

Exhibit J

October 14, 2003

Mail Stop: ___ (Citation of Prior Art per 37 CFR 1.501)
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

RE: Submission of Information Pursuant to 35 U.S.C. § 301 and 37 CFR 1.501
 in relation to U.S. Patent No. 5,838,906

Dear Sir,

Enclosed, please find prior art publications to be included in the file wrapper of U.S. Patent No. 5,838, 906 ("the '906 patent") pursuant to 35 U.S.C. § 301 and 37 C.F.R. § 1.501.

The '906 patent claims Web browser computer programs and processes. The two references provided herewith are printed publications published more than one year prior to the filing date of the '906 patent. Each is prior art under 35 U.S.C. § 102(b) to the '906 patent. The two printed publications provided herewith were not cited, made of record or considered during the prosecution of the '906 patent. One set of copies is provided for inclusion in the file wrapper of the '906 patent. The second set of copies is provided to permit service by the Office on the patent owner.

One or more claims of the '906 patent are *prima facie* anticipated and/or obvious by the art being cited herein. The '906 patent also has gained significant notoriety in the Internet community because, due to its invalidity, it will unfairly and significantly impact a very wide audience of consumers and other users of the Internet. Examples of press coverage illustrating these concerns are enclosed as Attachment D. The undersigned represent a significant cross-section of the community of developers of Internet-related software who share these concerns, and believe the Director should, on his initiative, commence a reexamination of the '906 patent.

Existence of a Substantial New Question of Patentability

The '906 patent generally relates to the ability of a Web browser to handle an "object" in a Web page having a data format not natively supported by the Web browser and thus requiring an external "executable application" to display the object. The '906 patent acknowledges that certain prior art Mosaic browsers allowed users, through clicking on a link, to view and interact with such an object via a "helper application" in a separate window. In such prior art browsers, in response to a user's click on a link, the browser invokes the helper application is invoked to display the object in a separate window. Pursuant to the claims of the '906 patent, in response to the inclusion of an "EMBED text format," or tag, in the document, the browser automatically invokes the helper application to display the object "in-line" in the browser window.

The two enclosed references describe and relate to characteristics of Web browsers for implementing HTML standards. They are dated more than one year prior to the filing date of the '906 patent. They each describe the use of an EMBED tag to automatically invoke an external executable application in order to display and enable interactivity with an object in-line within

the browser window. They each also inherently describe Web browsers including, in particular, the admitted prior art Web browsers of record. As such, each publication describes each claimed element of the inventions defined by at least claims 1 to 3 and 6 to 8 of the '906 patent and as such each publication anticipates these claims of the '906 patent. Alternatively, the newly cited printed publications, when considered in view of the admitted prior art Web browsers of record, render *prima facie* obvious the claimed subject matter of at least claims 1 to 3 and 6 to 8 of the '906 patent. As such, the two enclosed references each raise a substantial new question of patentability regarding the '906 patent.

Acknowledged Prior Art

The '906 patent acknowledges that Web browser computer programs were in the prior art. See, e.g., column 2, lines 9 to 12, which provides: "An example of a browser program is the National Center for Supercomputing Application's (NCSA) Mosaic software developed by the University of Illinois at Urbana/Champaign, Ill." More specifically, the inventors of the '906 patent indicate that the subject matter claimed as their invention concerns modifications of certain acknowledged prior art Web browser programs. See, e.g., column 8, lines 9 to 12, of the patent specification, which provides:

"[t]he source code in Appendix A includes NCSA Mosaic version 2.4 source code along with modifications to the source code to implement the present invention" (emphasis added);

and column 13, lines 43 to 46 which provides:

"that much of the source code in is [sic] pre-existing NCSA Mosaic code. Only those portions of the source code that relate to the new functionality discussed in this specification should be considered as part of the invention."

The inventors thus acknowledge that the features of Web browsers, at least to the degree reflected in version 2.4 of the NCSA Mosaic Web browser, are prior art to the claimed inventions.

