable application on said client workstation includes:

computer readable program code for causing said client workstation to issue from the client workstation, one or more commands to the network server;

computer readable program code for causing said network server to execute one or more instructions in response to said commands;

computer readable program code for causing said network server to send information to said client workstation in response to said executed instructions; and

computer readable program code for causing said client workstation to process said information at the client workstation to interactively control said controllable application.

14. The computer program product of claim 13, wherein said additional instructions for controlling said controllable application reside on said client workstation.