

CLAIM CHART EXHIBIT 9
MOSAIC, HTML+, AND DISCLOSURE AND
TESTIMONY OF BILL JANSSEN

INVALIDITY CLAIM CHART FOR U.S. PATENT NO. 5,838,906

- “NCSA MOSAIC FOR X 2.0 AVAILABLE”, WWW-TALK, OCT-DEC, 1993 [PA-00292659] [ANDREESSEN93A],
- NCSA MOSAIC TECHNICAL SUMMARY [PA-00292824] [ANDREESSEN 93B],
- NCSA COLLAGE FOR THE MACINTOSH VERSION 1.0, OCTOBER 1992 [PA-00292677] [COLLAGE92],
- MOSAIC SOFTWARE(E.G., THE CODEBASES FOUND AT [PA-NAT-00000044] – [PA-NAT-00000046])
- MMY PERSONAL EXPERIENCE WITH THE MOSAIC BROWSER,
- VIDEO: THE NATIONAL CENTER FOR SUPERCOMPUTING APPLICATIONS SOFTWARE DEVELOPMENT GROUP PRESENTS NCSA MOSAIC [HARDIN 93]
- “HTML+ (HYPERTEXT MARKUP LANGUAGE), HEWLETT-PACKARD, 1993 [RAGGETT93A] [PA-00321233]
- DEPOSITION OF WILLIAM JANSSEN (MAY 11, 2011) [JANSSEN DEP.]
 - EXHIBITS TO [JANSSEN DEP.], INCLUDING EXHIBIT 6 [PH_001_0000598210], EXHIBIT 8 [PH_001_0000598248], EXHIBIT 9 [PA-00306624], EXHIBIT 10 [PH_001_0000588858]; EXHIBIT 11
 - EXHIBITS TO [BINA DEP.] INCLUDING EXHIBIT 4 AND 7
 - EXHIBITS TO [MCRAE DEP.] INCLUDING EXHIBIT 37 (APRIL AND JUNE MESSAGES)

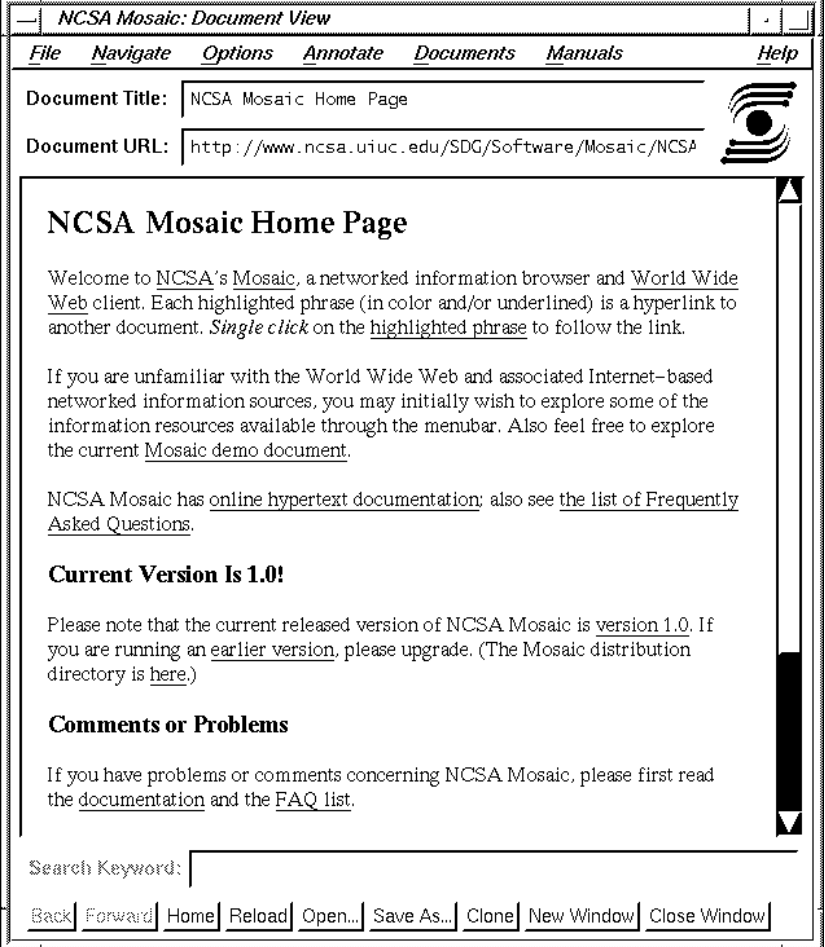
(“MOSAIC, HTML+, AND BILL JANSSEN'S POSTINGS AND TESTIMONY”)

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>906-1.a: A method for running an application program in a computer network environment, comprising:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an application program. <i>See, e.g.,</i> :</p> <p style="padding-left: 40px;">Compilation of code from the archive: file://tip.ncsa.uiuc.edu/Web/xmosaic/xmosaic-0.5.tar.Z produced an application program. Other examples of prior art Mosaic distributions that operated as application programs include the Mosaic Source Code identified above. See generally [Hardin93] video.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a computer network environment. <i>See, e.g.,</i> :</p> <p style="padding-left: 40px;">From [Andreessen93b], “NCSA Mosaic provides extensive distributed</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>hypermedia capabilities that take advantage of the information base on the global Internet.” See generally [Hardin93] video.</p>
<p>906-1.b: providing at least one client workstation and one network server coupled to said network environment, wherein said network environment is a distributed hypermedia environment;</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a client workstation. <i>See, e.g.,</i> :</p> <p>From [Andreessen93a], Mosaic was supported on the following client workstations: SGI (IRIX 4.0.2) IBM (AIX 3.2) Sun 4 (SunOS 4.1.2 with stock X11R4 and Motif 1.1 See generally [Hardin93] video.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a network server. <i>See, e.g.,</i> :</p> <p>From [Andreessen93b], “NCSA Data Transfer Mechanism communications support_ for integration with NCSA Collage and other network_ based DTM clients and information servers. . . . The scheme that NCSA Mosaic uses to name information resources on the global network is the Uniform Resource Locator mechanism Uniform Resource Locators can point to documents residing on FTP or HTTP servers” See generally [Hardin93] video.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a distributed hypermedia environment. <i>See, e.g.,</i> :</p> <p>From [Andreessen93b], “NCSA Mosaic provides extensive distributed hypermedia capabilities that take advantage of the information base on the global Internet.” See generally [Hardin93] video.</p>
<p>906-1.c:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>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;</p>	<p>application. <i>See, e.g.,</i> :</p> <p>Compilation of code from the archive file <code>://tip.ncsa.uiuc.edu/Web/xmosaic/xmosaic-0.5.tar.Z</code> produced an executable browser application.</p> <p>Other examples of prior art Mosaic distributions that operated as application programs include the Mosaic Source Code identified above. See generally [Hardin93] video.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the browser application parses a hypermedia document. <i>See, e.g.,</i> :</p> <p>Mosaic parses a file to discover tags. From [Andreessen93a], Mosaic parsed HTML files containing HTML tags. In addition, from [Andreessen93a], Mosaic parsed files that contained HTML+ tags, including tags for embedded, interactive fill-out forms.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a hypermedia document with text formats. <i>See, e.g.,</i> :</p> <p>Mosaic parses hypermedia documents to discover tags. From [Andreessen93a], Mosaic parsed HTML files containing HTML text formats. In addition, from [Andreessen93a], Mosaic parsed files that contained text formats in the form of HTML+ tags, including tags for embedded, interactive fill-out forms.</p>
<p>906-1.d: 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,</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that a hypermedia document is received from the server. <i>See, e.g.,</i> :</p> <p>From [Andreessen93b], "NCSA Mosaic provides extensive distributed hypermedia capabilities that take advantage of the information base on the global Internet." See above. See generally [Hardin93] video.</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the browser displays a hypermedia document. <i>See, e.g.,</i> :</p> <p>From [Andreessen93b], "NCSA Mosaic provides extensive distributed hypermedia capabilities that take advantage of the information base on the global Internet." See generally [Hardin93] video.</p>
<p>906-1.e: wherein the portion of said first hypermedia document is displayed within a first browser-controlled window on said client workstation,</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that a hypermedia document is displayed in a browser window. <i>See, e.g.,</i> :</p> <p>From [Andreessen93b], "A screen snapshot of NCSA Mosaic for X viewing the Mosaic home page _ the document that is retrieved and displayed when Mosaic is launched_ is in Figure 1." The figure is shown here:</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	 <p>See also generally [Hardin93] video.</p>
<p>906-1.f: 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</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an embed text format at a first location in a hypermedia document. <i>See, e.g., :</i></p> <p>Mosaic parsed text formats in the form of HTML and HTML+ tags. [Andreessen93a]. It would have been obvious for Mosaic to parse other</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>of at least a portion of an object external to the first distributed hypermedia document,</p>	<p>HTML+ tags, including the EMBED tag disclosed in [Raggett93a]. The EMBED tag disclosed in [Raggett93a] took the form: <embed type="application/eqn"> [equation] </embed> The EMBED tag was at a first location in the hypermedia document, and the result is that an equation would appear in the browser window at a location corresponding to the location of the EMBED tag.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the embed text format specifies the location of an object. <i>See, e.g., :</i></p> <p>The EMBED tag disclosed in [Raggett93a] took the form: <embed type="application/eqn"> [equation] </embed> It would have been obvious for the EMBED tag to specify the location of an object, such as its filepath location. Other HTML embed tags, such as the IMG tag, specified the location of an object using a filepath location. In reference to the EMBED tag disclosed above, Dave Raggett also disclosed that the EMBED text format could specify the location of an object: "you can also put the foreign data in a separate file referenced by a URL." (Janssen Dep. Ex. 9).</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an object that is external to a hypermedia document. <i>See, e.g., :</i></p> <p>The EMBED tag disclosed in [Raggett93a] took the form: <embed type="application/eqn"> [equation] </embed> This displayed an equation object that was internal to the hypermedia document. However, Dave Raggett disclosed that the EMBED text format could also specify the location of an object external to the hypermedia document: "you can also put the foreign data in a separate file referenced by a URL." (Janssen Dep. Ex. 9).</p>
<p>906-1.g:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>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</p>	<p>object has associated type information. <i>See, e.g., :</i></p> <p>The EMBED tag disclosed in [Raggett93a] took the form: <code><embed type="application/eqn"> [equation] </embed></code> The tag provided for a "type" attribute that, in this example, was specified as "application/eqn." Thus, this equation object has type information associated with it.</p> <p>As Dave Raggett disclosed, "[t]he browser identifies the format of the embedded data from the 'type' attribute, specified as a MIME content type." (Jannssen Dep. Ex. 9)</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the browser uses type information to identify and locate an executable application. <i>See, e.g., :</i></p> <p>As Dave Raggett disclosed, "[t]he browser identifies the format of the embedded data from the 'type' attribute, specified as a MIME content type." (Jannssen Dep. Ex. 9) Raggett further disclosed that "[t]he functions could be implemented as separate programs driven via pipes... ."</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the executable application is external to the hypermedia document. <i>See, e.g., :</i></p> <p>As Dave Raggett disclosed, "[t]he browser identifies the format of the embedded data from the 'type' attribute, specified as a MIME content type." (Jannssen Dep. Ex. 9) Raggett further disclosed that "[t]he functions could be implemented as separate programs driven via pipes... ." One mechanism Raggett disclosed for identifying and launching the executable application was the use of X resources: "binding the MIME content type to the function name for that format, e.g. via X resource... ."</p>