Version 2.4 of the NSCA Mosaic Web browser, like all Web browsers, is a computer program that is implemented on and operated using a computer. The Mosaic program is designed to and preferably runs on a computer connected to the Internet to allow the user to retrieve documents over the Internet and display those documents on the computer. Such documents may contain "an icon, or other indicator, within the text" linked to a particular image file (column 2, lines 64 to 65) that users "may select ... to obtain the full image" (column 3, lines 2 to 3). As the '906 patent admits, when a user selects such an indicator, the Mosaic program "retrieves the corresponding full image ... and displays it by using external software" (column 3, lines 5 to 6) "in a separate window" (column 3, line 17). See generally column 2, line 56 through column 3, line 26 of the '906 patent where the patent describes the capabilities of the Mosaic browser, among others.

Differences Between the Claimed Invention and the Acknowledged Prior Art

The differences between the claims and the acknowledged prior art are nominal. Specifically, independent claims 1 and 6 require the computer program/process to process an "EMBED text format," or tag, which is used to automatically display, and enable interaction with, an external object within the browser document window via an external application. The '906 patent asserts that this was an improvement over the prior "helper application" technology employed by prior art browsers such as the Mosaic program in which the browser interprets a user selection of an embedded link to launch an associated external program in a separate window for data that the browser could not process natively. See generally column 3, lines 2 to 20 of the '906 patent.

The patent disclosure and claims specify that the EMBED functionality is expressed in terms of a tag that "specifies the location of ... an object," having "type information associated with it utilized by the browser to identify and locate an executable application," where the tag is parsed by the browser "to automatically invoke said executable application ... in order to display said object and enable interactive processing of said object" in the browser window. See, in particular, Table II of the '906 patent, appearing at column 12, line 54, along with the descriptive text associated with the table appearing at column 13, line 31. These portions of the specification of the '906 patent show that the preferred embodiment of the claimed invention involves use of an EMBED tag having an HREF attribute for specifying the location (e.g., a uniform resource locator, or URL) of an object to be displayed and a TYPE attribute for the MIME type of the object data, which the browser uses to identify, locate and launch an associated application to render that data.

Prior Art Being Submitted Herewith

1. David Raggett, HTML+ (Hypertext markup language) (July 23, 1993) (hereinafter "Raggett I").

Raggett I ("A proposed standard for a light weight presentation independent delivery format for browsing and querying information across the Internet") describes and discloses the functionality of Web browsers that comply with the draft HTML+ specification as of July 23, 1993 (i.e., more than one year before the filing date of the '906 patent). In particular, at page 6, lines 43 to 45, *Raggett I* indicates that such browsers must parse and process "the EMBED tag" contained within a document retrieved over the Internet. *Raggett I* discloses that the EMBED tag includes a TYPE attribute with information concerning the type of the embedded object data. The TYPE attribute, according to *Raggett I*, uses the well-known MIME protocol to enable the browser to identify, locate and invoke an external program to display foreign object data within the document being rendered ("the *type* attribute specifies a registered MIME content type and is used by the browser to identify the appropriate shared library or external filter to use to render the embedded data, e.g., by returning a pixmap"). As is the case with all other HTML tags described in *Raggett I*, the browser performs the related operations for the disclosed EMBED tag automatically upon parsing the tag, without user input.

According to *Raggett I*, "embedding" (page 6, line 40) of an object means displaying the object within the document being rendered. For example, *Raggett I* shows the use of the

EMBED tag to invoke an external program to display an equation or graphic directly in the display of the HTML-based Web page (see, page 6), and also discusses the use of the EMBED tag in combination with the FIG tag to display, for instance, "simple graphs etc. defined in an external format" (page 12, line 30) in the document being rendered and allow for "control of picture alignment and text flow" (page 12, line 17) among other things. See also, generally, page 12, line 13 to page 14, line 6. At page 6, line 47, *Raggett I* further discloses the use of external editor programs that allow for interaction with the displayed object data within the document ("Sophisticated [sic] browsers can link to external editors for updating and revising embedded data"). The '906 patent discloses a comparable TYPE attribute of an EMBED tag (Table II) and use of the MIME protocol for matching the type information to an external program for displaying foreign data within a Web browser window as is described in *Raggett I*.

The above-recited publication was widely disseminated in 1993 by and to, among others, the leaders in the efforts to standardize the Internet, who later became founding participants in the WWW Consortium (or "W3C", the leading standard-setting organization for the Internet). The publication was, has been and continues to be available to all interested persons through the Internet and through other means since on or prior to July 23, 1993.¹ As such, it is a "printed publication" within the meaning of 35 U.S.C. § 102(b). See M.P.E.P. § 2128 (2003).² The effective date of the printed publication is the date of its availability; namely, at least as early as July 23, 1993. See M.P.E.P. § 2128.³ See also, the enclosed declaration from *Raggett I*'s author, David Raggett, which further authenticates the content and date of availability of the publication.

