

Exhibit 3

Parties' Joint Claim Chart for US Patent Nos. 6,034,652 and 6,788,314¹

I. Agreed Terms

	Terms to be construed	Agreed Construction
1.	'314 claims 1, 3, 7, 10 and 13 "the content provider <u>may provide</u> scheduling instructions <u>tailored to the set of content data</u> to control at least one of the duration, sequencing and timing of the display of said image or images generated from the set of content data	The [method/system/computer readable medium] of the claims must allow the content provider to provide scheduling instructions tailored to the set of content data.
2.	'652 claim 8 "means for scheduling the display of an image or images generated from a set of content data"	FUNCTION: scheduling the display of an image or images generated from a set of content data STRUCTURE: One or more digital computers programmed to (1) determine whether sets of content data are available for display, and (2) determine if, when, and for how long an image or images generated from the set of content data will be displayed.
3.	'652 patent: 4, 5, 6, 7, 8, 11 '314 patent: 1, 2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, 15 "engaging the peripheral attention of a person in the vicinity of a display device"	engaging a part of the user's attention that is not occupied by the user's primary interaction with the apparatus
4.	'652 claim 4 "control options"	user-selectable options to control the operation of the attention manager
5.	'652 claim 4 (112/6 also) "means for controlling aspects of the operation of the system in accordance with a selected control option"	FUNCTION: controlling aspects of the operation of the system in accordance with a selected control option STRUCTURE: One or more digital computers programmed to perform one or more of the following actions in response to a request from the user: (1) terminate the operation of the attention manager, (2) begin display of the next scheduled set of content data, (3) begin display of the previous scheduled set of content data, (4) remove a set of content data from the display schedule, (5) prevent a set of content data from being displayed until it has been updated, (6) modify the display schedule in response to a user's identified satisfaction with a set of content

¹ Defendants provide herein preliminary claim constructions and identification of purported "structure" disclosed in the specification of the '652 patent and/or '314 patent for certain claim terms. By providing these constructions for any claim term or identifying a purported structure for any means-plus-function term, Defendants do not concede that any such claim or claim term satisfies the definiteness requirements of 35 U.S.C. § 112 and expressly reserve the right to challenge any claim on that basis. Defendants reserve the right to modify/remove any of the evidence cited herein.

Terms to be construed	Agreed Construction
	data, (7) establish a link with an information source, (8) provide an overview of all of the content data available for display by the attention manager, (9) maintain display of the current set of content data, or (10) remove the control option interface and structural equivalents.
6. '652 claim 4 "means for selecting a displayed control option"	FUNCTION: selecting a displayed control option STRUCTURE: A keyboard, mouse, touch screen, or voice recognition system, and structural equivalents.
7. '652 claim 4 (also 112/6) "means for displaying one or more control options with the display device while the means for selectively displaying is operating"	FUNCTION: displaying one or more control options with the display device while the means for selectively displaying is operating STRUCTURE: One or more digital computers programmed to provide a dialog box that includes a list of one or more of the following control options: perform at least one of steps 501 (Want to display the next set of content data in the schedule?), 502 (Want to display the previous set of content data in the schedule?), 503 (Want to remove the current set of content data from the schedule?), 504 (Want to prevent display of the current set of content data until that set of content data has been updated?), and 505 (Want to specify a satisfaction level for the current set of content data?), and structural equivalents.
8. '314 claim 7 (also 112/6) "data acquisition apparatus that enables acquisition of a set of content data"	The parties agree that this term should be construed as a means-plus-function term pursuant to 35 U.S.C. § 112, ¶ 6 and that such construction should be consistent with the construction of the disputed term "means for acquiring a set of content data from a content providing system" in claim 4 of the '652 patent (see Disputed Term # 8).
9. '314 claim 7 display apparatus that effects selective display on the display device, in an unobtrusive manner that does not distract a user of the display device or an apparatus associated with the display device from a primary interaction with the display device or apparatus, of an image or images generated from the set of content data	The parties agree that this term should be construed as a means-plus-function term pursuant to 35 U.S.C. § 112, ¶ 6 and that such construction should be consistent with the construction of the disputed term "means for selectively displaying" term in claim 4 of the '652 patent (see Disputed Term #4).

II. Disputed Terms

	Claim Language (Disputed Terms <u>Underlined</u> where only portion being construed)	Plaintiff's Proposed Construction and Evidence in Support ²	Defendants' Proposed Construction and Evidence in Support
1.	<p>'652 claim 4, 5, 6, 7, 8, 11 and '314 claims 10 and 13 <u>"selectively displaying on the display device"</u> . . . an image or images generated from the set of content data"</p> <p>'314 claim 1 and 3 <u>"selectively display"</u> . . . an image or images generated from a set of content data"</p> <p>'314 claim 7 <u>"selective display on the display device"</u> . . . of an image or images generated from the set of content data"</p>	<p>[choose/choosing] and display[ing] one or more "images generated from the set of content data"</p> <p><u>Extrinsic Evidence:</u></p> <p>select: "to choose or pick out" (<i>Webster's New World Dictionary</i> (Victoria Neufeldt, ed., Pocket Books Press, 1995))</p> <p>selective: "Having the quality or faculty of selecting; characterized by choice or selection." . . . "Applied to physical processes or agencies which result in the selection of some elements or factors and the exclusion of others." (<i>The Oxford English Dictionary</i> (2d ed. 1989))</p> <p><u>Intrinsic Evidence:</u></p> <p><u>Specification:</u></p> <p>"Once one or more sets of content data has been acquired, a content display system integrates scheduling information for all sets of content data to produce a schedule according to which an image or images corresponding to the sets of content data are displayed on a display device associated with the content display system." ('652, 2:28-34) ('314, 37-43)</p> <p>A set or sets of instructions for enabling a display device to selectively display an image or images generated from a set of</p>	<p>[choosing/choose] and render[ing] on a display one or more images from within the "set of content data"</p> <p><u>Extrinsic Evidence:</u></p> <p>select: "to choose or pick out" (<i>Webster's New World Dictionary</i> (Victoria Neufeldt, ed., Pocket Books Press, 1995))</p> <p>selective: "Having the quality or faculty of selecting; characterized by choice or selection." . . . "Applied to physical processes or agencies which result in the selection of some elements or factors and the exclusion of others." (<i>The Oxford English Dictionary</i> (2d ed. 1989))</p> <p><u>Intrinsic Evidence:</u></p> <p><u>Specification:</u></p> <p>"Once one or more sets of content data has been acquired, a content display system integrates scheduling information for all sets of content data to produce a schedule according to which an image or images corresponding to the sets of content data are displayed on a display device associated with the content display system." ('652, 2:28-34) ('314, 2:37-43.)</p> <p>A set or sets of instructions for enabling a display device to selectively display an image or images generated from a set of content data are also made available for use by the content display systems. Typically, the instructions enable images generated from content data to be displayed automatically, without user</p>

² In addition to the intrinsic and extrinsic evidence cited herein, the parties reserve the right to identify (1) all claims in which any term appears as support for their constructions and (2) all intrinsic and extrinsic evidence for each claim term cited by the other side.

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	<p>content data are also made available for use by the content display systems. Typically, the instructions enable images generated from content data to be displayed automatically, without user intervention, in a predetermined manner, thereby enhancing the capability of the invention to occupy the user's peripheral attention. ('652, 2:35-42) ('314, 2:44-51).</p> <p>"[E]ach set of content data can include one or more 'clips', each clip being a definable portion of the set of content data that is used to generate a particular 'image.'" ('652, 6:57-60) ('314, 6:65-7:2)</p> <p>"Once obtained, one or more images generated from the clips of one or more sets of content are displayed by a content display system." ('652, 6:67-7:2) ('314, 7:9-11)</p> <p>"Hereinafter, reference is sometimes made to 'displaying content data' or 'displaying a set of content data'; it is to be understood that this means displaying images generated using the content data or set of content data. Herein, 'content data' refers to data that is used by the attention manager to generate displays (e.g., video images or sounds, or related sequences of video images or sounds). A 'set of content data' refers to a related set of such data that is used to generate a particular display. A 'clip' refers to a definable portion of a set of content data that is used to generate a particular image. . . ." ('652, 9:48-58) ('314, 9:56-66)</p> <p>"If, in step 103, at least one set of content data is available for display, then, in the step shown in the block 104 (hereinafter referred to as step 104), the available sets of content data are schedule for display by the content display system." ('652, 10:4-8) ('314, 10:12-16)</p>	<p>intervention, in a predetermined manner, thereby enhancing the capability of the invention to occupy the user's peripheral attention. ('652, 2:35-42) ('314, 2:44-51); <i>see also</i> ('652, 3:52-59) ('314, 3:61 to 4:1.)</p> <p>"[E]ach set of content data can include one or more 'clips', each clip being a definable portion of the set of content data that is used to generate a particular 'image.'" ('652, 6:57-60) ('314, 6:65 to 7:2.)</p> <p>"Once obtained, one or more images generated from the clips of one or more sets of content are displayed by a content display system." ('652, 6:67 to 7:2) ('314, 7:9-11.)</p> <p>"Hereinafter, reference is sometimes made to 'displaying content data' or 'displaying a set of content data'; it is to be understood that this means displaying images generated using the content data or set of content data. Herein, 'content data' refers to data that is used by the attention manager to generate displays (e.g., video images or sounds, or related sequences of video images or sounds). A 'set of content data' refers to a related set of such data that is used to generate a particular display. A 'clip' refers to a definable portion of a set of content data that is used to generate a particular image. . . ." ('652, 9:48-58) ('314, 9:56-66.)</p> <p>"Returning to FIG. 1, once the sets of content data have been scheduled for display, then, in the step shown in block 105 (hereinafter referred to as step 105), a set of content data is displayed." ('652, 11:34-37) ('314, 11:43-46.)</p> <p>"If, in step 107, there are additional sets of content data to be displayed, then the method 100 returns to the step 105 and displays a set of content data in accordance with the previously determined display schedule. Steps 105, 106 and 107 are continuously performed, resulting tin the continuous display of sets of content</p>

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	<p>“Returning to FIG. 1, once the sets of content data have been scheduled for display, then, in the step shown in block 105 (hereinafter referred to as step 105), a set of content data is displayed.” (’652, 11:34-37) (’314, 11:43-46)</p> <p>“If, in step 106, operation of the attention manager has not been terminated, then, in the step show in the block 107 (hereinafter referred to as step 107), a determination is made as to whether there is an additional set of content data to be displayed.” (’652, 12:6-10) (’314, 12:15-19)</p> <p>“If, in step 107, there are additional sets of content data to be displayed, then the method 100 returns to the step 105 and displays a set of content data in accordance with the previously determined display schedule. Steps 105, 106 and 107 are continuously performed, resulting tin the continuous display of sets of content data until either the user terminates the attention manager (step 106) or there are no more sets of content data to be displayed (step 107).” (’652, 12:24-31) (’314, 12:33-40)</p> <p>“The type of content data indicates the manner in which an image or images are generated from the content data (i.e., how the bit patterns in a particular clip are transformed into an image).” (’652,17:32-35)</p> <p>“FIG 5A and 5B together are a flow chart of a method 500 that implements an attention manager according to another embodiment of the invention.” (’652, 24:59-61) (’314, 25:1-3)</p> <p>Fig. 1 – items 103-105 – “Are sets of current data available for display?”; “Schedule sets of content data.”; “Display the next set of content data in the schedule.”</p>	<p>data until either the user terminates the attention manager (step 106) or there are no more sets of content data to be displayed (step 107).” (’652, 12:24-31) (’314, 12:33-40.)</p> <p>“FIG 5A and 5B together are a flow chart of a method 500 that implements an attention manager according to another embodiment of the invention.” (’652, 24:59-61) (’314, 25:1-3.)</p> <p>Fig. 1 – items 103-105 – “Are sets of current data available for display?”; “Schedule sets of content data.”; “Display the next set of content data in the schedule.”</p> <p>Fig. 4 – item 401 “Select a set of content data for display by the attention manager.”</p> <p>Fig. 5A – items 103, 104, 521 and 105 – “Are sets of content data available for display?”; “Schedule sets of content data.”; “Identify the next set of content data in the schedule.” “Display the next set of content data in the schedule.”</p> <p>Prosecution:</p> <p>“Finally, Pirani et al. also do not teach or suggest a ‘means for selectively displaying ... an image or images generated from [a] set of content data,’ as recited in claim 19. While Pirani et al. teach that advertisements can be displayed in different ways (see, e.g., column 6, lines 3-10), Pirani et al. do not teach or suggest that the manner in which advertisements are displayed during operation of particular software can be varied once those advertisements have been integrated into the software. In a system as in Claim 19, on the other hand, variation in the display of images generated from content data that has been acquired by the system is possible and is provided by the ‘means for selectively displaying’ (see, e.g., the description in Applicants’ specification at page 19, line 27 to page 22, line 27 of scheduling sets of content data for display by a</p>

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	<p>Fig. 4 – item 401 “Select a set of content data for display by the attention manager.”</p> <p>Fig. 5A – items 103, 104, 521 and 105 – “Are sets of content data available for display?”; “Schedule sets of content data.”; “Identify the next set of content data in the schedule.” “Display the next set of content data in the schedule.”</p>	<p>content display system, and the particular discussions of content display system scheduling instructions in Applicants' specification at page 54, line 11 to page 55, line 9 and content data scheduling instructions in Applicants' specification at page 34, line 2 to page 35, line 1). Thus, a system as in Claim 19 can provide a more flexible and varied display than is possible with a system based upon the teaching of Pirani et al.” ('652 Resp. 7/3/98 at pp. 8-9.)</p> <p><i>See also</i> ('652 Resp. 7/3/98 at pp. 6-7.)</p> <p><i>See also</i> ('652 Resp. 6/10/99 second Piernot Declaration at ¶¶ 2, 5).</p>
<p>2. All Claims</p> <p>“images generated from a set of content data”</p>	<p>audio and/or visual output that is generated from data within a set of related data that can be used to generate a display of audio and/or visual output</p> <p><u>Extrinsic Evidence</u></p> <p><u>Intrinsic Evidence</u></p> <p>“Moreover, each set of content data can include one or more ‘clips,’ each clip being a definable portion of the set of content data that is used to generate a particular ‘image.’ The term ‘image’ is used broadly here to mean any sensory stimulus that is produced from the set of content data, including, for example, visual imagery (e.g., moving or still pictures, text, or numerical information) and audio imagery (i.e., sounds).” ‘652 Patent at 6:52-64.</p> <p>“As indicated above, the sets of content data represent sensory data, i.e., data that can be used to generate images as defined above. Typically, the sensory data is either video or audio data. The kinds of content data that can be used with</p>	<p>audio and/or visual output defined by the content provider within a collection of related data</p> <p><u>Extrinsic Evidence:</u></p> <p>set: “a group of persons or things of the same kind of sharing a common characteristic and usu. Classed or associated together.” (<i>Webster's II New Riverside Dictionary for Home, School, Office</i> (1988))</p> <p><u>Intrinsic Evidence:</u></p> <p><i>Specification:</i></p> <p>“Each package file includes a reference to the set of content data 350 (e.g., a network address) to which that package file corresponds.” ('652, 21:33-35) ('314, 21:39-41.)</p> <p>“The information is embodied by one or more sets of content data. Each set of content data is formulated by a content provider and made available by a corresponding content providing system for use with the attention manager.” ('652, 6:52-55) ('314, 6:61-64.)</p>

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	<p>the attention manager are virtually limitless. For example, video data that might be used as content data includes data that can be used to generate advertisements of interest to the user, moving and still video images which can be real-time or pre-recorded (e.g., nature scenes, pictures of family members, MTV music segments, or video from a camera monitoring a specified location, such as ski slopes or a traffic intersection, for conditions at that location), financial data (e.g., stock ticker information) or news summaries. Audio data that might be used as content data includes data that can be used to generate, for example, music or news programs (e.g., radio talk shows)." '652 Patent at 7:23-38.</p> <p>A 'clip' refers to a definable portion of a set of content data that is used to generate a particular image; a set of content data can include one or more clips and, therefore, can be used to generate one or more images." '652 Patent at 9:56-60</p> <p>"As indicated above, each set of content data 350 defines a related group of data that is used to generate a particular display and includes one or more clips that each represent a definable portion of the set of content data that is used to generate a particular image." '652 Patent at 16:23-27.</p> <p>"The type of content data indicates the manner in which an image or images are generated from the content data (i.e., how the bit patterns in a particular clip are transformed into an image)." '652 Patent at 17:32-35.</p> <p>'652 File History, 6/14/1999 Declaration of Philippe Piernot, at ¶¶ 2, 5, 7 (identifying display instructions in attached exhibits); <i>see also</i> 6/14/1999 Response to Office Action at 10, 27, 28, 29.</p> <p>'652 File History, 6/14/1999 Declaration of Philippe Piernot,</p>	<p>"[T]he sets of content data represent sensory data, i.e., data that can be used to generate images as defined above. Typically, the sensory data is either video or audio data." ('652, 7:23-26) ('314, 7:33:36.)</p> <p>"[E]ach set of content data can include one or more 'clips', each clip being a definable portion of the set of content data that is used to generate a particular 'image.' The term 'image' is used broadly here to mean any sensory stimulus that is produced from the set of content data, including, for example, visual imagery (e.g., moving or still pictures, text, or numerical information) and audio imagery (i.e., sounds)." ('652, 6:57-64) ('314, 6:66 to 7:6.)</p> <p>"For example, video data that might be used as content data includes data that can be used to generate advertisements of interest to the user, moving and still video images which can be real-time or pre-recorded (e.g., nature scenes, pictures of family members, MTV music segments, or video from a camera monitoring a specified location, such as ski slopes or a traffic intersection, for conditions at that location), financial data (e.g., stock ticker information) or news summaries. Audio data that might be used as content data includes data that can be used to generate, for example, music or news programs (e.g., radio talk shows)." ('652, 7:27-38) ('314, 7:37-48.)</p> <p>"If, in step 102, an idle period is detected, then, in the step shown in the block 103 (hereinafter referred to as step 103), a determination is made as to whether there are any sets of content data available for use in generating a display. (Hereinafter, reference is sometimes made to "displaying content data" or "displaying a set of content data"; it is to be understood that this means displaying images generated using the content data or set of content data.) Herein, 'content data' refers to data that is used by the attention manager to generate displays (e.g., video images or sounds, or related sequences of video images or sounds). A 'set of content data'</p>

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	<p>at ¶¶ 2 (“The browser software included a capability that allowed a user to select an image displayed at a Web site so as to cause the content data representing the image to be transferred from a data storage device of the Web site to the content display computer and stored at a user-designated location of a non-volatile data storage device of the content display provider.”) 5 (same), 7 (same); <i>see also</i> 6/14/1999 Response to Office Action at 14-17.</p>	<p>refers to a related set of such data that is used to generate a particular display. A ‘clip’ refers to a definable portion of a set of content data that is used to generate a particular image; a set of content data can include one or more clips and, therefore, can be used to generate one or more images.” (’652, 9:44-60) (’314, 9:52 to 10:1.)</p> <p>“The content provider can also tailor the display instructions 321 to display a particular set or sets of content data. The display instructions 321 can be tailored, for example, according to the type or types of the content data. The type of content data indicates the manner in which an image or images are generated from the content data (i.e., how the bit patterns in a particular clip are transformed into an image). The type of content data is typically established as a consequence of the manner (e.g., with a particular software application program such as the Photoshop or Premiere programs produced by Adobe Systems of Mountain View, Calif.) in which a particular clip is created.” (’652, 17:29-40) (’314, 17:37-48.)</p> <p>“FIGS. 3A, 3B and 3C are schematic diagrams illustrating the functional components of the application manager 201, a content providing system 202 and a content display system 203, respectively, according to an embodiment of the invention. Each of the functional components are represented by a set of instructions and/or data. (In particular, each of the sets of instructions may include, if appropriate, data related to accomplishment of the functions associated with the set of instructions; similarly, a set of content data may include, if appropriate, instructions that enable generation of an image from the set of content data.)” (’652, 14:49-59) (’314, 14:56-66.)</p> <p>“As indicated above, each set of content data 350 defines a related group of data that is used to generate a particular display and includes one or more clips that each represent a definable portion of</p>

