may relate to a different size, shape, color, shading, font, design, or other perceivable trait.

[0085] The inactive map items at a given magnification level may identify those map items that will become active at a higher magnification level. For the illustrated example that employs discrete levels, the inactive map items displayed in map **108** (see **FIG. 1**) become active map items in the next highest magnification level displayed in map **208** (see **FIG. 2**). In addition, a number of new inactive map items become visible in map **208**; these inactive map items will become active map items at the next highest magnification level. In an alternate embodiment that uses a "continuous" zoom feature, a given map item may become active at a certain magnification point and remain active if the magnification remains substantially constant or if the magnification increases. The display of such inactive map items allows a user to anticipate the programming information that will become available in response to increased zooming.

[0086] The order in which categories and subcategories are displayed in response to magnification changes, the order in which active and inactive map items are displayed in response to magnification changes, and the selection of which map items (active or inactive) are displayed at the lowest hierarchical magnification level may follow any suitable prioritization scheme or metric. For example, the prioritization metric can be based on the frequency of selection of the map items by a user, thus resulting in frequently accessed map items being displayed at the lowest magnification level and less frequently accessed map items being delegated to relatively higher magnification levels. In an alternate embodiment, the prioritization scheme may be based on specified preferences that can be entered by the end user or by the service provider responsible for the maintenance of the navigation display system. This feature allows the service provider to highlight certain broadcasters, networks, genres, or categories in accordance with targeted marketing or focused programming. This feature also allows the end user to monitor or restrict access to certain programs, stations, or programming genres (e.g., in the context of a "parental lock" system). The prioritization scheme can be dynamically responsive to use patterns or programming changes in a manner that facilitates automatic updating of the navigation map characteristics. For example, if a user frequently visits a station, then that station will eventually move up in priority until it becomes displayed at the lowest magnification level and at each higher level.

[0087] Dynamic Map Item Appearance

[0088] In accordance with another preferred aspect of the present invention, the active map items (and/or other icons displayed on the navigation map) can be rendered in various ways to convey useful information to the user in an easy-to-interpret manner. In this respect, the map items may have at least one variable characteristic associated therewith. The map item appearance may be dynamically responsive to real-time changes in system status, user preferences, the current operating conditions related to the information source corresponding to the map item, or the like. For example, different colored map items may represent different types of programming genres, different programming characteristics, different transmission specifications, or the like. The appearance of the map items may also be altered according to any of the following characteristics: broadcast status, i.e., whether the station is currently broadcasting a program; quality of service; connection bandwidth; service conditions; time until the start of the program (e.g., a rendering of a clock face); the program name; the status of an intelligent home appliance; other programming information; etc. One or more of the following map item icon characteristics may be varied in a dynamic manner: shape, size, color, design, orientation, text label, visibility factor, motion, etc.

[0089] In a practical embodiment, flashing red arcs surrounding an active map item indicate the current selection (see reference number **202** in **FIG. 2**). As described in connection with **FIG. 3**, one preferred embodiment displays red colored active map items to represent pay per view stations and green colored active map items to represent free stations. Alternatively, the design of the map item icon itself (e.g., a dollar sign) may be used to designate pay per view stations. As mentioned above, colored map item icons represent active map items while gray or "transparent" map item icons represent inactive map items. In addition, a pop-up text box may appear proximate an map item when the user approaches the map item with the cursor or other pointing device. The pop-up box may identify dynamically changing information such as the current program, song title, or file name associated with that active map item. As an example, active map item **126** is shown with an associated pop-up text box that reads "On now: Friends" (see **FIG. 1**).

[0090] The dynamic appearance feature described above in connection with the map items may also apply to text labels (or other information) that accompany the map items. As described above, map items are preferably displayed along with an indicator of the respective stations, networks, or the like. For example, one practical embodiment utilizes fixed labels, e.g., "MTV" for active map item **116** and "ESPN" for active map item **112**. However, in an alternate embodiment, such labels may be dynamically configured to provide real-time programming, operating, or status information, such as the title of the program being broadcast, the time until broadcast, the time remaining in the program, the type of program, or the quality of service for the transmission of the program. The labels may also exhibit variable colors, fonts, styles, and other formatting. In a practical embodiment, the interface display system employs a subset of HTML to define the appearance of a given label. In this manner, HTML-like tags may be used to describe the appearance of a label.

[0091] **FIG. 4** is a schematic representation of an exemplary navigation interface display **400** that includes many of the elements described above. **FIG. 4** depicts an alternate format that may be employed in lieu of the format shown in FIGS. **1-3**. Briefly, interface display **400** includes a map **402**, a navigation control tool **404**, a zoom control tool **406**, a map item information element **408**, a content description element **410**, and a preview (or picture-in-picture) area **412**.

[0092] Map **402** includes various features, elements, and characteristics described above in connection with FIGS. **1-3**. For example, map **402** includes a number of active map items or control points **414** and a number of inactive map items or control points **416**. As described above, the map items are preferably located on or proximate to a number of regions, e.g., a news region **418**, a movies region **420**, and a sports region **422**. In addition, a region may include