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Method and Apparatus for Converting Characters of Non-alphabetic Languages

Field of The Invention

- 5 The present invention relates to a method for converting a desired character of a non-alphabetic language into the form of contextual information and linguistic patterns.

Background of The Invention

- 10 Chinese language is often characterized by a relatively large number of characters. The English language features twenty-six letters that combine to form words. By comparison, the Chinese language features thousands of ideograms (called Chinese characters) that represent entire words; each character is formed from units known as radicals and strokes, of which hundreds exist. Due to the large number of characters in the Chinese language,
- 15 the Chinese characters writing has in this electronic communication age shown various comparative weaknesses in terms of the speed of information delivery, ease of memorization, handwriting and typed writing when compared with other written languages which can be spelled with alphabet letters.
- 20 Basically, the input method for Chinese character can be categorized into two types. One type is radical-based and involves mapping the set of radicals to the standard English keyboard. The other type involves the use of a phonetic scheme known as Chinese Phonetic Spelling (Hanyu Pinyin), which has long been used to represent Chinese characters. In this Hanyu Pinyin-based scheme, each Chinese character is assigned a
- 25 Romanized representation derived from a phonetic spelling of its pronunciation. The Pinyin representation of a Chinese character, therefore, can be broken down into phonemes identical to the Roman alphabet. Additionally, tonal information can be conveyed using diacritical marks.
- 30 Although Chinese Phonetic Spelling (Hanyu Pinyin) can define the pronunciation of particular Chinese character using alphabet spelling, it left the problems and confusions of too many Chinese characters having the same pronunciation and hence sharing of same spelling. These confusions have made the Chinese Phonetic Spelling (Hanyu Pinyin)



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unsuccessful in replacing or paralleled the traditional Chinese characters writing. In short, the lack of one-to-one relationship between Chinese Phonetic Spelling (Hanyu Pinyin) and Chinese characters have resulted in the present Chinese Phonetic Spelling (Hanyu Pinyin) unsuccessful in replacing or paralleled the Chinese characters writing.

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“Romanization of Chinese Characters” which until to date has not been able to produce a satisfactory and practical solution, for the one-to-one correspondence between the Chinese characters writing and the “Romanized Chinese Characters words”.

- 10 The traditional Chinese Phonetic Spelling “Hanyu Pinyin” presented by English-like alphabet letters, consists of A to Z alphabet letters, with special characters for all its vowels a, e, i, o, u as āáǎǎ, ēéěě, īíǐǐ, ōóǒǒ, ūúǔǔ, ŭǔǔǔ, êetc, to denotes the tones specified. The Chinese Phonetic Spelling has not been or has not been able to use an all-English-alphabet-letters spelling method, making it not able to be typed out in an English
15 based computer keyboard or typewriter. The Chinese Phonetic Spelling has not also combined the Chinese Phonetic Spelling of a Chinese character with its associated radical (Chinese character’s “genetic” heading) as “all-alphabet-letters” distinctive word differentiable from all others.

- 20 China Patent No. 1209598 disclosed an inputting method for phonetic Chinese characters by inputting 4 keys for every Chinese character. The method is limited to 4 keys only and thus is not a one-to-one correspondence between the 4 keys and the subject Chinese characters.

25 **Summary of The Invention**

- The present invention relates a method and an apparatus for converting a desired character of a non-alphabetic language into alphabetical contextual information and linguistic patterns. The present invention enabling complete alphabetization or “Romanization” of
30 non-alphabetic languages preferably Chinese characters into distinctive “all-alphabet-letters-words”. “Alphabetic Chinese Spelling Writing” (hereinafter referred to as “ACSW”) according to the present invention is a highly efficient way of presenting the

associated radical of a Chinese character in the shortest and most convenient to type manner, also presenting the tone marks using less confusing alphabet letters when reading at one go with the radical, makes the complete alphabetization of Chinese characters meaningful and practical.

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A method for converting a desired character of a non-alphabetic language comprising the steps of: (a). presenting the consonant component of said character according to its phonetic spelling; (b). presenting the vowel component of said character according to said phonetic spelling; (c). indicating the tone component of said character with a fixed representation; (d). assigning the radical component of said character with a predetermined set of alphabetic symbol; and combining said represented components of said character to convert into the form of contextual information and linguistic patterns.

In the preferred embodiment of the present invention, the component of consonant, vowel, tone and radical are in the form of alphabetic and the combination of alphabets is designed with easy-to-reach typing manner.

The method according to the present invention, wherein said tone component is preferably an alphabet having the nature of causing lesser confusion as a tone mark identity.

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According to a particular embodiment of the present invention, the radical component is represented by a main radical or a composite radical. The composite radical comprising of a main radical followed by a secondary radical or a separator and a secondary radical whenever said secondary radical is in single letter.

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The radical component is distinguished from other components preferably by a space, dot, hyphen, or other signs that have the same function and said main radical may be having up to two letters (binary letter radical or its variant term, double letter radical).

The method according to the present invention, wherein said main radical may be in the form of single letter or double letters which is also known as Binary Letter Radical according to the present invention. The Binary Letter Radical is preferably derived from

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the combination of the first Chinese phonetic spelling letter of the subject radical and the first Chinese phonetic spelling letter of another Chinese character that is grouped under the family of the subject radical or having part the strokes of the subject radical.

