GESTURE RECOGNITION DATA TRANSFER

BACKGROUND OF THE INVENTION

[0001] The present invention relates generally to the field of mobile computing and, in particular, utilizing hand gestures on a wearable computing device to initiate a data transfer.

[0002] Advances in electronic technology allow for near instantaneous communication and data exchange, while leading to ever smaller devices. Recent advances in sensor technology, as well as the miniaturization of both electronics and power sources allow for the scaling down of commonly used devices. Specifically, computing devices have benefited from recent advancements in microprocessor design, providing increasingly complex computations while providing successively diminutive size.

[0003] Mobile computing devices provide a user with access to computing capabilities even as the user moves about to various locations. Many people carry one or more computing devices with them throughout their daily activities, for example, to keep in contact with others, to provide information, used as entertainment, etc. Wearable technological computing devices includes non-intrusive devices a user may wear on their body without impeding daily activities. Common wearable devices may include a watch, bracelet or other wrist worn device. Such devices may work independently, or sync to another electronic device such as a mobile phone.

SUMMARY

[0004] According to one embodiment of the present invention, a method for sharing content between devices is provided, the method comprising: storing, by one or more processors, a first gesture, wherein the stored first gesture comprises movement data and an associated first data file; discovering, by a first device, a second device, wherein the first device is configured to detect movement and send the associated first data file wirelessly to the second device and wherein the first device is a wearable device; receiving, by one or more processors, at least one movement of the first device; determining, by one or more processors, that the received at least one movement of the first device is similar to the stored first gesture; and in response to determining the received at least one movement of the first device is similar to the stored first gesture, sending the associated first data file from the first device to the second device.

[0005] Another embodiment of the present invention provides a computer program product for sharing content between devices, based on the method described above.

[0006] Another embodiment of the present invention provides a computer system for sharing content between devices, based on the method described above.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. **1** is a functional block diagram illustrating a user interface environment, in accordance with an embodiment of the present invention;

[0008] FIG. **2** is a flowchart illustrating operational steps for a gesture initiated file transfer program, executed on a wearable device, in accordance with an embodiment of the present invention; and

[0009] FIG. **3** is a block diagram of internal and external components of the computer systems of FIG. **1**, in accordance with an embodiment of the present invention.

DETAILED DESCRIPTION

[0010] Mobile devices have become an essential part of daily life. The small size of computing devices allows them to be easily portable and even wearable. Wearable devices, are unobtrusive for the wearer, as they are small and light weight.

[0011] Wearable devices may be provided in various form factors and may be designed to be worn in a variety of ways. In some embodiments of the present invention, a wearable device is a smart watch. A smart watch is a computerized wristwatch with functionality that is enhanced beyond mere time keeping; rather a smart watch is essentially a wearable computer. Many smart watches can run applications, while others contain additional capabilities, for example, making and receiving phone calls, replacing a traditional smart phone. In other embodiments of the present invention, a wearable device is a wrist band, where a wrist band is a secondary device, connected wirelessly or wired to a primary computing device. Embodiments of the present invention provide systems and methods for detecting specific gestures and transmitting data corresponding to the detected gesture to nearby devices.

[0012] It is to be understood that while the concepts included herein are presented in the context of a wearable device, in particular a smart watch, these concepts may be applied in other contexts as well if the appropriate hardware is available. For example, many modern smartphones include motion sensors, such as accelerometers and gyroscopes, enabling the concepts discussed herein, if appropriate, to be implemented in such a device.

[0013] The present invention will now be described in detail with reference to the Figures. FIG. **1** is a functional block diagram depicting a user interface environment, generally designated **100**, in accordance with one embodiment of the present invention. FIG. **1** provides only an illustration of one embodiment and does not imply any limitations with regard to the environments in which different embodiments may be implemented. Many modifications to the depicted environment may be made by those skilled in the art without departing from the scope of the invention, as recited by the claims. In this exemplary embodiment, user interface environment **100** includes wearable device **120** and computing device **130**, connected over Personal Area Network (PAN) **110**.

[0014] PAN **110** may be a computer network with a small geographic scope. Computer networks with a small geographic scope range from NFC to Local Area Networks (LANs). A computer network with a small geographic scope typically does not have a connection to the Internet or other remote networks. In an alternative embodiment, PAN **110** is not intended to be limited to a small geographic scope, rather PAN **110** may include a larger networking environment. For example, PAN **110** may be used for communication among mobile devices themselves (intrapersonal communication) or for connecting to a higher level network (e.g., the Internet). A wireless personal area network (WPAN) is a PAN carried over wireless network technologies such as BLUETOOTH® or peer-to-peer communications over a wireless LAN (Bluetooth is a registered trademark of Bluetooth SIG, Inc.). PAN **110** architecture may include one or