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		<p>the set of content data that is used to generate a particular image. The content data 350 represents sensory data and can be, for example, video or audio data. A particular set of content data 350 can be formulated in different versions that are each compatible with content display systems 203 having particular characteristics. In particular, the characteristics of the display device of a content display system 203 can affect the formulation of a set of content data 350.” (’652, 16:23-34) (’314, 16:32-43.)</p> <p>“The first part of line 7 indicates that the following describes a clip in the package file.... Line 9 specifies a network address that identifies the location of the clip.” (’652, 22:67 to 23:4) (’314, 23:9-13.)</p> <p>“Line 15 specifies the number of additional clips that are part of this package file.” (’652, 23:14-15) (’314, 23:24-25.)</p> <p><i>See Package File Example</i> (’652, 22:23-52) (’314, 22:30-60):</p>

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		<hr/> <p>Example</p> <hr/> <pre> 25 PACKAGE { Object-Id: 1 (1) Object-Type: 1 (2) Source: http://iwww.interval.com/~freiberg/ (3) Netscreen/Bookreviews/reviews.nss Name: Book Reviews: Day 1 (4) Description: (5) Update-Frequency: 720 (6) 30 } CLIP { Object-Id: 16919316 (7) Object-Type: 2 (8) Source: http://iwww.interval.com/~freiberg/ (9) Netscreen/Bookreviews/1%20Day%20Book/ bookreview-1-a1.gif 35 Name: Anger (10) Description: Book Review (11) Update-Frequency: 0 (12) View-Time: 15 (13) Followup-URL: http://www.randomhouse.com/ (14) knopE/ Linked-To-Following: 1 (15) 40 } CLIP { Object-Id: 16919384 (16) Object-Type: 2 (17) Source: http://iwww.interva1.com/~freiberg/ (18) Netscreen/Bookreviews/1%20Day%20Book/ bookreview-1-a2.gif 45 Name: Emotional Intelligence (19) Description: (20) Update-Frequency: 0 (21) View-Time: 15 (22) Followup-URL: http://www.randomhouse.com/ (23) knopE/ 50 Linked-To-Following: 0 (24) } </pre> <hr/> <p>Prosecution:</p> <p>“The ‘set of content data’ recited in Claim 1 was embodied by the content data representing an image displayed at a Web site (as also discussed in paragraph 2 of the second Piernot Declaration).” (‘652 Resp. 7/3/98 at p. 8.)</p> <p>“The browser software included a capability that allowed a user to select an image displayed at a Web site so as to cause the content</p>

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		<p>data representing the image to be transferred from a data storage device of the Web site to the content display computer and stored at a user-designated location of a non-volatile data storage device of the content display computer. In Exhibit 1, the user-designated location at which content data was stored is indicated at line 5. Line 6 caused execution of a set of instructions (see lines 23-34) that display an image or images generated from the content data.” (’652 Resp. 6/10/99 second Piernot Declaration, at pp. 1-2.)</p> <p>“In the computer program shown in Exhibit 1, sets of content data in either the JPEG format (see lines 140-148) or the GIF format (see lines 150-159) could be used to generate an image display. Lines 31-33 caused the retrieved content data to be used to generate a display of the corresponding image or images: in particular, line 32 caused execution of a computer program called DeskPicture (a commercially available shareware computer program, produced by Peirce Software, that generated a display of an image as ‘wallpaper’ on a computer display screen) that accessed a set of content data from the appropriate (previously identified; see line 5, discussed above) location on the non-volatile data storage device and produced the corresponding image display.” (’652 Resp. 6/10/99 second Piernot Declaration, at pp. 2-3.)</p> <p>“Lines 13-30 on page 2 of Exhibit 2 produced an image display from the set of content data identified in lines 5-12.” (’652 Resp. 6/10/99 second Piernot Declaration, at p. 6.)</p>
<p>3. ‘652 claim 4, 5, 6, 7, 8, 11 “in an unobtrusive manner that does not distract a user of the apparatus from a primary interaction with the apparatus”</p>	<p>during a user’s primary interaction with the apparatus and unobtrusively such that the images generated from the set of content data are displayed in addition to the display of images resulting from the user’s primary interaction</p> <p><u>Extrinsic Evidence:</u></p> <p><u>Intrinsic Evidence:</u></p>	<p>As written, this term is inherently subjective and therefore indefinite. Alternatively, this must be limited such that the images are displayed either when the attention manager [or system] detects that the user is not engaged in a primary interaction or as a background of the computer screen</p> <p><u>Extrinsic Evidence:</u></p>

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<p>‘314 all asserted claims (via claims 1, 3, 7, 10 and 13) “in an unobtrusive manner that does not distract a user of the display device or an apparatus associated with the display device from a primary interaction with the display device or apparatus”</p>	<p>“An attention manager according to the invention presents information to a person in the vicinity of a display device in a manner that engages the peripheral attention of the person. Often, the display device is part of a broader apparatus (e.g., the display device of a computer). Generally, the attention manager makes use of ‘unused capacity’ of the display device. For example, the information can be presented to the person while the apparatus (e.g., computer) is operating, but during inactive periods (i.e., when a user is not engaged in an intensive interaction with the apparatus). Or, the information can be presented to the person during active periods (i.e., when a user is engaged in an intensive interaction with the apparatus), but in an unobtrusive manner that does not distract the user from the primary interaction with the apparatus (e.g., the information is presented in areas of a display screen that are not used by displayed information associated with the primary interaction with the apparatus).” (‘652, 2:3-19)</p> <p>“According to a further aspect of the invention, the selective display of the image or images begins automatically after detection of an idle period of predetermined duration (the ‘screen saver embodiment’). This aspect can be implemented, for example, using the screen saver API (application program interface) that is part of many operating systems. According to another further aspect of the invention, the selective display of an image or images occurs while the user is engaged in a primary interaction with the apparatus, which primary interaction can result in the display of an image or images in addition to the image or images generated from the set of content data (the ‘wallpaper embodiment’).” (‘652, 3:19-31)</p> <p>“Often, the display device is part of a broader apparatus that</p>	<p><i>See</i> (Rebuttal Decl. of Dr. Maggs in Support of Def.’s Proposed Claim Constructions, ¶¶ 26-33.)</p> <p><u>Intrinsic Evidence:</u></p> <p><i>Specification:</i></p> <p>“Further, the use of ‘wallpaper’ (i.e., a pattern generated in the background portions on a computer display screen) in computer display screens has also arisen, largely one would suspect because of the aesthetic or entertainment value of the wallpaper imagery.” (‘652, 1:50-55) (‘314, 1:59-64.)</p> <p>“An attention manager according to the invention presents information to a person in the vicinity of a display device in a manner that engages the peripheral attention of the person. Often, the display device is part of a broader apparatus (e.g., the display device of a computer). Generally, the attention manager makes use of ‘unused capacity’ of the display device. For example, the information can be presented to the person while the apparatus (e.g., computer) is operating, but during inactive periods (i.e., when a user is not engaged in an intensive interaction with the apparatus). Or, the information can be presented to the person during active periods (i.e., when a user is engaged in an intensive interaction with the apparatus), but in an unobtrusive manner that does not distract the user from the primary interaction with the apparatus (e.g., the information is presented in areas of a display screen that are not used by displayed information associated with the primary interaction with the apparatus).” (‘652, 2:3-19) (‘314, 2:12-28.)</p> <p>“According to a further aspect of the invention, the selective display of the image or images begins automatically after detection of an idle period of predetermined duration (the ‘screen saver embodiment’). This aspect can be implemented, for example, using the screen saver API (application program interface) that is part of</p>

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	<p>can be utilized by a user for a primary interaction that is unrelated to the attention manager. (However, the attention manager can also be used with a display device that is not part of a broader apparatus, the user engaging in a primary interaction with the display device.) For example, the display device can be part of a computer that can be used to implement any of a number of application programs (e.g., word processing programs, computer games, spreadsheets, etc.). The person whose attention is engaged by the attention manager can be the user or another person in the vicinity of the display device. In one embodiment of the invention, the information is presented by the attention manager while a primary interaction is ongoing, but during inactive periods (i.e., when the user is not engaged in an intensive interaction with the apparatus). In another embodiment of the invention, the information is presented by the attention manager during active periods (i.e., when the user is engaged in an intensive interaction with the apparatus), but in an unobtrusive manner that does not distract the user from the primary interaction (e.g., the information is presented in areas of a display screen that are not used by displayed information associated with the primary interaction). Generally, then, an attention manager according to the invention makes use of 'unused capacity' of a display device, "unused capacity" being defined broadly to include, for example, the embodiments mentioned above, i.e., both temporal (e.g., the first-described embodiment above) and spatial (e.g., the second-described embodiment above) dimensions." ('652, 6:23-51)</p> <p>“‘Primary user interaction’ is to be construed broadly and, generally, includes any operation of the computer (or other apparatus with which the user is engaging in an interaction) other than operation that is part of the attention manager</p>	<p>many operating systems. According to another further aspect of the invention, the selective display of an image or images occurs while the user is engaged in a primary interaction with the apparatus, which primary interaction can result in the display of an image or images in addition to the image or images generated from the set of content data (the 'wallpaper embodiment')." ('652, 3:19-31) ('314, 3:28-40.)</p> <p>“Often, the display device is part of a broader apparatus that can be utilized by a user for a primary interaction that is unrelated to the attention manager. (However, the attention manager can also be used with a display device that is not part of a broader apparatus, the user engaging in a primary interaction with the display device.) For example, the display device can be part of a computer that can be used to implement any of a number of application programs (e.g., word processing programs, computer games, spreadsheets, etc.). The person whose attention is engaged by the attention manager can be the user or another person in the vicinity of the display device. In one embodiment of the invention, the information is presented by the attention manager while a primary interaction is ongoing, but during inactive periods (i.e., when the user is not engaged in an intensive interaction with the apparatus). In another embodiment of the invention, the information is presented by the attention manager during active periods (i.e., when the user is engaged in an intensive interaction with the apparatus), but in an unobtrusive manner that does not distract the user from the primary interaction (e.g., the information is presented in areas of a display screen that are not used by displayed information associated with the primary interaction). Generally, then, an attention manager according to the invention makes use of 'unused capacity' of a display device, "unused capacity" being defined broadly to include, for example, the embodiments mentioned above, i.e., both temporal (e.g., the first-described embodiment above) and spatial (e.g., the second-described embodiment above) dimensions." ('652, 6:23-51) ('314, 6:32-60.)</p>

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	<p>according to the invention. When the user is interacting with a computer, the primary user interaction includes any operation of the computer that occurs to enable or to support the performance of the function or functions that provide the basis for the user’s use of the computer. For example, the primary user interaction can be the use of any of a variety of conventional application programs (e.g., word processing programs, spreadsheet programs, personal finance programs, game programs, drawing programs, online services and Web browsers, among others). The primary user interaction can also be, for example, simply the operation of a conventional computer operating system, such as the Windows . . . or DOS operating systems produced by Microsoft . . . or the MacIntosh operating system produced by Apple Computer” (‘652, 8:14-34)</p> <p>“As indicated above, in other embodiments of the invention, the attention manager presents information to the person during active periods, but in an unobtrusive manner. In such embodiments, video content data could be presented, for example, as ‘wallpaper’ on the display screen of a video display monitor.” (‘652, 13:14-17)</p> <p>“In particular, simultaneous operation of programs must be allowed, since the attention manager operates while the primary user interaction is ongoing.” (‘652, 13:31-33)</p>	<p>“‘Primary user interaction’ is to be construed broadly and, generally, includes any operation of the computer (or other apparatus with which the user is engaging in an interaction) other than operation that is part of the attention manager according to the invention. When the user is interacting with a computer, the primary user interaction includes any operation of the computer that occurs to enable or to support the performance of the function or functions that provide the basis for the user’s use of the computer. For example, the primary user interaction can be the use of any of a variety of conventional application programs (e.g., word processing programs, spreadsheet programs, personal finance programs, game programs, drawing programs, online services and Web browsers, among others). The primary user interaction can also be, for example, simply the operation of a conventional computer operating system, such as the Windows (e.g., Windows 3.1, Windows NT or Windows 95) or DOS operating systems produced by Microsoft Corp. of Redmond, Wash. or the MacIntosh operating system produced by Apple Computer, Inc. of Cupertino, Calif., among others. While, typically, the display device produces a display as a result of the primary user interaction, this need not necessarily be the case.” (‘652, 8:14-36) (‘314, 8:23-45.)</p> <p><i>See also</i> (‘652, 8:60 to 9:2) (‘314, 9:2-11.)</p> <p><i>See also</i> (‘652, 13:11-17) (‘314, 13:19-25.)</p> <p>Prosecution:</p> <p>“Additionally, as indicated by the above-quoted section from the Judson patent, the method taught by Judson causes a computer to display information to the user during, and as part of, a primary interaction with the computer, i.e., during acquisition of information from other computers via a computer network (such as downloading web pages from other computers via the World Wide</p>

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		<p>Web). In contrast, in the system recited in Claim 1, a content display system 'selectively display[s], in an unobtrusive manner that does not distract a user of [an] apparatus from a primary interaction with the apparatus, an image or images generated from a set of content data'. This is neither taught nor suggested by Judson. The display of images in an unobtrusive manner in a system as recited in Claim 1 can be implemented by, for example, displaying images during an inactive period (e.g., when the user has not interacted with the apparatus for a predetermined period of time) of a primary interaction with the apparatus (the 'screensaver embodiment'), as described, for example, at page 3, lines 16-20, page 5, lines 30-33, and page 12, lines 16-20 of Applicants' specification. The display of images in an unobtrusive manner in a system as recited in Claim 1 can also be implemented by displaying images during an active period of a primary interaction with the apparatus, but in a manner that does not distract the user from the primary interaction (the 'wallpaper embodiment'), as described, for example, at page 3, lines 20-27, page 6, lines 2-8, and page 12, lines 20-28 of Applicants' specification. This aspect of the invention makes use of 'unused capacity' of a display device (see, e.g., page 12, lines 28-30 of Applicants' specification) and of the attention of a person in the vicinity of the display device (see, e.g., page 10, lines 11-14 of Applicants' specification). While a similar statement might be made of the method taught by Judson, it is important to note that the instant invention uses different unused capacity than that used by the method taught by Judson." ('652 Resp. 7/3/98, at pp. 13-14.)</p> <p>Non-final Office Action in Reexamination of '314 Patent (Application 95/001,577) (pp. 5, 10, 20, 25 and 30) (Examiner's explanation of how this limitation is disclosed by the screensaver in Kjorsvik):</p> <p style="text-align: center;">As to <u>claim 1</u>, Kjorsvik discloses a method for engaging the peripheral attention of a person in the vicinity of a</p>

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		<p>display device, comprising the steps of:</p> <p><u>(The presentations are initiated for each PC in the network following a selected amount of time during which each PC has been in an 'on' state but has not been in use. col. 2:15-17. These presentations in effect replace the conventional screen saver. but in addition, provide, information in visual form which is intended to be beneficial to the use of the PC col. 2: 17-20)</u></p> <p style="text-align: center;">* * * *</p> <p>in an unobtrusive manner that does not distract a user of the display device (<i>monitor</i>) from a primary interaction with the display device (<i>monitor</i>),</p> <p><u>(The presentations are initiated for each PC in the network following a selected amount of time during which the PC has been in an 'on' state but has not been in use. col. 2:13-16)</u></p> <p>(Non-final Office Action Application 95/001,577 at p. 5 (emphasis in original)).</p>
<p>4. '652 claims 4, 5, 6, 7, 8, 11 means for selectively displaying on the display device, in an unobtrusive manner that does not distract a user of the apparatus from a primary interaction with the apparatus, an image or images generated</p>	<p>FUNCTION: Selectively displaying an image or images generated from the set of content data on the display device in an unobtrusive manner that does not distract a user of the apparatus from a primary interaction with the apparatus.</p> <p>STRUCTURE: One or more digital computers programmed to perform at least steps 521 (identify the next set of content data in the schedule) and 105 (display the next set of content data in the schedule in an unobtrusive manner that does not distract a user of the apparatus from a primary interaction</p>	<p>As set forth above, this term includes a phrase that is indefinite within the recited function; thus this term is indefinite.</p> <p>Function: "selectively displaying on the display device, in an unobtrusive manner that does not distract a user of the apparatus from a primary interaction with the apparatus, an image or images generated from the set of content data" [as construed herein]</p> <p>To the extent there is any structure disclosed that could fulfill the recited function, it is:</p>

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<p>from the set of content data;</p>	<p>with the apparatus) of Figs. 1 and 5</p> <p><u>Extrinsic Evidence:</u> Declaration of William Henry Mangione-Smith</p> <p><u>Intrinsic Evidence:</u> “A set or sets of instructions for enabling a display device to selectively display an image or images generated from a set of content data are also made available for use by the content display systems. Typically, the instructions enable images generated from content data to be displayed automatically, without user intervention, in a predetermined manner, thereby enhancing the capability of the invention to occupy the user's peripheral attention.” ‘652 Patent at 2:35-42; <i>see also</i> 7:8-16.</p> <p>“If, in step 107, there are additional sets of content data to be displayed, then the method 100 returns to the step 105 and displays a set of content data in accordance with the previously determined display schedule. Steps 105, 106 and 107 are continuously performed, resulting in the continuous display of sets of content data, until either the user terminates the attention manager (step 106) or there are no more sets of content data to be displayed (step 107).” ‘652 Patent at 12:24-32.</p> <p>“Like the method 100 (FIG. 1), the method 500 is performed by a content display system 203 according to the invention which can be implemented, for example, using a digital computer that includes a display device and that is programmed to perform the functions of method 500, as described below. Below, the method 500 is described as implemented on such a digital computer, though the method 500 could be implemented on other apparatus. Steps in the method 500 that are the same as steps in the method 100 are</p>	<p><u>Structure:</u> A conventional digital computer programmed with a screen saver application program, activated by the detection of an idle period, or a wallpaper application program, that “selectively displays ... image or images generated from the set of content data” [as construed herein]</p> <p><u>Extrinsic Evidence:</u> <i>See</i> (Rebuttal Decl. of Dr. Maggs in Support of Def.'s Proposed Claim Constructions, ¶¶ 26-33.)</p> <p><u>Intrinsic Evidence:</u> <u>Specification:</u> See support for terms #1 (“selectively display[ing] ...”) and #3 (“in an unobtrusive manner ...”) above.</p> <p>“Detection of an idle period as the basis for beginning operation of the attention manager is an indirect activation of the attention manager. In an alternative embodiment, step 102 of the method 100 is modified so that the attention manager is activated directly by the user. In other words, step 102 would consist of waiting for explicit direction from the user to begin operation of the attention manager.” (‘652, 9:22-28.)</p> <p>“An attention manager according to the invention presents information to a person in the vicinity of a display device in a manner that engages the peripheral attention of the person. Often, the display device is part of a broader apparatus (e.g., the display device of a computer). Generally, the attention manager makes use of ‘unused capacity’ of the display device. For example, the information can be presented to the person while the apparatus (e.g., computer) is operating, but during inactive periods (i.e., when a user is not engaged in an intensive interaction with the apparatus).</p>

