

Summary of Invention

Accordingly, it is an object of the present invention to provide a portable word information device with faculties for examining and simultaneously displaying a full-length and complete word and its meaning in Tamil. For potential future versions, this may include still and animated picture and audio voice corresponding thereto, the complete word being selected from a partial word entered with an input keyboard and handwriting as well as speech to text along with the addition of synonyms and antonyms in a thesaurus like format in addition to the dictionary-like meaning etc.

It is another objective of the present invention to provide an electronic dictionary and language interpreter comprising means for determining and simultaneously displaying a full-length and complete word and a translated word corresponding thereto on basis of a partial or full word entered with an input keyboard.

Other objects and further scope of applicability of the present invention will become apparent from the detailed description given hereinafter. It should be understood, however, that the detailed description and specific examples, while indicating preferred embodiments of the invention, are given by way of illustration only, since various changes and modifications within the spirit and scope of the invention will become apparent to those skilled in the art from this detailed description.

To achieve the above objects, pursuant to an embodiment of the present invention, a portable electronic and language interpreter comprises a control circuit for retrieving one or more full-length words in response to entry of a non-full-length form. The one or more full-length words are preliminarily stored in a memory such as read only memory (ROM). The control circuit is activated by a search key provided on the main frame of the portable device.

According to the repetition of the actuation of the search key, a plurality of full-length words is successively developed from the memory and then indicated in a display. In another form of the recent invention, another type of search key may be provided so that the plurality of full-length words can be successively developed and then indicated.

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Brief Description of the Drawing

The disclosure is herein described, only through examples, with reference to the accompanying drawings. With specific reference now to the drawings in detail, it is stressed that the particulars shown are by way of example and for purposes of illustrative discussion of the preferred embodiments of the present disclosure only and are presented to provide what is believed to be the most useful and readily understood description of the principles and conceptual aspects of the disclosure. In this regard, no attempt is made to show structural details of the disclosure in more detail than is necessary for a fundamental understanding of the disclosure, the description taken with the drawings making apparent to those skilled in the art how the several forms of the disclosure may be embodied in practice. In the drawings:

Figure 1: is an isometric view of a portable electronic dictionary accordingly to the present invention.

Figure 2: is data communication and process flow diagram between various modules.

Figure 3: is data communication and process flow diagram between user input and device output.

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Detail Description of Preferred Embodiments

The following detailed description provides a preferred embodiment of the invention about accompanying drawings.

As shown in Figure -1, the disclosed invention comprises LCD screen, [100], Physical Keyboard [120], Body [130], Power on/off switch [140], Audio output port [150], Power Charging Port [160] and Light Sensor [170].

LCD screen [100] will be 3.2 inches diagonally, ensuring clear and quality images/texts could be seen by the user. The brightness of the LCD screen will be controlled by getting environmental feedback such as light intensity of the surrounding using the light sensor [170]. For future versions, the LCD screen could potentially be replaced with LED or OLED displays. Additionally, the entire screen could be replaced with a Touch Screen module which allows the user to interact directly with the screen to type out the words to search for meanings of the respective words.

Physical Keyboard [120] will be designed with Various Buttons for Tamil Characters, Enter Button, Back Space Button, Shift Button, Space Bar, Scroll Bar, Numbers, Special Characters and Symbol to form Search String.

Body [130] will be comprised with Physical Keyboard [120], Electronic Circuit Boards, Permanent and Temporary Memory Chips, Power Control Device, Rechargeable Battery, Audio Output Port [150], Charging Port [160] which comprises, USB, USB mini, Micro USB, USB A type, USB B type, USB C type etc and Mechanism to communicate and hold the assembly of LCD screen [100]. In future, a mini camera will be attached next to the light sensor or in an optimal location within the body of the device to make way for hand recognition sensing capabilities.

As shown in Figure -2, the flow diagram describes the data communication between various Physical and Virtual Modules such as Language Keyboard, LCD Screen, Read only memory, Processing unit, various buttons which includes the power buttons as well as the keyboard, the light sensor and the in-built battery management system as well as the charging port.

As shown in Figure -3, the flow diagram describes the functions between Input and Output of word and meaning search and display which also includes certain functionalities of future models

Claims:

In this Invention on **Tamil to Tamil E-Dictionary with Exam Board Compliance**, The c€laims are as follows:

1. The disclosed invention (hereinafter called as Claim 1) comprises of LCD Screen [100], Body [130] which further comprises with Physical Keyboard [120], Electronic Circuit Boards, Permanent and Temporary Memory Chips and Processor, Power Control Device [140], Rechargeable Battery, Audio Output Port [150], Charging Port [160] and Mechanism to communicate and hold the assembly of ~~Touch~~ LCD Screen [100].
2. Claim 1 will have Permanent Memory Hardware to store all the Characters, Words, System of Units .
3. Claim 1 will have Tamil Words and their Meanings.
4. Claim 1 will be designed with Waterproof, Wire and Wireless Charging Mechanisms including Solar Power Charging.
5. Claim 1 will not have any permanent storing and retrieval option by the user in consideration with exam regulation.

For Future models, the following claims are made:

1. The disclosed invention (hereinafter called as Claim 2) comprises Touch Screen, Body which further comprises with Physical Keyboard, Electronic Circuit Boards, Permanent and Temporary Memory Chips and Processor, Power Control Device, Rechargeable Battery, Audio Output Port, Charging Port and Mechanism to communicate and hold the assembly of Touch Screen.
2. Touch Screen will be designed with the latest technology to respond to Multi-touch, Single Tap and Double Tap, Touch and Hold, Drag, Swipe and Pinch operations by the fingers of user. It will also respond to the inputs from Stylus pen.
3. Claim 2 will have Permanent Memory Hardware to store all the Characters, Words, System of Units, Audio Pronunciation of Tamil Language.
4. Claim 2 will have Still and Animated Pictures related to Tamil Words and their Meanings.

5. Claim 2 will be designed with Virtual Key Board (without Physical Keyboard) as an additional model.
6. Claim 2 will have handwriting recognition and touch screen technology.
7. Claim 2 will have Audio output port to connect with Earpiece and will not have any speakers in compliance with Exam Board.
8. Claim 2 could be used for other languages using the same device as a e-dictionary platform

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