2. Posting of Dave Raggett, dsr@hplb.hpl.hp.com, to www-talk@nxoc01.cern.ch (June 14, 1993) (posting to WWW-Talk public mailing list) (hereinafter "*Raggett II*").

Raggett II is an email posting to the WWW-Talk email list (a public, archived and indexed discussion forum) by the author of *Raggett I* (the HTML+ draft specification) that was published on June 14, 1993.⁴ It specifically discusses the implementation of the EMBED tag operation disclosed in the draft specification and further notes, in the "p.s.," that the foreign data that is to be rendered in-line by the external editor program need not be contained in the Web document, but may also be external to the document, referenced by a URL. (Compare the '906 patent, e.g., column 13, lines 27 to 28 ("HREF specifies a URL address as discussed above for a data object.")) In addition to repeating the operative description of the EMBED tag operations

¹ For example, a dated copy of the document currently can be retrieved from the Cite Seer: Scientific Research Digital Library site via <http://citeseer.nj.nec.com/raggett93html.html>. Also, dated entries in the WWW-TALK archives related to the referenced provisions of the HTML+ specification, as well as the original posting of the July 23rd HTML+ specification, are still available on-line today at <http://ksi.cpsc.ucalgary.ca/archives/WWW-TALK/www-talk-1993q2.messages/467.html> and <http://ksi.cpsc.ucalgary.ca/archives/WWW-TALK/www-talk-1993q3.messages/282.html>.

² M.P.E.P. § 2128 provides, in the section entitled "ELECTRONIC PUBLICATIONS AS PRIOR ART: Status as a 'Printed Publication,'" that: "An electronic publication, including an on-line database or Internet publication, is considered to be a 'printed publication' within the meaning of 35 U.S.C. 102(a) and (b) provided the publication was accessible to persons concerned with the art to which the document relates."

³ M.P.E.P. § 2128 provides, in the section entitled "ELECTRONIC PUBLICATIONS AS PRIOR ART: Date of Availability," that: "Prior art disclosures on the Internet or on an on-line database are considered to be publicly available as of the date the item was publicly posted. If the publication does not include a publication date (or retrieval date), it cannot be relied upon as prior art under 35 U.S.C. 102(a) or (b)."

⁴ The complete archives of the WWW-talk email list for the second and third quarters of 1993 are provided on the enclosed CD. The complete archives, or the individual posting, are each printed publications.

from the HTML+ specification, the body of the posted Raggett email provides guidance regarding how to connect a MIME type via an EMBED tag to the appropriate external rendering program ("e.g. via X resources or a config file") and regarding use of external programs and inter-process communications ("separate programs driven via pipes and stdin/stdout or as dynamically linked library modules (Windows DLLs)").

The above-recited publication was widely disseminated and publicly available through the Internet and through other means at least from June 14, 1993, and continues to be available on-line at <http://ksi.cpsc.ucalgary.ca/archives/WWW-TALK/www-talk-1993q2.messages/467.html>. It is thus a "printed publication" within the meaning of 35 U.S.C. §102(b) because it was a "contribution" to "electronic bulletin boards, message systems, and discussions lists" that were "accessible to the persons concerned with the art to which the document relates" when it was posted to the WWW-Talk list (see, e.g., M.P.E.P. § 707.05(e)).⁵ It enjoys prior art effect as from the date of its posting (i.e., June 14, 1993), pursuant to M.P.E.P. § 2128, as noted above.