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	<p>shown by like-numbered blocks. Generally, the method 500 differs from the method 100 in that the method 500 provides a number of control options that enable the user to effect particular types of control of the attention manager.” ‘652 Patent at 24:61-25:7.</p> <p>“Or, the information can be presented to the person during active periods (i.e., when a user is engaged in an intensive interaction with the apparatus), but in an unobtrusive manner that does not distract the user from the primary interaction with the apparatus (e.g., the information is presented in areas of a display screen that are not used by displayed information associated with the primary interaction with the apparatus).” ‘652 Patent at 2:15-19.</p> <p>“According to another further aspect of the invention, the selective display of an image or images occurs while the user is engaged in a primary interaction with the apparatus, which primary interaction can result in the display of an image or images in addition to the image or images generated from the set of content data (the ‘wallpaper embodiment’).” 3:25-31.</p> <p>“‘Primary user interaction’ is to be construed broadly and, generally, includes any operation of the computer (or other apparatus with which the user is engaging in an interaction) other than operation that is part of the attention manager according to the invention. When the user is interacting with a computer, the primary user interaction includes any operation of the computer that occurs to enable or to support the performance of the function or functions that provide the basis for the user’s use of the computer. For example, the primary user interaction can be the use of any of a variety of conventional application programs (e.g., word processing programs, spreadsheet programs, personal finance programs,</p>	<p>Or, the information can be presented to the person during active periods (i.e., when a user is engaged in an intensive interaction with the apparatus), but in an unobtrusive manner that does not distract the user from the primary interaction with the apparatus (e.g., the information is presented in areas of a display screen that are not used by displayed information associated with the primary interaction with the apparatus).” (‘652, 2:3-19.)</p> <p>“A set or sets of instructions for enabling a display device to selectively display an image or images generated from a set of content data are also made available for use by the content display systems. Typically, the instructions enable images generated from content data to be displayed automatically, without user intervention, in a predetermined manner, thereby enhancing the capability of the invention to occupy the user’s peripheral attention.” (‘652, 2:35-42.)</p> <p>“According to a further aspect of the invention, the selective display of the image or images begins automatically after detection of an idle period of predetermined duration (the ‘screen saver embodiment’). This aspect can be implemented, for example, using the screen saver API (application program interface) that is part of many operating systems. According to another further aspect of the invention, the selective display of an image or images occurs while the user is engaged in a primary interaction with the apparatus, which primary interaction can result in the display of an image or images in addition to the image or images generated from the set of content data (the ‘wallpaper embodiment’).” (‘652, 3:19-31.)</p> <p>“Often, the display device is part of a broader apparatus that can be utilized by a user for a primary interaction that is unrelated to the attention manager.... In one embodiment of the invention, the information is presented by the attention manager while a primary interaction is ongoing, but during inactive periods (i.e., when the user is not engaged in an intensive interaction with the apparatus).</p>

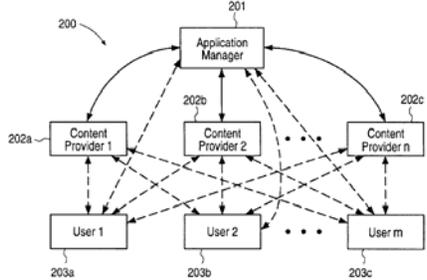
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	<p>game programs, drawing programs, online services and Web browsers, among others). The primary user interaction can also be, for example, simply the operation of a conventional computer operating system, such as the Windows . . . or DOS operating systems produced by Microsoft . . . or the MacIntosh operating system produced by Apple Computer” 8:14-34</p> <p>“As indicated above, in other embodiments of the invention, the attention manager presents information to the person during active periods, but in an unobtrusive manner. In such embodiments, video content data could be presented, for example, as ‘wallpaper’ on the display screen of a video display monitor.” 13:14-17.</p> <p>“In particular, simultaneous operation of programs must be allowed, since the attention manager operates while the primary user interaction is ongoing.” 13:31-33</p>	<p>In another embodiment of the invention, the information is presented by the attention manager during active periods (i.e., when the user is engaged in an intensive interaction with the apparatus), but in an unobtrusive manner that does not distract the user from the primary interaction (e.g., the information is presented in areas of a display screen that are not used by displayed information associated with the primary interaction). Generally, then, an attention manager according to the invention makes use of ‘unused capacity’ of a display device, ‘unused capacity’ being defined broadly to include, for example, the embodiments mentioned above, i.e., both temporal (e.g., the first-described embodiment above) and spatial (e.g., the second-described embodiment above) dimensions.” (’652, 6:23-51.)</p> <p>“The application manager 201, content providing systems 202 and content display systems 203 can be implemented using appropriately programmed digital computers. Generally, the computers can be any conventional digital computers including an input device (such as a keyboard, mouse or touch screen), an output device (such as a conventional computer display monitor and/or one or more audio speakers), a processing device (such as a conventional microprocessor), a memory (such as a hard disk and/or random access memory), additional conventional devices necessary to interconnect and enable communication between the above-listed devices, and communications devices (e.g., a modem) for enabling communication with other computers of the system. For example, the application manager 201 and content providing systems 202 can be implemented using conventional server computers, while the content display systems 203 can be implemented using conventional client computers. The application manager 201, content providing system 202 and content display systems 203 could also themselves each be implemented by a client-server network of computers. Communication between the computers can be accomplished using any appropriate communication transmission lines, such as conventional telephone</p>

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		<p>lines, or high speed data transmission systems such as T1, T3 or ISDN. The communication can be managed using any appropriate conventional networking methods (e.g., computer programs and protocols) and apparatus, as known by those skilled in the art. In particular, as described further below, the computers are programmed to enable the content display systems 203 to communicate with the content providing systems 202 and application manager 201 even without direct action by the user. In addition to being programmed to enable networking, each of the computers is also appropriately programmed, as described above and below, to perform the functions of the application manager 201, content providing systems 202 and content display systems 203, as appropriate.” (‘652, 14:12-48.)</p> <p>“However, practically, the duration of time necessary to constitute an idle period cannot be so short that the attention manager begins operating at times that inhibit the user’s primary interaction with the computer or that distract or annoy the user. Further, the duration of time chosen, as indicated above, should be sufficiently long to indicate an extended lack of interaction with the computer, suggesting that the user is not engaged in an interaction with the computer that the user would not want to have interrupted.” (‘652, 8:60 to 9:2.)</p> <p>“As indicated above, in other embodiments of the invention, the attention manager presents information to the person during active periods, but in an unobtrusive manner. In such embodiments, video content data could be presented, for example, as “wallpaper” on the display screen of a video display monitor.” (‘652, 13:11-17.)</p> <p>“Further, the use of ‘wallpaper’ (i.e., a pattern generated in the background portions on a computer display screen) in computer display screens has also arisen, largely one would suspect because of the aesthetic or entertainment value of the wallpaper imagery.” (‘652, 1:50-55.)</p>

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		<p>Prosecution:</p> <p>“Additionally, as indicated by the above-quoted section from the Judson patent, the method taught by Judson causes a computer to display information to the user during, and as part of, a primary interaction with the computer, i.e., during acquisition of information from other computers via a computer network (such as downloading web pages from other computers via the World Wide Web). In contrast, in the system recited in Claim 1, a content display system ‘selectively display[s], in an unobtrusive manner that does not distract a user of [an] apparatus from a primary interaction with the apparatus, an image or images generated from a set of content data’. This is neither taught nor suggested by Judson. The display of images in an unobtrusive manner in a system as recited in Claim 1 can be implemented by, for example, displaying images during an inactive period (e.g., when the user has not interacted with the apparatus for a predetermined period of time) of a primary interaction with the apparatus (the ‘screensaver embodiment’), as described, for example, at page 3, lines 16-20, page 5, lines 30-33, and page 12, lines 16-20 of Applicants' specification. The display of images in an unobtrusive manner in a system as recited in Claim 1 can also be implemented by displaying images during an active period of a primary interaction with the apparatus, but in a manner that does not distract the user from the primary interaction (the ‘wallpaper embodiment’), as described, for example, at page 3, lines 20-27, page 6, lines 2-8, and page 12, lines 20-28 of Applicants' specification. This aspect of the invention makes use of ‘unused capacity’ of a display device (see, e.g., page 12, lines 28-30 of Applicants' specification) and of the attention of a person in the vicinity of the display device (see, e.g., page 10, lines 11-14 of Applicants' specification). While a similar statement might be made of the method taught by Judson, it is important to note that the instant invention uses different unused capacity than that used by the method taught by Judson.” (‘652</p>

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		<p>Resp. 7/3/98, pp. 13-14.)</p> <p>“Finally, Pirani et al. also do not teach or suggest a ‘means for selectively displaying ... an image or images generated from [a] set of content data,’ as recited in claim 19. While Pirani et al. teach that advertisements can be displayed in different ways (see, e.g., column 6, lines 3-10), Pirani et al. do not teach or suggest that the manner in which advertisements are displayed during operation of particular software can be varied once those advertisements have been integrated into the software. In a system as in Claim 19, on the other hand, variation in the display of images generated from content data that has been acquired by the system is possible and is provided by the ‘means for selectively displaying’ (see, e.g., the description in Applicants’ specification at page 19, line 27 to page 22, line 27 of scheduling sets of content data for display by a content display system, and the particular discussions of content display system scheduling instructions in Applicants’ specification at page 54, line 11 to page 55, line 9 and content data scheduling instructions in Applicants’ specification at page 34, line 2 to page 35, line 1). Thus, a system as in Claim 19 can provide a more flexible and varied display than is possible with a system based upon the teaching of Pirani et al.” (‘652 Resp. 7/3/98, pp. 8-9.)</p> <p>“In a system as in Claim 19, on the other hand, variation in the display of images generated from content data that has been acquired by the system is possible and is provided by the ‘means for selectively displaying’[.]” (‘652 Resp. 7/3/98, p. 9.)</p>
<p>5. ‘314 all claims “each content provider provides its content data to [a/the] content display system independently of each other content provider</p>	<p>no construction needed; in the alternative: each content provider provides its content data to the content display system without being influenced or controlled by any other content provider</p> <p><u>Extrinsic Evidence:</u> Webster’s New World College Dictionary, 4th ed. at 725</p>	<p>Each content provider transmits its content data to [a/the] content display system without being transmitted through, by or under the influence or control of any other content provider</p> <p><u>Extrinsic Evidence:</u> independent: Not dependent: as a (1) not subject to control by</p>

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and . . . ”	<p>(defining “independent” as “free from the influence, control, or determination of another or others”)</p> <p><u>Intrinsic Evidence:</u> ‘314 Patent File History, 10/28/2003 Amendment to the claims (deleting “directly to the display device” language and adding “independently of each other content provider” language).</p>	<p>others, (2) not affiliated with a larger controlling unit; b (1) not requiring or relying on something else, (2) not looking to others for one’s opinions or for guidance in conduct, (3) not bound by or committed to a political party . . .” (<i>Merriam-Webster's Collegiate Dictionary</i> (10th ed. 1998))</p> <p><u>Intrinsic Evidence:</u></p> <p><i>Specification:</i></p> <p>“Each set of content data is formulated by a content provider and made available for use by content display systems.... The attention manager also affords an opportunity to content providers to disseminate their information to people that are interested in receiving such information, enabling the content providers to provide better directed information dissemination, as well as providing access to the previously unused attention capacity of those interested users.” (‘314, Abstract.)</p> <p>“Each set of content data is formulated by a content provider and made available by a corresponding content providing system for use with the attention manager.” (‘314, 6:62-64.)</p> <p>“For content providers, the attention manager affords an opportunity to disseminate information to users that are interested in receiving such information, thus enabling the content providers to provide better directed information dissemination.” (‘314, 7:63-67)</p>

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		 <p style="text-align: center;">FIG. 2</p> <p>Fig. 2.</p> <p>“FIG. 2 is a block diagram of a system 200 for implementing an attention manager according to an embodiment of the invention. The system 200 includes an application manager 201, a multiplicity of content providing systems, shown as Content Providers 1 through n (content providing systems 202a , 202b and 202c are illustrated in FIG. 2), and a multiplicity of content display systems, shown as Users 1 through n (content display systems 203a , 203b and 203c are illustrated in FIG. 2). ... In FIG. 2, the solid lines indicate that communication must occur in the system 200 and the dashed lines indicate that communication may occur.” (’314, 14:1-14.)</p> <p><i>See also</i> (’314, 13:47-55.)</p> <p><i>See also</i> Fig. 4, steps 406 and 410.</p> <p><i>See also</i> (’314, 20:61-21:4.)</p> <p>Prosecution:</p> <p>“Farber teaches aggregating content from multiple content providers 150-154 at a single service node 120 located remote from the display devices 101 and connected to the display devices 101</p>

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		<p>via a network connection. Farber col. 2, line 56 – col. 3, line 10 & figure 1. The Office Action suggests (pp. 5-6) that Farber teaches sending data directly from the content providers 150-154 to the user computer 101, citing Farber col. 4 lines 8-11 and 29-31, but the cited portions of Farber merely describe alternative ways to aggregate the content providers 150-154 at the service node 120, which as noted is remote from the display devices associated with personal computers 101.” (‘314 Amendment D, 10/28/03 at 9.)</p> <p>“Reasons for Allowance. . . . The prior art of record fails to teach or suggest engaging the peripheral attention of a person in the vicinity of a display device by at least wherein each associated content provider is located in a different physical location than at least one other content provider and each content provider provides its content data to the content display system independently of each other content provider and without the content data being aggregated at a common physical location remote from the content display system prior to being provided to the content display system.” (‘314 Notice of Allowability, 1/12/04 at 2.)</p>
<p>6. ‘652 claims 15-18 (112/6 also) “user interface installation instructions for enabling provision of a user interface that allows a person to request the set of content data from the specified information source”</p>	<p>“instructions” for enabling provision of an interface that enables a person to request the set of content data from a specific source of information</p> <p><u>Intrinsic Evidence:</u> “The content data acquisition instructions can include . . . user interface installation instructions for enabling provision of a user interface that allows a person to request a set of content data from a content providing system.” ‘652 Patent at 2:63-3:3</p> <p>“The content providing systems can also provide user interface tools that allow a user of the attention manager to</p>	<p>This is a means plus function term because reciting “instructions for” merely recites the function to be performed without reciting structure to perform that function.</p> <p><u>Function:</u> to enable content providers to install a user interface in the content provider’s information environment (e.g., Web page) so that users can request sets of content data from the content provider</p> <p><u>Structure:</u> The specification merely discloses the instructions are conventional and readily available, but does not provide any further description of the steps or operations such instructions would perform</p>

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	<p>specify that they want to obtain a particular set of content data.” 652 Patent at 6:64-67.</p> <p>“Any appropriate user interface can be used for enabling a user to directly request a particular set of content data.” ‘652 Patent at 18:60-61.</p> <p>”Judson does not appear to teach or suggest ‘user interface installation instructions for enabling provision of a user interface that allows a person to request [a] set of content data from [a] specified information source,’ as recited in claim 49. Such user interface installation instructions are described in Applicants’ specification at, for example, page 32, lines 11-19, and allow content providers to provide an interface that enables sets of content data (and, perhaps, instructions for displaying an image or images generated from the content data) to be requested from the content provider.” (‘652 File History, 07/09/98 Response at 18)</p>	<p><u>Alternative if not means plus function:</u> “instructions” [as construed herein] that enable content providers to install a user interface in the content provider’s information environment (e.g., Web page) so that users can request sets of content data from the content provider</p> <p><u>Extrinsic Evidence:</u></p> <p>None.</p> <p><u>Intrinsic Evidence:</u></p> <p><i>Specification:</i></p> <p>“The content data acquisition instructions 330 can also include user interface installation instructions 333 that enable content providers to install a user interface in the information environment (e.g., Web page) of the content provider so that users can request sets of content data from the content provider. Such user interface installation instructions are conventional and readily available for use with the attention manager of the invention.” (‘652, 16:9-16.)</p> <p>“The content providing systems provide user interface tools that enable a particular set of content data to be requested.” (‘652, 2:26-28.)</p> <p>“In the step shown in the block 401 (referred to hereinafter as step 401), a set of content data is selected for display by the attention manager. Initially, in step 401, particular sets of content data are obtained as a result of direct request by the user. Any appropriate user interface can be used for enabling a user to directly request a particular set of content data. For example, Web pages on the World Wide Web could include graphical buttons for enabling users that visit the Web page to request particular sets of content data. Selection of a button on a Web page results in an indication to</p>

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		<p>the appropriate content providing system 202 that the requesting content display system 203 has requested the set of content data corresponding to the selected button to be transferred to the content display system 203. The user interface instructions 333 discussed above, that can be provided to each content providing system 202, can be used to create the user interface.” (‘652, 18:56 to 19:5.)</p> <p>“In particular, the graphical attributes of the World Wide Web would be particularly useful in enabling the provision of user interfaces that allow users to access the attention manager while visiting network sites of content providing systems.” (‘652, 13:55-60.)</p> <p>Prosecution:</p> <p>”Judson does not appear to teach or suggest ‘user interface installation instructions for enabling provision of a user interface that allows a person to request [a] set of content data from [a] specified information source,’ as recited in claim 49. Such user interface installation instructions are described in Applicants’ specification at, for example, page 32, lines 11-19, and allow content providers to provide an interface that enables sets of content data (and, perhaps, instructions for displaying an image or images generated from the content data) to be requested from the content provider.” (‘652 Resp. 7/3/98, p. 18.)</p>
<p>7. ‘652 claim 15-18 “during operation of an attention manager”</p>	<p>during the operation of a system for engaging at least a part of the user’s attention that is not occupied by the user’s primary interaction with the apparatus</p> <p><u>Intrinsic Evidence:</u> “An attention manager presents information to a person in the vicinity of a display device in a manner that engages at least the peripheral attention of the person. . . . The attention manager makes use of ‘unused capacity’ of the display device and the person’s attention” ‘652 Patent Abstract</p>	<p>During operation of a computer program that displays images to a user either when the program detects that the user is not engaged in a primary interaction or as a background of the computer screen</p> <p><u>Extrinsic Evidence:</u> None.</p> <p><u>Intrinsic Evidence:</u></p>