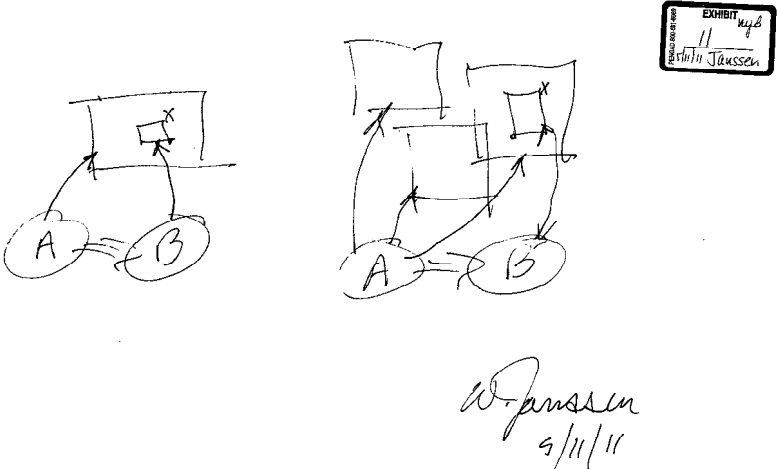
Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>906-1.h: wherein said embed text format is parsed by said browser to automatically invoke said executable application to execute on said client workstation in order to display said object and enable an end-user to 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.</p>	<p>(Janssen Dep. Ex. 9)</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the browser parses the embed text format. <i>See, e.g., :</i></p> <p style="padding-left: 40px;">Mosaic parsed text formats in the form of HTML and HTML+ tags. [Andreessen93a]. It would have been obvious for Mosaic to process other HTML+ tags, including the EMBED tag disclosed in [Raggett93a]. The EMBED tag disclosed in [Raggett93a] took the form: <embed type="application/eqn"> [equation] </embed> The result is that an equation would appear in the browser window at a location corresponding to the location of the EMBED tag.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose automatic invocation of the executable application. <i>See, e.g., :</i></p> <p style="padding-left: 40px;">In prior art Mosaic 2.4, helper applications display the hypermedia object and the applications are invoked by the user, not automatically. However, it was obvious and widely known to persons of ordinary skill at the time how to automatically initiate invocation of an executable application. The earlier discussion of inline embedding involved a determination of the type of external application to be invoked and the location of an external dataset to be accessed. The default invocation would normally be automatic.</p> <p style="padding-left: 40px;">Dave Raggett disclosed automatic invocation of an executable application through "binding the MIME content type to the function name for that format, e.g. via X resources. The functions could be implemented as separate programs" (Janssen Dep. Ex. 9) If the "type=" attribute were bound in that fashion to separate programs, those programs would be invoked automatically upon parsing of the "type=" attribute.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the executable application displays the object. <i>See, e.g., :</i></p>

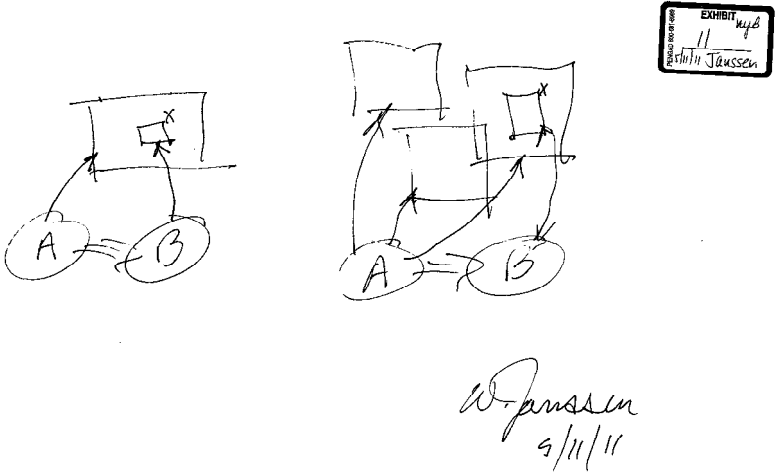
Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>Dave Raggett disclosed in connection with his EMBED tag that "[b]rowsers can then be upgraded to display new formats without changing their code at all."</p> <p>As Bill Janssen disclosed in connection with Dave Raggett's EMBED tag, a browser could create and manage an X sub-window over an area where an object is to be displayed. (Janssen Dep. Ex. 10.)</p> <p>Bill Janssen further discussed that one could achieve this by passing a window ID to an executable application as to allow that executable application to paint its output in an X sub-window where an object is to be displayed. (Janssen Dep. Ex. 8.)</p> <p>The mechanism of passing a window ID to an executable application to allow that application to paint its output in an X sub-window was extensible, in that any application could be used. As one example, Bill Janssen disclosed the use of XV in this capacity. (Janssen Dep. Ex. 8.) In that scenario, XV would display an image object.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the executable application enables direct interaction with the object. <i>See, e.g., :</i></p> <p>For example, Bill Janssen disclosed embedded "insets" that provide control panels. (Janssen Dep. Ex. 6.)</p> <p>Bill Janssen also disclosed in connection with the EMBED tag that the external program "is to handle all events and refresh on the sub-window... ." (Janssen Dep. Ex. 10.) By events, Janssen inherently disclosed user interaction X events, as I discuss in the X Windows section of my report. This was explained further by Janssen during the Janssen deposition:</p> <p>The</p> <p>21 idea is that -- this is basically a restatement of</p> <p>22 an idea that I came up with back in 1987, I believe,</p> <p>23 where you have one perim which creates an X window</p> <p>24 which it does not want to manage itself for various</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>25 reasons. But it does want to control the placement 0041</p> <p>1 of the window inside some larger user interface 2 context and wants to control the size of the window. 3 So it operates as the window's manager, what we call 4 it in X11 terminology. But it passes off control of 5 the inside of the window responding to mouse or 6 keyboard events and redrawing the window. 7 The reference to "refresh" there, "refresh 8 on the sub-window," is actually referring to the act 9 of repainting the window when part of it needs to be 10 repainted. And then the surrounding program, the 11 larger user interface context gets to handle the 12 configuration and the window movement.</p> <p>The mechanism of passing a window ID to an executable application to allow that application to paint its output in an X sub-window was extensible, in that any application could be used. As one example, Bill Janssen disclosed the use of XV in this capacity. (Janssen Dep. Ex. 8.) In that scenario, XV would display an image object. XV was an application program that enabled direct interaction with an object. For example, with XV, a user could apply various special effects or scaling factors to a displayed image object.</p> <p>Bill Janssen further elaborated during the Janssen Deposition:</p> <p>2 Q. And using X11, if I understood your 3 explanation of what was being discussed on www-talk 4 on April 29th, 1993, you could have the browser pass 5 the window ID to XV, and then XV would allow a user 6 to manipulate an image directly with inline of the 7 Web page? 8 A. That's a pretty good summary, yeah. 9 Q. In 1993 did you believe that having 10 browsers and external viewers cooperate with each</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>11 other was an easy project? 12 A. I'd call it straightforward, because I'd 13 certainly already done it several times in different 14 kinds of browsers. And I knew other people who had 15 done it. For example, the Andrew project at CMU, 16 the Slate project referred to apparently did it, 17 although I don't remember the Slate project. So 18 yes. I would say straightforward, not easy. (Janssen Dep. at 30.)</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that interaction with the object is at a first location in the hypermedia document. <i>See, e.g., :</i></p> <p>Bill Janssen disclosed in connection with the EMBED tag that the external program "is to handle all events and refresh on the sub-window... ." (Janssen Dep. Ex. 10.) By events, Janssen inherently disclosed user interaction X events such as mouse events that occur on the sub-window, of the type that I discuss in the X Windows section of my report. This was explained further by Janssen during the Janssen deposition:</p> <p>The</p> <p>21 idea is that -- this is basically a restatement of 22 an idea that I came up with back in 1987, I believe, 23 where you have one perim which creates an X window 24 which it does not want to manage itself for various 25 reasons. But it does want to control the placement 0041 1 of the window inside some larger user interface 2 context and wants to control the size of the window. 3 So it operates as the window's manager, what we call 4 it in X11 terminology. But it passes off control of 5 the inside of the window responding to mouse or</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>6 keyboard events and redrawing the window. 7 The reference to "refresh" there, "refresh 8 on the sub-window," is actually referring to the act 9 of repainting the window when part of it needs to be 10 repainted. And then the surrounding program, the 11 larger user interface context gets to handle the 12 configuration and the window movement. Also, as explained by Bill Janssen during the Janssen Deposition: 2 Q. And using X11, if I understood your 3 explanation of what was being discussed on www-talk 4 on April 29th, 1993, you could have the browser pass 5 the window ID to XV, and then XV would allow a user 6 to manipulate an image directly with inline of the 7 Web page? 8 A. That's a pretty good summary, yeah. 9 Q. In 1993 did you believe that having 10 browsers and external viewers cooperate with each 11 other was an easy project? 12 A. I'd call it straightforward, because I'd 13 certainly already done it several times in different 14 kinds of browsers. And I knew other people who had 15 done it. For example, the Andrew project at CMU, 16 the Slate project referred to apparently did it, 17 although I don't remember the Slate project. So 18 yes. I would say straightforward, not easy. (Janssen Dep. at 30.)</p>
<p>906-2.a: The method of claim 1, wherein said executable application is a controllable application and further comprising the step of: interactively controlling said controllable application on said client</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose interactive control via inter-process communications between a browser and an application. <i>See, e.g.,</i> :</p> <p>Dave Raggett disclosed that "[t]he functions could be implemented as</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>workstation via inter-process communications between said browser and said controllable application.</p>	<p>separate programs driven via pipes and stdin/stdout... ." (Janssen Dep. Ex. 9)</p> <p>With further reference to the example in which XV is an executable application interoperating with the browser, Bill Janssen explained:</p> <p>11 Q. In Janssen Exhibit 11, what you have 12 described as program B, could that be a separate 13 stand-alone program such as the graphics program XV? 14 A. It could. 15 Q. And you have some lines going back and 16 forth between A and B. Does that indicate 17 inter-process communications between program A and 18 program B? 19 A. It does.</p> <div style="text-align: center;">  </div>
<p>906-3.a: The method of claim 2, wherein the</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose ongoing inter-process communications. <i>See, e.g., :</i></p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>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.</p>	<p>With further reference to the example in which XV is an executable application interoperating with the browser, Bill Janssen explained:</p> <p>11 Q. In Janssen Exhibit 11, what you have 12 described as program B, could that be a separate 13 stand-alone program such as the graphics program XV? 14 A. It could. 15 Q. And you have some lines going back and 16 forth between A and B. Does that indicate 17 inter-process communications between program A and 18 program B? 19 A. It does.</p>  <p style="text-align: right;">EXHIBIT 11 Bill Janssen</p> <p style="text-align: right;"><i>W. Janssen</i> 9/11/11</p>
<p>906-6.a: A computer program product for use in a system having at least one client workstation and one network server coupled to said network</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an application program in a computer network environment. See evidence recited for 906-1.a.</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
environment, wherein said network environment is a distributed hypermedia environment, the computer program product comprising:	Mosaic, HTML+, and Bill Janssen's postings and testimony also disclose a client workstation and a network server in a distributed hypermedia environment. <i>See</i> evidence recited for 906-1.b.
906-6.b: a computer usable medium having computer readable program code physically embodied therein, said computer program product further comprising:	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose computer code physically embodied on a medium. <i>See, e.g.,</i> : Release of machine readable source code of Mosaic 0.5 at access path: file://tip.ncsa.uiuc.edu/Web/xmosaic/xmosaic-0.5.tar.Z disclosed in [Andreessen93a]. A listing of current capabilities was disclosed in the same document as well as machines it was known to compile on. See also Mosaic Source Code. See generally [Hardin93] video.
906-6.c: 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;	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser application that parses a hypermedia document with text formats. <i>See</i> evidence recited for 906-1.c.
906-6.d: 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,	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a hypermedia document received from a server and a browser that displays the hypermedia document. <i>See</i> evidence recited for 906-1.d.
906-6.e: wherein the portion of said first hypermedia document is displayed within a first browser-controlled window on said client workstation,	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the hypermedia document is displayed in a browser window. <i>See</i> evidence recited for 906-1.e.
906-6.f:	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an embed