Comparison of the Claims to the Acknowledged and Newly Cited Art

In the context of independent claims 1 and 6, the NCSA Mosaic version 2.4 browser is a "computer program product" (e.g., a Web browser) that is "embodied" in a "computer usable medium" (e.g., installed in a computer or contained on a disk) for use in a "distributed hypermedia environment" having "at least one client workstation and one network server" (e.g., the Internet). The Mosaic program can run on "said client workstation" to "parse[] a first distributed hypermedia document" (e.g., an HTML document) "received over" the Internet to "identify text formats" (e.g., HTML tags and elements) and "respond[] to predetermined text formats to initiate processing specified by said text formats" in the hypermedia document in order "to display" the document in a browser window on "said client workstation." Furthermore, the Mosaic program can locate "an external object" having "type information associated with it utilized by said browser to identify and to locate an executable application external to" said hypermedia document. The Mosaic program can "invoke" said external application (e.g., an "external editor") "to display" the "external object." As implemented in version 2.4, said invocation and display occurs via another window (as opposed to within the browser window displaying the hypermedia document as required by the claims) when the user selects a hyperlink to the external object (as opposed to "automatically" as required by the claims). Version 2.4 of Mosaic also enables "interactive processing of" (e.g., editing of) the "external object." See, e.g., column 6, lines 32 to 35 of the '906 patent (i.e., prior art browsers permit some degree of interactive processing of the external object).

The only claim limitation not explicitly disclosed, described and implemented in the admitted prior art Mosaic Web browser is the proviso requiring the Web browser to parse an "embed text format" in a hypermedia document to "automatically invoke" an external application "to display" an external object within the browser window displaying the hypermedia

⁵ For instance, a review of the University of Calgary archive site containing this posting demonstrates that more than 1,000 such postings were made during the three months surrounding the posting of the July 23rd HTML+ Specification (*Raggett I*) by the very people that were developing the Internet at the time. (See <http://ksi.cpsc.ucalgary.ca/archives/WWW-TALK/www-talk-1993q3.index.html>.) Moreover, the HTML+ Specification itself asks that comments be sent "to the WWW discussion group: www-talk@nxoc01.cern.ch." (*Raggett I* at page 1, footnote 1.)

document. *Raggett I* (i.e., the draft HTML+ specification), however, specifically describes just such an HTML “embed” tag for such purposes (i.e., automatically invoking an external program to render interactive objects in-line in an HTML document). This is reflected in the HTML+ specification and in the specification author’s contemporaneous email to the WWW-Talk email list, both of which demonstrate that it was well-known in the browser field prior to the filing date of the ‘906 patent that the foreign data could be contained in a separate file referenced, for example by a URL. Moreover, the ability of a Web browser to retrieve and process data from both local and non-local sources is the inherent design of such browsers. Indeed, one of the first applications of HTML/Web browsers was the rendering, in a single document, of text and image files, where the image files were located in a file external to the file containing the text to be rendered.

An element by element comparison of claim 6⁶ to the acknowledged and newly cited prior art is provided below in Table I. It should be noted that, as described in greater detail below, *Raggett I* and *II* each inherently describe each feature of the NCSA Mosaic version 2.4 Web browser, which is acknowledged by the owner of the ‘906 patent to be prior art.

Table I	
Claim 6	Acknowledged and Newly Cited Prior Art
<i>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</i>	Mosaic, see ‘906 patent at column 1, line 19 to column 3, line 51 (describing Internet, and use and function of browser programs, and noting that Mosaic is “an example of a browser program”).
<i>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;</i>	Mosaic, see ‘906 patent at column 1, line 19 to column 3, line 51 (same); <i>Raggett I</i> at page 3, lines 4 to 38 (discussing “Parsing HTML+ Documents”).
<i>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,</i>	Mosaic, see ‘906 patent at column 1, line 19 to column 3, line 51 (same).
<i>wherein the portion of said first hypermedia document is displayed within a first browser-controlled window on said client workstation;</i>	Mosaic, see ‘906 patent at column 1, line 19 to column 3, line 51 (same).
<i>wherein said first distributed hypermedia</i>	Mosaic, see ‘906 patent at column 1, line 19 to

⁶ Note that claims 1 and 6 are nearly identical but for the type of invention (i.e., claim 1 claims a process, whereas claim 6 is directed to a “computer program product for use in...”).