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	<p>“In one embodiment of the invention, the information is presented by the attention manager while a primary interaction is ongoing, but during inactive periods (i.e., when the user is not engaged in an intensive interaction with the apparatus). In another embodiment of the invention, the information is presented by the attention manager during active periods (i.e., when the user is engaged in an intensive interaction with the apparatus), but in an unobtrusive manner that does not distract the user from the primary interaction (e.g., the information is presented in areas of a display screen that are not used by displayed information associated with the primary interaction).” ‘652 Patent at 6:34-45.</p> <p>“Generally, then, the attention manager according to the invention makes use of ‘unused capacity’ of a display device, ‘unused capacity’ being broadly defined to include both, for example, the embodiments above, i.e., both temporal (e.g., the first-described embodiment above) and spatial (e.g., the second-described embodiment above).” ‘652 Patent at 6:45-51.</p> <p>“An attention manager according to the invention presents information to a person in the vicinity of a display device in a manner that engages the peripheral attention of the person. Often, the display device is part of a broader apparatus (e.g., the display device of a computer). Generally, the attention manager makes use of ‘unused capacity’ of the display device. For example, the information can be presented to the person while the apparatus (e.g., computer) is operating, but during inactive periods (i.e., when a user is not engaged in an intensive interaction with the apparatus). Or, the information can be presented to the person during active periods (i.e., when a user is engaged in an intensive interaction with the apparatus), but in an unobtrusive manner</p>	<p>Specification:</p> <p>“As shown by block 101, initially (i.e., before operation of 10 the attention manager begins), a user is engaged in a primary user interaction, e.g., a primary user interaction with a computer. Though shown in FIG. 1, the primary user interaction of block 101 does not form part of the method 100 according to the invention. “Primary user interaction” is to be construed broadly and, generally, includes any operation of the computer (or other apparatus with which the user is engaging in an interaction) other than operation that is part of the attention manager according to the invention.” (‘652, 8:9-18.)</p> <p>“The method 100 actually begins with the block 102. In the step shown in the block 102 (referred to hereinafter as step 102), a determination is made as to whether an "idle period" has occurred. Generally, as used herein, "idle period" refers to a period of time of specified duration during which a specified condition does not occur. . . . Theoretically, any duration of time can be specified to define the idle period. However, practically, the duration of time necessary to constitute an idle period cannot be so short that the attention manager begins operating at times that inhibit the user’s primary interaction with the computer or that distract or annoy the user. Further, the duration of time chosen, as indicated above, should be sufficiently long to indicate an extended lack of interaction with the computer, suggesting that the user is not engaged in an interaction with the computer that the user would not want to have interrupted.” (‘652, 8:37-9:2.)</p> <p>“Detection of an idle period as the basis for beginning operation of the attention manager is an indirect activation of the attention manager. In an alternative embodiment, step 102 of the method 100 is modified so that the attention manager is activated directly by the user. In other words, step 102 would consist of waiting for explicit direction from the user to begin operation of the attention manager.”</p>

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	<p>that does not distract the user from the primary interaction with the apparatus (e.g., the information is presented in areas of a display screen that are not used by displayed information associated with the primary interaction with the apparatus).” (‘652, 2:3-19)</p> <p>“According to a further aspect of the invention, the selective display of the image or images begins automatically after detection of an idle period of predetermined duration (the ‘screen saver embodiment’). This aspect can be implemented, for example, using the screen saver API (application program interface) that is part of many operating systems. According to another further aspect of the invention, the selective display of an image or images occurs while the user is engaged in a primary interaction with the apparatus, which primary interaction can result in the display of an image or images in addition to the image or images generated from the set of content data (the ‘wallpaper embodiment’).” (‘652, 3:19-31)</p> <p>“‘Primary user interaction’ is to be construed broadly and, generally, includes any operation of the computer (or other apparatus with which the user is engaging in an interaction) other than operation that is part of the attention manager according to the invention. When the user is interacting with a computer, the primary user interaction includes any operation of the computer that occurs to enable or to support the performance of the function or functions that provide the basis for the user’s use of the computer. For example, the primary user interaction can be the use of any of a variety of conventional application programs (e.g., word processing programs, spreadsheet programs, personal finance programs, game programs, drawing programs, online services and Web browsers, among others). The primary user interaction can also be, for example, simply the operation of a conventional</p>	<p>(‘652, 9:22-28)</p> <p>“According to one aspect of the invention, an attention manager engages the peripheral attention of a person in the vicinity of a display device of an apparatus by acquiring one or more sets of content data from a content providing system and selectively displaying on the display device, in an unobtrusive manner that does not distract a user of the apparatus from a primary interaction with the apparatus, an image or images generated from the set of content data. According to a further aspect of the invention, the selective display of the image or images begins automatically after detection of an idle period of predetermined duration (the ‘screen saver embodiment’). This aspect can be implemented, for example, using the screen saver API (application program interface) that is part of many operating systems. According to another further aspect of the invention, the selective display of an image or images occurs while the user is engaged in a primary interaction with the apparatus, which primary interaction can result in the display of an image or images in addition to the image or images generated from the set of content data (the ‘wallpaper embodiment’). If multitasking is allowed by the apparatus (e.g., by the computer operating system) with which the attention manager is used, the attention manager can be implemented so that, when operation of the attention manager is terminated, the user is returned to the state of the primary interaction that existed when operation of the attention manager began.” (‘652, 3:11-37.)</p> <p>“Generally, the attention manager makes use of "unused capacity" of the display device. For example, the information can be presented to the person while the apparatus (e.g., computer) is operating, but during inactive periods (i.e., when a user is not engaged in an intensive interaction with the apparatus). Or, the information can be presented to the person during active periods (i.e., when a user is engaged in an intensive interaction with the apparatus), but in an unobtrusive manner that does not distract the user from the primary</p>

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	<p>computer operating system, such as the Windows . . . or DOS operating systems produced by Microsoft . . . or the MacIntosh operating system produced by Apple Computer" ('652, 8:14-34)</p> <p>"As indicated above, in other embodiments of the invention, the attention manager presents information to the person during active periods, but in an unobtrusive manner. In such embodiments, video content data could be presented, for example, as 'wallpaper' on the display screen of a video display monitor." ('652, 13:14-17)</p>	<p>interaction with the apparatus (e.g., the information is presented in areas of a display screen that are not used by displayed information associated with the primary interaction with the apparatus)." ('652, 2:7-19.)</p> <p>"Generally, then, an attention manager according to the invention makes use of "unused capacity" of a display device, "unused capacity" being defined broadly to include, for example, the embodiments mentioned above, i.e., both temporal (e.g., the first-described embodiment above) and spatial (e.g., the second-described embodiment above) dimensions." ('652, 6:45-51.)</p> <p>"The attention manager according to the invention is useful both to users of the attention manager and to content providers. For users, the attention manager provides information to a user in which the user has expressed an interest. In particular, the attention manager provides information to a user that the user might not otherwise expend adequate energy to obtain. Additionally, the information is presented to the user in a manner that uses portions of the user's attention capacity that may otherwise be filled with extraneous information." ('652, 7:39-48)</p> <p>"FIG. 1 is a flow chart of a method 100 that implements an attention manager according to an embodiment of the invention. The method 100 is performed by a content display system according to the invention." ('652, 7:66 to 8:2.)</p> <p>"After a set of content data has been displayed, then, in the step shown in the block 106 (hereinafter referred to as step 106), a determination is made as to whether operation of the attention manager has been terminated. Generally, operation of the attention manager can be terminated either directly or indirectly. Indirect termination of operation of the attention manager can be effected by,</p>

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		<p>for example, causing operation of the attention manager to terminate when the specified condition (the non-occurrence of which is used to signal an idle period) occurs. For example, the attention manager can be terminated if the user makes an input to the computer using an input device, e.g., strikes a key on a keyboard, clicks a mouse, presses on a touch-sensitive area of a touchscreen or issues a voice command. ... In contrast to indirect termination, direct termination of operation of the attention manager can be effected by, for example, causing operation of the attention manager to terminate when the user selects a control option that specifies such termination, as described in more detail below with respect to FIGS 5A, 5B and 6.” (‘652, 11:42-67.)</p> <p>“If, in step 106, operation of the attention manager has been terminated, then the primary user interaction begins again (block 101). The method 100 then begins executing the step 102 again, checking for the occurrence of an idle period.” (‘652, 12:1-5.)</p> <p><i>See also</i> (‘652 5:11-32)</p> <p><i>See also</i> (‘652, 2:3-5)</p>
<p>8. ‘652 claim 4 “means for acquiring a set of content data from a content providing system”</p>	<p>FUNCTION: acquiring a set of content data from a content providing system</p> <p>STRUCTURE: A digital computer programmed to perform at least the following steps: (1) providing a user with an interface to directly request a particular set of content data, (2) indicating to the content provider the particular set of content data requested by the user, and (3) obtaining the particular set(s) of content data requested by the user at the content display system.</p> <p><u>Extrinsic Evidence:</u></p>	<p><u>Function:</u> acquiring a set of content data from a content providing system</p> <p><u>Structure:</u> A digital computer connected to a content providing system via a network and programmed to perform the steps described in connection with 401-406 of FIG. 4, namely: (1) providing a user with an interface to directly request a particular set of content data, (2) indicating to the content provider the particular set of content data requested by the user, (3) receiving a set of instructions at the content display system that identify the site from which the set of content data is to be acquired, (4) downloading the particular set(s) of content data requested by the user at the content display system.</p>

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	<p>Declaration of William Henry Mangione-Smith</p> <p>Webster’s New World College Dictionary, 4th ed. at 12 (defining “acquire” as “to come to have as one’s own; get possession of”)</p> <p><u>Intrinsic Evidence:</u> “FIG. 4 is a flow chart of a method 400 according to the invention for acquiring and updating sets of content data, i.e., the method 400 is an embodiment, at least in part, of the acquisition instructions 331 and content data update instructions 332 of the content data acquisition instructions 330 discussed above with respect to FIGS. 3A through 3C. In the method 400, the steps shown by blocks 402 through 407 can be implemented in the acquisition instructions 331 and the steps shown by blocks 403 through 410 can be implemented in the content data update instructions 332. Generally, the steps of the method 400 can be implemented on an appropriately programmed digital computer that is programmed to perform the functions of the method 400, as described below.” ‘652 Patent at 18:32-45.</p> <p>“As will be understood by those skilled in the art of digital computer programming for computer network communications, when the method 400 is implemented using a programmed digital computer, particular steps of method 400 could be implemented on either a content display system 203 or a content providing system 202.” ‘652 Patent at 18:49-55; <i>see also</i> 14:12-14.</p> <p>“In the step shown in the block 401 (referred to hereinafter as step 401), a set of content data is selected for display by the attention manager. Initially, in step 401, particular sets of content data are obtained as a result of direct request by the user. Any appropriate user interface can be used for enabling</p>	<p><u>Extrinsic Evidence:</u> None.</p> <p><u>Intrinsic Evidence:</u> <i>Specification:</i> “Each content providing system can provide more than one set of content data. The content providing systems provide user interface tools that enable a particular set of content data to be requested.” (‘652, 2:25-28) (‘314, 2:34-37.)</p> <p>“According to yet another aspect of the invention, a computer readable medium can be encoded with one or more computer programs for enabling acquisition of a set of content data and display of an image or images generated from the set of content data on a display device during operation of an attention manager. The instructions of the computer program can include: i) acquisition instructions for enabling acquisition of a set of content data from a specified information source” (‘652, 4:26-34) (‘314, 4:34-42.)</p> <p>“FIG. 4 is a flow chart of a method 400 according to the invention for acquiring and updating sets of content data, i.e., the method 400 is an embodiment, at least in part, of the 35 acquisition instructions 331 and content data update instructions 332 of the content data acquisition instructions 330 discussed above with respect to FIGS. 3A through 3C. In the method 400, the steps shown by blocks 402 through 407 can be implemented in the acquisition instructions 331 and the steps shown by blocks 403 through 410 can be implemented in the content data update instructions 332. Generally, the steps of the method 400 can be implemented on an appropriately programmed digital computer that is programmed to perform the</p>

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	<p>a user to directly request a particular set of content data. For example, Web pages on the World Wide Web could include graphical buttons for enabling users that visit the Web page to request particular sets of content data. Selection of a button on a Web page results in an indication to the appropriate content providing system 202 that the requesting content display system 203 has requested the set of content data corresponding to the selected button to be transferred to the content display system 203.” ‘652 Patent at 18:56-19:2.</p> <p>‘652 File History, 6/14/1999 Declaration of Philippe Piernot, at ¶¶ 2 (“The browser software included a capability that allowed a user to select an image displayed at a Web site so as to cause the content data representing the image to be transferred from a data storage device of the Web site to the content display computer and stored at a user-designated location of a non-volatile data storage device of the content display provider.”) 5 (same), 7 (same); <i>see also</i> 6/14/1999 Response to Office Action at 14-17.</p>	<p>functions of the method 400, as described below. Below, the method 400 is described as implemented on such a digital computer, though the method 400 is not limited to such an implementation. The method 400 necessitates communication between a content display system 203 and one or more content providing systems 202. As will be understood by those skilled in the art of digital computer programming for computer network communications, when the method 400 is implemented using a programmed digital computer, particular steps of the method 400 could be implemented on either a content display system 203 or a content providing system 202. (‘652, 18:32-55) (‘314, 18:40-63.)</p> <p>“In the step shown in the block 401 (referred to hereinafter as step 401), a set of content data is selected for display by the attention manager. Initially, in step 401, particular sets of content data are obtained as a result of direct request by the user. Any appropriate user interface can be used for enabling a user to directly request a particular set of content data. For example, Web pages on the World Wide Web could include graphical buttons for enabling users that visit the Web page to request particular sets of content data. Selection of a button on a Web page results in an indication to the appropriate content providing system 202 that the requesting content display system 203 has requested the set of content data corresponding to the selected button to be transferred to the content display system 203.” (‘652, 18:56 to 19:2) (‘314, 18:64 to 19:10.)</p> <p>“Selection of a set of content data in step 401 causes a set of acquisition instructions 331 to be transferred to the content display system 203. The acquisition instructions 331 include information identifying the site from which the set of content data can be obtained, as well as the site or sites from which instructions (e.g., application instructions 310, control instructions 320, content data acquisition instructions 330 and audit instruction 340) for implementing the attention manager can be obtained.” (‘652, 19:6-15) (‘314, 19:14-22.)</p>

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		<p>“Returning to FIG. 4, in the step shown in the block 406 (referred to hereinafter as step 406), the content providing system 202 provides the current set of content data 350 to the content display system 203. (In practice, the set of content data 350 can be provided before, after or simultaneously with provision of the application instructions 310.) Further, as described above, a particular set of content data 350 can exist in different versions that are each compatible with the content display system 203 to which the version of the set of content data 350 is being provided. The step 406 can include a determination as to the version or versions of the set of content data 350 that can be used by the requesting content display system 203, so that a properly formulated set of content data 350 is acquired” (‘652, 20:62 to 21:8) (‘314, 21:1-14.)</p> <p>“Each set of content obtained by a content display system 203 can be stored in a database (having any suitable structure) that is stored in a memory of the computer used to implement the content display system 203. The database can also store other information associated with each set of content data 350. This information is discussed in more detail below in the discussion of package files which can be used to convey such information from the content providing systems 202 to the content display systems 203. The package file editor mentioned above can be provided to each content providing system 202 to enable the content provider to easily create a package file for each set of content data 350 provided by that content provider.” (‘652, 21:20-32) (‘314, 21:26-38.)</p> <p>“The acquisition of content data by the content display system is described in more detail below. Here, it is sufficient to note that, over time, an attention manager can acquire any number of sets of content data that can be displayed by the content display system.” (‘652, 9:60-64) (‘314, 10:1-5.)</p>

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		<p>“If, in step 103, no sets of content data are available for display, then the primary user interaction continues (block 101). The method 100 continues executing the steps 102 and 103 at predefined time intervals, continually checking for the occurrence of an idle period and the acquisition of at least one set of content data.” (’652, 9:65 to 10:3) (’314, 10:6-11.)</p> <p>“Below, a description is given of package files that can be used for tailoring the control instructions 320 and content data acquisition instructions 330, as well identifying the location of content data.” (’652, 16:56-59) (’314, 16:65 to 17:1.)</p> <p>“The content data acquisition instructions 330--in particular, the content data update instructions 332--are also tailored by content providers as appropriate for particular sets of content data 350. In particular, the content provider can tailor the content data acquisition instructions 330 to indicate where and when to obtain an updated set of content data 350. For example, the indication of where to obtain an updated set of content data 350 can be accomplished by specifying an appropriate network address of a content providing system 202. The network addresses can be specified by, for example, a URL used to identify, for example, an HTML file, an applet (a short application program written in Java or other suitable programming language), a script based on CGI or other suitable mechanism, or any other resource (i.e., computer program or set of data).” (’652, 17:58 to 18:5) (’314, 17:66 to 18:13.)</p> <p>“The content providing systems can also provide user interface tools that allow a user of the attention manager to specify that they want to obtain a particular set of content data.” (’652, 6:64-67) (’314, 7:6-9.)</p> <p>“The application manager 201, content providing systems 202 and content display systems 203 can be implemented using</p>

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		<p>appropriately programmed digital computers.” . . . The application manager 201, content providing system 202 and content display systems 203 could also themselves each be implemented by a client-server network of computers. Communication between the computers can be accomplished using any appropriate communication transmission lines. . . . In particular, as described further below, the computers are programmed to enable the content display systems 203 to communicate with the content providing systems 202 and application manager 201 even without direct action by the user. In addition to being programmed to enable networking, each of the computers is also appropriately programmed, as described above and below, to perform the functions of the application manager 201, content providing systems 202 and content display systems 203, as appropriate.” (’652, 14:12-48) (’314, 14:19-55.)</p> <p>“In the step shown in the block 410 (referred to hereinafter as step 410), a determination is made as to whether an updated set of content data 350 is available on the content providing system 202. If an updated set of content data 350 is not available, then the step 408 begins executing again, continuing until the update schedule indicates that it is again time to check for an updated set of content data 350. If an updated set of content data 350 is available, then the method 400 returns to the step 403, and an updated set of content data 350 and, if necessary, related control instructions 320 and content data acquisition instructions 330 are provided to the content display system 203 (i.e., an appropriate package file is provided to the content display system 203). As discussed above, the content display system 203 compares the version of the package file contents stored in the database to the contents of the version of the package file being newly provided, and makes changes to the database as necessary.” (’652, 24:42-58) (’314, 24:51-67.)</p> <p><i>See also</i> (’652, 13:44-48) (’314, 13:51-55.)</p>

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		<p><i>See also</i> ('652, 14:12-48) ('314, 14:19-55.)</p> <p><i>See also</i> ('652, 16:1-16) ('314, 16:10-25.)</p> <p><i>See also</i> ('652, 21:33-35) ('314, 21:39-41.)</p> <p><i>See also</i> ('652, 21:55-58) ('314, 21:61-64.)</p> <p><i>See also</i> Package File Example ('652, 22:23-52) ('314, 22:30-60.)</p> <p>Prosecution:</p> <p>“Thus, Pirani et al. contemplate that advertisements are to be integrated into, and displayed during operation of, software that is installed on a computer via ‘conventional’ means (e.g., by installing software stored on a floppy disk or CD-ROM), not software that is obtained via a computer network. Consequently, Pirani et al. do not teach a system for use with an apparatus in which the system includes ‘means for acquiring a set of content data from a content data from a content providing system,’ as recited in Claim 19.” ('652 Resp. 7/3/98 at p. 7.)</p> <p>“‘Acquisition Instructions,’ as recited in Claim 7, were embodied by the computer program shown in Exhibit 1 together with capabilities of conventional Internet browser software (see lines 50-54 of Exhibit 1 – in particular, line 53 – and the accompanying description in paragraph 2 of the second Piernot Declaration).” ('652 Resp. 6/10/99 at p. 11.)</p> <p>“Prior to October 19, 1995, I developed a computer program, an Applescript source code listing of which is attached hereto as Exhibit 1, that, together with the capabilities of conventional Internet browser software, acquired content data from a World Wide Web site and displayed an image generated from the content data as ‘wallpaper’ on a display device of the computer (‘content</p>

