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ELECTRONIC PEN

Pedro Felix

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ABSTRACT

A system and method of an electronic pen is disclosed. The disclosed electronic pen device comprises sensors for motion detection that is incorporated into a writing instrument such as a pen, or any other wearable such as a ring, a glove or a watch. The electronic pen device transcribes the written text and stores it in memory, so that the file transfer could be managed directly from the user's smartphone. The system further includes a mobile application that enables the mobile or tablet to recognize and respond to written commands from the electronic pen.

BACKGROUND

A lot of information is written down. However, nobody is really involved in organizing the world's written information and making it even more smart and useful. Pens are widely used in many aspects of people's daily lives. Although computers and smartphones have made pens less useful, a lot of people still use pens every day. Further, computers may be used to harness this existing technology, rather than make it obsolete.

Pens are still used for several, often important things today. They are used, for example, to sign documents and it may be desirable to have a record of all the documents signed, including details such as when those documents were signed. Pens are used to write notes or memos – which could be missed or lost. We write down shopping lists – such lists could have business implications for ads and learning people's interests as well as implications (since we may still forget that shopping list) for record-keeping. Some still people use pens to write and send letters,

but we may never know what we sent; these will just remain as memories. We may draw a scheme of thought, a table with rows and columns, for example when brainstorming using sketches and pens.

Nowadays, few of us carry a pen all the time. So, a device is required that makes any stylus an electronic pen.

DESCRIPTION

The disclosed electronic pen device comprises sensors for motion detection that is incorporated into a writing instrument such as a pen, or any other wearable such as a ring, a glove or a watch that stores whatever is written by the user in its internal memory. When the writing instrument is pressed to a piece of paper, the user starts to write or draw. The electronic pen device transcribes the written text, pictures or other written matter and stores it in memory. Once recorded, the transcribed text files are then sent to the user's Cloud storage through Bluetooth or other wireless communications via a paired computing device. The file would not need to exist in the pen's memory anymore once the file transfer to drive has occurred and the file transfer could be managed directly from the user's smartphone.

In one aspect, the pen converts the user's handwriting into digital characters using handwriting recognition. Thereafter, the user's writing can be stored, searched and shared as any other document. The device disclosed solves the problem of transcription of any notes the user makes in the folder on the user's drive, so that they won't be lost.

In some scenarios, the pen is paired with the user's tablet or mobile device, and further includes a mobile application that enables the mobile or tablet to recognize and respond to written commands from the electronic pen. Some examples of written commands may include:

1. While writing “Send to: Contact_name” at the top of the page, the pen could be configured to send the message through the user’s mail account to the selected contact. The mail program could be configured to convert the user’s writing to text and send the mail message.
2. While writing “Share to: Circle_name, Social Network_App_name” the writing could be shared to the particular circle or social network.
3. Sync with website.
4. Sync with calendar.

In some instances, the electronic pen would allow a person to write in normal ink, while allowing digitization of what the user writes. Once the user finishes writing, the information is transformed into digital content through cloud computing and the user may choose to still have the physical note in hand. The quality and the smoothness of this type of writing could give the user a natural feel while communicating through control of one’s mobile device or tablet. The disclosed device thus provides endless possibilities in terms of convenience and applications.