- 5 In another embodiment of the present invention, the Binary Letter Radical can be the first two letters of the Chinese Phonetic Spelling of the subject radical.

Still, in another embodiment of the present invention, said method further comprising a pronunciation indicator preferably an apostrophe (') to the tone mark for the particular
10 pronunciation of multiple pronunciation characters.

A further embodiment of the present invention further comprising a rolling tongue indicator preferably a "r" at the end part of the coding system for rolling tongue words.

- 15 The method according to the present invention further comprising a specific alphabetic code for uncommon Chinese Phonetic Spelling (Hanyu Pinyin) such as ü, üe, and ê. It is preferably uee as equivalent of ü; ue as equivalent of üe and e' as equivalent of ê in the present invention.

- 20 The method according to the present invention further comprising an indication number encapsulated preferably after the consonant, vowel and tone components for conversion of character in between traditional, simplified or a variant form thereof.

Another embodiment of the present invention may be used in other non-alphabetic
25 language or dialectal languages when a language indicator preferable a 'u' prefix to the components of the present invention.

- The method according to the present invention further comprising a Hanzi (Chinese character) indicator when the method of the present invention is used alternatively with an
30 alphabetic language, wherein said Hanzi indicator is preferably "hz" for non-radical-word.

One of the advantages of the present invention is the method has the capacity of one-to-one correspondence relationship with each and every Chinese character.

5 In another embodiment of the present invention, a desired character input apparatus in which each component of said desired character are inputted comprising: (a). an input means for inputting the representative components of said character; (b). memory means for storing a plurality of said character; and (c). a generating means which is responsive to said input means to generate said character from said memory means corresponding to the inputted representative components of said character.

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In a further embodiment of the present invention, a desired character pronouncing apparatus in which each component of said desired character are inputted comprising:

- a. an input means for inputting the representative components of said character;
- b. a memory means for storing a plurality of said character;
- 15 c. a generating means which is responsive to said input means; and
- d. a voice producing means to generate the pronunciation of said character from said memory means corresponding to the inputted representative components of said character.

20 The representative components are consonant, vowel, tone and radical of said character according to the present invention. Whereas, the memory means is a database.

Brief Description of Drawings

25 Figure 1 shows typical alphabetic Chinese spelling writing presentation for various applications.

Figure 2 shows standard radicals tabulation for Single Letter Radicals and Binary Letter Radicals.

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Figure 3 shows radical table for alphabetic Chinese spelling writing academic version.

Figure 4 shows characters tabulation for derivation of alphabetic Chinese spelling writing radicals.

Figure 5 shows Single Letter Radicals and Binary Letter Radicals 2-Dimensional Radicals
5 Table.

Detailed Description of the Preferred Embodiment

The present invention relates to a method for converting a desired character of a non-
10 alphabetic language comprising the steps of: (a). presenting the consonant component of
said character according to its phonetic spelling; (b). presenting the vowel component of
said character according to said phonetic spelling; (c). indicating the tone component of
said character with a fixed representation; (d). assigning the radical component of said
character with a predetermined set of alphabetic symbol; and lastly combining said
15 represented components of said character to convert into the form of contextual
information and linguistic patterns.

Phonetic spelling (Hanyu Pinyin or Pinyin) is a phonetic scheme used to represent the
pronunciation of characters in the Chinese language. Each Pinyin representation of a
20 character consists of one or two components. One is an initial or consonant sound. The
other is a final or vowel sound. For instance, the Pinyin representation “yong” can be
broken down into initial sound or consonant component “y” and the final sound or vowel
component “ong”. Some characters, such as “an”, lack the initial sound.

25 Basically, the common format for Alphabetic Chinese Spelling Writings of the present
invention is formatted and defined as <consonant component according to phonetic
spelling + vowel component according to phonetic spelling + one of the 4 tones or light
tone + Radical in Single Letter or Binary Letter / Double Letters >. The uncommon
format is defined as < consonant component according to phonetic spelling + vowel
30 component according to phonetic spelling + one or more of the 4 tones or light tone +
Main Radical in Single Letter or Binary letter + o (only for separating Single Letter
Radicals (SLR) if any) + Secondary Radical in Single Letter or Binary Letter >.

Another embodiment of the present invention relates to a desired character input apparatus in which each component of said desired character are inputted comprising: (a). an input means for inputting the representative components i.e. consonant, vowel, tone and radical of said character; (b). a memory means preferably databases for storing a plurality of said character; and (c). a generating means which is responsive to said input means to generate said character from said memory means corresponding to the inputted representative components of said character.

- 10 A further embodiment of the present invention, a desired character pronouncing apparatus in which each component of said desired character are inputted comprising: (a). an input means for inputting the representative components of said character; (b). a memory means for storing a plurality of said character; (c). a generating means which is responsive to said input means; and (d). a voice producing means to generate the pronunciation of said character from said memory means corresponding to the inputted representative components of said character.

The methodology of Alphabetic Chinese Spelling Writing according to the present invention enables the reading of words, phrases, paragraph, or essay of the precisely pronounced Chinese Language to be artificially synthesize from a database of pre-recorded voices of single word including the very difficult ad-hoc change-tone, the selective pronunciation for Multiple Pronunciation Characters Multiple Syllables Words, and dialects. It is also extensible to other languages when corresponding tone marks are inputted.

