[0011] In yet another embodiment of the present invention, a resource search tool for annotating a representation of a search result target resource, identified in a resource search based on a search criterion, is provided. An image generator creates the representation of the search result target resource. A layout analysis module analyzes the layout of the search result target resource to identify one or more logical sections of the search result target resource. A linguistics analysis module performs linguistic analysis of the search result target resource. An annotation module annotates the representation of the search result target resource based on the linguistic analysis to indicate at least one logical section of the search result target resource includes an element that satisfies the at least one search criterion.

[0012] These and various other features as well as other advantages, which characterize the present invention, will be apparent from a reading of the following detailed description and a review of the associated drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] **FIG. 1** depicts three parts of a Web page displayed on a handheld device at different horizontal scroll points in an embodiment of the present invention.

[0014] **FIG. 2** depicts a logical section of the Web page partition reformatted to be compatible with the display on a handheld device in an embodiment of the present invention.

[0015] **FIG. 3** depicts a Web page partition map in an embodiment of the present invention.

[0016] **FIG. 4** depicts a search results Web page prior to completion of the analysis of any search results target pages in an embodiment of the present invention.

[0017] **FIG. 5** depicts a search results Web page displaying progress in the analysis of search result target pages in an embodiment of the present invention.

[0018] **FIG. 6** depicts a selected search result target page with annotations in embodiment of the present invention.

[0019] **FIG. 7** depicts the logical section of a selected search result target page having the most search hits in an embodiment of the present invention.

[0020] **FIG. 8** depicts a reformatted view of a logical section of a selected search result target page with highlighted search terms in an embodiment of the present invention.

[0021] **FIG. 9** depicts a control for toggling between a Web search and a document search in an embodiment of the present invention.

[0022] **FIG. 10** depicts a search result target page showing results of a document search in an embodiment of the present invention.

[0023] **FIG. 11** depicts a reformatted view of a selected logical section in a document search mode in an embodiment of the present invention.

[0024] **FIG. 12** illustrates operations for analyzing, thumbnail marking, and term highlighting in an embodiment of the present invention.

[0025] **FIG. 13** illustrates detailed operations of the analyzing process in an environment of the present invention.

[0026] **FIG. 14** illustrates operations for thumbnail marking and term highlighting in an embodiment of the present invention.

[0027] **FIG. 15** illustrates an exemplary system useful for implementing an embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0028] When a Web page is received for display on an "incompatible" display (i.e., a display which is incompatible with the Web page's design), a Web page partitioner/reformatter can partition the Web page and/or reformat logical sections of the Web page to fit within the incompatible display. For example, a Web page may be designed with complex display features that, while appropriate for a desktop or laptop display, make the Web page difficult to use on a handheld device or large screen display. By partitioning and/or reformatting logical sections of the Web page, each logical section can be displayed optimally within the previously incompatible display.

[0029] One specific example of a potentially incompatible display is a handheld device with a browser, such as a Personal Digital Assistant (PDA) device (e.g., an iPAQ handheld device from Compaq). Web pages designed for a desktop or laptop display tend to horizontally overrun the limited real estate on a handheld device's display. As such, a user would typically have to scroll the Web page back and forth along a horizontal axis to read text on the Web page. The Web page partitioner/reformatter allows the browser to display only the logical section in which the user is interested and can reformat the logical section to eliminate the need for horizontal scrolling.

[0030] Another example of a potentially incompatible display is a large screen display, such as may be used in a convention hall or conference room. Web pages designed for a desktop or laptop display tend to crowd the display with multiple logical sections. If the user zooms in to the Web page to maximize the size and readability of text on the Web page, other areas of the Web page may be obscured. Furthermore, depending on the amount of zoom required to make the text readable to the entire audience, the desired text may overrun the screen horizontally (i.e., along a horizontal axis), requiring the undesirable use of horizontal scrolling for each line of text. Again, the Web page partitioner/reformatter allows the browser to display only the logical section in which the user is interested and can reformat the logical section to eliminate the need for horizontal scrolling (e.g., using a font size that is more appropriate for a large audience in a convention hall).

[0031] Furthermore, on a Web page with multiple logical sections, a Web page partition map provides a convenient user interface for navigating among the logical sections of the Web page. A "zoomed out" image of the Web page is displayed on the device with partition lines designating individual logical sections. By selecting a logical section, a user can view the reformatted logical section in a new format that is compatible with the device's display.

[0032] Features of a zoomed out image and a zoomed in, reformatted image may be combined to provide both spatial context and convenient readability. A user interface for a resource search tool annotates search result target resources