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>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,</p>	<p>text format at a first location in a hypermedia document; that the embed text format specifies the location of an object; and that the object is external to the hypermedia document. <i>See</i> evidence recited for 906-1.f.</p>
<p>906-6.g: 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</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the object has associated type information, that the browser uses the type information to identify and locate an executable application, and that the executable application is external to the hypermedia document. <i>See</i> evidence recited for 906-1.g.</p>
<p>906-6.h: 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 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.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the browser parses the embed text format; that the browser automatically invokes the executable application; that the executable application displays the object and enables an end-user to directly interact with it; and that interaction with the object is at a first location in the hypermedia document. <i>See</i> evidence recited for 906-1.h.</p>
<p>906-7.a: The computer program product of claim 6, 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.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose interactive control via inter-process communications between a browser and an application. <i>See</i> evidence recited for 906-2.a.</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>906-8.a: The computer program product of claim 7, 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.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose ongoing inter-process communications. <i>See</i> evidence recited for 906-3.a.</p>
<p>906-11.a: 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:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose additional instructions on the server. <i>See, e.g.,</i> :</p> <p>Dave Raggett disclosed in connection with his EMBED tag that "[b]rowsers can then be upgraded to display new formats without changing their code at all." (Janssen Dep. Ex. 9) Thus, Mosaic could interoperate with external applications, including distributed applications, without any change to Mosaic.</p> <p>In addition, as Bill Janssen disclosed in connection with Dave Raggett's EMBED tag, a browser could create and manage an X sub-window over an area where an object is to be displayed. (Janssen Dep. Ex. 10.) Bill Janssen further discussed that one could achieve this by passing a window ID to an executable application as to allow that executable application to paint its output in an X sub-window where an object is to be displayed. (Janssen Dep. Ex. 8.) The mechanism of passing a window ID to an executable application to allow that application to paint its output in an X sub-window was extensible, in that any application could be used. As one example, Bill Janssen disclosed the use of XV in this capacity. (Janssen Dep. Ex. 8.) However, any application, including a distributed application, could also be used.</p> <p>One example of a distributed application is the Collage application: "in a networked environment, this tool provides the capability to distribute most of these data analysis and visualization functions synchronously among a</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>number of users. This is the foundation for the collaborative aspects of this tool's functionality." [Collage92]</p> <p>From [Andreessen93b], Mosaic interoperated with Collage.</p>
<p>906-11.b: issuing, from the client workstation, one or more commands to the network server;</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the client issues commands to the server. <i>See, e.g.,</i> :</p> <p>Dave Raggett disclosed in connection with his EMBED tag that "[b]rowsers can then be upgraded to display new formats without changing their code at all." (Janssen Dep. Ex. 9) Thus, Mosaic could interoperate with external applications, including distributed applications, without any change to Mosaic.</p> <p>In addition, as Bill Janssen disclosed in connection with Dave Raggett's EMBED tag, a browser could create and manage an X sub-window over an area where an object is to be displayed. (Janssen Dep. Ex. 10.) Bill Janssen further discussed that one could achieve this by passing a window ID to an executable application as to allow that executable application to paint its output in an X sub-window where an object is to be displayed. (Janssen Dep. Ex. 8.) The mechanism of passing a window ID to an executable application to allow that application to paint its output in an X sub-window was extensible, in that any application could be used. As one example, Bill Janssen disclosed the use of XV in this capacity. (Janssen Dep. Ex. 8.) However, any application, including a distributed application, could also be used.</p> <p>One example of a distributed application is the Collage application: "in a networked environment, this tool provides the capability to distribute most of these data analysis and visualization functions synchronously among a number of users. This is the foundation for the collaborative aspects of this tool's functionality." [Collage92]</p> <p>From [Andreessen93b], Mosaic interoperated with Collage.</p>
<p>906-11.c:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>executing, on the network server, one or more instructions in response to said commands;</p>	<p>server executes instructions in response to client commands. <i>See, e.g.,</i> :</p> <p>Dave Raggett disclosed in connection with his EMBED tag that "[b]rowsers can then be upgraded to display new formats without changing their code at all." (Janssen Dep. Ex. 9) Thus, Mosaic could interoperate with external applications, including distributed applications, without any change to Mosaic.</p> <p>In addition, as Bill Janssen disclosed in connection with Dave Raggett's EMBED tag, a browser could create and manage an X sub-window over an area where an object is to be displayed. (Janssen Dep. Ex. 10.) Bill Janssen further discussed that one could achieve this by passing a window ID to an executable application as to allow that executable application to paint its output in an X sub-window where an object is to be displayed. (Janssen Dep. Ex. 8.) The mechanism of passing a window ID to an executable application to allow that application to paint its output in an X sub-window was extensible, in that any application could be used. As one example, Bill Janssen disclosed the use of XV in this capacity. (Janssen Dep. Ex. 8.) However, any application, including a distributed application, could also be used.</p> <p>One example of a distributed application is the Collage application: "in a networked environment, this tool provides the capability to distribute most of these data analysis and visualization functions synchronously among a number of users. This is the foundation for the collaborative aspects of this tool's functionality." [Collage92]</p> <p>From [Andreessen93b], Mosaic interoperated with Collage.</p>
<p>906-11.d: sending information from said network server to said client workstation in response to said executed instructions; and</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the server responds with information to the client. <i>See, e.g.,</i> :</p> <p>Dave Raggett disclosed in connection with his EMBED tag that "[b]rowsers can then be upgraded to display new formats without changing their code at all." (Janssen Dep. Ex. 9) Thus, Mosaic could</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>interoperate with external applications, including distributed applications, without any change to Mosaic.</p> <p>In addition, as Bill Janssen disclosed in connection with Dave Raggett's EMBED tag, a browser could create and manage an X sub-window over an area where an object is to be displayed. (Janssen Dep. Ex. 10.) Bill Janssen further discussed that one could achieve this by passing a window ID to an executable application as to allow that executable application to paint its output in an X sub-window where an object is to be displayed. (Janssen Dep. Ex. 8.) The mechanism of passing a window ID to an executable application to allow that application to paint its output in an X sub-window was extensible, in that any application could be used. As one example, Bill Janssen disclosed the use of XV in this capacity. (Janssen Dep. Ex. 8.) However, any application, including a distributed application, could also be used.</p> <p>One example of a distributed application is the Collage application: "in a networked environment, this tool provides the capability to distribute most of these data analysis and visualization functions synchronously among a number of users. This is the foundation for the collaborative aspects of this tool's functionality." [Collage92]</p> <p>From [Andreessen93b], Mosaic interoperated with Collage.</p>
<p>906-11.e: processing said information at the client workstation to interactively control said controllable application.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the client uses information from the server to interactively control the application. <i>See, e.g., :</i></p> <p>Dave Raggett disclosed in connection with his EMBED tag that "[b]rowsers can then be upgraded to display new formats without changing their code at all." (Janssen Dep. Ex. 9) Thus, Mosaic could interoperate with external applications, including distributed applications, without any change to Mosaic.</p> <p>In addition, as Bill Janssen disclosed in connection with Dave Raggett's EMBED tag, a browser could create and manage an X sub-window over</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>an area where an object is to be displayed. (Janssen Dep. Ex. 10.) Bill Janssen further discussed that one could achieve this by passing a window ID to an executable application as to allow that executable application to paint its output in an X sub-window where an object is to be displayed. (Janssen Dep. Ex. 8.) The mechanism of passing a window ID to an executable application to allow that application to paint its output in an X sub-window was extensible, in that any application could be used. As one example, Bill Janssen disclosed the use of XV in this capacity. (Janssen Dep. Ex. 8.) However, any application, including a distributed application, could also be used.</p> <p>One example of a distributed application is the Collage application: “in a networked environment, this tool provides the capability to distribute most of these data analysis and visualization functions synchronously among a number of users. This is the foundation for the collaborative aspects of this tool’s functionality.” [Collage92]</p> <p>From [Andreessen93b], Mosaic interoperated with Collage.</p>
<p>906-13.a: 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:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose additional instructions on the server <i>See</i> evidence recited for 906-11.a.</p>
<p>906-13.b: computer readable program code for causing said client workstation to issue from the client workstation, one or more commands to the network server;</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the client issues commands to the server. <i>See</i> evidence recited for 906-11.b.</p>

Claim Text from '906 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>906-13.c: computer readable program code for causing said network server to execute one or more instructions in response to said commands;</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the server executes instructions in response to client commands. <i>See</i> evidence recited for 906-11.c.</p>
<p>906-13.d: computer readable program code for causing said network sever to send information to said client workstation in response to said executed instructions; and</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the server responds with information to the client. <i>See</i> evidence recited for 906-11.d.</p>
<p>906-13.e: computer readable program code for causing said client workstation to process said information at the client workstation to interactively control said controllable application.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the client uses information from the server to interactively control the application. <i>See</i> evidence recited for 906-11.e.</p>

INVALIDITY CLAIM CHART FOR U.S. PATENT NO. 7,599,985

- “NCSA MOSAIC FOR X 2.0 AVAILABLE”, WWW-TALK, OCT-DEC, 1993 [PA-00292659] [ANDREESSEN93A],
- NCSA MOSAIC TECHNICAL SUMMARY [PA-00292824] [ANDREESSEN 93B],
- NCSA COLLAGE FOR THE MACINTOSH VERSION 1.0, OCTOBER 1992 [PA-00292677] [COLLAGE92],
- MOSAIC SOFTWARE (E.G., THE CODEBASES FOUND AT [PA-NAT-00000044] – [PA-NAT-00000046])
- MMY PERSONAL EXPERIENCE WITH THE MOSAIC BROWSER,
- VIDEO: THE NATIONAL CENTER FOR SUPERCOMPUTING APPLICATIONS SOFTWARE DEVELOPMENT GROUP PRESENTS NCSA MOSAIC [HARDIN 93]
- “HTML+ (HYPERTEXT MARKUP LANGUAGE), HEWLETT-PACKARD, 1993 [RAGGETT93A] [PA-00321233]
- DEPOSITION OF WILLIAM JANSSEN (MAY 11, 2011) [JANSSEN DEP.]
 - EXHIBITS TO [JANSSEN DEP.], INCLUDING EXHIBIT 6 [PH_001_0000598210], EXHIBIT 8 [PH_001_0000598248], EXHIBIT 9 [PA-00306624], EXHIBIT 10 [PH_001_000058858]; EXHIBIT 11

