[0037] Referring to FIG. **6**, multiple text entry interface methods and text input styles **301** of the embodiment are illustrated. Planar navigation interfaces **302**, such as a five-button interface **304** (FIG. **3**) or a touchpad interface **305** can avoid the user having to look at the physical remote, by using an on-screen virtual keyboard **306** with visual cues to assist users to locate a character (as described in detail below). An example of one possible virtual keyboard **306** is shown in FIG. **8**. Even for key entry interfaces **303**, which could range from a 12-key keypad interface **307** to other keypad layouts with overloaded keys **308**, the on-screen virtual keypad with visual cues **306** assists users to locate a character without having to look at the physical remote control.

[0038] As used herein, the term "overloaded" used in reference to keys, keypads, or keyboards describes a condition where a cluster of multiple different letters or numerals are associated with a single key, and one or more of the letters or the numeral of the cluster can be selected using a single key, whether by pressing the key a single time or by pressing the key multiple times. The 2-9 digit keys of a mobile telephone implementation of the T9® text input method are examples of what is meant by overloaded keys because, for example, pressing the 2 digit key can enter the letters A, B, C, or the numeral 2. Another example of overloaded keys are the 2-9 digits of a mobile telephone implementation of the multi-tap text entry method where the user can cycle through the letters and numeral of a single key by pressing the single key multiple times in sequence. The term overloaded is not meant to apply to traditional QWERTY keyboards, or similar keyboards, that require the keyboard user to press an additional key to access an additional character set. Thus, the 4 key of a typical QWERTY keyboard is not considered overloaded because the Shift key must be engaged in order to access the $ symbol associated with the 4 key.

[0039] The on-screen virtual keypad interface provides sufficient visual cues for both the stages of text input without having to look at the remote control (1) for the user to navigate to a key and (2) to select a particular character from the overloaded key. For instance, text may be entered using planar navigation, wherein an on-screen cursor is manipulated using a five-button interface **304** (FIG. **3**). During planar navigation, the navigation path is automatically highlighted as the cursor moves from one key to the next, enabling the user to be properly oriented to locate a character.

[0040] The virtual keypad of the embodiment can be used to assist in both multi-press style input **309** and single press style text input (e.g., T9® style input **313** or "VTAP" style text input **314** described below). T9® style input enables the user to enter each character of the query string by a single press on an overloaded keypad. User gets to a desired word from a choice of multiple words generated by the ambiguous text entry. The VTAP style text input is similar to T9® in that it enables user to get to a desired result for a corresponding search input where a single key press for each character forms the text entry of the query string. The VTAP style text input differs from T9® in that ambiguous text input generates search results matching the ambiguous sequence of letters rather than merely returning possible word choices that form the query itself. Thus, one example of a VTAP style text input results in all letters and numerals associated with the particular key pressed being entered into a single character position of the search input. In VTAP style input, the input query could be either a single word or word prefix input (matching a single word or multiple phrase prefixes) or a multi-phrase word or prefix input (matching a multiple phrase prefixes). Additional aspects of the VTAP style text input are described in U.S. patent application Ser. No. 11/312,908, filed on Dec. 20, 2005, entitled Method and System For Dynamically Processing Ambiguous, Reduced Text Search Queries and Highlighting Results Thereof, hereby incorporated by reference.

[0041] In the case of direct key selection on the device, be it a multi-press **309** or single press **310** style input, the on-screen keypad **306** of the embodiment provides a visual cue in the form a highlighted key that helps orient the user on the physical device keypad. Furthermore, the highlight of the last key pressed is made persistent so as to maintain the user's orientation on the physical device keypad when selecting the next character. In the case of the planar navigation method (using, for example, a five-button interface **304**), user can cycle through the characters of the overloaded key cluster by pressing the central button in the five-button interface (FIG. **3**). While cycling through the characters, visual cue of the current selection is shown. For example, the current letter may be enlarged or highlighted in a unique color (as shown by the "J" in alphabet **501** in FIG. **8**). The alphabet cluster on a key may be rendered in the standard lexicographic collating sequence of the language **311** or it may be ordered based on other criteria such as the frequency (FIG. **9**) of occurrence of the alphabet in the language **312**.

[0042] FIG. **7** illustrates the usage of visual cues on the virtual keypad to help assist in selection of a particular character from the character cluster on a key using multi-press style text entry. In the first stage of text input, user either navigates **401** to a particular character using the five button interface (FIG. **3**) or directly presses a key on the remote control aided by the visual cue on the on-screen keypad of the last character pressed **402**. In the former case, the navigation trail is dynamically highlighted to fixate users' attention on the screen keypad interface **306** (e.g., a highlighted cursor may appear over the key currently in focus). The highlight on the selected focus may have a four-way navigation cue to inform the user that they can traverse using the five-button control. In an embodiment of the invention, visual cues are overlaid on a 12-key on-screen keypad (FIG. **8**), since the traversal path on this keypad is lower in comparison to other keypads (FIG. **2**).

[0043] For example, the maximum traversal path on the keypad of FIG. **8** is at most 6 hops in contrast to 12 hops on a TIVO® keypad (FIG. **2**). In the example embodiment, this reduction in number of hops is achieved by having an automatic timeout based auto selection for character clusters, similar to the triple tap mode of text entry in practice today on most phones. The shortened planar navigation on a familiar keypad interface followed by selection of a character on the familiar multi-press text entry interface, with both steps aided by visual cues on on-screen keypad, liberates the user from the drudgery of both the "tiresome long navigation path" and the "ocular focus toggle"—two key text entry interface drawbacks that plague other user interface methods in practice today.