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Single Letter Single Character Radicals And Binary Letter Binary Character Radicals; and the rare Binary Letter Single Character Radicals and the Single Letter Binary Character Radicals.

- 30 Based on the radicals (Characters headings/groupings) found in the “Xiandai Hanyu Cidian” (Today’s Chinese Dictionary), the inventor successfully developed a system for representing those radicals by single letter (Single Letter Single Character Radicals) or

binary letter (Binary Letter Binary Character Radicals) based on the first alphabet's letter (and in rare cases first and second alphabets to become Binary Letters Single Character Radical) of the Chinese Phonetic Spelling of Single Character Radicals (SCR) and first alphabet's letter of the Chinese Phonetic Spelling of each character in Binary Character Radicals (and in rare cases the first alphabet letter only to become Single Letter Binary Character Radical) and displayed in a two-dimensional table (Figure 5). Binary Character Radical in the present invention shall define as double character radical. The advantage of Binary Character Radical may overcome the problem of shortage of single alphabet letter to represent all the 189 Chinese Language Radicals found in Xiandai Hanyu Cidian (translated as Today's Chinese Dictionary). The tabulation in Figure 5 can also be presented as such a way shown in Figure 2 for ease of reading and remembrance. The tabulation in Figure 5 is preferably derived with a systematic approach, and example of typical description of said systematic approach is presented in Figure 4.

According to the present invention, all Chinese characters are successfully alphabetized with Roman's alphabet when each of the Single Letter Radical or Binary Letter Radical representing the particular radicals are combined with their respective phonetic spellings (or Hanyu Pinyin). Every Chinese characters are assigned with a unique Single Letter Radicals such as "s"(representing 氵 which pronounce as "shui3" and with the meaning "water") or Binary Letter Radicals such as "fd" for 父 爹 (using the phonics fu4diel's initials of "fd" to represent the radical 父 (父 pronounced as fu4, meaning father and 爹 diel is the nick name for father; of which the characters utilizing 父 as radical are in most cases related to 父 in meaning but occasionally related only in writing strokes)), and in this way made the prospect for complete alphabetization of Chinese characters becoming possibly achievable. Part of the completed presentation of all standard Chinese characters found in "Xindai Hanyu Cidian" is shown in Figure 1 "Typical alphabetic Chinese spelling writing presentation for various application".

The High Efficiency Design Of Alphabetic Chinese Spelling Writing And Its Design
Concept/Theory

The Alphabetic Chinese Spelling Writing is designed to have high efficiency for type writing, handwriting, reading and memorization. Its theory evolved from type writing usage but the end product offers high efficiency in handwriting, reading and memorization as well. The theory for its high efficiency design are presented and explained in the following paragraphs.

- (i) More frequently used radicals (defined here as the radical having more character counts in Xiandai Hanyu Cidian) are purposely designed to be allocated with a Single Letter Single Character Radical with the use of single alphabet's letter representation such as the "s" used for 氵 (pronounced as shuǐ, meaning water). That is to say to use a single alphabet's letter to represent the radical, thereby making the Alphabetic Chinese Spelling Writing shorter and easier for writing, reading, and memorization; thereby enhancing working efficiency.
- (ii) There are further unique high efficiency design in which, radicals having more character counts are also specially designed to be allocated with the either of the letter a, s, d, f, g, h, j, k or l which are where hands resting on the normal typewriting keyboard or near to them, hence making typing works faster and more efficient.
- (iii) The even more highly efficient design is that the radicals having more character counts are allocated with the keys of either of s, d, f, j, k, or l then only comes to g, h, and a. The theory is that s, d, f, j, k, and l are where hands resting naturally on the keyboard and therefore are easiest and fastest to type; while else the typing of 'g' or 'h' requires moving the particular finger, and the finger typing "a" is relatively weak.
- (iv) The next in the line Chinese radicals having less character counts are then theoretically given the e; r; u; i locations, followed by t; y, and then by w; q; o; p locations.
- (v) Then, the even lesser character counts radicals are theoretically given the c; v ; b; n ; m locations, followed by the most difficult typing locations of z; x.

(vi) The above described one of the few high efficiency design theory of Alphabetic Chinese Spelling Writing. However, theory is compromised during implementations whenever required.

5 Binary Letter Binary Character Radicals And Their High Efficiency Binary Letter Combination.

In the grammar of Binary Letter Binary Character Radicals, the initial alphabet's letter of the Chinese Phonetic Spelling (Hanyu Pinyin) for each of the Binary Character Radicals are taken to combine to become Binary Letter Radicals. When combining letters for Binary Letter Binary Character Radicals, either of "s, d, f, j, k or l" is given priority to combine with radicals having more character counts, followed by "g, h, a". Within the "s, d, f, j, k, and l", another filtering is done to allocate either of "d, f, j, k" to more radicals having more character counts, and combining to allow alternate typing with left and right hand or right and left hand (such as the ck combination for the radical 虫 (chong2), is the result of using 𧈧 (kuo1) to combine with the original radical character 虫 (chong2)). This is a purposely done and a unique design that provides high efficiency typing and provides alternate usage of left and right brain and alternate resting of left and right brain while typing. According to published result of research done by other researchers and scientists, while typing with left hand the right brain will be functioning actively; while when typing with right hand the left brain will be functioning actively thereby enabling the full or better development of both left and right brains.