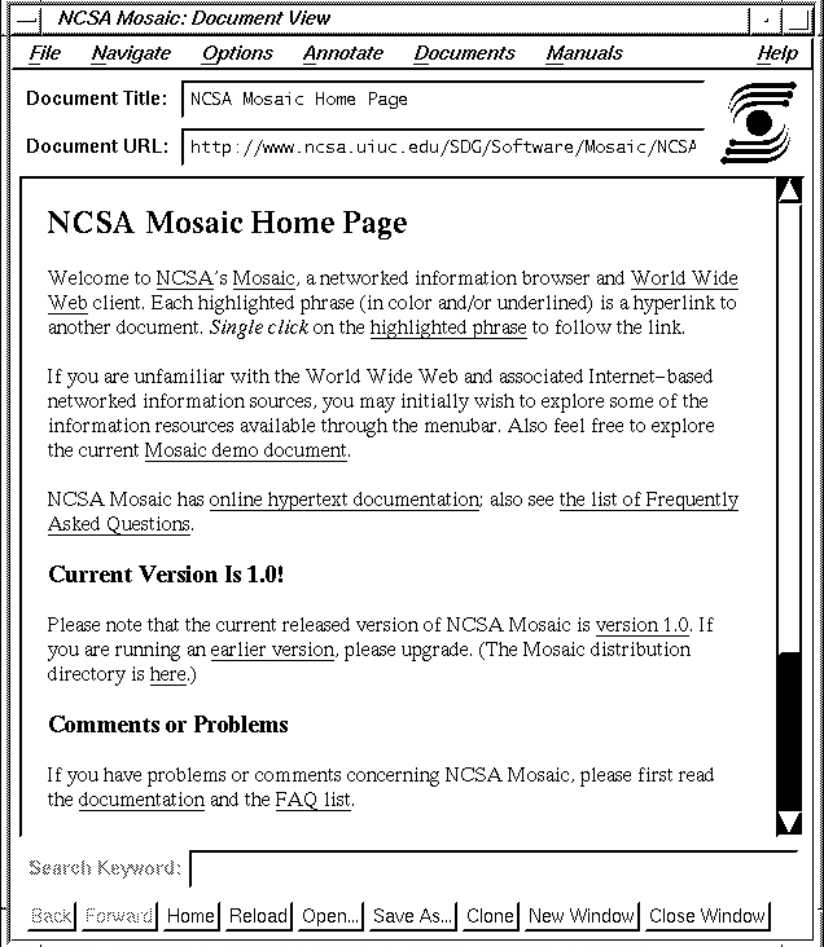
(“MOSAIC, HTML+, AND BILL JANSSEN'S POSTINGS AND TESTIMONY”)

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>985-1.a: A method for running an application program in a distributed hypermedia network environment, wherein the network environment comprises at least one client workstation and one network server coupled to the network environment, the method comprising:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an application program. <i>See, e.g.,</i> :</p> <p style="padding-left: 40px;">Compilation of code from the archive: file://tip.ncsa.uiuc.edu/Web/xmosaic/xmosaic-0.5.tar.Z produced an application program. Other examples of prior art Mosaic distributions that operated as application programs include the Mosaic Source Code identified above. See generally [Hardin93] video.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a computer network environment. <i>See, e.g.,</i> :</p> <p style="padding-left: 40px;">From [Andreessen93b], “NCSA Mosaic provides extensive distributed hypermedia capabilities that take advantage of the information base on the global Internet.” See generally [Hardin93] video.</p>