TABLE ATTACHED

Table I	
Claim 6	Acknowledged and Newly Cited Prior Art
<i>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,</i>	column 3, line 51 (same, including: "A distributed hypertext or hypermedia document typically has many links within it that specify many different data objects located in computers at different geographical locations connected by a network."); <i>Raggett II</i> at pages 1-2 (providing example of embedded text format and stating that: "The browser identifies the format of the embedded data from the "type" attribute, specified as a MIME content type;" and that "you can also put the foreign data in a separate file referenced by a URL").
<i>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</i>	Mosaic, see '906 patent at column 3, lines 5 to 6 (the Mosaic program "retrieves the corresponding full image ... and displays it by using <u>external software</u> ") (emphasis added); <i>Raggett II</i> at page 1 (providing example of embedded text format and stating that: "The browser identifies the format of the embedded data from the "type" attribute, specified as a MIME content type;" and that "The functions could be implemented as <u>separate programs ...</u> ") (emphasis added).
<i>and wherein said embed text format is parsed by said browser to automatically invoke said executable application on said client workstation</i>	Mosaic, see '906 patent at column 1, line 19 to column 3, line 51 (noting that Mosaic is "an example of a browser program" and, as such, parses HTML documents accessed); <i>Raggett I</i> at page 3, lines 4 to 38 and page 6, lines 40 to 45 (discussing "Parsing HTML+ Documents" generally, and "the EMBED tag" specifically, as part of the initial processing of every HTML document accessed by a Web browser); <i>Raggett II</i> at page 1 (providing example of embedded text format and stating: "The browser identifies the format of the embedded data from the "type" attribute, specified as a MIME content type.").
<i>in order to display said object</i>	Mosaic, see '906 patent at column 3, lines 5 to 6 (the Mosaic program "retrieves the corresponding full image ... and displays it by using external software").
<i>and enable interactive processing of said object</i>	Mosaic, see '906 patent at column 6, lines 32 to 35 ("Also, while the present open distributed hypermedia system on the Internet allows users to locate and retrieve data objects it allows users very little, if any, interaction with these data objects."); <i>Raggett I</i> at page 6, line 47 ("Sophisticated [sic] browsers can link to external editors for updating and revising embedded data.").

Table I	
Claim 6	Acknowledged and Newly Cited Prior Art
<i>within a display area</i>	Mosaic, see '906 patent at column 3, lines 5 to 6 (the Mosaic program "retrieves the corresponding full image ... and displays it by using external software").
<i>created at said first location within the portion of said first distributed hypermedia document being displayed in said first browser-controlled window.</i>	<i>Raggett I</i> at page 6, lines 40 to 45 and page 12, line 13 to page 14, line 6 (discussing various options when displaying embedded objects in-line, such as text wrapping around the object) and at page 34, lines 1 to 20 (in section entitled "Notes for Implementers" stating: "It is generally better to avoid displaying the retrieved document in a new window, unless explicitly requested by the user ..."); <i>Raggett II</i> at page 1 ("Well both of these will be possible with the HTML+ DTD, by using the capability to embed foreign formats <u>inline</u> in the HTML+ source ...") (emphasis added).

The Newly Cited References Anticipate Claims 1, 2, 3, 6, 7 and 8

As shown above, *Raggett I* and *II* each fully disclose the allegedly novel features of claims 1 and 6; namely, the use of an EMBED tag to automatically invoke an external application to display an external object inline within the same browser window displaying the document containing the EMBED tag. The remaining limitations of claims 1 and 6 are all admitted by the inventors of the '906 patent to be disclosed in prior art Web browsers such as Mosaic. See column 8, lines 9 to 12 and column 13, lines 43 to 46. Those same prior art Web browsers are inherently disclosed and described by *Raggett I* and by *Raggett II*, making each reference fully anticipatory.

Raggett I and *II* each refer to Web browsers that are acknowledged to be prior art in the '906 patent (see, e.g., *Raggett I*, page 15, lines 43 to 45). The inherent features and characteristics of such Web browsers, such as Mosaic, include the ability to render HTML-compliant documents. HTML is the predecessor standard to the HTML+ specification that is the basis of the *Raggett I* and *II* disclosures. The set of elements that make up the HTML specification is found in its entirety in, and is added to by, the HTML+ specification. Both HTML and HTML+ are implementations of the Standard Generalized Markup Language (SGML). Consequently, references in *Raggett I* and *II* to prior art Web browsers inherently are described by the disclosure of HTML in *Raggett I* and *II*.

Moreover, those of skill in the browser coding art, upon reading *Raggett I* and *II*, would immediately infer the inclusion of such prior art browsers in the teachings of these two disclosures. See M.P.E.P. § 2144.01 (2003) ("[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.") (quoting *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968)). This stems from the fact that

Raggett I and *II* each define and describe the functional and other characteristics of computer programs that are HTML+ compliant Web browsers. The discussion in *Raggett I* and *II* concerning new features that prior art browsers should be modified to incorporate *necessarily* includes a full description of the prior art Web browsers themselves. See *Atlas Powder Co. v. Ireco, Inc.*, 190 F.3d 1342, 1346, 51 USPQ2d 1943, 1946 (Fed. Cir. 1999) (“[A] prior art reference may anticipate when the claim limitation or limitations not expressly found in that reference are nonetheless inherent in it. Under the principles of inherency, if the prior art necessarily functions in accordance with, or includes, the claimed limitations, it anticipates.”) (internal citations omitted).