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		<p>display computer’) on which the computer program was executing. The browser software included a capability that allowed a user to select an image displayed at a Web site so as to cause the content data representing the image to be transferred from a data storage device of the Web site to the content display computer and stored at a user-designated location of a non-volatile data storage device of the content display computer. In Exhibit 1, the user-designated location at which content data was stored is indicated at line 5. Line 6 caused execution of a set of instructions (see lines 23-34) that display an image or images generated from the content data. Line 29, together with lines 35-62, caused content data to be retrieved by the content display computer from an appropriate World Wide Web site. In particular, lines 39-41 identified multiple sets of content data to be retrieved (and displayed). Lines 50-54, together with lines 79-110, caused the sets of content data to be successively retrieved and stored (see, in particular, line 87).” (’652 Resp. 6/10/99 second Piernot Declaration, at pp. 1-2.)</p> <p>“A ‘means for acquiring a set of content data from a content providing system,’ as recited in claim 19, was embodied by the content display computer operating in accordance with the computer program shown in Exhibit 1 and the Internet browser software (see lines 50-54 of Exhibit 1 – in particular, line 53 – and the accompanying description in paragraph 2 of the second Piernot Declaration), together with conventional hardware and software enabling communication between the content display computer and a Web site.” (’652 Resp. 6/10/99 at pp. 14-15.)</p> <p>“The content display computer was operated in accordance with conventional software that enabled a user of the content display computer to request transfer of the computer program from the application management computer to the content display computer and installation of the computer program on the content display computer. The content display computer was additionally connected, using conventional hardware and software adapted for</p>

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		<p>such purpose, to the Internet computer network, such that the content display computer could be operated in accordance with conventional browser software to enable a user of the content display computer to select an image displayed at a Web site accessible via the Internet computer network so as to cause the content data representing the image to be transferred from a data storage device of the Web site to the content display computer and stored at a user-designated location of a non-volatile data storage device of the content display computer.” ('652 Resp. 6/10/99 second Piernot Declaration, at p. 4.)</p> <p>“In Exhibit 2, the user-designated location at which content data was stored is indicated at page 2, line 7.” ('652 Resp. 6/10/99 second Piernot Declaration, at p. 6.)</p> <p>“The actual retrieval of content data was accomplished at line 23 using an Applescript computer program called ‘fetchImages’ (which is not shown as part of Exhibit 2) that accessed the user-designated location(s) of the non-volatile data storage device of the content display computer at which content data was stored to identify the World Wide Web site(s) (identification(s), e.g., URL(s), of which were stored together with the corresponding content data) from which the content data was obtained, then caused the browser software to retrieve content data from those site(s). I developed ‘fetchImages,’ which embodied the functionality of lines 29, 30, 35-62, 63-78, 79-120 and 134-161 of the computer program shown in Exhibit 1, to enable the Macromedia Director computer program shown in Exhibit 2 to make use of the browser software to transfer set(s) of content data from Web site(s) to the content display computer.” ('652 Resp. 6/10/99 second Piernot Declaration, at p. 7.)</p>
9. ‘314 all claims “content provider”	No construction necessary; in the alternative: a system that provides a set of content data	An entity that creates “sets of content data” <u>Extrinsic Evidence:</u>

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	<p><u>Intrinsic Evidence:</u></p> <p>“Each set of content data is formulated by a content provider and made available for use by content display systems.... The attention manager also affords an opportunity to content providers to disseminate their information to people that are interested in receiving such information, enabling the content providers to provide better directed information dissemination, as well as providing access to the previously unused attention capacity of those interested users.” (’314, Abstract.)</p> <p>“The information is embodied as one or more sets of content data. The sets of content data represent sensory data; typically, the sensory data is either video or audio data. Each set of content data is formulated by a content provider and made available for use by an attention manager according to the invention. Each content providing system can provide more than one set of content data.” (’314, 2:29-35)</p> <p>’652 Patent File History, 6/14/1999 Response to Office Action, at 8 (“The content providing system recited in Claim 1 was embodied by the device or devices (e.g., computer) used to implement a Web site from which content was obtained.”), 15 (same).</p>	<p>None.</p> <p><u>Intrinsic Evidence:</u></p> <p><i>Specification:</i></p> <p>“Each set of content data is formulated by a content provider and made available for use by content display systems.... The attention manager also affords an opportunity to content providers to disseminate their information to people that are interested in receiving such information, enabling the content providers to provide better directed information dissemination, as well as providing access to the previously unused attention capacity of those interested users.” (’314, Abstract.)</p> <p>“Each set of content data is formulated by a content provider and made available for use by an attention manager according to the invention. Each content providing system can provide more than one set of content data.” (’314, 2:31-35)</p> <p>“The package file editor mentioned above can be provided to each content providing system 202 to enable the content provider to easily create a package file for each set of content data 350 provided by that content provider.” (’314, 21:34-38)</p> <p>“Each set of content data is formulated by a content provider and made available by a corresponding content providing system for use with the attention manager.” (’314, 6:62-64.)</p> <p>“The attention manager according to the invention also provides a new and useful information dissemination tool to content providers. The attention manager affords an opportunity to content providers to disseminate their information to users that are interested in receiving such information, enabling the content providers to provide better</p>

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		<p>directed information dissemination.... Additionally, the attention manager allows content providers to tailor particular aspects of the attention manager as desired by the content provider, such as the acquisition of updated sets of the content provider's content data (e.g., the frequency of such updates), the display scheduling and manner of display of the content provider's content data, and the user interface that enables users to specify acquisition of the content provider's content data.” (’314, 5:41-57.)</p> <p>“[E]ach content providing system is implemented on a content provider computer. (It is possible to have more than one content providing system on a content provider computer.) Content display systems are implemented on user computers. The content provider computers and user computers are integrated together into a network such that each user computer can communicate with one or more of the content provider computers.” (’314, 13:47-55)</p>
<p>10. ‘652 claim 15-18 (112/6 also) “display instructions for enabling display of the image or images”</p>	<p>See constructions of “instructions” and “image or images generated from a set of content data.” No additional construction necessary.</p> <p><u>Extrinsic Evidence:</u></p> <p>None</p> <p><u>Intrinsic Evidence:</u></p> <p>“According to yet another aspect of the invention, a computer readable medium can be encoded with one or more computer programs for enabling acquisition of a set of content data and display of an image or images generated from the set of content data on a display device during operation of an attention manager. The instructions of the computer program can include: i) acquisition instructions for enabling acquisition of a set of content data from a specified</p>	<p>This is a means plus function term because reciting “instructions for” merely recites the function to be performed without reciting structure to perform that function.</p> <p><u>Function:</u> to enable particular types of images to be displayed on particular types of display device</p> <p><u>Structure:</u> “instructions” [as construed herein] that enable the display of particular image(s) on a particular type of display device and are capable of being tailored by the content provider for each set of content data</p> <p><u>Alternative if not means plus function:</u> “instructions” [as construed herein] that enable the display of particular image(s) on a particular type of display device and are capable of being tailored by the content provider for each set of content data</p> <p><u>Extrinsic Evidence:</u></p>

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	<p>information source, ii) user interface installation instructions for enabling provision of a user interface that allows a person to request the set of content data from the specified information source, iii) content data scheduling instructions for providing temporal constraints on the display of the image or images generated from the set of content data, and iv) display instructions for enabling display of the image or images generated from the set of content data. The computer readable medium can also further include content data update instructions for enabling acquisition of an updated set of content data from an information source that corresponds to a previously acquired set of content data, the content data up date instructions specifying where and when to obtain the updated set of content data. The content data scheduling instructions can specify, for example, the duration of time that the image or images generated from a set of content data can be displayed, an order in which the images generated from a plurality of sets of content data are displayed, a time or times at which the image or images generated from a set of content data can or cannot be displayed, and/or constraint on the number of times that the image or images generated from a set of content data can be displayed. The display instructions can be tailored to enable display of the image or images generated from a set of content data on a display device of a particular type, or display of an image or images generated from a set of content data of a particular type.” ‘652 Patent at 4:26-59.</p> <p>“Generally, the display instructions 321 of a particular set of control instructions 320 enable display of content data on a particular type of display device (e.g., a particular type of computer video display or a particular type of audio speaker) or display of a particular type of content data.” ‘652 Patent at 15:48-52.</p>	<p>None.</p> <p><u>Intrinsic Evidence:</u></p> <p><i>Specification:</i></p> <p>“According to yet another aspect of the invention, a computer readable medium can be encoded with one or more computer programs for enabling acquisition of a set of content data and display of an image or images generated from the set of content data on a display device during operation of an attention manager. The instructions of the computer program can include: ... iv) display instructions for enabling display of the image or images generated from the set of content data. ... The display instructions can be tailored to enable display of the image or images generated from a set of content data on a display device of a particular type, or display of an image or images generated from a set of content data of a particular type.” (‘652, 4:26-59)</p> <p>“The control instructions 320 include display instructions 321 and content data scheduling instructions 322, as described in more detail below, that are typically enhanced by content providers in a particular manner that is appropriate for the content data that the content providers provide. The application manager 201 can (and typically does) store and disseminate multiple distinct sets of control instructions 320. Generally, the display instructions 321 of a particular set of control instructions 320 enable display of content data on a particular type of display device (e.g., a particular type of computer video display or a particular type of audio speaker) or display of a particular type of content data. Display instructions 321 that can be used with a particular display device are typically already developed by third parties (e.g., the maker of the display device) and are readily available. Tailoring of the display instructions 321 to display particular types of content data (such as</p>

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	<p>'652 File History, 6/14/1999 Declaration of Philippe Piernot, at ¶¶ 2, 5, 7 (identifying display instructions in attached exhibits); <i>see also</i> 6/14/1999 Response to Office Action at 10, 27, 28, 29.</p>	<p>instructions for displaying content data that is in the GIF format or the format of AutoDesk Animator FLC files) can be done by either the application manager 201 or a content provider.” ('652, 15:41-67)</p> <p>“The content display system is provided with one or more sets of display instructions to enable display of the set or sets of content data on the display device (as discussed elsewhere herein and, in particular, with respect to FIGS. 3A through 3C below).” ('652, 11:27-33)</p> <p>“The content provider can also tailor the display instructions 321 to display a particular set or sets of content data. The display instructions 321 can be tailored, for example, according to the type or types of the content data. The type of content data indicates the manner in which an image or images are generated from the content data (i.e., how the bit patterns in a particular clip are transformed into an image). The type of content data is typically established as a consequence of the manner (e.g., with a particular software application program such as the Photoshop or Premiere programs produced by Adobe Systems of Mountain View, Calif.) in which a particular clip is created. The installation instructions 313, discussed above, enable content data of different types to be obtained by the attention manager. Generally, the possible types of content data can be confined to an enumerated set of standard data types, such as the Mime data types used with the World Wide Web. As will be more readily understood from the description below, the type of content data can be specified, for example, in a field of the clip part of a package file.” ('652, 17:29-48)</p> <p>Prosecution:</p> <p>“Judson also does not teach or Suggest control instructions, including display instructions and content data scheduling instructions, as in Claim 5 (see, e.g., the description in Applicants'</p>

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		<p>specification at page 31, line 8 to page 32, line 2 and page 34, line 2 to page 35, line 21).” (‘652 Resp. 7/3/98, p. 15.)</p> <p>"[D]isplay instructions for enabling display of the image or images generated from the set of content data," as recited in Claim 49, were also embodied by the computer program shown in Exhibit 1 (see lines 30, 63-78 and 134-161 of Exhibit 1 and the accompanying description in paragraph 2 of the second Piernot Declaration)." (‘652 Resp. 7/3/98, pp. 28-29)</p> <p>"Line 30 together with lines 63-78 and lines 134-161, caused identification of the format of a set of content data and display of the set of content data in accordance with the identified format. In the computer program shown in Exhibit 1, sets of content data in either the JPEG format (see lines 140-148) or the GIF format (see lines 150-159) could be used to generate an image display." (‘652 Resp. 6/10/99 second Piernot Declaration, at p. 2.)</p>
<p>11. ‘652, claims 15, 17, 18 (also 112/6) “content data scheduling instructions for providing temporal constraints on the display of the image or images generated from the set of content data”</p>	<p>“instructions” that affect the duration, order, timing, and/or frequency of the display of the “image or images generated from the set of content data”</p> <p><u>Extrinsic Evidence:</u> temporal: of, pertaining to, or limited by time. (<i>Webster’s II New Riverside Dictionary for Home, School, Office</i> (1988))</p> <p><u>Intrinsic Evidence:</u> “According to yet another aspect of the invention, a computer readable medium can be encoded with one or more computer programs for enabling acquisition of a set of content data and display of an image or images generated from the set of content data on a display device during operation of an attention manager. The instructions of the computer program can include: i) acquisition instructions for</p>	<p>This is a means plus function term because reciting “instructions for” merely recites the function to be performed without reciting structure to perform that function.</p> <p><u>Function:</u> to enable the content provider to specify the time or times at which the image or images generated from a set of content data can or cannot be displayed</p> <p><u>Structure:</u> a file, capable of being tailored by a content provider that specifies the time or times at which the image or images generated from a set of content data can or cannot be displayed.</p> <p><u>Alternative if not means plus function:</u> a file, capable of being tailored by a content provider, that specifies the time or times at which the image or images generated from a set of content data can or cannot be displayed.</p>

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	<p>enabling acquisition of a set of content data from a specified information source, ii) user interface installation instructions for enabling provision of a user interface that allows a person to request the set of content data from the specified information source, iii) content data scheduling instructions for providing temporal constraints on the display of the image or images generated from the set of content data, and iv) display instructions for enabling display of the image or images generated from the set of content data. The computer readable medium can also further include content data update instructions for enabling acquisition of an updated set of content data from an information source that corresponds to a previously acquired set of content data, the content data up date instructions specifying where and when to obtain the updated set of content data. The content data scheduling instructions can specify, for example, the duration of time that the image or images generated from a set of content data can be displayed, an order in which the images generated from a plurality of sets of content data are displayed, a time or times at which the image or images generated from a set of content data can or cannot be displayed, and/or constraint on the number of times that the image or images generated from a set of content data can be displayed. The display instructions can be tailored to enable display of the image or images generated from a set of content data on a display device of a particular type, or display of an image or images generated from a set of content data of a particular type.” ‘652 Patent at 4:26-59.</p> <p>“Other scheduling rules, not directed to mediating conflicts between sets of content data, can also be used in determining a schedule. For example, any set of content data that has been initially obtained before a certain time and/or that has been last updated before a certain time (i.e., a set of content data that is ‘stale’) can be automatically precluded from</p>	<p><u>Extrinsic Evidence:</u></p> <p>temporal: of, pertaining to, or limited by time. (<i>Webster’s II New Riverside Dictionary for Home, School, Office</i> (1988))</p> <p>constraint: a restriction (<i>Webster’s II New Riverside Dictionary for Home, School, Office</i> (1988))</p> <p><u>Intrinsic Evidence:</u></p> <p><i>Specification:</i></p> <p>“The content data scheduling instructions can specify, for example, the duration of time that the image or images generated from a set of content data can be displayed, an order in which the images generated from a plurality of sets of content data are displayed, a time or times at which the image or images generated from a set of content data can or cannot be displayed, and/or constraint on the number of times that the image or images generated from a set of content data can be displayed.” (‘652, 4:47-55.)</p> <p>“This information is discussed in more detail below in the discussion of package files which can be used to convey such information from the content providing systems 202 to the content display systems 203. The package file editor mentioned above can be provided to each content providing system 202 to enable the content provider to easily create a package file for each set of content data 350 provided by that content provider.” (‘652, 21:25-32).</p> <p>“The content provider can tailor the content data scheduling instructions 322 to indicate the duration of time that a particular set of content data can be displayed (“duration instructions”). Generally, the duration instructions can be arbitrarily complex and can vary in accordance with a variety of factors, including, for example, the particular time at which the set of content data 350 is</p>

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	<p>being inserted into the display schedule. This exclusion could further be restricted to apply only to certain sets of content data or content data of certain kinds. Similarly, the frequency with which a particular set of content data appears in a display schedule can be based upon how stale the set of content data is. Scheduling rules of this kind would typically be part of the scheduling parameters provided by a content provider for a set of data (i.e., in tailored content data scheduling instructions, as discussed elsewhere herein and, in particular, with respect to FIGS. 3A through 3C below)." 11:12-26.</p> <p>"The content provider can tailor the content data scheduling instructions 322 to indicate the duration of time that a particular set of content data can be displayed ('duration instructions'). Generally, the duration instructions can be arbitrarily complex and can vary in accordance with a variety of factors, including, for example, the particular time at which the set of content data 350 is displayed after the attention manager begins operating, or the number of previous times that the set of content data 350 has been displayed during a continuous operation of the attention manager. The content provider can also tailor the content data scheduling instructions 322 to indicate an order in which the clips of a set of content data 350 are displayed, as well as the duration of the display for each clip ('sequencing instructions'). The content provider can also tailor the content data scheduling instructions 322 to indicate particular times or ranges of times at which a set of content data 350 can or cannot be displayed ('timing instructions'). These times can be absolute (e.g., a particular clock time on a particular day or days during a week, after or before a specified date) or relative (e.g., not before or after a specified duration of time since the attention manager began operation, first or not first among the sets of content data 350</p>	<p>displayed after the attention manager begins operating, or the number of previous times that the set of content data 350 has been displayed during a continuous operation of the attention manager. The content provider can also tailor the content data scheduling instructions 322 to indicate an order in which the clips of a set of content data 350 are displayed, as well as the duration of the display for each clip ("sequencing instructions"). The content provider can also tailor the content data scheduling instructions 322 to indicate particular times or ranges of times at which a set of content data 350 can or cannot be displayed ("timing instructions"). These times can be absolute (e.g., a particular clock time on a particular day, a particular day or days during a week, after or before a specified date) or relative (e.g., not before or after a specified duration of time since the attention manager began operation, first or not first among the sets of content data 350 to be displayed, not after a particular kind or set of content data 350). The content provider can also tailor the content data scheduling instructions 322 to specify a maximum number of times that the set of content data 350 can be displayed after the attention manager begins operating or a maximum number of times that the set of content data 350 can be displayed over any number of operations of the attention manager ("saturation instructions)." ('652, 16:65 to 17:28.)</p> <p>Claim 14 (separately reciting "duration instructions" 32:26-34), Claim 15 (separately reciting "sequencing instructions" 32:52-55), Claim 17 (separately reciting "saturation instructions" 33:9-13)</p> <p>"The control instructions can include. . . content data scheduling instructions for enabling temporal control of the images generated from a set or sets of content data." ('652, 2:57-63.)</p> <p>"The instructions of the computer program can include: . . . iii) content data scheduling instructions for providing temporal</p>