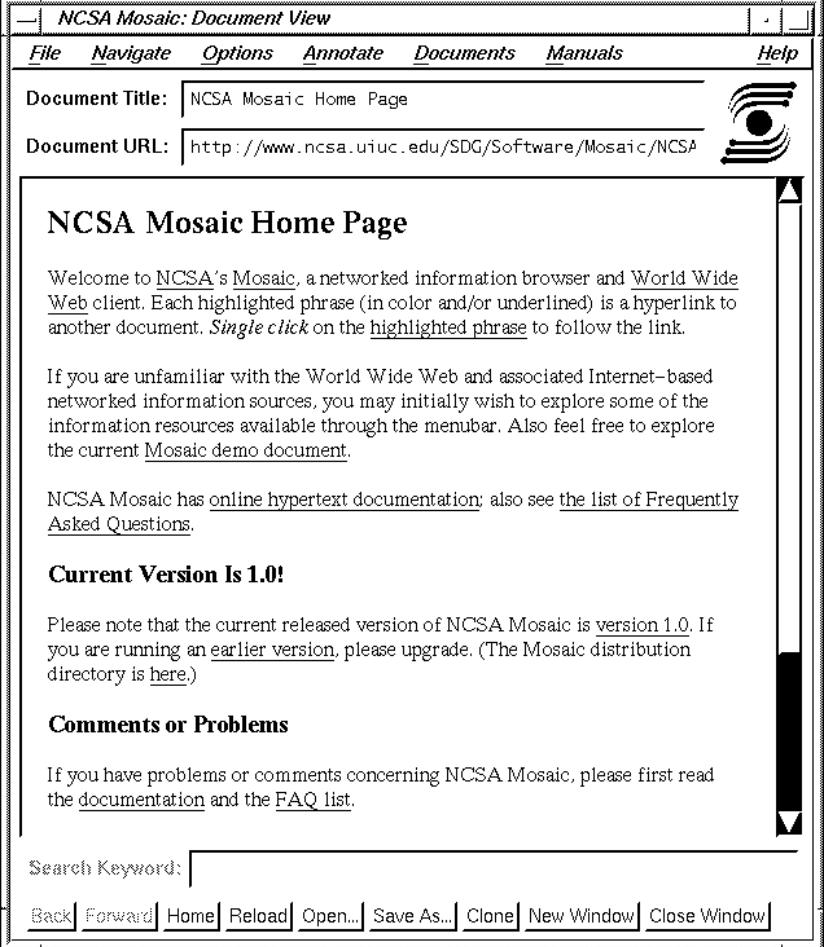
Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a client workstation. <i>See, e.g.,</i> :</p> <p style="padding-left: 40px;">From [Andreessen93a], Mosaic was supported on the following client workstations: SGI (IRIX 4.0.2) IBM (AIX 3.2) Sun 4 (SunOS 4.1.2 with stock X11R4 and Motif 1.1 See generally [Hardin93] video.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a network server. <i>See, e.g.,</i> :</p> <p style="padding-left: 40px;">From [Andreessen93b], “NCSA Data Transfer Mechanism communications support_ for integration with NCSA Collage and other network_based DTM clients and information servers. . . . The scheme that NCSA Mosaic uses to name information resources on the global network is the Uniform Resource Locator mechanism Uniform Resource Locators can point to documents residing on FTP or HTTP servers” See generally [Hardin93] video.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a distributed hypermedia environment. <i>See, e.g.,</i> :</p> <p style="padding-left: 40px;">From [Andreessen93b], “NCSA Mosaic provides extensive distributed hypermedia capabilities that take advantage of the information base on the global Internet.” See generally [Hardin93] video.</p>
<p>985-1.b: receiving, at the client workstation from the</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser application. <i>See, e.g.,</i> :</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>network server over the network environment, at least one file containing information to enable a browser application to display at least a portion of a distributed hypermedia document within a browser-controlled window;</p>	<p>Compilation of code from the archive file <code>://tip.ncsa.uiuc.edu/Web/xmosaic/xmosaic-0.5.tar.Z</code> produced an executable browser application.</p> <p>Other examples of prior art Mosaic distributions that operated as application programs include the Mosaic Source Code identified above. See generally [Hardin93] video.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a file containing enabling information. <i>See, e.g., :</i></p> <p>From [Andreessen93a], Mosaic parsed HTML files containing enabling information in the form of HTML markup tags. In addition, from [Andreessen93a], Mosaic parsed files that contained enabling information in the form of HTML+ tags, including tags for embedded, interactive fill-out forms.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the file is received at the client workstation from the network server. <i>See, e.g., :</i></p> <p>From [Andreessen93b], "NCSA Mosaic provides extensive distributed hypermedia capabilities that take advantage of the information base on the global Internet." Hypermedia document is a file received from server described above.</p> <p>See generally [Hardin93] video.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the browser displays at least a portion of a distributed hypermedia document. <i>See, e.g., :</i></p> <p>From [Andreessen93b], "NCSA Mosaic provides extensive distributed hypermedia capabilities that take advantage of the information base on the</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>global Internet.” See generally [Hardin93] video.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that at least a portion of a hypermedia document is displayed in a browser-controlled window. <i>See, e.g.,</i> :</p> <p>From [Andreessen93b], “A screen snapshot of NCSA Mosaic for X viewing the Mosaic home page _ the document that is retrieved and displayed when Mosaic is launched_ is in Figure 1.” The figure is shown here:</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	 <p>See also generally [Hardin93] video.</p>
<p>985-1.c: executing the browser application on the client workstation, with the browser application:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser application executing on the client workstation. <i>See, e.g.,</i> :</p> <p>Compilation of code from the archive file ://tip.ncsa.uiuc.edu/Web/xmosaic/xmosaic-0.5.tar.Z produced an</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>executable browser application. Other examples of prior art Mosaic distributions that operated as application programs include the Mosaic Source Code identified above. See generally [Hardin93] video.</p>
<p>985-1.d: responding to text formats to initiate processing specified by the text formats;</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose responding to text formats to initiate processing specified by the text formats, i.e., parsing text formats. <i>See, e.g.,</i> :</p> <p>Mosaic parsed a file to discover tags. From [Andreessen93a], Mosaic parsed HTML files to identify HTML markup tags and HTML+ tags, including tags for embedded, interactive fill-out forms.</p>
<p>985-1.e: displaying at least a portion of the document within the browser-controlled window;</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the browser displays a hypermedia document. <i>See, e.g.,</i> :</p> <p>From [Andreessen93b], “NCSA Mosaic provides extensive distributed hypermedia capabilities that take advantage of the information base on the global Internet.” See generally [Hardin93] video.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that a hypermedia document is displayed in a browser window. <i>See, e.g.,</i> :</p> <p>From [Andreessen93b], “A screen snapshot of NCSA Mosaic for X viewing the Mosaic home page _ the document that is retrieved and displayed when Mosaic is launched_ is in Figure 1.” The figure is shown here:</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	 <p>See also generally [Hardin93] video.</p>
<p>985-1.f: identifying an embed text format which corresponds to a first location in the document, where the embed text format specifies the location of at least a portion of an object external to the file,</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose identifying an embed text format. <i>See, e.g.,</i> :</p> <p>Mosaic parsed enabling information to identify text formats in the form of HTML and HTML+ tags. [Andreessen93a]. It would have been obvious</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>where the object has type information associated with it;</p>	<p>for Mosaic to process other HTML+ tags, including the EMBED tag disclosed in [Raggett93a]. The EMBED tag disclosed in [Raggett93a] took the form: <embed type="application/eqn"> [equation] </embed> The result is that an equation would appear in the browser window at a location corresponding to the location of the EMBED tag.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the embed text format corresponds to a first location in the hypermedia document. <i>See, e.g.,</i> :</p> <p>Mosaic parsed enabling information to identify text formats in the form of HTML and HTML+ tags. [Andreessen93a]. It would have been obvious for Mosaic to process other HTML+ tags, including the EMBED tag disclosed in [Raggett93a]. The EMBED tag disclosed in [Raggett93a] took the form: <embed type="application/eqn"> [equation] </embed> The result is that an equation would appear in the browser window at a location corresponding to the location of the EMBED tag.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the embed text format specifies the location of an object. <i>See, e.g.,</i> :</p> <p>The EMBED tag disclosed in [Raggett93a] took the form: <embed type="application/eqn"> [equation] </embed> It would have been obvious for the EMBED tag to specify the location of an object, such as its filepath location. Other HTML embed tags, such as the IMG tag, specified the location of an object using a filepath location. In reference to the EMBED tag disclosed above, Dave Raggett also disclosed that the EMBED text format could specify the location of an object: "you can also put the foreign data in a separate file referenced by a URL." (Janssen Dep. Ex. 9).</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the object is external to the file containing enabling information. <i>See, e.g.,</i> :</p> <p>The EMBED tag disclosed in [Raggett93a] took the form: <code><embed type="application/eqn"> [equation] </embed></code> This displayed an equation object that was internal to the hypermedia document.</p> <p>However, Dave Raggett disclosed that the EMBED text format could also specify the location of an object external to the file containing enabling information: "you can also put the foreign data in a separate file referenced by a URL." (Janssen Dep. Ex. 9).</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the object has associated type information. <i>See, e.g.,</i> :</p> <p>The EMBED tag disclosed in [Raggett93a] took the form: <code><embed type="application/eqn"> [equation] </embed></code> The tag provided for a "type" attribute that, in this example, was specified as "application/eqn." Thus, this equation object has type information associated with it.</p> <p>As Dave Raggett disclosed, "[t]he browser identifies the format of the embedded data from the 'type' attribute, specified as a MIME content type." (Janssen Dep. Ex. 9)</p>
<p>985-1.g: utilizing the type information to identify and locate an executable application external to the file; and</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the browser uses type information to identify and locate an executable application. <i>See, e.g.,</i> :</p> <p>As Dave Raggett disclosed, "[t]he browser identifies the format of the embedded data from the 'type' attribute, specified as a MIME content type." (Janssen Dep. Ex. 9) Raggett further disclosed that "[t]he functions could be implemented as</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>separate programs driven via pipes... ."</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the executable application is external to the file containing enabling information. <i>See, e.g., :</i></p> <p>As Dave Raggett disclosed, "[t]he browser identifies the format of the embedded data from the 'type' attribute, specified as a MIME content type." (Janssen Dep. Ex. 9)</p> <p>Raggett further disclosed that "[t]he functions could be implemented as separate programs driven via pipes... ."</p> <p>One mechanism Raggett disclosed for identifying and launching the executable application was the use of X resources: "binding the MIME content type to the function name for that format, e.g. via X resource... ." (Janssen Dep. Ex. 9)</p>
<p>985-1.h: automatically invoking the executable application, in response to the identifying of the embed text format, to execute on the client workstation in order to display the object and enable an end-user to directly interact with the object while the object is being displayed within a display area created at the first location within the portion of the hypermedia document being displayed in the browser-controlled window.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the browser parses the embed text format. <i>See, e.g., :</i></p> <p>Mosaic parsed text formats in the form of HTML and HTML+ tags. [Andreessen93a]. It would have been obvious for Mosaic to process other HTML+ tags, including the EMBED tag disclosed in [Raggett93a]. The EMBED tag disclosed in [Raggett93a] took the form: <embed type="application/eqn"> [equation] </embed> The result is that an equation would appear in the browser window at a location corresponding to the location of the EMBED tag.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose automatic invocation of the executable application. <i>See, e.g., :</i></p> <p>In prior art Mosaic 2.4, helper applications display the hypermedia object and the applications are invoked by the user, not automatically. However, it was obvious and widely known to persons of ordinary skill at</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>the time how to automatically initiate invocation of an executable application. The earlier discussion of inline embedding involved a determination of the type of external application to be invoked and the location of an external dataset to be accessed. The default invocation would normally be automatic.</p> <p>Dave Raggett disclosed automatic invocation of an executable application through "binding the MIME content type to the function name for that format, e.g. via X resources. The functions could be implemented as separate programs" (Janssen Dep. Ex. 9) If the "type=" attribute were bound in that fashion to separate programs, those programs would be invoked automatically upon parsing of the "type=" attribute.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the executable application displays the object. <i>See, e.g., :</i></p> <p>Dave Raggett disclosed in connection with his EMBED tag that "[b]rowsers can then be upgraded to display new formats without changing their code at all."</p> <p>As Bill Janssen disclosed in connection with Dave Raggett's EMBED tag, a browser could create and manage an X sub-window over an area where an object is to be displayed. (Janssen Dep. Ex. 10.)</p> <p>Bill Janssen further discussed that one could achieve this by passing a window ID to an executable application as to allow that executable application to paint its output in an X sub-window where an object is to be displayed. (Janssen Dep. Ex. 8.)</p> <p>The mechanism of passing a window ID to an executable application to allow that application to paint its output in an X sub-window was extensible, in that any application could be used. As one example, Bill Janssen disclosed the use of XV in this capacity. (Janssen Dep. Ex. 8.) In that scenario, XV would display an image object.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>executable application enables direct interaction with the object. <i>See, e.g.,</i> :</p> <p>For example, Bill Janssen disclosed embedded "insets" that provide control panels. (Janssen Dep. Ex. 6.)</p> <p>Bill Janssen also disclosed in connection with the EMBED tag that the external program "is to handle all events and refresh on the sub-window... ." (Janssen Dep. Ex. 10.) By events, Janssen inherently disclosed user interaction X events, as I discuss in the X Windows section of my report. This was explained further by Janssen during the Janssen deposition:</p> <p>The</p> <p>21 idea is that -- this is basically a restatement of</p> <p>22 an idea that I came up with back in 1987, I believe,</p> <p>23 where you have one perim which creates an X window</p> <p>24 which it does not want to manage itself for various</p> <p>25 reasons. But it does want to control the placement</p> <p>0041</p> <p>1 of the window inside some larger user interface</p> <p>2 context and wants to control the size of the window.</p> <p>3 So it operates as the window's manager, what we call</p> <p>4 it in X11 terminology. But it passes off control of</p> <p>5 the inside of the window responding to mouse or</p> <p>6 keyboard events and redrawing the window.</p> <p>7 The reference to "refresh" there, "refresh</p> <p>8 on the sub-window," is actually referring to the act</p> <p>9 of repainting the window when part of it needs to be</p> <p>10 repainted. And then the surrounding program, the</p> <p>11 larger user interface context gets to handle the</p> <p>12 configuration and the window movement.</p> <p>The mechanism of passing a window ID to an executable application to allow that application to paint its output in an X sub-window was extensible, in that any application could be used. As one example, Bill Janssen disclosed the use of XV in this capacity. (Janssen Dep. Ex. 8.) In</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>that scenario, XV would display an image object. XV was an application program that enabled direct interaction with an object. For example, with XV, a user could apply various special effects or scaling factors to a displayed image object.</p> <p>Bill Janssen further elaborated during the Janssen Deposition:</p> <p>2 Q. And using X11, if I understood your 3 explanation of what was being discussed on www-talk 4 on April 29th, 1993, you could have the browser pass 5 the window ID to XV, and then XV would allow a user 6 to manipulate an image directly with inline of the 7 Web page?</p> <p>8 A. That's a pretty good summary, yeah.</p> <p>9 Q. In 1993 did you believe that having 10 browsers and external viewers cooperate with each 11 other was an easy project?</p> <p>12 A. I'd call it straightforward, because I'd 13 certainly already done it several times in different 14 kinds of browsers. And I knew other people who had 15 done it. For example, the Andrew project at CMU, 16 the Slate project referred to apparently did it, 17 although I don't remember the Slate project. So 18 yes. I would say straightforward, not easy. (Janssen Dep. at 30.)</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that interaction with the object is at a first location in the hypermedia document. <i>See, e.g., :</i></p> <p>Bill Janssen disclosed in connection with the EMBED tag that the external program "is to handle all events and refresh on the sub-window... ." (Janssen Dep. Ex. 10.) By events, Janssen inherently disclosed user interaction X events such as mouse events that occur on the sub-window,</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>of the type that I discuss in the X Windows section of my report. This was explained further by Janssen during the Janssen deposition:</p> <p>The</p> <p>21 idea is that -- this is basically a restatement of</p> <p>22 an idea that I came up with back in 1987, I believe,</p> <p>23 where you have one perim which creates an X window</p> <p>24 which it does not want to manage itself for various</p> <p>25 reasons. But it does want to control the placement</p> <p>0041</p> <p>1 of the window inside some larger user interface</p> <p>2 context and wants to control the size of the window.</p> <p>3 So it operates as the window's manager, what we call</p> <p>4 it in X11 terminology. But it passes off control of</p> <p>5 the inside of the window responding to mouse or</p> <p>6 keyboard events and redrawing the window.</p> <p>7 The reference to "refresh" there, "refresh</p> <p>8 on the sub-window," is actually referring to the act</p> <p>9 of repainting the window when part of it needs to be</p> <p>10 repainted. And then the surrounding program, the</p> <p>11 larger user interface context gets to handle the</p> <p>12 configuration and the window movement.</p> <p>Also, as explained by Bill Janssen during the Janssen Deposition:</p> <p>2 Q. And using X11, if I understood your</p> <p>3 explanation of what was being discussed on www-talk</p> <p>4 on April 29th, 1993, you could have the browser pass</p> <p>5 the window ID to XV, and then XV would allow a user</p> <p>6 to manipulate an image directly with inline of the</p> <p>7 Web page?</p> <p>8 A. That's a pretty good summary, yeah.</p> <p>9 Q. In 1993 did you believe that having</p> <p>10 browsers and external viewers cooperate with each</p> <p>11 other was an easy project?</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>12 A. I'd call it straightforward, because I'd 13 certainly already done it several times in different 14 kinds of browsers. And I knew other people who had 15 done it. For example, the Andrew project at CMU, 16 the Slate project referred to apparently did it, 17 although I don't remember the Slate project. So 18 yes. I would say straightforward, not easy. (Janssen Dep. at 30.)</p>
<p>985-2.a: The method of claim 1 where: the information to enable comprises text formats.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the enabling information in the file is text formats. <i>See, e.g.,</i> :</p> <p>Mosaic parses a file to discover tags. From [Andreessen93a], Mosaic parsed HTML files containing enabling information in the form of HTML markup tags. In addition, from [Andreessen93a], Mosaic parsed files that contained enabling information in the form of HTML+ tags, including tags for embedded, interactive fill-out forms.</p>
<p>985-3.a: The method of claim 2 where the text formats are HTML tags.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the text formats are HTML tags. <i>See, e.g.,</i> :</p> <p>Mosaic parses a file to discover tags, including HTML tags. [Andreessen93a].</p>
<p>985-4.a: The method of claim 1 where the information contained in the file received comprises at least one embed text format.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the enabling information in the file includes an embed text format. <i>See, e.g.,</i> :</p> <p>Mosaic processed enabling information in the form of HTML and HTML+ tags. [Andreessen93a]. It would have been obvious for Mosaic to process other HTML+ tags, including the EMBED tag disclosed in [Raggett93a]. The EMBED tag disclosed in [Raggett93a] took the form:</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p><embed type="application/eqn"> [equation] </embed></p> <p>The result is that an equation would appear in the browser window at a location corresponding to the location of the EMBED tag.</p>
<p>985-5.a:</p> <p>The method of claim 1 where the step of identifying an embed text format comprises: parsing the received file to identify text formats included in the received file.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the embed text format is identified by parsing the file containing enabling information. <i>See, e.g.,</i> :</p> <p>Mosaic parsed enabling information to identify text formats in the form of HTML and HTML+ tags. [Andreessen93a]. It would have been obvious for Mosaic to process other HTML+ tags, including the EMBED tag disclosed in [Raggett93a].</p> <p>The EMBED tag disclosed in [Raggett93a] took the form:</p> <p><embed type="application/eqn"> [equation] </embed></p> <p>The result is that an equation would appear in the browser window at a location corresponding to the location of the EMBED tag.</p>
<p>985-6.a:</p> <p>The method of claim 5 where the parsing is by a parser in the browser.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the parser is in the browser <i>See, e.g.,</i> :</p> <p>Mosaic included a parser to discover tags, including HTML or HTML+ tags. [Andreessen93a].</p>
<p>985-7.a:</p> <p>The method of claim 1 where the processing specified by the text formats is specified directly.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the text formats directly specify the processing. <i>See, e.g.,</i> :</p> <p>Mosaic parses a file to discover tags. These tags include HTML and HTML+ tags. [Andreessen93a]. The tags directly specify processing, such as text that should be formatted in certain ways or objects that should be processed in certain ways. By way of example, [Raggett93a] provides a host of tags that directly specify processing, including tags that specify whether text should appear in a certain style (bold, italics, etc.) or that</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	specify objects to be embedded within the browser window.
<p>985-8.a: The method of claim 1 where the correspondence is implied by the order of the text format in a set of all of the text formats.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the correspondence is implied by the order of text formats. <i>See, e.g.,</i> :</p> <p>Mosaic parses a file to discover tags. Text and objects were rendered in the browser window based on the order in which corresponding tags were parsed, so the correspondence was implied by the order of text formats.</p>
<p>985-9.a: The method of claim 1 where the embed text format specifies the location of at least a portion of an object directly.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the embed text format specifies the location of the object directly. <i>See, e.g.,</i> :</p> <p>The EMBED tag disclosed in [Raggett93a] took the form: <code><embed type="application/eqn"> [equation] </embed></code> It would have been obvious for the EMBED tag to specify the location of an object, such as its filepath location. Other HTML embed tags, such as the IMG tag, specified the location of an object directly using a filepath location. In reference to the EMBED tag disclosed above, Dave Raggett also disclosed that the EMBED text format could specify the location of an object directly: "you can also put the foreign data in a separate file referenced by a URL." (Janssen Dep. Ex. 9).</p>
<p>985-10.a: The method of claim 1 where having type information associated is by including type information in the embed text format.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the type information is in the embed text format. <i>See, e.g.,</i> :</p> <p>The "type=" attribute in the EMBED tag disclosed in [Raggett93a] was in the embed text format: <code><embed type="application/eqn"> [equation] </embed></code> As Dave Raggett disclosed, "[t]he browser identifies the format of the embedded data from the 'type' attribute, specified as a MIME content type." (Janssen Dep. Ex. 9)</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>985-11.a: The method of claim 1 where automatically invoking does not require interactive action by the user.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that automatic invocation does not require interactive action by the user. <i>See, e.g., :</i></p> <p>In prior art Mosaic 2.4, helper applications display the hypermedia object and the applications are invoked by the user, not automatically. However, it was obvious and widely known to persons of ordinary skill at the time how to automatically initiate invocation of an executable application. The earlier discussion of inline embedding involved a determination of the type of external application to be invoked and the location of an external dataset to be accessed. The default invocation would normally be automatic.</p> <p>Dave Raggett disclosed automatic invocation of an executable application through "binding the MIME content type to the function name fro that format, e.g. via X resources. The functions could be implemented as separate programs" (Janssen Dep. Ex. 9) If the "type=" attribute were bound in that fashion to separate programs, those programs would be invoked automatically upon parsing of the "type=" attribute. No interactive action by a user would be required.</p>
<p>985-16.a: One or more computer readable media encoded with software comprising computer executable instructions, for use in a distributed hypermedia network environment, wherein the network environment comprises at least one client workstation and one network server coupled to the network environment, and when the software is executed operable to:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose computer code physically embodied on a medium. <i>See, e.g., :</i></p> <p>Release of machine readable source code of Mosaic 0.5at access path: file://tip.ncsa.uiuc.edu/Web/xmosaic/xmosaic-0.5.tar.Z disclosed in [Andreessen93a]. A listing of current capabilities was disclosed in the same document as well as machines it was known to compile on. See also Mosaic Source Code. See generally [Hardin93] video.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a client workstation and a network server in a distributed hypermedia environment. <i>See</i></p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	evidence recited for 985-1.a.
<p>985-16.b: receive, at the client workstation from the network server over the network environment, at least one file containing information to enable a browser application to display at least a portion of a distributed hypermedia document within a browser-controlled window;</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser application; a file containing enabling information received from a server; that the browser displays at least a portion of a distributed hypermedia document; and that the display is in a browser-controlled window. <i>See</i> evidence recited for 985-1.b.</p>
<p>985-16.c: cause the client workstation to utilize the browser to:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser application executing on the client workstation. <i>See</i> evidence recited for 985-1.c.</p>
<p>985-16.d: respond to text formats to initiate processing specified by the text formats;</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose parsing text formats. <i>See</i> evidence recited for 985-1.d.</p>
<p>985-16.e: display at least a portion of the document within the browser-controlled window;</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose displaying at least a portion of the document within the browser-controlled window. <i>See</i> evidence recited for 985-1.e.</p>
<p>985-16.f: identify an embed text format corresponding to a first location in the document, the embed text format specifying the location of at least a portion of an object external to the file, with the object having type information associated with it;</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose identifying an embed text format; that the embed text format corresponds to a first location in a hypermedia document; that the embed text format specifies the location of at least a portion of an object external to the file containing enabling information; and that the object has associated type information. <i>See</i> evidence recited for 985-1.f.</p>
<p>985-16.g: utilize the type information to identify and locate an executable application external to the file; and</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose using type information to identify and locate an executable application external to the file. <i>See</i> evidence recited for 985-1.g.</p>
<p>985-16.h: automatically invoke the executable application, in response to the identifying of the embed text format, to execute on the client workstation in order to display the object and enable an end-user to directly interact with the object while the object</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose automatically invoking the executable application; that the executable application displays the object and enables an end-user to directly interact with it; and that the interaction with the object is at a first location in a hypermedia document. <i>See</i> evidence recited for 985-1.h.</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
is being displayed within a display area created at the first location within the portion of the hypermedia document being displayed in the browser-controlled window.	
985-17.a: The computer readable media of claim 16 where: the information to enable comprises text formats.	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the enabling information in the file is text formats. <i>See</i> evidence recited for 985-2.a.
985-18.a: The computer readable media of claim 17 where: the text formats are HTML tags.	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the text formats are HTML tags. <i>See</i> evidence recited for 985-3.a.
985-19.a: The computer readable media of claim 16 where: the information contained in the file received comprises at least one embed text format.	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the enabling information in the file includes an embed text format. <i>See</i> evidence recited for 985-4.a.
985-20.a: A method of serving digital information in a computer network environment having a network server coupled the network environment, and where the network environment is a distributed hypermedia environment, the method comprising:	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose digital information. <i>See, e.g., :</i></p> <p style="padding-left: 40px;">From [Andreessen93b], “The initial versions of the NCSA Mosaic clients have the following functionality . . . Graphical display of plain text, rich (formatted) text, and hypertext, as well as inlined access to graphs, images, audio clips, video sequences, and scientific data in multimedia and hypermedia documents.” All that information is digital. See generally [Hardin93] video.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a network server in a distributed hypermedia environment. <i>See</i> evidence recited for 985-1.a.</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>985-20.b: communicating via the network server with at least one client workstation over said network in order to cause said client workstation to:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a client workstation. <i>See</i> evidence recited for 985-1.a.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose communicating via network server in order to cause the client workstation to act. <i>See, e.g.,</i> :</p> <p>Dave Raggett disclosed in connection with his EMBED tag that "[b]rowsers can then be upgraded to display new formats without changing their code at all." (Janssen Dep. Ex. 9) Thus, Mosaic could interoperate with external applications, including distributed applications, without any change to Mosaic.</p> <p>In addition, as Bill Janssen disclosed in connection with Dave Raggett's EMBED tag, a browser could create and manage an X sub-window over an area where an object is to be displayed. (Janssen Dep. Ex. 10.) Bill Janssen further discussed that one could achieve this by passing a window ID to an executable application as to allow that executable application to paint its output in an X sub-window where an object is to be displayed. (Janssen Dep. Ex. 8.) The mechanism of passing a window ID to an executable application to allow that application to paint its output in an X sub-window was extensible, in that any application could be used. As one example, Bill Janssen disclosed the use of XV in this capacity. (Janssen Dep. Ex. 8.) However, any application, including a distributed application, could also be used.</p> <p>One example of a distributed application is the Collage application: "in a networked environment, this tool provides the capability to distribute most of these data analysis and visualization functions synchronously among a number of users. This is the foundation for the collaborative aspects of this tool's functionality." [Collage92] From [Andreessen93b], Mosaic interoperated with Collage.</p>
<p>985-20.c: receive, over said network environment from said</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser application; a file containing enabling information received from a server; that</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
server, at least one file containing information to enable a browser application to display at least a portion of a distributed hypermedia document within a browser-controlled window;	the browser displays at least a portion of a distributed hypermedia document; and that the display is in a browser-controlled window. <i>See</i> evidence recited for 985-1.b.
985-20.d: execute, at said client workstation, a browser application, with the browser application:	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser application executing on the client workstation. <i>See</i> evidence recited for 985-1.c.
985-20.e: responding to text formats to initiate processing specified by the text formats;	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose parsing text formats. <i>See</i> evidence recited for 985-1.d.
985-20.f: displaying, on said client workstation, at least a portion of the document within the browser-controlled window;	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose displaying at least a portion of the document within the browser-controlled window. <i>See</i> evidence recited for 985-1.e.
985-20.g: identifying an embed text format which corresponds to a first location in the document, where the embed text format specifies the location of at least a portion of an object external to the file, where the object has type information associated with it;	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose identifying an embed text format; that the embed text format corresponds to a first location in a hypermedia document; that the embed text format specifies the location of at least a portion of an object external to the file containing enabling information; and that the object has associated type information. <i>See</i> evidence recited for 985-1.f.
985-20.h: utilizing the type information to identify and locate an executable application external to the file; and	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose using type information to identify and locate an executable application external to the file. <i>See</i> evidence recited for 985-1.g.
985-20.i: automatically invoking the executable application, in response to the identifying of the embed text format, to execute on the client workstation in order to display the object and enable an end-user to directly interact with the object while the object is being displayed within a display area created at the first location within the portion of the	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose automatically invoking the executable application; that the executable application displays the object and enables an end-user to directly interact with it; and that the interaction with the object is at a first location in a hypermedia document. <i>See</i> evidence recited for 985-1.h.