Binary Letter Radical with two identical letters (e.g. ss) are having advantage in terms of speed of typewriting, hand writing, and memorization over the type of alternate hand combinations described in the preceding paragraphs, and therefore have given priority to allocate Binary Character Radicals with identical letters to radicals having more character counts.

Binary Letter Binary Character Radicals may assume more Chinese characters to represent the Binary Character Radicals (such as zr 𠂇 zhong4 人 ren2 (Reversed Radical)

- may assume 人 入 𠂔) but only one original radical character (in this particular example, the ‘人’) and another character used for deriving its binary letter (in this particular example ‘𠂔’) are encouraged to be used as the official terminology for that radical in Alphabetic Chinese Spelling Writing grammar so as to simplified the learning process
- 5 (refer Figure 2). Another unofficial table (academic version) with multiple characters tabled along side the official binary characters shall also be taught in school so that the meaning associated with that particular Binary Letter Radical may be brought out more readily to facilitate the learning of Alphabetic Chinese Spelling Writing (refer Figure 3).
- 10 “Characteristic of r, k, v, t and o rows and columns of Single Letter Radicals and Binary Letter Radicals 2-Dimensional Radicals Table (Figure 5)” Gives Rise To New Method Of Marking The Four Basic Tones And The Additional Light Tone In Chinese Language Pronunciations.
- 15 Figure 5 shows the arrangement of the Binary Letter Radicals in the 2-dimensional table in the (y,x)* coordinate manner. This is because the Binary Letter Radicals normally have its first letter representing the radical proper and the second letter representing the base character or associate characters for that particular radical, though there are rare exceptions. Arranging the 2-dimensional table in this manner made all Binary Letter
- 20 Radicals having the same initial letter appearing in a row and that helps identification and memorizing because Chinese language is nowadays written in horizontal lines. The rows of r,k,v,t are designed to become empty without any radical assigned to them (i.e. Binary Letter Radicals with ra...until rz, ka...until kz, ta...until tz, va...until vz nil) and thereby allowed the use of r,k,v,t to represent the 4 basic tones of Chinese language
- 25 pronunciations without causing significant confusion between tone marks and Single or Binary Letter Radical. The use of r,k,v,t to represent the 4 tones (yin1 阴, yang2 阳, shang3 上 and qu4 去) made the appearance of the proposed Alphabetized Chinese Spelling Writing looks more natural compared to using 1, 2, 3 and 4 used occasionally nowadays.

The system according to the present invention further comprising a composite radical by introducing a secondary radical leaving the most commonly used character with the most simple spelling with only one radical.

5 “O” Composite Radicals Separator (OCRS)

In circumstances when composite radicals have to be used to differentiate Chinese characters having identical Chinese Phonetic Spelling (Hanyu Pinyin) and radical, “o composite Radicals Separator (OCRS)” is introduced to separate the main radical and the
10 secondary radical when either one or both of the main radical or the secondary radical is/are of Single Letter Radical(s). “o” is used as the “Composite Radicals Separator (CRS)” because the specifically invented 2-Dimensional Single Letter Radicals and Binary Letter Radicals Table does not have any radical occupying the row and column of “o”. This characteristic made the letter “o” suitable for use as the “Composite Radicals
15 Separator (CRS)” without causing confusion. Although “o” is also allocated as the “light tone” tone mark for Alphabetic Chinese Spelling Writing, the light tone is not frequently pronounced in Chinese Language and therefore offers less of a problem.

Despite the additional considerations above, “o” is still considered as a suitable
20 “Composite Radicals Separator” because it stands out more prominently as a separator due to the effect of its geometrical shape.

Specifying The Methodology Of Reading The Spelling Of Alphabetic Chinese Spelling Writing For Best Learning And Understanding Effects.

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The methodology of reading the spelling of Alphabetic Chinese Spelling Writing words including the Composite Radical Words for best learning and understanding effects as follows:

- 30 i) The spelling is read as normal ABC letters pronunciation except the radical portion.

- ii) The spelling for radicals portion of either Single Letter Radicals, Binary Letter Radicals or Composite Radicals are proposed to be read as the actual pronunciations of the radical and (if any) base character forming the Single Letter Radicals or Binary Letters Radicals, instead of reading the alphabet letters part of it. For example, the 扌 (pao 1) in Alphabetic Chinese Spelling Writing word is “paor sl” whereby the “sl” is the Binary Letters Radical short formed from “扌 shou3 拉 la1”. Therefore the spelling letters shall be read as “P, A, O, R, Shou3. LA1” instead of “P, A, O, R, S, L”. This is because while reading “P, A, O, R, Shou3 LA1”, it definitely brought out the ways “扌 paor sl” relate to the radical “扌 shou3 拉 la1” in terms of writing strokes and meaning more than pronouncing the spelling as “paor sl” alone.

“Additional Syllable Phrasal Word With Apostrophe’ At Radical” As Alternative for Composite Radical Word

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Any ACSW words with Same-Radical-Identical-Pronunciation that needed a secondary radical to make it different from the main more commonly used Same-Radical-Identical-Pronunciation ACSW word can theoretically be done in another manner by adding an additional suffix syllable of one of its two-characters-suffix-phrase (词) together with tone mark (less the radical portion to shorten the writing) and placing a Apostrophe’ behind the subject radical. For example the character “拌” when given a composite radical became “bantslbf” and is designated as a Standard ACSW Word; while when adopting the alternative mutation of “Additional Syllable Phrasal Word With Apostrophe’ At Radical” can become “bantsl'zuiv” which was derived from the Chinese two-characters-phrase of “拌嘴”. In this way the Chinese character phrase of “拌嘴” became “bantsl'zuiv zuivk”.