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	<p>to be displayed, not after a particular kind or set of content data 350). The content provider can also tailor the content data scheduling instructions 322 to specify a maximum number of times that the set of content data 350 can be displayed after the attention manager begins operating or a maximum number of times that the set of content data 350 can be displayed over any number of operations of the attention manager (‘saturation instructions’).” ‘652 Patent at 16:65-17:28.</p> <p>“‘[C]ontent data scheduling instructions for providing temporal constraints on the display of the image or images generated from the set of content data,’ as recited in Claim 49, were embodied by the computer program shown in Exhibit 2 (see, for example, lines 5-12 – in particular, the variable DisplayTime in line 5 – on page 2 of Exhibit 2, control option 304 of the display shown in Exhibit 3 and the accompanying description in the second Piernot Declaration).” (‘652 Resp. 7/9/98 at p. 27.)</p> <p>“‘[C]ontent data scheduling instructions for providing temporal constraints on the display of the image or images generated from the set of content data,’ as recited in Claim 49, were embodied by the capability of the DeskPicture computer program (which was executed as part of the execution of the computer program shown in Exhibit 1) that enabled specification of how long each set of content data was to be used to generate a display of an image (see paragraph 2 of the second Piernot Declaration).” (‘652 Resp. 7/9/98 at p. 28.)</p> <p>“[E]ach set of content data was used to generate images for a specified amount of time (which was user-specified in the computer program shown in Exhibit 2; see line 5 on page 2 of Exhibit 2 and control option 304 in Exhibit 3, discussed</p>	<p>constraints on the display of the image or images generated from the set of content data” (‘652, 4:31-39.)</p> <p>“The content data scheduling instructions 322 provide temporal constraints on the display of particular sets of content data. As stored by the application manager 201, the content data scheduling instructions 322 are usually the same for each set of control instructions 320 and provide a generic set of scheduling instructions that can be tailored by a content provider.” (‘652, 15:61-67.)</p>

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	<p>below).” (‘652 Resp. 6/14/99 second Piernot Declaration, at p. 6.)</p> <p>“The third control option (designated by the numeral 304 in Exhibit 3) enabled the user to specify the duration of time for which each set of content data would be used to generate an image display during operation of the screen saver.” (‘652 Resp. 6/14/99 second Piernot Declaration, at p. 8.)</p>	
<p>12. ‘652 claim 15 (also 112/6) “sequencing instructions that specify an order in which the images generated from a set of content data are displayed”</p>	<p>See constructions for “instructions” and “images generated from a set of content data.” No additional construction necessary.</p> <p><u>Intrinsic Evidence:</u> “According to yet another aspect of the invention, a computer readable medium can be encoded with one or more computer programs for enabling acquisition of a set of content data and display of an image or images generated from the set of content data on a display device during operation of an attention manager. The instructions of the computer program can include: i) acquisition instructions for enabling acquisition of a set of content data from a specified information source, ii) user interface installation instructions for enabling provision of a user interface that allows a person to request the set of content data from the specified information source, iii) content data scheduling instructions for providing temporal constraints on the display of the image or images generated from the set of content data, and iv) display instructions for enabling display of the image or images generated from the set of content data. The computer readable medium can also further include content data update instructions for enabling acquisition of an updated set of content data from an information source that corresponds to a previously acquired set of content data, the content data up date instructions specifying where and when to obtain the</p>	<p>This is a means plus function term because reciting “instructions for” merely recites the function to be performed without reciting structure to perform that function.</p> <p><u>Function:</u> specifying an order in which images generated from a set of content are displayed</p> <p><u>Structure:</u> “instructions” [as construed herein] that are capable of being tailored by the content provider and control the order in which the image(s) within a set of content data are displayed</p> <p><u>Alternative if not means plus function:</u> “instructions” [as construed herein] that are capable of being tailored by the content provider and control the order in which the image(s) within a set of content data are displayed</p> <p><u>Extrinsic Evidence:</u> None.</p> <p><u>Intrinsic Evidence:</u> <i>Specification:</i> “The content provider can also tailor the content data scheduling instructions 322 to indicate an order in which the clips of a set of</p>

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	<p>updated set of content data. The content data scheduling instructions can specify, for example, the duration of time that the image or images generated from a set of content data can be displayed, an order in which the images generated from a plurality of sets of content data are displayed, a time or times at which the image or images generated from a set of content data can or cannot be displayed, and/or constraint on the number of times that the image or images generated from a set of content data can be displayed. The display instructions can be tailored to enable display of the image or images generated from a set of content data on a display device of a particular type, or display of an image or images generated from a set of content data of a particular type.” ‘652 Patent at 4:26-59.</p> <p>“The content provider can tailor the content data scheduling instructions 322 to indicate the duration of time that a particular set of content data can be displayed (‘duration instructions’). Generally, the duration instructions can be arbitrarily complex and can vary in accordance with a variety of factors, including, for example, the particular time at which the set of content data 350 is displayed after the attention manager begins operating, or the number of previous times that the set of content data 350 has been displayed during a continuous operation of the attention manager. The content provider can also tailor the content data scheduling instructions 322 to indicate an order in which the clips of a set of content data 350 are displayed, as well as the duration of the display for each clip (‘sequencing instructions’). The content provider can also tailor the content data scheduling instructions 322 to indicate particular times or ranges of times at which a set of content data 350 can or cannot be displayed (‘timing instructions’). These times can be absolute (e.g., a particular clock time on a particular day or days during a week, after or before a</p>	<p>content data 350 are displayed, as well as the duration of the display for each clip (‘sequencing instructions’).” (‘652, 17:8-12)</p> <p>“According to yet another aspect of the invention, a computer readable medium can be encoded with one or more computer programs for enabling acquisition of a set of content data and display of an image or images generated from the set of content data on a display device during operation of an attention manager.... The content data scheduling instructions can specify, for example, the duration of time that the image or images generated from a set of content data can be displayed, an order in which the images generated from a plurality of sets of content data are displayed, a time or times at which the image or images generated from a set of content data can or cannot be displayed, and/or constraint on the number of times that the image or images generated from a set of content data can be displayed.” (‘652, 4:26-55)</p> <p>“The content data scheduling instructions can specify, for example, the duration of time that the image or images generated from a set of content data can be displayed, an order in which the images generated from a plurality of sets of content data are displayed, a time or times at which the image or images generated from a set of content data can or cannot be displayed, and/or constraint on the number of times that the image or images generated from a set of content data can be displayed.” (‘652, 4:47-55)</p> <p>“The control instructions 320 include display instructions 321 and content data scheduling instructions 322, as described in more detail below, that are typically enhanced by content providers in a particular manner that is appropriate for the content data that the content providers provide.” (‘652, 15:41-45)</p> <p>Prosecution:</p>

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	<p>specified date) or relative (e.g., not before or after a specified duration of time since the attention manager began operation, first or not first among the sets of content data 350 to be displayed, not after a particular kind or set of content data 350). The content provider can also tailor the content data scheduling instructions 322 to specify a maximum number of times that the set of content data 350 can be displayed after the attention manager begins operating or a maximum number of times that the set of content data 350 can be displayed over any number of operations of the attention manager (‘saturation instructions’).” ‘652 Patent at 16:65-17:28.</p>	<p>“In claim 53, at lines 15-19 the sequencing instructions can select the order of the images to be other than the original order.” (‘652 Notice of Allowability, 8/23/99)</p>
<p>13. ‘652 claim 17 (also 112/6) “saturation instructions that constrain the number of times that the image or images generated from a set of content data can be displayed”</p>	<p>See constructions of “instructions” and “image or images generated from a set of content data.” No additional construction necessary.</p> <p><u>Intrinsic Evidence:</u> “According to yet another aspect of the invention, a computer readable medium can be encoded with one or more computer programs for enabling acquisition of a set of content data and display of an image or images generated from the set of content data on a display device during operation of an attention manager. The instructions of the computer program can include: i) acquisition instructions for enabling acquisition of a set of content data from a specified information source, ii) user interface installation instructions for enabling provision of a user interface that allows a person to request the set of content data from the specified information source, iii) content data scheduling instructions for providing temporal constraints on the display of the image or images generated from the set of content data, and iv) display instructions for enabling display of the image or images generated from the set of content data. The computer readable medium can also further include content data</p>	<p>This is a means plus function term because reciting “instructions for” merely recites the function to be performed without reciting structure to perform that function.</p> <p><u>Function:</u> specifying a maximum number of times that the image or images generated from the acquired set of content data can be displayed</p> <p><u>Structure:</u> “instructions” [as construed herein] that are capable of being tailored by the content provider and specify a maximum number of times that the set of content data can be displayed</p> <p><u>Alternative if not means plus function:</u> “instructions” [as construed herein] that are capable of being tailored by the content provider and specify a maximum number of times that the set of content data can be displayed.</p> <p><u>Extrinsic Evidence:</u> None.</p> <p><u>Intrinsic Evidence:</u></p>

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	<p>update instructions for enabling acquisition of an updated set of content data from an information source that corresponds to a previously acquired set of content data, the content data up date instructions specifying where and when to obtain the updated set of content data. The content data scheduling instructions can specify, for example, the duration of time that the image or images generated from a set of content data can be displayed, an order in which the images generated from a plurality of sets of content data are displayed, a time or times at which the image or images generated from a set of content data can or cannot be displayed, and/or constraint on the number of times that the image or images generated from a set of content data can be displayed. The display instructions can be tailored to enable display of the image or images generated from a set of content data on a display device of a particular type, or display of an image or images generated from a set of content data of a particular type.” ‘652 Patent at 4:26-59.</p> <p>“The content provider can tailor the content data scheduling instructions 322 to indicate the duration of time that a particular set of content data can be displayed (‘duration instructions’). Generally, the duration instructions can be arbitrarily complex and can vary in accordance with a variety of factors, including, for example, the particular time at which the set of content data 350 is displayed after the attention manager begins operating, or the number of previous times that the set of content data 350 has been displayed during a continuous operation of the attention manager. The content provider can also tailor the content data scheduling instructions 322 to indicate an order in which the clips of a set of content data 350 are displayed, as well as the duration of the display for each clip (‘sequencing instructions’). The content provider can also tailor the content data scheduling instructions 322 to indicate</p>	<p>Specification:</p> <p>“The content data scheduling instructions can specify, for example, the duration of time that the image or images generated from a set of content data can be displayed, an order in which the images generated from a plurality of sets of content data are displayed, a time or times at which the image or images generated from a set of content data can or cannot be displayed, and/or constraint on the number of times that the image or images generated from a set of content data can be displayed.” (‘652, 4:47-55)</p> <p>“The content provider can also tailor the content data scheduling instructions 322 to specify a maximum number of times that the set of content data 350 can be displayed over any number of operations of the attention manager (‘saturation instructions’).” (‘652, 17:22-27)</p> <p>“Typically, in operation of an attention manager according to the invention, there will always be another set of content data to be displayed, since, as discussed above, the sets of content data in the display schedule are iteratively displayed until operation of the attention manager is terminated. However, this need not be the case. For example, a limit can be established on the number of times that each set of content data can be displayed, or on the total number of times that any set of content data is displayed.” (‘652, 12:10-18)</p> <p>Prosecution:</p> <p>“Judson also does not appear to teach or suggest ‘content data scheduling instructions for providing temporal constraints on the display of [an] image or images generated from [a] set of content data.,’ as also recited in Claim 49. Such content data scheduling</p>

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	<p>particular times or ranges of times at which a set of content data 350 can or cannot be displayed (‘timing instructions’). These times can be absolute (e.g., a particular clock time on a particular day or days during a week, after or before a specified date) or relative (e.g., not before or after a specified duration of time since the attention manager began operation, first or not first among the sets of content data 350 to be displayed, not after a particular kind or set of content data 350). The content provider can also tailor the content data scheduling instructions 322 to specify a maximum number of times that the set of content data 350 can be displayed after the attention manager begins operating or a maximum number of times that the set of content data 350 can be displayed over any number of operations of the attention manager (‘saturation instructions’).” ‘652 Patent at 16:65-17:28.</p> <p>Prosecution:</p> <p>“Judson also does not appear to teach or suggest ‘content data scheduling instructions for providing temporal constraints on the display of [an] image or images generated from [a] set of content data.,’ as also recited in Claim 49. Such content data scheduling instructions are described in Applicants’ specification at, for example, page 19, line 27 to page 22 line 27 and page 34, line 2 to page 35, line 1, and enable content providers to provide constraints on the manner in which the content data they provide is used for display. Such constraints may relate to, for example, ... limitations on the number of times that a set of content data can be used to generate image(s) for display” (‘652 Resp. 7/9/98, pp. 18-19)</p>	<p>instructions are described in Applicants’ specification at, for example, page 19, line 27 to page 22 line 27 and page 34, line 2 to page 35, line 1, and enable content providers to provide constraints on the manner in which the content data they provide is used for display. Such constraints may relate to, for example, ... limitations on the number of times that a set of content data can be used to generate image(s) for display” (‘652 Resp. 7/3/98, pp. 18-19)</p>
14. ‘314 claim 3 (also 112/6)	See constructions for “instructions” and “content data.” No additional construction necessary.	This is a means plus function term because reciting “instructions for” merely recites the function to be performed without reciting

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<p>“instructions for providing one or more sets of content data to a content display system associated with the display device”</p>	<p><u>Extrinsic Evidence:</u></p> <p><u>Intrinsic Evidence:</u></p> <p>“Returning to Fig. 4, in the step shown in the block 406 (referred to hereinafter as step 406), the content providing system 202 provides the current set of content data 350 to the content display system 203.” ‘652 Patent at 20:62-65.</p>	<p>structure to perform that function.</p> <p><u>Function:</u> to provide one or more sets of content data to a “content display system” associated with the “display device”</p> <p><u>Structure:</u> “instructions” [as construed herein] that cause a digital computer connected to a content display system via a network to perform at least the steps of: (1) transferring to the content display system a user interface tool that enables the user a to request a particular set of content data; (2) receiving from the content display system a user request for a particular set of content data; (3) transferring to the content display system a set of instructions that identify the site from which the data is to be acquired and (4) downloading to the content display system the particular set(s) of content data requested by the user at the content display system.</p> <p><u>Extrinsic Evidence:</u></p> <p>None.</p> <p><u>Intrinsic Evidence:</u></p> <p>See support for Disputed Term #8 (“means for acquiring a set of content data from a content providing system”) above.</p>
<p>15. ‘652 claim 18 (112/6 also) “content data update instructions for enabling acquisition of an updated set of content data from an information source that corresponds to a</p>	<p>“instructions” that specify when to obtain an updated set of content data and the location from which to obtain such updated version of the set of content data</p> <p><u>Extrinsic Evidence:</u></p> <p><u>Intrinsic Evidence:</u></p>	<p>This is a means plus function term because reciting “instructions for” merely recites the function to be performed without reciting structure to perform that function.</p> <p><u>Function:</u> to enable the content display system to acquire an updated version of a previously acquired set of content data.</p> <p><u>Structure:</u> “instructions” [as construed herein] that cause a computer to perform the operations described as step 403-410,</p>

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previously acquired set of content data”	<p>“According to yet another aspect of the invention, a computer readable medium can be encoded with one or more computer programs for enabling acquisition of a set of content data and display of an image or images generated from the set of content data on a display device during operation of an attention manager. The instructions of the computer program can include: i) acquisition instructions for enabling acquisition of a set of content data from a specified information source, ii) user interface installation instructions for enabling provision of a user interface that allows a person to request the set of content data from the specified information source, iii) content data scheduling instructions for providing temporal constraints on the display of the image or images generated from the set of content data, and iv) display instructions for enabling display of the image or images generated from the set of content data. The computer readable medium can also further include content data update instructions for enabling acquisition of an updated set of content data from an information source that corresponds to a previously acquired set of content data, the content data up date instructions specifying where and when to obtain the updated set of content data. The content data scheduling instructions can specify, for example, the duration of time that the image or images generated from a set of content data can be displayed, an order in which the images generated from a plurality of sets of content data are displayed, a time or times at which the image or images generated from a set of content data can or cannot be displayed, and/or constraint on the number of times that the image or images generated from a set of content data can be displayed. The display instructions can be tailored to enable display of the image or images generated from a set of content data on a display device of a particular type, or display of an image or images generated from a set of content data of a particular type.”</p> <p>’652 Patent at 4:26-59.</p>	<p>namely: (1) detect the version of the content display program; (2) check whether the version of the content display program is compatible with the display content and, if it is incompatible, acquire a compatible version; (3) load the display content into the content display program; (4) execute control instructions and data acquisition instructions of the content display program; (5) check whether a predetermined time to update the content data has elapsed using schedule information programmed in the display content, and using a communications daemon inserted into the startup file of the operating system; (6) if the time to update the content has elapsed, detect the location of the content provider from the scheduling information of the content data, and acquire, if available, from the content provider a updated version of a previously acquired set of content data.</p> <p>Alternative if not means plus function: “instructions” [as construed herein] that specify when to obtain an updated version of a previously acquired set of content data and the location from which to obtain such updated version of the set of content data</p> <p>Extrinsic Evidence:</p> <p>Update: (1) to search a file (such as a particular record in a computer tape) and select one entry, then perform some operation to bring the entry up-to-date; (2) in a computer, to modify an instruction so that the address numbers in it are increased by a specified amount each time the instruction is executed; (3) generally applied to computer files in which records are added, deleted, or amended to ensure that the latest information is contained in the file. (<i>Modern Dictionary of Electronics</i> (Rudolf F. Graf, ed., Newnes, 7th ed. 1999))</p> <p>Update: (1) to modify a master file with current information according to a specified procedure; (2) to apply all current changes, additions, and deletions (substitutions) to a new file; (3) to modify</p>

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	<p>“As mentioned above, the content data update instructions 332 include a description of the location of the content providing system 202 from which the updates can be obtained as well a schedule of times at which such updates should be obtained.” ‘652 Patent at 23:49-53.</p> <p>“Returning to FIG. 4, once it is determined that an update of the set of content data 350 should be obtained, then, in the step shown in the block 409 (referred to hereinafter as step 409), the location of the appropriate content providing system 202 is ascertained from the scheduling information, and that location is accessed.” ‘652 Patent at 24:36-42.</p>	<p>an instruction so that the address numbers it contains are increased by a stated amount each time the instruction is performed; (4) during the checkout period, the updating run deletes and adds programs, corrections, test data, etc., to the master program file. (<i>Computer Dictionary</i> (Charles J. Sippl, ed., 4th ed. 1985))</p> <p>“update (1) (supervisory control, data acquisition, and automatic control) The process of modifying or reestablishing data with more recent information.” (<i>The IEEE Standard Dictionary of Electrical and Electronics Terms</i> (IEEE Press, 6th ed. 1996)).</p> <p>“Computer Instruction: (2)(A) (software) A statement in a programming language, specifying an operation to be performed by a computer and the address or value of the associated operands.” (<i>The IEEE Standard Dictionary of Electrical and Electronics Terms</i> (IEEE Press, 6th ed. 1996))</p> <p><u>Intrinsic Evidence:</u></p> <p><i>Specification:</i></p> <p>“The content data acquisition instructions can include acquisition instructions for enabling the acquisition of a set of content data, content data update instructions for enabling update of a previously acquired set of content data, and user interface installation instructions for enabling provision of a user interface that allows a person to request a set of content data from a content providing system.” (‘652, 2:63-3:3)</p> <p>“The computer readable medium can also further include content data update instructions for enabling acquisition of an updated set of content data from an information source that corresponds to a previously acquired set of content data, the content data up date instructions specifying where and when to obtain the updated set of content data.” (‘652, 4:41-47)</p>