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
hypermedia document being displayed in the browser-controlled window.	
<p>985-21.a: The method of claim 20 where: the information to enable comprises text formats.</p>	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the enabling information in the file is text formats. <i>See</i> evidence recited for 985-2.a.
<p>985-22.a: The method of claim 21 where: the text formats are HTML tags.</p>	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the text formats are HTML tags. <i>See</i> evidence recited for 985-3.a.
<p>985-23.a: The method of claim 20 where: the information contained in the file received comprises at least one embed text format.</p>	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the enabling information in the file includes an embed text format. <i>See</i> evidence recited for 985-4.a.
<p>985-24.a: A method for running an executable application in a computer network environment, wherein said network environment has at least one client workstation and one network server coupled to a network environment, the method comprising:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a client workstation and a network server in a network environment. <i>See</i> evidence recited for 985-1.a.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an executable application. <i>See</i> evidence recited for 985-1.g.</p>
<p>985-24.b: enabling an end-user to directly interact with an object by utilizing said executable application to interactively process said object while the object is being displayed within a display area created at a first location within a portion of a hypermedia document being displayed in a browser-controlled window,</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose displaying at least a portion of the document within the browser-controlled window. <i>See</i> evidence recited for 985-1.e.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an object external to a file containing enabling information. <i>See</i> evidence recited for 985-1.f.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that there is enabling of an end-user to directly interact with the object. <i>See, e.g., :</i></p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>For example, Bill Janssen disclosed embedded "insets" that provide control panels. (Janssen Dep. Ex. 6.)</p> <p>Bill Janssen also disclosed in connection with the EMBED tag that the external program "is to handle all events and refresh on the sub-window... ." (Janssen Dep. Ex. 10.) By events, Janssen inherently disclosed user interaction X events, as I discuss in the X Windows section of my report. This was explained further by Janssen during the Janssen deposition:</p> <p>The</p> <p>21 idea is that -- this is basically a restatement of</p> <p>22 an idea that I came up with back in 1987, I believe,</p> <p>23 where you have one perim which creates an X window</p> <p>24 which it does not want to manage itself for various</p> <p>25 reasons. But it does want to control the placement</p> <p>0041</p> <p>1 of the window inside some larger user interface</p> <p>2 context and wants to control the size of the window.</p> <p>3 So it operates as the window's manager, what we call</p> <p>4 it in X11 terminology. But it passes off control of</p> <p>5 the inside of the window responding to mouse or</p> <p>6 keyboard events and redrawing the window.</p> <p>7 The reference to "refresh" there, "refresh</p> <p>8 on the sub-window," is actually referring to the act</p> <p>9 of repainting the window when part of it needs to be</p> <p>10 repainted. And then the surrounding program, the</p> <p>11 larger user interface context gets to handle the</p> <p>12 configuration and the window movement.</p> <p>The mechanism of passing a window ID to an executable application to allow that application to paint its output in an X sub-window was extensible, in that any application could be used. As one example, Bill Janssen disclosed the use of XV in this capacity. (Janssen Dep. Ex. 8.) In that scenario, XV would display an image object. XV was an application</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>program that enabled direct interaction with an object. For example, with XV, a user could apply various special effects or scaling factors to a displayed image object.</p> <p>Also, as explained by Bill Janssen during the Janssen Deposition:</p> <p>2 Q. And using X11, if I understood your 3 explanation of what was being discussed on www-talk 4 on April 29th, 1993, you could have the browser pass 5 the window ID to XV, and then XV would allow a user 6 to manipulate an image directly with inline of the 7 Web page?</p> <p>8 A. That's a pretty good summary, yeah.</p> <p>9 Q. In 1993 did you believe that having 10 browsers and external viewers cooperate with each 11 other was an easy project?</p> <p>12 A. I'd call it straightforward, because I'd 13 certainly already done it several times in different 14 kinds of browsers. And I knew other people who had 15 done it. For example, the Andrew project at CMU, 16 the Slate project referred to apparently did it, 17 although I don't remember the Slate project. So 18 yes. I would say straightforward, not easy. (Janssen Dep. at 30.)</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the interaction with the object is at a first location in a hypermedia document. <i>See</i> evidence recited for 985-1.h.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the object is displayed at a first location within a portion of the hypermedia document being displayed. <i>See, e.g., :</i></p> <p>Mosaic parsed text formats in the form of HTML and HTML+ tags.</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>[Andreessen93a]. For prior art Mosaic 2.4, only media of type XBM and GIF are embedded inline, by the HTML IMG tag, at the first location in the hypermedia document.</p> <p>However, it was obvious and widely known to persons of ordinary skill at the time how to cause the object to be displayed at the first location in a hypermedia document. There were numerous posts to the www-talk interest group in mid-1993 about the subject. The issue was often referred to as "inlining" or "embedding" and the EMBED tag was proposed in the HTML+ standard [Raggett93a] to handle that situation. That means that when the presence of a hypermedia object was discovered during parsing, its representation was displayed in the browser window at the page position where it was parsed. Among many possibilities, the hypermedia object could be video, mathematical equations and running applications. The EMBED tag disclosed in [Raggett93a] took the form:</p> <pre><embed type="application/eqn"> [equation] </embed></pre> <p>The EMBED tag was at a first location in the hypermedia document, and the result is that an equation would appear in the browser window also at a first location, corresponding to the location of the EMBED tag.</p> <p>In addition, Bill Janssen disclosed in connection with Dave Raggett's EMBED tag that a browser could create and manage an X sub-window over an area where an object is to be displayed. (Janssen Dep. Ex. 10.) Bill Janssen further discussed that one could achieve this by passing a window ID to an executable application as to allow that executable application to paint its output in an X sub-window where an object is to be displayed. (Janssen Dep. Ex. 8.)</p> <p>This was elaborated on by Bill Janssen during the Janssen Deposition:</p> <p>9 MR. CHANDLER: Q. Let me try again. Does 10 the combination of a www-talk postings on June 14th, 11 1993, and the HTML+ standard dated July 23rd, 1993, 12 describe a technique of how a browser can parse an 13 EMBED tag and then automatically invoke a different 14 stand-alone program to display an image in a sub</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>15 window that appears within the larger browser window</p> <p>16 and enables an end user to interact with that image</p> <p>17 at the same location as where the EMBED tag was in</p> <p>18 the HTML file?</p> <p>19 MR. CAMPBELL: Objection; form.</p> <p>20 THE WITNESS: In my opinion, yes.</p>
<p>985-24.c: wherein said network environment is a distributed hypermedia environment,</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a client workstation and a network server in a distributed hypermedia environment. <i>See</i> evidence recited for 985-1.a.</p>
<p>985-24.d: wherein said client workstation receives, over said network environment from said server, at least one file containing information to enable said browser application to display, on said client workstation, at least said portion of said distributed hypermedia document within said browser-controlled window,</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser application; a file containing enabling information received from a server; that the browser displays at least a portion of a distributed hypermedia document; and that the display is in a browser-controlled window. <i>See</i> evidence recited for 985-1.b.</p>
<p>985-24.e: wherein said executable application is external to said file,</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an executable application external to the file. <i>See</i> evidence recited for 985-1.g.</p>
<p>985-24.f: wherein said client workstation executes the browser application, with the browser application responding to text formats to initiate processing specified by the text formats,</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser application executing on the client workstation. <i>See</i> evidence recited for 985-1.c.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose parsing text formats. <i>See</i> evidence recited for 985-1.d.</p>
<p>985-24.g: wherein at least said portion of the document is displayed within the browser-controlled window,</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose displaying at least a portion of the document within the browser-controlled window. <i>See</i> evidence recited for 985-1.e.</p>
<p>985-24.h: wherein an embed text format which corresponds to said first location in the document is identified by the browser,</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose identifying an embed text format and that the embed text format corresponds to a first location in a hypermedia document. <i>See</i> evidence recited for 985-1.f.</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>985-24.i: wherein the embed text format specifies the location of at least a portion of said object external to the file,</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the embed text format specifies the location of at least a portion of an object external to the file containing enabling information. <i>See</i> evidence recited for 985-1.f.</p>
<p>985-24.j: wherein the object has type information associated with it,</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the object has associated type information. <i>See</i> evidence recited for 985-1.f.</p>
<p>985-24.k: wherein the type information is utilized by the browser to identify and locate said executable application, and</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose using type information to identify and locate an executable application external to the file. <i>See</i> evidence recited for 985-1.g.</p>
<p>985-24.l: wherein the executable application is automatically invoked by the browser, in response to the identifying of the embed text format.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose automatically invoking the executable application. <i>See</i> evidence recited for 985-1.h.</p>
<p>985-25.a: The method of claim 24 where: the information to enable comprises text formats.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the enabling information in the file is text formats. <i>See</i> evidence recited for 985-2.a.</p>
<p>985-26.a: The method of claim 25 where: the text formats are HTML tags.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the text formats are HTML tags. <i>See</i> evidence recited for 985-3.a.</p>
<p>985-27.a: The method of claim 24 where: the information contained in the file received comprises at least one embed text format.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the enabling information in the file includes an embed text format. <i>See</i> evidence recited for 985-4.a.</p>
<p>985-28.a: One or more computer readable media encoded with software comprising an executable</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose computer code physically embodied on a medium. <i>See</i> evidence recited for 985-16.a.</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>application for use in a system having at least one client workstation and one network server coupled to a network environment, operable to:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a client workstation and a network server in a network environment. <i>See</i> evidence recited for 985-1.a.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an executable application. <i>See</i> evidence recited for 985-1.g.</p>
<p>985-28.b: cause the client workstation to display an object and enable an end-user to directly interact with said object while the object is being displayed within a display area created at a first location within a portion of a hypermedia document being displayed in a browser-controlled window,</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose displaying at least a portion of the document within the browser-controlled window. <i>See</i> evidence recited for 985-1.e.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an object external to a file containing enabling information. <i>See</i> evidence recited for 985-1.f.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that there is enabling of an end-user to directly interact with the object. <i>See</i> evidence recited for 985-24.b.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the interaction with the object is at a first location in a hypermedia document. <i>See</i> evidence recited for 985-1.h.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the object is displayed within a display area created at the first location.. <i>See, e.g.,</i> :</p> <p>Mosaic parsed text formats in the form of HTML and HTML+ tags. [Andreessen93a]. For prior art Mosaic 2.4, only media of type XBM and GIF are embedded inline, by the HTML IMG tag, at the first location in the hypermedia document.</p> <p>However, it was obvious and widely known to persons of ordinary skill at the time how to cause the object to be displayed at the first location in a hypermedia document. There were numerous posts to the www-talk</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>interest group in mid-1993 about the subject. The issue was often referred to as “inlining” or “embedding” and the EMBED tag was proposed in the HTML+ standard [Raggett93a] to handle that situation. That means that when the presence of a hypermedia object was discovered during parsing, its representation was displayed in the browser window at the page position where it was parsed. Among many possibilities, the hypermedia object could be video, mathematical equations and running applications. The EMBED tag disclosed in [Raggett93a] took the form: <code><embed type="application/eqn"> [equation] </embed></code></p> <p>The EMBED tag was at a first location in the hypermedia document, and the result is that an equation would appear in the browser window also at a first location, corresponding to the location of the EMBED tag. In addition, Bill Janssen disclosed in connection with Dave Raggett's EMBED tag that a browser could create and manage an X sub-window over an area where an object is to be displayed. (Janssen Dep. Ex. 10.) Bill Janssen further discussed that one could achieve this by passing a window ID to an executable application as to allow that executable application to paint its output in an X sub-window where an object is to be displayed. (Janssen Dep. Ex. 8.)</p> <p>This was elaborated on by Bill Janssen during the Janssen Deposition:</p> <p>9 MR. CHANDLER: Q. Let me try again. Does 10 the combination of a www-talk postings on June 14th, 11 1993, and the HTML+ standard dated July 23rd, 1993, 12 describe a technique of how a browser can parse an 13 EMBED tag and then automatically invoke a different 14 stand-alone program to display an image in a sub 15 window that appears within the larger browser window 16 and enables an end user to interact with that image 17 at the same location as where the EMBED tag was in 18 the HTML file?</p> <p>19 MR. CAMPBELL: Objection; form. 20 THE WITNESS: In my opinion, yes.</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
985-28.c: wherein said network environment is a distributed hypermedia environment,	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a client workstation and a network server in a distributed hypermedia environment. <i>See</i> evidence recited for 985-1.a.
985-28.d: wherein said client workstation receives, over said network environment from said server, at least one file containing information to enable said browser application to display, on said client workstation, at least said portion of said distributed hypermedia document within said browser-controlled window,	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser application; a file containing enabling information received from a server; that the browser displays at least a portion of a distributed hypermedia document; and that the display is in a browser-controlled window. <i>See</i> evidence recited for 985-1.b.
985-28.e: wherein said executable application is external to said file,	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an executable application external to the file. <i>See</i> evidence recited for 985-1.g.
985-28.f: wherein said client workstation executes said browser application, with the browser application responding to text formats to initiate processing specified by the text formats,	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser application executing on the client workstation. <i>See</i> evidence recited for 985-1.c. Mosaic, HTML+, and Bill Janssen's postings and testimony disclose parsing text formats. <i>See</i> evidence recited for 985-1.d.
985-28.g: wherein at least said portion of the document is displayed within the browser-controlled window,	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose displaying at least a portion of the document within the browser-controlled window. <i>See</i> evidence recited for 985-1.e.
985-28.h: wherein an embed text format which corresponds to said first location in the document is identified by the browser,	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose identifying an embed text format and that the embed text format corresponds to a first location in a hypermedia document. <i>See</i> evidence recited for 985-1.f.
985-28.i: wherein the embed text format specifies the location of at least a portion of said object external to the file,	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the embed text format specifies the location of at least a portion of an object external to the file containing enabling information. <i>See</i> evidence recited for 985-1.f.
985-28.j: wherein the object has type information associated	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the object has associated type information. <i>See</i> evidence recited for 985-1.f.