Some ACSW words with Same-Radical-Identical-Pronunciation that needed a secondary radical to make it different from the main more commonly used Same-Radical-Identical-Pronunciation ACSW word did not have any two characters Chinese suffix phrase (词) in Xiandau Hanyu Cidian but, rather, it has two-characters-prefix-phrase(s). In this situation, “Additional Syllable prefix Phrasal Word With Apostrophe’ At Radical” is used whereby the prefix syllable and the tone mark of the two-characters-phrase is added in

front of the subject Same-Radical-Identical-Pronunciation ACSW word not added with secondary radical. For example the 谊 (yi4) of the 友 (you3) 谊 (yi4), when adopting composite radical is “yit yog” and is the standard Alphabetic Chinese Spelling Writing Word; when adopting the mutation of “Additional Syllable prefix Phrasal Word With Apostrophe’ At Radical” became “youvyit y” of the two-character-phrase 友 (you3) 谊 (yi4) and the ACSW words for “友谊” became “youvym youvyity”.

The “Additional Syllable Phrasal Word With Apostrophe’ At Radical” as an alternative to the composite radical ACSW words may be a good alternative for foreigners or students not having the foundation of Chinese character writing and maybe more happy to use it. This is because this type of Same-Radical-Identical-Pronunciation Phrasal Word adopt a two character phrase to bring out the difference between itself and other Same-Radical-Identical-Pronunciation ACSW words, therefore helps students to understand and remember its meaning. However the “Additional Syllable Phrasal Word With Apostrophe’ At Radical” as an alternative to the composite radical ACSW words is standardized and fixed and shall not be mutated with any other two-character-phrase.

The Unique Characteristic Of “O” In The Two-Dimensional Alphabetic Chinese Spelling Writing Radicals Table Make It The Natural Choice To Represent Chinese Language”
Light Tone”

On the two-dimensional Alphabetical Chinese Spelling Writing Radicals Table, the single’s” alphabet, the “o” row, and the “o” columns are all empty. Therefore, “o” clearly separate main radical’s short form letter(s) and secondary radical’s short form letters.

This unique characteristic of “o” also made it the natural choice for marking the only “tone” in Chinese that until now has not been allocated with an alphabet to represent it, which is the” light tone”. Since the positioning of “tone marks” in Alphabetic Chinese Spelling Writing format is before the radicals, and since all radicals were designed to not utilize “o”, the use of “o” as tone mark will never cause confusion between “o” tone mark and radicals, as to which is which. Meanwhile, use of r, k, v, t as tone marks will not cause confusion as to which is tone mark and which is radical. This is because all Binary

Letter Radicals never start with “r, k, v, and t” and all original Chinese Phonetic Spellings (Hanyu Pinyin) never end with “r, k, v, and t” except “er”. Therefore for example in situation where [Original Chinese Phonetic Spelling (Hanyu Pinyin without tone mark) + (“rr” or “rk”, “rt”, “kr”, “kk”, “kt”, “vr”, “vk”, “vt”, “tr”, “tk”, “tt” or “rkt”)] exist, we knew the last letter shall be radical and the earlier(s) must be tone mark. In the special case of “er”, er₄ for 耳, for example, the Chinese Phonetic Spelling without tone mark (Hanyu Pinyin without tone mark) is separated from the tone mark with a dash “-” as er-tr.).

10 Statistical Considerations

The Alphabetic Chinese Spelling Writing developed according to the present invention has put a lot of emphasis in statistical consideration. Other than the considerations detailed in the preceding paragraph above, the ACSW also considered the official classification of “Commonly Used Characters” and “Rarely Used Characters” found in the People’s Republic of China National Standard Encoding for Information Exchange GB2312-80 (which in Chinese is “Guo Biao Ma” and of which the English normally short formed as GB Code). The methodology is to give priority to assign single radical to the “Commonly used Characters” when there are more than one characters under the same radical having identical Chinese Phonetic Spelling and tone mark. The “Rarely Used Characters” and the character not even found in the GB Code would have to assume Composite Radicals with a Main Radical and a Secondary Radical. When there are more than one “Commonly Used Characters” of the same radical were found to have identical Chinese Phonetic Spelling and tone mark, then the inventor had to exercise judgment as to which of the few “Commonly Used Characters” actually is even more commonly used and assigned single radical to it and composite radicals to others.

With the understanding that the People’s Republic of China GB Code GB2312-80 comprising a total of 6373 (some say 6378 characters; ref. Junda WebCentral) Chinese characters is the first China’s National Standard Encoding for Information Interchange, and the GBK Code (which in Chinese is Guo Biao Kuo Zhan Ma, and stand for National Standard *Extended* Encoding for Information Exchange) is the next code set incorporating

Big-5 code set for traditional Chinese characters, followed by other more recent codes incorporating all characters found in Unicode 3.0 or later, it is theorized that the characters found in GB Code GB2312-80 would comprise more commonly used characters, followed by characters found in GBK Code but not found in GB code, then the characters found in the more recent code but not found in earlier codes. In this order also the priority of assigning single radical to characters under the same radical having identical Chinese Phonetic Spelling and tone mark are given.

