and a cluster-character selection action selects one of the alphanumeric characters corresponding to the selected cluster.

[0015] According to one or more embodiments, the cluster selection action is pressing one of a plurality of buttons on the input device, the button pressed being mapped to a desired alphanumeric cluster of the virtual user alphanumeric interface. According to one or more embodiments, the cluster selection action is a planar navigation action on the input device.

[0016] According to one or more embodiments, the cluster-character selection action is pressing one of a plurality of buttons on the input device, the button pressed being mapped to the alphanumeric clusters of the virtual user alphanumeric interface corresponding to a desired alphanumeric character. According to one or more embodiments, the cluster-character selection action is pressing a character selection button on the input device.

[0017] According to one or more embodiments, the set of selectable alphanumeric characters of at least one cluster is presented in alphabetical order. According to one or more embodiments, the set of selectable alphanumeric characters of at least one cluster is presented in an order according to an alphabet occurrence frequency of a predetermined language. According to one or more embodiments, the set of selectable alphanumeric characters of at least one cluster is presented in an order according to an alphabet occurrence frequency of characters in words that describe items in a searchable collection of information content. According to one or more embodiments, a presentation order of the set of selectable alphanumeric characters of at least one cluster is changed from an initial presentation order based on the received user actions.

[0018] According to one or more embodiments, a user-interface system also has display logic to visually emphasize the selected alphanumeric cluster. According to one or more embodiments, a user-interface system also has display logic to visually emphasize the selected alphanumeric character.

BRIEF DESCRIPTIONS OF DRAWINGS

[0019] For a more complete understanding of various embodiments of the present invention, reference is now made to the following descriptions taken in connection with the accompanying drawings in which:

[0020] FIG. **1** illustrates an example of a numerical remote control;

[0021] FIG. **2** illustrates an example of a text input display;

[0022] FIG. **3** illustrates a five button control interface;

[0023] FIG. **4** illustrates a text entry system used in a different range of network configurations in accordance with certain embodiments of the invention;

[0024] FIG. **5** illustrates a television configuration to perform text entry in certain embodiments;

[0025] FIG. **6** illustrates the various text entry methods and styles of text input of certain embodiments;

[0026] FIG. **7** illustrates a process of user locating a character using the on-screen virtual keypad cues and entering text in a multi-press style input according to certain embodiments;

[0027] FIG. **8** illustrates an embodiment of the on-screen virtual keypad on screen with a highlighted character and key;

[0028] FIG. **9** illustrates the frequency of occurrence of letters of the alphabet in the English language;

[0029] FIG. **10** illustrates a specialized collating sequence on a highlighted key as found in certain embodiments;

[0030] FIG. **11** illustrates a specialized collating sequence on a highlighted key as user is entering the second character according to certain embodiments;

[0031] FIG. **12** illustrates an interface for text entry with the single press of a key according to certain embodiments;

[0032] FIG. **13** illustrates an interface for text entry where a lazy approach to disambiguation is in progress according to certain embodiments; and

[0033] FIG. **14** illustrates an example of the competition of a lazy disambiguation process according to certain embodiments.

DETAILED DESCRIPTION

[0034] Preferred embodiments of the invention provide techniques for assisting a user to enter text into a search interface. These techniques include providing for visual cooperation between a remote control text entry device and a display device. These techniques facilitate text entry without the need to look back-and-forth between the remote control device and display device while entering text, and facilitate entry for capability limited input devices, such as five button interfaces. A television remote control (e.g., with five button control) and television screen is one example of a pair of devices that can benefit from aspects of the invention. Examples involving television systems are provided below, in part because of the well-known nature of televisions. Thus, embodiments can be used to search for content items that can be displayed on televisions, e.g., television shows or movies. However, use of the invention is not limited to television systems and television content, as aspects of the invention are useful to any interface requiring text input.

[0035] Referring to FIG. **4**, an overall system **100** for text entry on a television in accordance with an embodiment of the invention is illustrated. A server farm **101** serves as the source of media data with the network **102** functioning as the distribution framework. The distribution could be a combination of wired and wireless connections. The television **103** is coupled with a remote control **104** having an keypad or a touchpad interface (e.g. capacitive touchpad made by SYNAPTICS™) along with a five-button control (FIG. **3**) for navigation. A handheld computing device **105** and a personal computer **106** can also access data residing on the server farm **101** via the network **102**. Thus, embodiments of the invention can be used with the handheld computing device **105** and/or the personal computer **106**.

[0036] Referring to FIG. **5**, according to the embodiment, a television **103** has display **201**, a processor **202**, volatile memory **203**, text input interface **204**, which is through a wireless remote control **104**, remote connectivity **205** to a server **101** through a network **102**, and a persistent storage **206**.