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		<p>“The content data acquisition instructions 330 include acquisition instructions 331 for enabling the initial acquisition of a set of content data and instructions for implementing the attention manager, and content data update instructions 332 for enabling update of previously obtained sets of content data and attention manager instructions. The acquisition instructions 331 and content data update instructions 332 are generic sets of instructions that can be tailored by a content provider.” (‘652, 16:1-9)</p> <p>“The content data acquisition instructions 330--in particular, the content data update instructions 332--are also tailored by content providers as appropriate for particular sets of content data 350.” (‘652, 17:58-61)</p> <p>“FIG. 4 is a flow chart of a method 400 according to the invention for acquiring and updating sets of content data, i.e., the method 400 is an embodiment, at least in part, of the acquisition instructions 331 and content data update instructions 332 of the content data acquisition instructions 330 discussed above with respect to FIGS. 3A through 3C. In the method 400, the steps shown by blocks 402 through 407 can be implemented in the acquisition instructions 331 and the steps shown by blocks 403 through 410 can be implemented in the content data update instructions 332. Generally, the steps of the method 400 can be implemented on an appropriately programmed digital computer that is programmed to perform the functions of the method 400, as described below. Below, the method 400 is described as implemented on such a digital computer, though the method 400 is not limited to such an implementation. The method 400 necessitates communication between a content display system 203 and one or more content providing systems 202. As will be understood by those skilled in the art of digital computer programming for computer network communications, when the method 400 is implemented using a programmed digital computer, particular steps of the method 400 could be implemented on either a content display system 203 or</p>

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		<p>a content providing system 202.” (‘652, 18:32-55)</p> <p>“If the content display system 203 does not have the application instructions 310, then, in the step shown in the block 405 (referred to hereinafter as step 405), the content display system 203 uses the appropriate site identification provided by the content providing system 202 to obtain a version of the application instructions 310 (typically the most current version of the application instructions 310 that is compatible with the set of content data 350 requested by the user).” (‘652, 19:27-35).</p> <p>“If the content display system 203 does have the application instructions 310 (step 402), then, in the step shown in the block 403 (referred to hereinafter as step 403), a determination is made as to which version or versions of the application instructions 310 the content display system 203 has.” (‘652, 19:45-50)</p> <p>“It is necessary, therefore, to determine whether the content display system 203 has a version of the application instructions 310 that is compatible with the type and version of the set of content data 350 being requested so that, if necessary, a compatible set of application instructions 310 can be provided to the content display system 203. In the step shown in the block 404 (referred to hereinafter as step 404), this determination is made. If the content display system 203 does not have a compatible version of the application instructions 310, then, in step 405, the content providing system 202 (or, for example, the application manager 201) provides to the content display system 203 a version of the application instructions 310 (typically the most current version) that is compatible with the requested set of content data 350.” (‘652, 20:4-18).</p> <p>“Alternatively, in step 404, a determination could be made as to whether the version of the application instructions 310 that the content display system 203 has is the most current version of a set of compatible application instructions 310. If the version is not the</p>

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		<p>current version, then the content providing system 202 provides the current version (step 405), even if the version that the content display system 202 already had is compatible with the newly acquired set of content data 350.” (‘652, 20:19-27)</p> <p>“The content data update instructions 332 can also include instructions that ascertain the current version of the application instructions 310 and, for each set of content data 350 that is incompatible with the current version of the application instructions 310, seek to obtain, at the time scheduled for an update, an updated set of content data 350 that is compatible with the current version of the application instructions 310.” (‘652, 20:43-50)</p> <p>“Returning to FIG. 4, in the step shown in the block 406 (referred to hereinafter as step 406), the content providing system 202 provides the current set of content data 350 to the content display system 203. (In practice, the set of content data 350 can be provided before, after or simultaneously with provision of the application instructions 310.) Further, as described above, a particular set of content data 350 can exist in different versions that are each compatible with the content display system 203 to which the version of the set of content data 350 is being provided. The step 406 can include a determination as to the version or versions of the set of content data 350 that can be used by the requesting content display system 203, so that a properly formulated set of content data 350 is acquired.” (‘652, 20:62-67).</p> <p>“A set of control instructions 320 and content data acquisition instruction 330 (FIGS. 3A through 3C) associated with the set of content data 350 can also be provided, as shown by the step of block 407 (referred to hereinafter as step 407). Typically, a check is made (like that for the application instructions 310 and providing similar benefits) to determine whether the content display system 203 already has a compatible (and/or current) version of the control instructions 320 and/or the content data acquisition instructions 330 associated with the set of content data 350 being obtained” (‘652,</p>

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		<p>21:9-19).</p> <p>“Returning to FIG. 4, as indicated above, when a set of content data 350 is obtained (step 406), corresponding control instructions 320 and content data acquisition instructions 330 are also obtained (step 407) if such instructions have not already been acquired by the content display system 203. In particular, content data update instructions 332 can be obtained, so that updates to the set of content data 350 and/or the associated control instructions 320 and content data acquisition instructions 330 can be obtained in the future. As mentioned above, the content data update instructions 332 include a description of the location of the content providing system 202 from which the updates can be obtained as well a schedule of times at which such updates should be obtained. (‘652, 23:40-53)</p> <p>“In the step shown in the block 408 (referred to hereinafter as step 408), a determination is made as to whether it is time to update the set of content data 350. The update schedule discussed above is used for this purpose. As long as the schedule indicates that no update need be obtained, the method 400 continues executing the step 408, thereby continuously monitoring whether an update need be obtained. The monitoring of step 408 could be implemented, for example, by a procedure that monitors the content display system computer clock and indicates that an update should be obtained when the clock time is equal to a time in the update schedule.” (23:54-65)</p> <p>“Preferably, then, at least this part of the content display system 203 is implemented on a computer that is always on, so that such cheap communications time can be utilized for obtaining updates. This can be particularly feasible if the content display system 203 is implemented on a client-server network in which at least the content data update instructions 332 are executed by a server computer which remains on at all times. If, however, the computer on which the content data update instructions 332 are executed is</p>

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		<p>turned off at a time when an update is scheduled to be retrieved, then the update can occur immediately after the next time that the computer is turned on.” (‘652, 24:9-20)</p> <p>“This aspect of the content data acquisition instructions 332 can be implemented, for example, using a communications daemon that is part of the content data update instructions 332. When the content data update instructions 332 are acquired by a content display system 203, the daemon is inserted into a startup file that is executed at the beginning of operation of the operating system of the computer with which the content display system 203 is associated. The daemon causes a connection to be made to each location from which the content data update instructions 332 indicate that an update is to be acquired. For example, if the computer uses a Windows operating system, the daemon initiates a WinSock TCP/IP connection to enable connection to be made to the locations of the updated sets of content data 350.” (‘652, 24:21-35)</p> <p>“Returning to FIG. 4, once it is determined that an update of the set of content data 350 should be obtained, then, in the step shown in the block 409 (referred to hereinafter as step 409), the location of the appropriate content providing system 202 is ascertained from the scheduling information, and that location is accessed.” (‘652, 24:36-42)</p> <p>“In the step shown in the block 410 (referred to hereinafter as step 410), a determination is made as to whether an updated set of content data 350 is available on the content providing system 202. If an updated set of content data 350 is not available, then the step 408 begins executing again, continuing until the update schedule indicates that it is again time to check for an updated set of content data 350. If an updated set of content data 350 is available, then the method 400 returns to the step 403, and an updated set of content data 350 and, if necessary, related control instructions 320 and</p>

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		content data acquisition instructions 330 are provided to the content display system 203 (i.e., an appropriate package file is provided to the content display system 203). As discussed above, the content display system 203 compares the version of the package file contents stored in the database to the contents of the version of the package file being newly provided, and makes changes to the database as necessary.” (’652, 24:42-58)
16. ’652 claim 18 (also 112/6) “content display system scheduling instructions for scheduling the display of the image or images on the display device”	<p>“instructions” that implement a display schedule by determining which image or images generated from the “set(s) of content data” will be displayed and mediating conflicts between the display requirements of multiple “sets of content data”</p> <p><u>Extrinsic Evidence:</u></p> <p><u>Intrinsic Evidence:</u> “The content display system integrates scheduling information associated with the sets of content data to produce a schedule according to which the images corresponding to the sets of content data are displayed for a particular user of the attention manager.” ’652 Patent at 7:2-7.</p> <p>“If, in step 103, at least one set of content data is available for display, then, in the step shown in block 104 (hereinafter referred to as step 104), the available sets of content data are scheduled for display by the content display system. (Alternatively, in other embodiments of the invention, scheduling the sets of content data can occur before the method 100 begins. Such scheduling might be implemented, for example, so that each time a new set of content data is received by the content display system, the schedule is</p>	<p>This is a means plus function term because reciting “instructions for” merely recites the function to be performed without reciting structure to perform that function.</p> <p><u>Function:</u> “determining the display order and display duration for each available set of content data used to generate an image or images on the display device”</p> <p><u>Structure:</u> “instructions” [as construed herein] that cause a computer to check for available sets of content data and use a set of rules to prioritize the display of all available sets of content data and set the display duration of each available set of content data by evaluating at least one of the following: (1) the amount of time that has passed since a set of content data has been updated, (2) a user’s preference for a set of content data, (3) compatibility of a set of content data with other application “instructions” [as construed herein], or (4) display restrictions for a set of content data.</p> <p><u>Alternative if not means plus function:</u> “instructions” [as construed herein] for determining the display order and display duration for each available set of content data used to generate an image or images on the display device</p> <p><u>Extrinsic Evidence:</u> None.</p>

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	<p>revised to include the new set of content data. Typically, when the content display system acquires a new (or updated) set of content data, scheduling information for that set of content data is also acquired. Taken together, the scheduling information for all of the sets of content data is used to determine a schedule for display of the sets of content data by the content display system. Generally, determining a display schedule involves specifying the order in which the sets of content data are to be displayed and the duration of time for which each set of content data is to be displayed. The determination of the display schedule can also accommodate (to the extent possible) any special scheduling parameters for particular sets of content data (e.g., restrictions specifying when a particular set of content data must be displayed or cannot be displayed), mediating any conflicts between the display requirements of particular sets of content data. . . . [T]he display schedule can also accommodate scheduling parameters that delete sets of content data from the display schedule during particular iterations, thereby, for example, controlling the frequency with which particular sets of content data are displayed.” ‘652 Patent at 10:4-39.</p> <p>“Any appropriate set of rules that can, for example, be arranged in any appropriate hierarchical manner, can be used for establishing a display schedule and, in particular, mediating conflicts between conflicting scheduling parameters associated with different sets of content data. For example, one rule for mediating conflicts may give preference to displaying sets of content data so that the sets of content data are displayed inversely to the order in which they were obtained by the content display system. This rule might be further specified so that a set of content data that has never previously been displayed by the attention manager is displayed prior to display of a set of content data</p>	<p><u>Intrinsic Evidence:</u></p> <p><i>Specification:</i></p> <p>“Hereinafter, reference is sometimes made to ‘displaying content data’ or ‘displaying a set of content data’; it is to be understood that this means displaying images generated using the content data or set of content data” (‘652, 9:48-51.)</p> <p>“The application instructions can include operating instructions for beginning, managing, and terminating operation of the attention manager on a content display system, content display system scheduling instructions for scheduling the display of content data on a content display system.” (‘652, 2:50-55)</p> <p>“If, in step 103, at least one set of content data is available for display, then, in the step shown in the block 104 (hereinafter referred to as step 104), the available sets of content data are scheduled for display by the content display system. (Alternatively, in other embodiments of the invention, scheduling of the sets of content data can occur before the method 100 begins. Such scheduling might be implemented, for example, so that each time a new set of content data is received by the content display system, the schedule is revised to include the new set of content data.) Typically, when the content display system acquires a new (or updated) set of content data, scheduling information for that set of content data is also acquired. Taken together, the scheduling information for all of the sets of content data is used to determine a schedule for display of the sets of content data by the content display system. Generally, determining a display schedule involves specifying the order in which the sets of content data are to be displayed and the duration of time for which each set of content data is to be displayed. The determination of the display schedule can also accommodate (to the extent possible) any special scheduling parameters for particular sets of content data (e.g.,</p>

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	<p>that has been previously displayed, even though an update of the previously displayed set of content data has been obtained at a later time than that at which the never displayed set of content data was obtained. Another rule for mediating conflicts might resolve a conflict between two sets of content data having scheduling parameters that specify display at the same sequential position in the display schedule by randomly selecting one of the sets of content data to be displayed first during each iteration through the display schedule. Still another rule for mediating conflicts might establish a hierarchy of kinds of content data, with sets of content data of kinds at the top of the hierarchy being given preference for display over those at the bottom. Yet another rule or set of rules for mediating conflicts may involve performing some sort of analysis of the characteristics of the sets of content data that have been obtained by a particular content display system to ascertain preferences indicated thereby, and giving preference to sets of content data that are evaluated to be relatively more preferred. Scheduling rules of this kind would typically be part of the scheduling parameters provided independent of the content providers (i.e., in the content display system scheduling instructions, as discussed elsewhere herein and, in particular, with respect to FIGS. 3A through 3C below.” ‘652 Patent at 10:43-11:10.</p> <p>“[I]ncompatible sets of content data can be removed from the schedule of sets of content data to be displayed (this can be accomplished by the use of appropriate instructions in the content display system scheduling instructions 312 that check for the compatibility of sets of content data with the existing set of application instructions 310) . . .” ‘652 Patent at 20:37-42.</p> <p>“The content display system scheduling instructions 312 can</p>	<p>restrictions specifying when a particular set of content data must be displayed or cannot be displayed), mediating any conflicts between the display requirements of particular sets of content data. Often, though not necessarily, once the order and duration of display are established, the sets of content data are repetitively displayed by cycling through the display schedule repeatedly until operation of the attention manager is terminated. However, even where such iteration through the display schedule occurs, the display schedule can also accommodate scheduling parameters that delete sets of content data from the display schedule during particular iterations, thereby, for example, controlling the frequency with which particular sets of content data are displayed. The display schedule can be stored in an appropriately structured database, as known by those skilled in the art, that is stored in a memory of the computer used to implement the content display system. Any appropriate set of rules, that can, for example, be arranged in any appropriate hierarchical manner, can be used for establishing a display schedule and, in particular, mediating conflicts between conflicting scheduling parameters associated with different sets of content data. For example, one rule for mediating conflicts may give preference to displaying sets of content data so that the sets of content data are displayed inversely to the order in which they were obtained by the content display system. This rule might be further specified so that a set of content data that has never previously been displayed by the attention manager is displayed prior to display of a set of content data that has been previously displayed, even though an update of the previously displayed set of content data has been obtained at a later time than that at which the never displayed set of content data was obtained. Another rule for mediating conflicts might resolve a conflict between two sets of content data having scheduling parameters that specify display at the same sequential position in the display schedule by randomly selecting one of the sets of content data to be displayed first during each iteration through the display schedule. Still another rule for mediating conflicts might establish a hierarchy of kinds of content data, with sets of content data of kinds</p>

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	<p>include instructions that evaluate a probability function each time that a set of content data in the schedule is presented for display, and either display or not display the set of content data dependent upon the evaluation of the probability function. The probability function can include consideration of a variety of factors (e.g., the amount of time that has passed since a particular set of content data has been updated), but for implementation of the instant option, the probability function includes a term np, where n is a constant between 1 and 2, and p is a variable that represents a user's preference for a particular set of content data. Initially, the value of p is 0. Each time that a user indicates a like or dislike for a set of content data (by, for example, selecting an appropriate option in a dialog box such as the dialog box 601), the variable p is incremented or decremented, respectively, by a predetermined amount. The content display system scheduling instructions 312 evaluate a stochastic probability function (e.g., a Gaussian probability function) using the evaluated probability function as an argument. If the result of evaluation of the stochastic probability function is "true", then the set of content data is displayed; if "false", then the set of content data is not displayed. As can be seen, then, initially (i.e., when $p=0$), the user has expressed no like or dislike of a set of content data and the set of content data is displayed or not according to other criteria. Incrementing or decrementing p (i.e., expressing like or dislike for a set of content data) causes the term np to increase or decrease exponentially, thereby increasing or decreasing the likelihood that the set of content data will be displayed." '652 Patent at 26:52 to 27:15.</p> <p>Prosecution:</p> <p>"Additionally, as also discussed above with respect to Claim 19, Pirani et al. do not teach or suggest that the manner in</p>	<p>at the top of the hierarchy being given preference for display over those at the bottom. Yet another rule or set of rules for mediating conflicts may involve performing some sort of analysis of the characteristics of the sets of content data that have been obtained by a particular content display system to ascertain preferences indicated thereby, and giving preference to sets of content data that are evaluated to be relatively more preferred. Scheduling rules of this kind would typically be part of the scheduling parameters provided independent of the content providers (i.e., in content display system scheduling instructions, as discussed elsewhere herein and, in particular, with respect to FIGS. 3A through 3C below). Other scheduling rules, not directed to mediating conflicts between sets of content data, can also be used in determining a schedule. For example, any set of content data that has been initially obtained before a certain time and/or that has been last updated before a certain time (i.e., a set of content data that is "stale") can be automatically precluded from being inserted into the display schedule. This exclusion could further be restricted to apply only to certain sets of content data or content data of certain kinds. Similarly, the frequency with which a particular set of content data appears in a display schedule can be based upon how stale the set of content data is. Scheduling rules of this kind would typically be part of the scheduling parameters provided by a content provider for a set of content data (i.e., in tailored content data scheduling instructions, as discussed elsewhere herein and, in particular, with respect to FIGS. 3A through 3C below). The particular scheduling rules used may be influenced by the characteristics of a particular embodiment of the attention manager, such as the available kinds of content data or the characteristics of the potential users of the attention manager. The particular scheduling rules used may also be influenced by the need or desire to simplify implementation of the scheduling rules. ('652, 10:4 to 11:33).</p> <p>"The content display system scheduling instructions 312 can include instructions that evaluate a probability function each time</p>