Those characters not chosen to have single radical would have to be contented with a composite double radicals Alphabetic Chinese Spelling Writing with a Main Radical followed by a Secondary Radical also forming part of the particular character. In this way the inventor at last produced the tabulated Alphabetic Chinese Spelling Writing refer Figure 1) that has incorporated important statistical considerations and high efficiency considerations.

The Conversion Of Multiple Radicals Characters Found In Today's Chinese Dictionary (Xiandai Hanyu Cidian) Into Single Radical.

The method of conversion of Multiple Radicals Characters found in Today's Chinese Dictionary (Xiandai Hanyu Cidian) into the Alphabetic Chinese Spelling Writing standardized single radical is by the used of the "Method of Relationship in Meanings Decide". Whenever there exist non-existence of any relationship between the meaning of the character and the radical assigned in the Today's Chinese Dictionary, the radical not assigned in Today's Chinese Dictionary but is the radical of the counterpart Traditional Chinese Character (繁体字) may be used. Otherwise, such as in situations where the numerous radicals assigned in Today's Chinese Dictionary all having relationship with the meaning of the particular character, then the "Method of Habitual Radical Comes First" will be used to convert Multiple Radicals Characters into a single standardized radical used for Alphabetic Chinese Spelling Writing. In circumstances where there isn't any relationship in meaning between the radical allocated for an ACSW word and the ACSW word itself, the "Method of Explaining the Adoption of a Particular Radical with Related

Sentence (口诀说明及记忆法)”, is used. The method or process of using Related Sentence 口诀记忆法 (Phrases specially formulated to relate to the particular character for the ease of remembering the single radical assigned in ACSW) solved the problem of allocating a radical to a particular ACSW word considered when no obvious explanation for the use of a particular single radical assigned to ACSW word is available. The examples of the occasion when no obvious explanation for the use of a particular single radical assigned to ACSW word is available may be found in simplified Chinese character, whereby the meaning of the character was not linked to the pictograph of the character, for the sake of simplifying the writing strokes.

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The Spelling Methodology For Multiple Meaning Multiple Pronunciations Characters (MPC) As Multiple Syllables Alphabetic Chinese Spelling Writing Words

There are in fact further important grammars in Alphabetic Chinese Spelling Writing that require a few more paragraphs of explanations.

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This paragraph explains the methodology used in assigning spelling to Multiple Meaning Multiple Pronunciation Characters. The best way for giving a clear explanation is by the used of examples.

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Multiple Meaning Multiple Pronunciation Characters such as:

(i) 没 mei2 ;

has two pronunciations, one is mei2, meaning does not have (没有的没); another is mo4, meaning drowned in water (淹没的没).

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ACSW earliest design was

mei2mo4s,

After adding r, k, v, t and o as tone marks became

meikmot s.

Here k marked the 2nd tone, t marked the 4th tone and s represent 氵 (shui3) radical that means, “water”.

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This type of Multiple Pronunciations Character Multiple Syllables Alphabetic Chinese Spelling Writing Words helps to reduce the numbers of Chinese characters with same-radical-identical-spelling in single syllable form that requires differentiation into composite radicals ACSW words, and hence simplified the effort to change Chinese characters into words with alphabet spelling. It also helps Chinese language students to learn in one-shot different pronunciations in different phrases for the same word, which were originated from the same Chinese character. Sometimes it also facilitate the students to understand better the used of particular radical for Multiple Pronunciations Characters and hence Multiple Pronunciation Words (Note: All Multiple Pronunciations Characters after converted into Alphabetic Chinese Spelling Writing are terms Multiple Pronunciation Words). For example the 没 (mei2) in 没有 (mei2you3) if not knowing it is same character with the 没 (mo4) in 淹没 (yan1mo4, for drowned), then the reason for it using 氵 shui3 (means water) radical would not be easily known.

The Co-spelling of Multiple Pronunciation Characters and this specification enable students to understand better in most cases the Chinese ancestor choice of radical for a particular character/word. However there shall be an effort by the Chinese using community and the relevant language standardization authority to restrict the number of different pronunciations for the same character so that the objective of developing a highly efficient Alphabetic Chinese Spelling Writing can be realized more effectively. The objective of reducing the number of pronunciations for the same characters can be achieved via two methods: one is via the cooperation of China's language standardization authority; the other is by the use of Variant Characters, which takes the place of one of the pronunciation and meaning of the originally Multiple Pronunciation Character making it lesser pronunciations by one number. The inventor has adopted the second approach with the absent of participation of China in this initial proposal of Alphabetic Chinese Spelling Writing.

(ii) 缝 feng4 (meaning sew or cleavage)

There are two meanings for this character, one is sew for sewing a dress; another is cleavage of a cracked item.

ACSW earliest design was

feng2feng4 ss

after adding r for 2nd tone and t for 4th tone became

fengkfengt ss

5 finally simplified as

fengkt ss

In this word feng is the original Chinese Phonetic spelling; k represents 2nd tone; t represents the 4th tone and ss represents the radical 纟 (si 1, meaning fine string).

10 This kind of Chinese spelling simplified the Alphabetic Chinese Spelling Writing, since it merely brings all the different tone marks of Multiple Tones Characters together in one place behind the original phonetic spelling and before the radical's alphabet letters short form.