Included -- through explicit references and inherently due to the fact that the HTML+ specification builds upon and expands the original HTML specification -- in the disclosure of the HTML+ specification by *Raggett I* and *II* is the original HTML specification. See, e.g., *Raggett I* at page 2, line 3 (“HTML+ follows on from an earlier standard - HTML. see [Berners-Lee 93a].”), at page 3, line 40 (“This format is designed to be largely compatible with the earlier format HTML.”) and at page 33, lines 1 to 37 (discussing compatibility with HTML, for example, by listing and describing each obsolete tag from HTML and how to map to HTML+). Because the HTML+ specification, like the earlier HTML specification, describes the functionality that Web browsers must possess to be fully compliant with the specification, one of skill in the art would immediately “envisage” both the prior art Web browsers that support HTML and the modified versions of those browsers that comply with the new HTML+ specification. See M.P.E.P. § 2131.02 (in chemical context, stating that a reference may be relied upon for what one of skill in the art would “at once envisage” upon reading the reference).

Particularly when they are considered in light of their inherent disclosures of admitted prior art Web browsers, *Raggett I* and *II* disclose and therefore anticipate each claimed limitation of claims 1 and 6 of the ‘906 patent. Furthermore, as claims 2, 3, 7 and 8 recite only inherent features present in prior art Web browsers, these claims add no further limitations relative to claims 1 and 6 that would distinguish them from the anticipating disclosures of *Raggett I* and *II*.

Claims 1, 2, 3, 6, 7 and 8 are Also *Prima Facie* Obvious Over the Prior Art

As set forth above, claims 1, 2, 3, 6, 7 and 8 are anticipated by *Raggett I* and *II*. In the alternative, these claims are *prima facie* obvious when the acknowledged prior art is taken in view of *Raggett I* and *Raggett II* because these disclosures specifically suggest modifying the prior art to incorporate the differences between the claims and the acknowledged prior art.

The Level of Ordinary Skill in the Art for Purposes of Obviousness

The person of ordinary skill in the relevant art to the claimed invention is a software programmer. The ‘906 patent acknowledges that the act of modifying the Mosaic prior art browser to implement the functionalities described and claimed in the patent was well within the skill of the art. For example, at column 13, lines 51 to 59, the patent states:

“In general, the flowcharts in this specification illustrate one or more software routines executing in a computer system such as computer system 1 of FIG. 1. The routines may be implemented by any means as is known in the art. For example, any number of

computer programming languages, such as 'C', Pascal, FORTRAN, assembly language, etc., may be used. Further, various programming approaches such as procedural, object oriented or artificial intelligence techniques may be employed."

In addition, at column 16, lines 51 to 53, the patent specifies that:

"It will, however, be evident that various modifications and changes may be made thereunto without departing from the broader spirit and scope of the invention as set forth in the appended claims. For example, various programming languages and techniques can be used to implement the disclosed invention. ... Many such changes or modifications will be readily apparent to one of ordinary skill in the art."

Thus, based on the admissions within the '906 patent, a software programmer could readily implement the noted functionality into the acknowledged prior art Mosaic Web browser, the source code for which was readily available (also as acknowledged in the '906 patent specification):

The *Prima Facie* Obviousness of Claims 1 and 6

The printed publications provided herewith were not considered by the PTO during the original prosecution of the '906 patent. When they are considered in view of the acknowledged prior art (e.g., the version 2.4 Mosaic Web browser) by a person of ordinary skill in the art, they render the claimed invention defined by claims 1 and 6 of the patent *prima facie* obvious.⁷

As noted above, the differences between the claimed invention and the acknowledged prior art Mosaic version 2.4 Web browser are limited to the Web browser parsing an "embed text format" in a hypermedia document (e.g., an HTML document) to "automatically invoke" an external application "to display" an external object within the browser window displaying the hypermedia document. *Raggett I* and *Raggett II* each specifically disclose implementing this functionality in Web browsers.

