Abstract

METHOD AND SYSTEM TO CREATE CHINESE LANGUAGE SEEDS FROM MOST FREQUENTLY USED CHARACTERS AND THEIR APPLICATIONS

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The first (main) embodiment of this invention is the method and system to create Chinese language seeds from most frequently used Chinese characters, normal distribution, and IQ (Intelligent Quotient) as a few easily memorizable sentences quantized by IQ levels for various applications. The first application is faster learning of Chinese language to the levels of newspaper reading and simple letter writing. Meanwhile, the second (main) invention embodiment is 2D key the big memorizable secret using general spatial input sequence and specific sūdoku (数独) input sequence to further increase the secret entropy.

Second application is secure computer-free cryptography in cases of electricity power failure and computer absence, by using 2D key, pens, papers and books working out the polyalphabetic cipher or Vigenère cipher in Chinese language. The third is a group of eleven variants from the second application by using modified polyalphabetic cipher based on weirdly added symbols, bilingual languages using a second Latin language like English language, pronunciation Romanization, different set sizes of plaintext symbols, ciphertext symbols, and key symbols, starting point of ciphertext or plaintext symbol set, left-right (or up-down) directing of cipher table, random order of symbol set lines in cipher table, as well as skipping number and sequential scrolling number of cipher tables in book form.

The fourth is Chinese input method for computer data entry using the frequently used characters quantized into tens of sentences. A third (side) invention embodiment is a complementary Chinese input method for the fourth application by using special stroke encoding of Chinese character structure based on bagua (八卦), yijing (易经), and Chinese character yong (永) (meaning forever). This side invention embodiment is called “Yongzi Guaxiang” (永字卦象) input method. The fourth application and side invention embodiment improve the speed of Chinese input method, and lengthen the symbol set size in the fifth application, which is a computer cryptography using polyalphabetic cipher in Chinese language.

The sixth application is a variant of the fifth application by using the good phrase formation strength of Chinese language and hybrid communications network. The seventh is another variant of the fifth application by using key strengthening and multihash key to create pseudo-longer semantic unicity distance and stronger polyalphabetic cipher. The eighth uses the key processing methods of the seventh application, but replaces the cipher tables of Chinese language seeds by other ciphers like AES (Advanced Encryption Standard) cipher to provide alternative sub-key generation techniques.

Most Illustrative: Figure 5a