

produced whose frequency depends on the position of the styles **38** on the signature capture area **34**. Moving the styles **38** changes the tone. When the starting point tone matches the styles tone, the user knows he/she is at the proper location of the signature capture area **34** to begin writing/entry of the signature.

[0036] The generated audio signal may be stored in a suitable storage device. In the case of a retail transaction, the generated audio signal may be appended to a digital receipt generated for the particular transaction and stored with the digital receipt. The generated audio signal will have a particular pattern that may be used for matching and/or identification purposes regarding other transactions.

[0037] It should be appreciated that the SCT **30** of FIG. **1** may be utilized in a variety of applications and/or circumstances. Without being exhaustive, the SCT **30** may be used for electronic fund transfers (EFTs), as a credit card signature capture device for purchase transactions, and the like.

[0038] Referring to FIG. **2**, a block diagram of the components of the SCT **30** is shown. It should be initially understood that the block diagram does not show each and/or every physical/electrical connection between the circuitry/logic of the various blocks of circuitry/logic and/or components, only the general configuration of the various components. The SCT **30** includes a processing unit of appropriate circuitry/logic that is generally operative to be a main processing component, memory **54** such as RAM that is operative to temporarily store program instructions (i.e. software) for use by the processing unit and other components, and a mass storage device **52** (i.e. hard disk) that is operative to store program instructions of various types for operation of the SCT **30**. The SCT **30** further includes an audio generator **58** of appropriate circuitry/logic that is generally operative to generate or produce the signature audio signal as described above. The audio jack **44** and the speaker **40** are in communication with the audio generator **58** such that the generated signature audio signal is provided to either or both the speaker **40** and audio jack **44**. A network interface **56** of appropriate circuitry/logic may also be provided in order to allow the SCT **30** to be in communication with other devices.

[0039] Referring to FIG. **3** there is depicted a system, generally designated **60**, that is operative to carry out an aspect of the present invention in accordance with the principles presented herein. In particular, the system **60** is operative to receive a signature and produce a signature audio signal in substantially the same manner as that described with reference to FIGS. **1** and **2**. However, in FIG. **3**, a signature capture terminal (SCT) **62** is coupled to a retail terminal **64** via a communication line **66**. The system **60** is typical of a point-of-service retail terminal such as are located in grocery stores and other retail outlets. Thus, in this embodiment, the SCT **62** may not contain every component/function/feature as the stand-alone SCT **30**.

[0040] The SCT **62** includes a housing **68** that supports a signature capture area **70** of the same type as the signature capture area **34** of the SCT **30**. Disposed on either side of the signature capture area **70** are raised alignment tabs **72a** and **72b**. The alignment tabs **72a** and **72b** include tactile indicia such as Braille for aiding in locating the boundaries of the signature capture area **70**, and particularly the center line thereof in like manner to the alignment tabs **36a** and **36b** of

the SCT **30**. A stylus **74** is included as a writing instrument for the user to enter his/her signature onto the signature capture area **70**. The SCT **62** further includes a speaker **76**, a headphone jack for receipt of a pair of headphones **82**, a volume control **78**, and a port **84**, each of which functions and/or operates in the same manner as the corresponding parts of the SCT **30**. The SCT **62**, however, is adapted to be used in conjunction with a retail terminal or like device and not as a stand-alone terminal. As such, the SCT **62** may not have every component/feature/function as the SCT **30**. However, it should be appreciated that the SCT **62** along with the retail terminal **64** is operative in substantially the same manner as the SCT **30**.

[0041] The retail terminal **64** has a housing **88** that encloses various components and/or circuitry/logic thereof, and includes a display **86**, a keyboard/keypad **90** as a manual input device, a cash drawer **92**, and a card reader **94**. The retail terminal **64** further includes a scanner **96** and a scale **98** that are shown as coupled to the housing **88**. It should be appreciated that the retail terminal **64** shown in FIG. **3** is only exemplary of one of the many forms that the retail terminal may take. Therefore, the retail terminal may take any form such as an operator-assisted type retail terminal, a self-service retail terminal, or otherwise. The principles of the present invention are the same regardless of the form of the retail terminal.

[0042] In the system **60**, a purchase transaction is performed on or by the retail terminal **64** and if it is necessary to obtain a signature of the consumer, the signature is obtained on the SCT **62**. The SCT **62** is typically mounted proximate to the retail terminal **64**. The SCT **62** may provide an audible signal when it is ready to accept a signature on the signature capture area **70**. The consumer then writes his/her signature on the signature capture area **70** typically with the supplied stylus **74**. The received signature is converted into an audio signal that is audibly provided to the speaker **76** and/or the headphones **82** in the same manner as that for the SCT **30**. More particularly, the SCT **62** converts the signature written onto the signature capture area **70** into an electronic signal that is then converted into an audio signal. The audio signal is then provided to the speaker **76** and/or headphones **82** for receipt by the consumer. The electronic signal representing the received signature may also be stored as a graphic file, i.e. as an electronic representation of the received signature.

[0043] In the system **60**, the SCT **62** is operative to generate and provide various audio signals that correspond to various inputs to the system **60** both by the user and an operator of the retail terminal **64**. In this manner, the user can hear each input, transaction, or event performed on and/or by the system **60**. Preferably, each such input, transaction, or event is characterized by a different audio signal.

[0044] FIG. **4** depicts a block diagram of the various components of the system **60**. It should be initially understood that the interconnections shown with respect to the retail terminal **64** and the SCT **62** are only exemplary and may not necessarily represent all of the various connections of the circuitry/logic employed to carry out the various features/functions herein ascribed to the various components.

[0045] The retail terminal **64** includes a processing unit **100** to which is coupled the display **86** (with or without a