15 The above method of writing Alphabetic Chinese Spelling Writing for Multiple Pronunciations Characters solved the spelling difficulty in Alphabetic Chinese Spelling Writing. However, the weakness is it leaves the readers to judge the correct pronunciation according to the context of the sentence. The inventor therefore designed a method to denote the actual pronunciation using the Apostrophe' Pronunciation Indicator (API). The method is detailed in the following section.

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The Methodology Of Denoting The Intended Pronunciation For Multiple Pronunciations Characters Multiple Syllables ACSW Words Using The Apostrophe' Pronunciation Indicator (') And The Concepts On Mutations Of Alphabetic Chinese Spelling Writing Words.

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To make the pronunciation of a particular Multiple Pronunciations Character in the form of Multiple Syllables Alphabetic Chinese Spelling Writing Word specific in a particular phrase or sentence, the ACSW grammar specified the denotation with Apostrophe Pronunciation Indicator (') immediately following the intended pronunciation after the 30 tone mark of r, k, v, t, or o. This method is deemed required especially when synthesized pronunciation using computer or robot is used so that the software can recognize the pronunciation precisely. The choice of Apostrophe' Pronunciation Indicator (') and not

other symbol indicator is another design of Alphabetic Chinese Spelling Writing of the present invention as a type of writing that would match with the present English Writing and thereby enable it to be merged with or utilize the present American English or British English computer software seamlessly without alterations or rewriting of software or,
5 requires minimum modifications.

For an example:

缝 fengkt ss, if used to mean sewing it will become fengkt'ss;
if used to mean cleavage it will then become fengkt'ss.

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Another words, the character/word 缝 (fengkt ss) can have another two type of mutations. The first mutation is fengkt'ss; the second mutation is fengkt'ss.

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The “fengkt ss” is endorsed as the standard parent ACSW word and this maintained the very important one to one master-slave relationship between the original Chinese character in the Xiandai Hanyu Cidian (Today's Chinese Dictionary) and the Alphabetic Chinese Spelling Writing to enable clarity in the future development of ACSW.

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The Methodology Of Denoting The Intended Pronunciation For In-Situ Tone Changes Using the In-Situ Tone-At-End Modifier (').

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Sometimes, a light tone or another tone has to be used for the second character following another character; or the first character preceding another character. The modified tone may not have already been incorporated as part of the tone marks of that entailing or preceding character due to its being not so popular usages or other reasons. The following example illustrated these circumstances:

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- a) The 娃 (wa2) when used in pair become 娃娃 wa2wa0. In ACSW, this change in pronunciation is the change from “娃娃 (wak n wak n)” to become “娃娃 wak n wak no”; the second pronunciation/syllable being

incorporated with an In-Situ Tone-At-End modifier (o') for the light tone o'. Note that eventually all ACSW will be written having the pronunciation part and the radical part together in one entity such as “~~娃~~娃 (wakn wakno')”.

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- b) The 保險 (bao3 xian3) became 保险 (bao2 xian3). In ACSW, this change in pronunciation is the change from “~~保~~险 (baov r xianv ef)” to become “~~保~~险 (baov rk' xianv ef)”; the first pronunciation/syllable being incorporated with an In-Situ Tone-At-End modifier (k') for the second tone k'.

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In both cases, the modified tone is given ad-hoc to the phrases as part of the Chinese language tradition for certain (but not all) circumstances when both the characters in the double character phrases are of identical tone. This is another mutated form of the standard ACSW and its present helps to enable the development of precise artificial synthesized voice reporting as well as the precise robotic voice synthesis without disturbing the standard ACSW one-to-one slave-master relationship with the original Chinese character.

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20 The Used Of Silent Word-Radical For Certain Unique Composite-Characters-Meaning-Revealing (会意字) Characters

As the norm for most languages, the ACSW grammar allows exceptions to its general grammatical rules. One of the major exception is its used of non-standard “Silent Word-Radical” other than the 189 “standard short-forms Single Letter and Binary Letter Radicals” derived from the radicals found in Xiandai Hanyu Cidian (Today's Chinese Dictionary). Most of the characters allowed with non-standard “Silent Word-Radicals” were characters originally found in simple strokes radicals such as 一, 丨, 丿, 乙 (

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), 十, 八, 亠, 二 and 𠂇 of which the allocation of these standard radicals to these particular characters may not be able to bring out the meaning of these particular

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characters and, of which the allocation of a “Silent Word-Radical” will in fact help to bring out the meaning of the particular character readily. For these particular characters, however, the existence of the “Silent Word-Radicals” is implicit, through the “Silent-o Pronunciation Specifier” after the Single or Binary Letter Radical of the particular Word-Radical. An example of the presentation and existence of this “Silent Word-Radical” is in the character 艳 (yantsetdfo), formed by two Chinese character 丰 (feng1) 色 (se4), of which 丰 (feng1) means abundant or rich in and 色 (se4) means colour, and therefore 艳 means colourfully beautiful. The used of “Silent Word-Radical “色 setdfo” brought out the meaning of the character 艳 (“yantsetdfo”) more readily than using the radical for 色 (set df) alone, which is 匕 (df, which means knife, or a pictograph representation of a person); and at the same time specified that the “Word-Radical 色 (set df)” shall not be pronounced by incorporating a “Silent-o Pronunciation Specifier” at the end of this particular Word-Radical to become 色 (set dfo). The readers might observed that the standard ACSW for the character 色 is actually “setshaik df” instead of “set df” due its being a Multiple Pronunciations Characters. The ACSW grammar allows the used of only the relevant pronunciation for the intended use of Silent Word-Radical to serve to bring out the meaning and at the same time reduce the complexity of the spelling. As do other languages, these exceptions are left to the educationists to teach and explain.