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
with it,	
985-28.k: wherein the type information is utilized by the browser to identify and locate said executable application, and	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose using type information to identify and locate an executable application external to the file. <i>See</i> evidence recited for 985-1.g.
985-28.l: wherein the executable application is automatically invoked by the browser, in response to the identifying of the embed text format.	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose automatically invoking the executable application. <i>See</i> evidence recited for 985-1.h.
985-36.a: A method for running an application program in a distributed hypermedia network environment, wherein the distributed hypermedia network environment comprises at least one client workstation and one remote network server coupled to the distributed hypermedia network environment, the method comprising:	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an application program in a distributed hypermedia environment comprising at least client workstation and network server. <i>See</i> evidence recited for 985-1.a.
985-36.b: receiving, at the client workstation from the network server over the distributed hypermedia network environment, at least one file containing information to enable a browser application to display at least a portion of a distributed hypermedia document within a browser-controlled window;	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser application; a file containing enabling information; that the file is received at the client workstation from the network server; that the browser displays at least a portion of a distributed hypermedia document; and that at least a portion of a hypermedia document is displayed in a browser-controlled window. <i>See</i> evidence recited for 985-1.b.
985-36.c: executing the browser application on the client workstation, with the browser application:	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser application executing on the client workstation. <i>See</i> evidence recited for 985-1.c.
985-36.d: responding to text formats to initiate processing specified by the text formats;	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose parsing text formats. <i>See</i> evidence recited for 985-1.d.