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	<p>which advertisements are displayed during operation of particular software can be varied once those advertisements have been integrated into the software. With the computer program(s) of Claim 66, on the other hand, variation in the display of images generated from content data is possible and is enabled by the content display system scheduling instructions. Thus, the compute program(s) of Claim 66 can provide a more flexible and varied display than is possible with the 'enhanced' software taught by Pirani et al.' ('652 Resp. at 11, 7/9/98)</p> <p>"Further, though Judson teaches some flexibility in the display of information (see, e.g., column 7, lines 6-17), Judson does not appear to teach or suggest 'content display system scheduling instructions for scheduling the display of [an] image on [a] display device,' as recited in Claim 66. (see, e.g., the description in Applicants' specification at page 19, line 27 to page 22, line 27 and page 54, line 11 to page 55, line 9.)" ('652 Resp. at 20, 7/9/98)</p> <p>"'[C]ontent display system scheduling instructions for scheduling the display of the image or images on the display device,' as recited in Claim 64, were embodied by the computer program shown in Exhibit 1 (see lines 37, 39-41 and 50-54 Exhibit 1 and the accompanying description in paragraph 2 of the second Piernot Declaration) and by the alphabetical file retrieval feature of the Applescript computer programs (see paragraph 2 of the second Piernot Declaration)." ('652 Resp. 6/14/99 second Piernot Declaration, at pp. 31-32.)</p> <p>"Sets of content data were retrieved in alphabetical order of the name of the file containing the content data, in accordance with the manner in which an Applescript computer program orders a list of files within a folder</p>	<p>that a set of content data in the schedule is presented for display, and either display or not display the set of content data dependent upon the evaluation of the probability function. The probability function can include consideration of a variety of factors (e.g., the amount of time that has passed since a particular set of content data has been updated), but for implementation of the instant option, the probability function includes a term np, where n is a constant between 1 and 2, and p is a variable that represents a user's preference for a particular set of content data. Initially, the value of p is 0. Each time that a user indicates a like or dislike for a set of content data (by, for example, selecting an appropriate option in a dialog box such as the dialog box 601), the variable p is incremented or decremented, respectively, by a predetermined amount. The content display system scheduling instructions 312 evaluate a stochastic probability function (e.g., a Gaussian probability function) using the evaluated probability function as an argument. If the result of evaluation of the stochastic probability function is "true", then the set of content data is displayed; if "false", then the set of content data is not displayed. As can be seen, then, initially (i.e., when $p=0$), the user has expressed no like or dislike of a set of content data and the set of content data is displayed or not according to other criteria. Incrementing or decrementing p (i.e., expressing like or dislike for a set of content data) causes the term np to increase or decrease exponentially, thereby increasing or decreasing the likelihood that the set of content data will be displayed." ('652, 26:52 to 27:15.)</p> <p>"If downward compatibility is not maintained, the updated set of application instructions 310 can replace a previous set of application instructions 310 and incompatible sets of content data can be removed from the schedule of sets of content data to be displayed (this can be accomplished by the use of appropriate instructions in the content display system scheduling instructions 312 that check for the compatibility of sets of content data with the existing set of application instructions 310) when the attention</p>

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	<p>defined on a data storage device (see line 37).” (‘652 Resp. 6/14/99 second Piernot Declaration, at p. 2.)</p>	<p>manager is operating. (‘652, 20:34-43.)</p> <p>Prosecution:</p> <p>“Additionally, as also discussed above with respect to Claim 19, Pirani et al. do not teach or suggest that the manner in which advertisements are displayed during operation of particular software can be varied once those advertisements have been integrated into the software. With the computer program(s) of Claim 66, on the other hand, variation in the display of images generated from content data is possible and is enabled by the content display system scheduling instructions. Thus, the computer program(s) of Claim 66 can provide a more flexible and varied display than is possible with the ‘enhanced’ software taught by Pirani et al.” (‘652 Resp. 7/3/98, p. 11.)</p> <p>“Further, though Judson teaches some flexibility in the display of information (see, e.g., column 7, lines 6-17), Judson does not appear to teach or suggest ‘content display system scheduling instructions for scheduling the display of [an] image on [a] display device,’ as recited in Claim 66. (see, e.g., the description in Applicants’ specification at page 19, line 27 to page 22, line 27 and page 54, line 11 to page 55, line 9.)” (‘652 Resp. 7/3/98, p. 20.)</p>
<p>17. ‘652 claim 18 “audit instructions for monitoring usage of the content display system to selectively display an image or images generated from a set of content data”</p>	<p>See constructions of “instructions” and “selectively display an image or images generated from a set of content data.” No additional construction needed.</p> <p>Extrinsic Evidence:</p> <p>“monitor” (3)(software) “a software tool or hardware device that operates concurrently with a system or component and supervises, records, analyzes or verifies the operation of the system or component.” (<i>The IEEE Standard Dictionary of Electrical and Electronics Terms</i> (IEEE Press, 6th ed. 1996))</p>	<p>‘652 claim 18 and ‘314 claim 3 are means-plus-function because “audit instructions” has insufficient structure.</p> <p>Function: recording or computing information about the “sets of content data” that the display system chooses and displays to the user.</p> <p>Structure: software that stores in an appropriately structured database at least one of the (i) identity of each set of content data displayed by the attention manager, (ii) the frequency (e.g., number of times per week) that a set of content data was displayed by the</p>

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	<p><u>Intrinsic Evidence:</u> “Additionally, audit instructions can be made available that enable monitoring of usage of the attention manager.” ‘652 Patent at 3:8-10; <i>see also</i> 15:5-9, 28:29-30.</p> <p>“As discussed above (see FIG. 2), usage of the attention manager can be audited using audit instructions 340 (FIGS. 3A and 3C) that can be supplied by the application manager 201 to the content display systems 203, either directly or via the content providing systems 202. The audit instructions 340 can include instructions that cause a content display system 203 to record, as the attention manager is used, particular information (audit information) regarding use of the attention manager (or compute such information from other, more basic information recorded by the attention manager). The audit information can be stored by the content display system 203 in an appropriately structured database. The audit information can include, for example, the identity of each set of content data 350 displayed by the attention manager, the number of times that a set of content data 350 was displayed by the attention manager, the frequency (e.g., number of times per week) that a set of content data 350 was displayed by the attention manager, the times at which a set of content data 350 was displayed by the attention manager, a user-expressed satisfaction level for a particular set of content data 350, and the last set of content data 350 displayed to a user before the user either "passively" (i.e., by making an input to the computer with an input device) or "actively" (i.e., by selecting a control option) terminated operation of the attention manager (of interest, since the user presumably was viewing the display screen when such interaction occurred).” ‘652 Patent at 28:29-55.</p>	<p>attention manager, (iii) the times at which a set of content data was displayed by the attention manager, (iv) a user-expressed satisfaction level for a particular set of content data, and (v) last set of content data displayed to a user before the user either “passively” (i.e., by making an input to the computer with an input device) or "actively" (i.e., by selecting a control option) terminated operation of the attention manager (of interest, since the user presumably was viewing the display screen when such interaction occurred).</p> <p><u>Extrinsic Evidence:</u> “monitor” (3)(software) “a software tool or hardware device that operates concurrently with a system or component and supervises, records, analyzes or verifies the operation of the system or component.” (<i>The IEEE Standard Dictionary of Electrical and Electronics Terms</i> (IEEE Press, 6th ed. 1996))</p> <p><u>Intrinsic Evidence:</u> <i>Specification:</i> “Additionally, audit instructions can be made available that enable monitoring of usage of the attention manager..” (‘652, 3:8-10). “The computer readable medium can also further include audit instructions for monitoring usage of the content display system to selectively display an image generated from a set of content data.” (‘652, 5:7-10). “The application manager 201 can also store audit instructions 340 that can be used to enable monitoring of usage of the attention manager.” (‘652, 15:5-8). “The package file can also include data structures that can be used to</p>

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	<p>“Auditing of use of the attention manager can be useful to both users of the attention manager and content providers for a variety of reasons. Such auditing can be used, for example, to illustrate to content providers the value of the attention manager as a tool for disseminating the content provider's information, by showing the content providers how many content data display systems 203 are displaying the content provider's content data. The auditing can also give content providers insight into the interests of computer users, enabling the content providers to better target the information that the content providers provide. The auditing can also indicate to a user the amount and types of the information that the user has been receiving.” ‘652 Patent at 29:15-27.</p>	<p>store auditing information, as discussed in more detail below.” (‘652, 21:60-62)</p> <p>“As discussed above (see FIG. 2), usage of the attention manager can be audited using audit instructions 340 (FIGS. 3A and 3C) that can be supplied by the application manager 201 to the content display systems 203, either directly or via the content providing systems 202. The audit instructions 340 can include instructions that cause a content display system 203 to record, as the attention manager is used, particular information (audit information) regarding use of the attention manager (or compute such information from other, more basic information recorded by the attention manager). The audit information can be stored by the content display system 203 in an appropriately structured database. The audit information can include, for example, the identity of each set of content data 350 displayed by the attention manager, the number of times that a set of content data 350 was displayed by the attention manager, the frequency (e.g., number of times per week) that a set of content data 350 was displayed by the attention manager, the times at which a set of content data 350 was displayed by the attention manager, a user-expressed satisfaction level for a particular set of content data 350, and the last set of content data 350 displayed to a user before the user either "passively" (i.e., by making an input to the computer with an input device) or "actively" (i.e., by selecting a control option) terminated operation of the attention manager (of interest, since the user presumably was viewing the display screen when such interaction occurred).” (‘652, 28:29-55)</p> <p>“Auditing of use of the attention manager can be useful to both users of the attention manager and content providers for a variety of reasons. Such auditing can be used, for example, to illustrate to content providers the value of the attention manager as a tool for disseminating the content provider's information, by showing the content providers how many content data display systems 203 are displaying the content provider's content data. The auditing can also</p>

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		<p>give content providers insight into the interests of computer users, enabling the content providers to better target the information that the content providers provide. The auditing can also indicate to a user the amount and types of the information that the user has been receiving.” (’652, 29:15-27.)</p>
<p>18. ’314 claim 13 (also 112/6) “instructions for acquiring a set of content data from a content providing system”</p>	<p>See constructions of “instructions,” “set of content data,” and “content providing system.” No additional construction required.</p> <p><u>Extrinsic Evidence:</u></p> <p><u>Intrinsic Evidence:</u></p> <p>“In the step shown in the block 401 (referred to hereinafter as step 401), a set of content data is selected for display by the attention manager. Initially, in step 401, particular sets of content data are obtained as a result of direct request by the user. Any appropriate user interface can be used for enabling a user to directly request a particular set of content data. For example, Web pages on the World Wide Web could include graphical buttons for enabling users that visit the Web page to request particular sets of content data. Selection of a button on a Web page results in an indication to the appropriate content providing system 202 that the requesting content display system 203 has requested the set of content data corresponding to the selected button to be transferred to the content display system 203.” ’652 Patent at 18:56-19:2.</p> <p>’652 File History, 6/14/1999 Declaration of Philippe Piernot, at ¶¶ 2 (“The browser software included a capability that allowed a user to select an image displayed at a Web site so as to cause the content data representing the image to be transferred from a data storage device of the Web site to the</p>	<p>This is a means plus function term because reciting “instructions for” merely recites the function to be performed without reciting structure to perform that function.</p> <p><u>Function:</u> acquiring a set of content data from a content providing system</p> <p><u>Structure:</u> “instructions” [as construed herein] to perform the steps described in connection with 401-406 of FIG. 4, namely: (1) providing a user with an interface to directly request a particular set of content data, (2) indicating to the content provider the particular set of content data requested by the user, (3) receiving a set of instructions at the content display system that identify the site from which the set of content data is to be acquired, (4) downloading the particular set(s) of content data requested by the user at the content display system.</p> <p><u>Extrinsic Evidence:</u></p> <p>None.</p> <p><u>Intrinsic Evidence:</u></p> <p>See support for Disputed Term #8 (“means for acquiring a set of content data from a content providing system”) above.</p>

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	<p>content display computer and stored at a user-designated location of a non-volatile data storage device of the content display provider.”) 5 (same), 7 (same); <i>see also</i> 6/14/1999 Response to Office Action at 14-17.</p>	
<p>19. ‘652 patent: 15, 16, 17, 18 ‘314 patent: 1, 2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, 15 “instructions”</p>	<p>Either (a) data related to the accomplishment of a function and/or (b) a statement that specifies a function to be performed by a system and that identifies data involved in the function</p> <p><u>Extrinsic Evidence:</u></p> <p><u>Intrinsic Evidence:</u></p> <p>“Each of the functional components are represented by a set of instructions and/or data. (In particular, each of the sets of instructions may include, if appropriate, data related to accomplishment of the functions associated with the set of instructions; similarly, a set of content data may include, if appropriate, instructions that enable generation of an image from the set of content data.) Each of these sets of instructions and/or data can be embodied in an appropriate computer program or set of computer instructions (the latter capable of including computer instructions and data), or an appropriate set of data configured for use by a set or sets of instructions (e.g., computer program) that must interact with the set of data in order to implement the attention manager.” ‘652 Patent at 14:53-65.</p> <p>‘314 Patent File History, 6/25/2003 Office Action, at 2-3 (“Applicant arguments fail to consider that one embodiment</p>	<p>A statement in a programming language that specifies an operation to be performed by a computer and may identify data involved in performing the function</p> <p><u>Extrinsic Evidence:</u></p> <p>“Computer Instruction: (2)(A) (software) A statement in a programming language, specifying an operation to be performed by a computer and the address or value of the associated operands.” <i>(The IEEE Standard Dictionary of Electrical and Electronics Terms</i> (IEEE Press, 6th ed. 1996))</p> <p>“operand: (1) (mathematics of computing) (software) A variable, constant, or function upon which an operation is to be performed. For example, in the expression $A = B + 3$, B and 3 are the operands.” <i>(The IEEE Standard Dictionary of Electrical and Electronics Terms</i> (IEEE Press, 6th ed. 1996))</p> <p><u>Intrinsic Evidence:</u></p> <p><u>Specification:</u></p> <p>“FIGS. 3A, 3B and 3C are schematic diagrams illustrating the functional components of the application manager 201, a content providing system 202 and a content display system 203, respectively, according to an embodiment of the invention. Each of the functional components are represented by a set of instructions and/or data. (In particular, each of the sets of instructions may</p>

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	<p>of Farber teaches having content providers continuously connected to the content display system (130 and 101) in order for the content provider to control when new content is displayed by the content display system and has the personal computer or terminals or television directly connected to server 130, column 4 lines 8-11 and 29-31. Thus, Farber teaches the newly added feature of providing content data from the content providing system directly to the content display system as well as teaching the newly added feature of the content provider may provide scheduling instructions tailored to the set of content data to control at least one of the duration, sequencing, and timing of the display of said image or images generated from the set of content data since the new content data sent from server 130 or providers 150, 152, 154 indicates a timing, such as display new information now or soon.”). See also 2/14/2003 Office Action at 6.</p>	<p>include, if appropriate, data related to accomplishment of the functions associated with the set of instructions; similarly, a set of content data may include, if appropriate, instructions that enable generation of an image from the set of content data.) Each of these sets of instructions and/or data can be embodied in an appropriate computer program or set of computer instructions (the latter capable of including computer instructions and data), or an appropriate set of data configured for use by a set or sets of instructions (e.g., computer program) that must interact with the set of data in order to implement the attention manager.” (’652, 14:49-65) (’314, 14:56 to 15:5.)</p> <p>Prosecution:</p> <p>“In particular, the Examiner has not addressed at all Applicants’ contention that Judson does not teach or suggest ‘a content display system ... including means for receiving ... a set of instructions (e.g., a computer program) for enabling a display device to selectively display ... an image or images generated from a set of content data’ (emphasis added), as recited in Claim 1.” (’652 Resp. 6/10/99, pp. 34-35.)</p>
<p>20. ‘314 claim 3 a set of instructions for enabling the content display system to selectively display, in an unobtrusive manner that does not distract a user of the display device or an apparatus associated with the display device from a primary interaction with the display device or</p>	<p>See constructions for “instructions,” “selectively display,” “unobtrusive manner,” and “image or images generated from a set of content data.” No additional construction needed.</p>	<p>This is a means plus function term because reciting “instructions for” merely recites the function to be performed without reciting structure to perform that function. These terms should be interpreted consistently with the “means for selectively displaying” in claim 4 of the ‘652 patent.</p> <p>As set forth above, this term includes a phrase that is indefinite within the recited function; thus this term is indefinite.</p> <p>Function: “selectively displaying [on the display device], in an unobtrusive manner that does not distract a user of the display device or apparatus associated with the display device from a primary interaction with the display device or apparatus, an image</p>

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<p>apparatus, an image or images generated from a set of content data;</p> <p>‘314 claim 13 instructions for selectively displaying on the display device, in an unobtrusive manner that does not distract a user of the display device or an apparatus associated with the display device from a primary interaction with the display device or apparatus, an image or images generated from the set of content data</p>		<p>or images generated from the set of content data” [as construed herein]</p> <p>To the extent there is any structure disclosed that could fulfill the recited function, it is:</p> <p>Structure: a program(s) that includes a screen saver application program, activated by the detection of an idle period, or a wallpaper application program, that “selectively displays ... image or images generated from the set of content data” [as construed herein]</p> <p>Extrinsic Evidence:</p> <p>computer instruction: “A statement in a programming language specifying an operation to be performed by a computer and the addresses or values of the associated operands.” (<i>The IEEE Standard Dictionary of Electrical and Electronics Terms</i> (IEEE Press, 6th ed. 1996))</p> <p>Intrinsic Evidence:</p> <p><i>Specification:</i></p> <p>“Often, the display device is part of a broader apparatus (e.g., the display device of a computer).” (‘314, 2:15-16.)</p> <p>“FIGS. 3A, 3B and 3C are schematic diagrams illustrating the functional components of the application manager 201, a content providing system 202 and a content display system 203, respectively, according to an embodiment of the invention. Each of the functional components are represented by a set of instructions and/or data. (In particular, each of the sets of instructions may include, if appropriate, data related to accomplishment of the functions associated with the set of instructions; similarly, a set of content data may include, if appropriate, instructions that enable</p>

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		<p>generation of an image from the set of content data.) Each of these sets of instructions and/or data can be embodied in an appropriate computer program or set of computer instructions (the latter capable of including computer instructions and data), or an appropriate set of data configured for use by a set or sets of instructions (e.g., computer program) that must interact with the set of data in order to implement the attention manager.” ('314, 14:56 to 15:5)</p> <p>“Generally, the display instructions 321 of a particular set of control instructions 320 enable display of content data on a particular type of display device (e.g., a particular type of computer video display or a particular type of audio speaker) or display of a particular type of content data. Display instructions 321 that can be used with a particular display device are typically already developed by third parties (e.g., the maker of the display device) and are readily available. Tailoring of the display instructions 321 to display particular types of content data (such as instructions for displaying content data that is in the GIF format or the format of AutoDesk Animator FLC files) can be done by either the application manager 201 or a content provider.” ('314, 15:57 to 16:2)</p> <p>“The content provider can also tailor the display instructions 321 to display a particular set or sets of content data. The type of content data indicates the manner in which an image or images are generated from the content data (i.e., how the bit patterns in a particular clip are transformed into an image). The type of content data is typically established as a consequence of the manner (e.g., with a particular software application program such as the Photoshop or Premiere programs produced by Adobe Systems of Mountain View, Calif.) in which a particular clip is created.” ('314, 17:37-48)</p> <p>Prosecution:</p>

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		<p>“Judson teaches, at column 1, lines 59-63, that the invention ‘enhance[s] the operation of a web browser by causing the display of some useful information to [a] user during the period of user “downtime” that otherwise occurs between linking and downloading of a hypertext document identified by [a] link.’ Though Judson is unclear on this point, it appears that the instructions for causing the display of the information are implemented as part of the browser, i.e., a browser is modified to perform the steps of the method described by Judson. Judson does not teach or suggest that such instructions can be transferred from another device (e.g., from another computer via a computer network such as the Internet) to the computer used to display information to the user. Thus, Judson does not teach or suggest ‘a content display system ... including means for receiving ... a set of instructions for enabling a display device to selectively display ... an image or images generated from a set of content data,’ as recited in Claim 1.” (‘652 Resp. 7/3/98, pp. 12-13.)</p> <p>“In particular, the Examiner has not addressed at all Applicants’ contention that Judson does not teach or suggest ‘a content display system ... including means for receiving ... a set of instructions (e.g., a computer program) for enabling a display device to selectively display ... an image or images generated from a set of content data’, as recited in Claim 1.” (‘652 Resp. 6/10/99, pp. 34-35.)</p>