The two printed publications provided herewith thus provide specific motivation and guidance to a person of ordinary skill to modify the acknowledged prior art NCSA Mosaic version 2.4 browser (and other prior art browsers) to arrive at the claimed invention. Indeed, for a Web browser to be fully compliant with *Raggett I* (the HTML+ specification), which was publicly disseminated more than a year prior to the filing date of the '906 patent, the Web browser must possess the functionality disclosed therein. As such, it is difficult to envision a document that could provide more specific motivation to modify prior art Web browsers to provide the disclosed functionality. Furthermore, as acknowledged and admitted by the inventors of the '906 patent (e.g., column 13, lines 51 to 59 and column 16, lines 51 to 53), the act of modifying the Mosaic prior art browser to implement the features called for by *Raggett I* was well within the abilities of a person having an ordinary level of skill in the relevant art (e.g.,

⁷ Pursuant to M.P.E.P. §2143 (2003), "[t]o establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations."

402720-ETHRE00

software programming). Thus, modification of prior art Web browsers (e.g., NCSA Mosaic version 2.4) by such a person to implement the functionalities described in *Raggett I* or in *Raggett II* would have been *prima facie* obvious to a person of ordinary skill in the art. . Further comparison of the '906 patent specification to *Raggett I* and *Raggett II* confirms this conclusion. As noted above, Table II (column 12, line 54, with descriptive text through column 13, line 31) of the '906 patent shows the preferred embodiment of an EMBED tag with HREF and TYPE attributes which the browser uses to identify, locate and launch associated external applications. The EMBED tag TYPE and HREF attributes, and their descriptions, disclosed in Table II of the '906 patent and the surrounding text are nearly identical to the EMBED tag TYPE attribute disclosed in *Raggett I* (page 6, lines 43 to 46) and to the HREF attribute disclosed elsewhere in *Raggett I* (compare '906 patent at column 13, lines 27 to 28 ("HREF specifies a URL address as discussed above for a data object."), with *Raggett I*, page 13, line 23 (defining HREF as: "A URL specifying the link to traverse when clicked.")). The enclosed publications thus disclose not only the same functionality but precisely the same means of implementing the same functionality in Web browsers (i.e., the same "EMBED" tag is used to initiate the same browser behavior that provides the same results as the claimed subject matter of the '906 patent).

Moreover, the enclosed publications enable, as the '906 patent claims, Web browsers to provide the user with more functionality (e.g., through displaying and/or editing new data formats) without changing the browser code. Compare, '906 patent, column 11, lines 52 to 55, *Raggett I*, page 6, and *Raggett II*, cover page. As noted above, the enclosed publications were promulgated to the WWW community more than a year before the filing of the '906 patent for the purpose of implementing this very same capability in prior art Web browsers.

Claims 2, 3, 7 and 8 are *Prima Facie* Obvious

Claims 2 and 7 of the '906 patent add an additional limitation to claims 1 and 6 respectively; namely, that the process or computer program provide for "interactively controlling" the external application "via inter-process communications" between the browser and the external application. The patent specification indicates that "inter-process communications" are a "protocol to exchange information between browser client and application client", and exemplify such communications by referring to the prior art "XEvent interprocess communication protocol" (column 9, line 8 to 10). See also column 16, lines 29 to 32, wherein the '906 patent discusses how "the browser process, Mosaic, communicates with the [external application] process via inter-client communications mechanisms such as provided in the X-Window environment." (Emphasis added.) The added limitations specified in claims 2 and 7 thus refer to characteristics and properties of the acknowledged prior art.

As noted above, claims 1 and 6 are *prima facie* obvious over the acknowledged prior art Mosaic version 2.4 Web browser when taken in view of *Raggett I* and *II*, independently and in combination. The acknowledged prior art, along with *Raggett I* and *II*, also disclose the additional limitation of claims 2 and 7 as noted above. For example, *Raggett I* discloses that "[s]ophisticated [sic] browsers can link to external editors for updating and revising embedded data" (see page 6, line 47). Similarly, *Raggett II* notes that such "separate programs" (e.g., "external editors") can be "driven via pipes and stdin/stdout" (see cover page). An "external editor" is, by definition, a controllable external application, and "pipes and stdin/stdout" is an example of "inter-process communications" for use in transferring data between, among other

programs, a browser and an external application.⁸ *Raggett I* and *II*, thus, clearly disclose the additional limitation of claims 2 and 7 and provide specific motivation to one of ordinary skill in the art to modify the NCSA Mosaic version 2.4 Web browser to incorporate the above-noted claimed features. Also as noted above, the '906 patent indicates that a person of ordinary skill in the art has the requisite abilities to implement such features (e.g., column 13, lines 51 to 59 and column 16, lines 51 to 53). Claims 2 and 7, thus, are *prima facie* obvious when the acknowledged prior art NCSA Mosaic version 2.4 Web browser is taken in view of *Raggett I* and *II*, considered individually or collectively.⁹