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>985-36.e: displaying at least a portion of the document within the browser-controlled window;</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose displaying at least a portion of the document within the browser-controlled window. <i>See</i> evidence recited for 985-1.e.</p>
<p>985-36.f: identifying an embed text format which corresponds to a first location in the document, where the embed text format specifies the location of at least a portion of an object;</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an object. <i>See, e.g.,</i> :</p> <p style="padding-left: 40px;">The EMBED tag disclosed in [Raggett93a] took the form: <embed type="application/eqn"> [equation] </embed> The result is that an equation object would appear in the browser window at a location corresponding to the location of the EMBED tag.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose identifying an embed text format; that the embed text format corresponds to a first location in the hypermedia document; and that the embed text format specifies the location of an object. <i>See</i> evidence recited for 985-1.f.</p>
<p>985-36.g: identifying and locating an executable application associated with the object; and</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the browser identifies and locates an executable application associated with the object. <i>See, e.g.,</i></p> <p style="padding-left: 40px;">As Dave Raggett disclosed, "[t]he browser identifies the format of the embedded data from the 'type' attribute, specified as a MIME content type." (Janssen Dep. Ex. 9) Raggett further disclosed that "[t]he functions could be implemented as separate programs driven via pipes... ." (Janssen Dep. Ex. 9) One mechanism Raggett disclosed for identifying and launching the executable application was the use of X resources: "binding the MIME content type to the function name for that format, e.g. via X resource... ." (Janssen Dep. Ex. 9)</p>
<p>985-36.h: automatically invoking the executable application, in response to the identifying of the embed text format, in order to enable an end-user to directly</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose identifying an embed text format. <i>See</i> evidence recited in 985-1.f.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose automatic</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
<p>interact with the object, while the object is being displayed within a display area created at the first location within the portion of the hypermedia document being displayed in the browser-controlled window,</p>	<p>invocation of the executable application; that the executable application displays the object; that the executable application enables direct interaction with the object; and that interaction with the object is at a first location in the hypermedia document. <i>See</i> evidence recited in 985-1.h.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the object is displayed at a first location within a portion of the hypermedia document being displayed. <i>See</i> evidence recited at 985-24.b.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that a hypermedia document is displayed in a browser window. <i>See, e.g.</i>, evidence recited for 985-1.e.</p>
<p>985-36.i: wherein the executable application is part of a distributed application, and</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a distributed application. <i>See, e.g.</i>, :</p> <p>Dave Raggett disclosed in connection with his EMBED tag that "[b]rowsers can then be upgraded to display new formats without changing their code at all." (Janssen Dep. Ex. 9) Thus, Mosaic could interoperate with external applications, including distributed applications, without any change to Mosaic.</p> <p>In addition, as Bill Janssen disclosed in connection with Dave Raggett's EMBED tag, a browser could create and manage an X sub-window over an area where an object is to be displayed. (Janssen Dep. Ex. 10.) Bill Janssen further discussed that one could achieve this by passing a window ID to an executable application as to allow that executable application to paint its output in an X sub-window where an object is to be displayed. (Janssen Dep. Ex. 8.) The mechanism of passing a window ID to an executable application to allow that application to paint its output in an X sub-window was extensible, in that any application could be used. As one example, Bill Janssen disclosed the use of XV in this capacity. (Janssen</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>Dep. Ex. 8.) However, any application, including a distributed application, could also be used.</p> <p>One example of a distributed application is the Collage application: “in a networked environment, this tool provides the capability to distribute most of these data analysis and visualization functions synchronously among a number of users. This is the foundation for the collaborative aspects of this tool’s functionality.” [Collage92]</p> <p>From [Andreessen93b], Mosaic interoperated with Collage.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the executable application is part of a distributed application. <i>See, e.g., :</i></p> <p>Dave Raggett disclosed in connection with his EMBED tag that “[b]rowsers can then be upgraded to display new formats without changing their code at all.” (Janssen Dep. Ex. 9) Thus, Mosaic could interoperate with external applications, including distributed applications, without any change to Mosaic.</p> <p>In addition, as Bill Janssen disclosed in connection with Dave Raggett's EMBED tag, a browser could create and manage an X sub-window over an area where an object is to be displayed. (Janssen Dep. Ex. 10.) Bill Janssen further discussed that one could achieve this by passing a window ID to an executable application as to allow that executable application to paint its output in an X sub-window where an object is to be displayed. (Janssen Dep. Ex. 8.) The mechanism of passing a window ID to an executable application to allow that application to paint its output in an X sub-window was extensible, in that any application could be used. As one example, Bill Janssen disclosed the use of XV in this capacity. (Janssen Dep. Ex. 8.) However, any application, including a distributed application, could also be used.</p> <p>One example of a distributed application is the Collage application: “in a networked environment, this tool provides the capability to distribute most of these data analysis and visualization functions synchronously among a</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	<p>number of users. This is the foundation for the collaborative aspects of this tool's functionality." [Collage92] From [Andreessen93b], Mosaic interoperated with Collage.</p>
<p>985-36.j: wherein at least a portion of the distributed application is for execution on a remote network server coupled to the distributed hypermedia network environment.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the distributed application executes at least partially on a network server. <i>See, e.g.,</i> :</p> <p>Dave Raggett disclosed in connection with his EMBED tag that "[b]rowsers can then be upgraded to display new formats without changing their code at all." (Janssen Dep. Ex. 9) Thus, Mosaic could interoperate with external applications, including distributed applications, without any change to Mosaic.</p> <p>In addition, as Bill Janssen disclosed in connection with Dave Raggett's EMBED tag, a browser could create and manage an X sub-window over an area where an object is to be displayed. (Janssen Dep. Ex. 10.) Bill Janssen further discussed that one could achieve this by passing a window ID to an executable application as to allow that executable application to paint its output in an X sub-window where an object is to be displayed. (Janssen Dep. Ex. 8.) The mechanism of passing a window ID to an executable application to allow that application to paint its output in an X sub-window was extensible, in that any application could be used. As one example, Bill Janssen disclosed the use of XV in this capacity. (Janssen Dep. Ex. 8.) However, any application, including a distributed application, could also be used.</p> <p>One example of a distributed application is the Collage application: "in a networked environment, this tool provides the capability to distribute most of these data analysis and visualization functions synchronously among a number of users. This is the foundation for the collaborative aspects of this tool's functionality." [Collage92] From [Andreessen93b], Mosaic interoperated with Collage.</p>
<p>985-37.a: The method of claim 36 where: the information to</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the enabling information in the file is text formats. <i>See</i> evidence recited for 985-2.a.</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
enable comprises text formats.	
<p>985-38.a: The method of claim 37 where: the text formats are HTML tags.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the text formats are HTML tags. <i>See</i> evidence recited for 985-3.a.</p>
<p>985-39.a: The method of claim 36 where: the information contained in the file received comprises at least one embed text format.</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the enabling information in the file includes an embed text format. <i>See</i> evidence recited for 985-4.a.</p>
<p>985-40.a: A method of serving digital information in a computer network environment having a network server coupled to said computer network environment, and where the network environment is a distributed hypermedia network environment, the method comprising:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose digital information. <i>See</i> evidence recited for 985-20.a.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a network server in a distributed hypermedia environment. <i>See</i> evidence recited for 985-1.a.</p>
<p>985-40.b: communicating via the network server with at least one remote client workstation over said computer network environment in order to cause said client workstation to:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a client workstation. <i>See</i> evidence recited for 985-1.a.</p> <p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose communicating via network server in order to cause the client workstation to act. <i>See</i> evidence recited for 985-20.b.</p>
<p>985-40.c: receive, over said computer network environment from the network server, at least one file containing information to enable a browser application to display at least a portion of a distributed hypermedia document within a browser-controlled window;</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser application; a file containing enabling information received from a server; that the browser displays at least a portion of a distributed hypermedia document; and that the display is in a browser-controlled window. <i>See</i> evidence recited for 985-1.b.</p>
<p>985-40.d:</p>	<p>Mosaic, HTML+, and Bill Janssen's postings and testimony disclose a browser</p>

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
execute, at said client workstation, a browser application, with the browser application:	application executing on the client workstation. <i>See</i> evidence recited for 985-1.c.
985-40.e: responding to text formats to initiate processing specified by the text formats;	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose parsing text formats. <i>See</i> evidence recited for 985-1.d.
985-40.f: displaying, on said client workstation, at least a portion of the document within the browser-controlled window;	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose displaying at least a portion of the document within the browser-controlled window. <i>See</i> evidence recited for 985-1.e.
985-40.g: identifying an embed text format which corresponds to a first location in the document, where the embed text format specifies the location of at least a portion of an object;	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose an object. <i>See</i> evidence recited for 985-36.f. Mosaic, HTML+, and Bill Janssen's postings and testimony disclose identifying an embed text format; that the embed text format corresponds to a first location in the hypermedia document; and that the embed text format specifies the location of an object. <i>See</i> evidence recited for 985-1.f.
985-40.h: identifying and locating an executable application associated with the object; and	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the browser identifies and locates an executable application associated with the object. <i>See</i> evidence recited for 985-36.g.
985-40.i: automatically invoking the executable application, in response to the identifying of the embed text format, in order to enable an end-user to directly interact with the object while the object is being displayed within a display area created at the first location within the portion of the hypermedia document being displayed in the browser-controlled window,	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose identifying an embed text format. <i>See</i> evidence recited in 985-1.f. Mosaic, HTML+, and Bill Janssen's postings and testimony disclose automatic invocation of the executable application; that the executable application displays the object; that the executable application enables direct interaction with the object; and that interaction with the object is at a first location in the hypermedia document. <i>See</i> evidence recited in 985-1.h. Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the object is displayed at a first location within a portion of the hypermedia document being displayed. <i>See</i> evidence recited for 985-24.b.

Claim Text from '985 Patent	Mosaic, HTML+, and Bill Janssen's postings and testimony
	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that a hypermedia document is displayed in a browser window. <i>See, e.g.</i> , evidence recited for 985-1.e.
985-40.j: wherein the executable application is part of a distributed application, and	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the executable application is part of a distributed application. <i>See</i> evidence recited in 985-36.i.
985-40.k: wherein at least a portion of the distributed application is for execution on the network server.	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the distributed application executes at least partially on a network server. <i>See</i> evidence recited for 985-36.j.
985-41.a: The method of claim 40 where: the information to enable comprises text formats.	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the enabling information in the file is text formats. <i>See</i> evidence recited for 985-2.a.
985-42.a: The method of claim 41 where: the text formats are HTML tags.	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the text formats are HTML tags. <i>See</i> evidence recited for 985-3.a.
985-43.a: The method of claim 40 where: the information contained in the file received comprises at least one embed text format.	Mosaic, HTML+, and Bill Janssen's postings and testimony disclose that the enabling information in the file includes an embed text format. <i>See</i> evidence recited for 985-4.a.