[0070] In addition to above, the media player **700** may also include one or more buttons **712**. The buttons **712** are configured to provide one or more dedicated control functions for making selections or issuing commands associated with operating the media player **700**. By way of example, in the case of a music player, the button functions may be associated with opening a menu, playing a song, fast forwarding a song, seeking through a menu and the like. In most cases, the button functions are implemented via a mechanical clicking action. The position of the buttons **712** relative to the rotational input device **710** may be widely varied. For example, they may be adjacent to one another or spaced apart. In the illustrated embodiment, the buttons **712** are configured to surround the inner and outer perimeter of the rotational input device **710**. In this manner, the buttons **712** may provide tangible surfaces that define the outer boundaries of the rotational input device **710**. As shown, there are four buttons **712**A that surround the outer perimeter and one button **712**B disposed in the center or middle of the rotational input device **710**. By way of example, the plurality of buttons **712** may consist of a menu button, play/stop button, forward seek button, reverse seek button, and the like.

[0071] Moreover, the media player **700** may also include a power switch **714**, a headphone jack **716** and a data port **718**. The power switch **714** is configured to turn the media device **700** on and off. The headphone jack **716** is capable of receiving a headphone connector associated with headphones configured for listening to sound being outputted by the media device **700**. The data port **718** is capable of receiving a data connector/cable assembly configured for transmitting and receiving data to and from a host device, such as a general purpose computer. By way of example, the data port **718** may be used to upload or download songs to and from the media device **700**. The data port **718** may be widely varied. For example, the data port may be a PS/2 port, a serial port, a parallel port, a USB port, a FireWire port, and the like. In some cases, the data port **718** may be a radio frequency (RF) link or optical infrared (IR) link to eliminate the need for a cable. Although not shown in **FIG. 7**B, the media player **700** may also include a power port that receives a power connector/cable assembly configured for delivering power to the media player **700**. In some cases, the data port **718** may serve as both a data and a power port.

[0072] **FIG. 8A** is a block diagram of a media player **800** according to one embodiment of the invention. The media player **800** can, for example, represent internal components of the media player **700**.

[0073] The media player **800** includes a processor **802** that pertains to a microprocessor or controller for controlling the overall operation of the media player **800**. The media player **800** stores media data pertaining to media items in a file system **804** and a cache **806**. The file system **804** is, typically, a storage disk or a plurality of disks. The file system typically provides high capacity storage capability for the media player **800**. However, since the access time to the file system **804** is relatively slow, the media player **800** also includes a cache **806**. The cache **806** is, for example, Random-Access Memory (RAM) provided by semiconductor memory. The relative access time to the cache **806** is substantially shorter than for the file system **804**. However, the cache **806** does not have the large storage capacity of the file system **804**. Further, the file system **804**, when active, consumes more power than does the cache **806**. The power consumption is particularly important when the media player **800** is a portable media player that is powered by a battery (not shown).

[0074] The media player **800** also includes a user input device **808** that allows a user of the media player **800** to interact with the media player **800**. For example, the user input device **808** can take a variety of forms, such as a button, keypad, dial, etc. Still further, the media player **800** includes a display **810** (screen display) that can be controlled by the processor **802** to display information to the user. A data bus **811** can facilitate data transfer between at least the file system **804**, the cache **806**, the processor **802**, and the coder/decoder (CODEC) **812**. The media player **800** can also include an audio feedback unit (not shown) to provide audio feedback for user interactions (such as with the user input device **808**).

[0075] In one embodiment, the media player **800** serves to store a plurality of media items (e.g., songs) in the file system **804**. When a user desires to have the media player play a particular media item, a list of available media items is displayed on the display **810**. Then, using the user input device **808**, a user can select one of the available media items. The processor **802**, upon receiving a selection of a particular media item, supplies the media data (e.g., audio file) for the particular media item to a coder/decoder (CODEC) **812**. The CODEC **812** then produces analog output signals for a speaker **814**. The speaker **814** can be a speaker internal to the media player **800** or external to the media player **800**. For example, headphones or earphones that connect to the media player **800** would be considered an external speaker.

[0076] **FIG. 8B** is a block diagram of a computing system **850** according to one embodiment of the invention. The computing system **850** can, for example, represent a portion of any of the computer system **650** shown in **FIG. 7**A, the media player **700** shown in **FIG. 7**B, or the media player **800** shown in **FIG. 8A**.

[0077] The computing system **850** includes a housing **852** that exposes a rotational input device **854**. The housing **852** can be a computer's housing or an input/output device's housing. The rotational input device **854** permits a user to interact with the computing system **850** through a rotational action. The rotational action results from either rotation of the rotational input device **854** itself or by rotation of a stylus or user's finger about the rotational input device **854**. As examples, the rotational input device **854** can be a rotary dial (including, e.g., a navigational wheel or a scroll wheel) capable of being rotated or a touch pad capable of rotational sensing. In one embodiment, the touch pad has a circular shape. A rotation pickup unit **856** couples to the rotational input device **854** to sense the rotational action. For example, the rotational pickup unit **856** can be optically or electrically coupled to the rotational input device **854**.

[0078] The computing system **850** further includes a processor **858**, a display **860** and an audio feedback unit **862**. Signals pertaining to the rotational action are supplied to the processor **858**. The processor **858** not only performs processing operations for application programs hosted by the computing system **850** but also can control the display **860** and the audio feedback unit **862**. Alternatively, a specialized controller or other circuitry can support the processor **858** in controlling the display **860** or the audio feedback unit **862**.