Claims 3 and 8 add a further limitation calling for "the communications to ... continue to be exchanged between the controllable application and the browser even after the controllable application program has been launched." Similar to the discussion in footnote 9 above, this limitation, however, adds nothing to claims 2 and 7 (or even claims 1 and 6) of the '906 patent. To interactively control an external application, as each of claims 1, 2, 6 and 7 requires, the communications between the browser and the external application must continue after the external application is launched. Claims 3 and 8 thus add no patentable distinction and, for the reasons provided above in relation to claims 1, 2, 6 and 7, are *prima facie* obvious in the light of the acknowledged Mosaic prior art browser in combination with *Raggett I* and *II*.

* * *

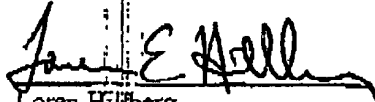
⁸ "Pipes are IPC (interprocess communication) features of the UNIX, Windows, and OS/2 operating systems." See <<http://www.linktionary.com/p/pipes.html>> (Tom Sheldon's Linktionary.com, an online networking dictionary).

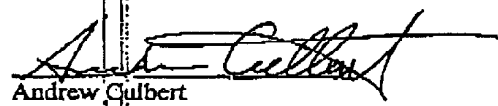
⁹ This is not surprising given that the specification of the '906 patent admits that the additional limitation of claims 2 and 7 is a simple use prior art network capability for its intended purpose (column 9, lines 12 to 13 (X-Windows)). Moreover, at a fundamental level, the '906 patent effectively concedes that this limitation cannot render the otherwise obvious claims 1 and 6 patently distinct. Independent claims 1 and 6 already include a limitation requiring the "external application" to "enable interactive processing" of the external object. In other words, claim 1 and 6 inherently include the "interactively controlling ... via inter-process communications" limitation. After all, to "enable interactive processing" (claims 1 and 6), there must be some type of "inter-process communications" between the browser and an "interactively controll[ed]" external application (claims 2 and 7). The additional limitation of claims 2 and 7, if it can even be called a limitation, is therefore an empty one that merely parrots limitations already included in the underlying independent claims 1 and 6, and thus is certainly as obvious as the underlying independent claims.

In conclusion, the two printed publications provided herewith anticipate at least claims 1, 2, 3 and 6, 7 and 8 of the '906 patent. The acknowledged prior art, when taken in view of the newly cited prior art provided herewith also provide specific motivation and guidance to a person of ordinary skill to modify the NCSA Mosaic version 2.4 browser to arrive at the claimed invention. As such, these disclosures render claims 1, 2, 3, 6, 7 and 8 of the '906 patent *prima facie* obvious to a person of skill in the art.

Very truly yours,

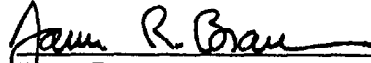
James Branson
Associate General Counsel
America Online, Inc.


Loren Hillberg
Senior Vice President and General Counsel
Macromedia, Inc.


Andrew Culbert
Associate General Counsel
Microsoft Corporation

In conclusion, the two printed publications provided herewith anticipate at least claims 1, 2, 3 and 6, 7 and 8 of the '906 patent. The acknowledged prior art, when taken in view of the newly cited prior art provided herewith also provide specific motivation and guidance to a person of ordinary skill to modify the NCSA Mosaic version 2.4 browser to arrive at the claimed invention. As such, these disclosures render claims 1, 2, 3, 6, 7 and 8 of the '906 patent *prima facie* obvious to a person of skill in the art.

Very truly yours,



James Bramson
Chief Counsel
America Online, Inc.

Loren Hillberg
Senior Vice President and General Counsel
Macromedia, Inc.

Andrew Culbert
Associate General Counsel
Microsoft Corporation

FILED OCT 13 1996