20 The ‘r’Rolling Tongue Pronunciation Indicator.

The individual character word in ACSW does not end with ‘r’ to denote the ending of the character word with ‘r’rolling tongue pronunciation. Instead the ACSW grammar specified an individual ‘r’rolling tongue pronunciation indicator word immediately following the particular word so that the particular ACSW character word has the proper pronunciation ended with ‘r’rolling tongue pronunciation, while preserving the standard form of ACSW character word. The ACSW further specified that character word for the ending ‘r’rolling tongue pronunciation incorporating the nasal tone is expressed as ‘ngr’ for all Chinese Phonetic Spelling (Hanyu Pinyin) ended with ng and the character word for the ending ‘r’rolling tongue pronunciation incorporating the ‘er’ tone as ‘er’.

Example:

头 tou2 儿 r can be written as toukdw r.

灯 deng1 儿 r can be written as dengrh ngr.

5 字 zi4 儿 r can be written as zitg er.

In all cases the grammatical rule for the choice of r, ngr or er is still following the rule specified in the Xiandai Hanyu Cidian (Today's Chinese Dictionary). However, the inventor advocate simplification as a standard "r" irrespective of preceding word.

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However, in official elaborate reporting, "r", "ngr" and "er" shall be used to give a high standard artificial synthesized reporting.

15 The Selection Of Tone Marks Other Than The Letter r,k,v,t,o For The 1st, 2nd, 3rd, 4th And The Light Tones Is Only A Matter Of Choice.

Tone component can alternatively be conveyed using other symbols such as either of クス セフ ユ ヤ ラ ム, mainly of Japanese spelling letters of one or two writing strokes for simplicity and of which not part of the present day Chinese characters (to avoid confusion with the Chinese characters) and not similar to the English alphabet. The inventor has also started compiling a further set of tone marks using other symbols such as 10 ♀ Δ or similars. In all cases, Greek alphabet shall be avoided due to its extensive used in mathematical symbols to avoid confusion.

25 The uee as üequivalent, ue as üe equivalent and e' as ê equivalent.

In order to achieve closest typing similarities with English so as to let the Alphabetic Chinese Spelling Writing or International Parallel Chinese Writing of the present invention became an easy to type and easy to learn Chinese Writing for the English using community, the inventor has proposed to use uee as üequivalent, ue as üe equivalent and e' as êequivalent of Hanyu Pinyin (Chinese Phonetic Spelling) symbols.

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The only occasion when Hanyu Pinyin was using “ü” are the pinyins (Chinese Phonetic Spelling) of “lǚ” and “nǚ” and has been replaced with “lue” and “nue” according to the present invention. In Jones International Phonetic Symbols, these may be approximated as “lvi:” and “nvi:” respectively.

The only occasions when Hanyu Pinyin was using “üe” are the pinyins (Chinese Phonetic Spelling) of “lüe” and “nüe” and it has replaced them with “lue” and “nue” without altering their original intended pronunciations.

The only occasions when Hanyu Pinyin was using “ê” are the pinyins (Chinese Phonetic Spelling) of “ê” for 欸 in page 330 and 331 of Xiandai Hanyu Cidian (Translated as Today’s Chinese Dictionary). It has been replaced with e’ according to the present invention so that typing will not be interrupted by the need of inserting special Chinese Phonetic Symbols.

Spelling Method For The Name Of A Place And The Name Of A Person.

There are usually substantial difference in languages between races and communities, and therefore the spelling methodology. Considering presently that Chinese language writing using characters is not a language familiarized by most of the other races or nationalities, and that the ACSW is only at the introductory stage, therefore it is easily imagined that peoples will not be able to understand the method of reading ACSW’s tone marks and that the ACSW’s radicals letters shall be silent before studying the ACSW.

For this reason, the inventor recommend and specify that the present methodology for spelling the name of a place and the name of a person be remained, that is the tone mark portion and the radical portion shall not be written, while keeping the original spelling of Hanyu Pinyin without tone mark. For example the capital city of China, 北京, shall still be spelt as Beijing as presently, and the great Chinese leader 邓小平 shall still be spelt as Deng Xiaoping. This is not an innovation, but a recommendation to stick to the present system.

Introducing The “‘hz’Hanzi Indicator” In The “End With ‘hz’Non-Radical-Specific Word”

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In order to promote the easier communication while using ACSW, the “End With ‘hz’ Non-Radical-Specific Word” in the following circumstances:

- (i) Whenever a person remembered the syllable(s) only of an ACSW and could not recall the radical for that ACSW word, he may replace the radical portion with ‘hz’ to denote he still intended a Chinese word. The ‘hz’ is the short form of Hanzi in which the meaning is Han’s Character. The Chinese characters are originally Han’s Character. “hz” is before this not occupied in the 2-Dimensional Single Letter Radicals and Binary Letter Radicals Table (Figure 5) by the 189 radicals from “Xiandai Hanyu Cidian” and therefore is available for use in this purpose.

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Introducing “English language Indicator” for English words

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English words presented in ACSW sentences can be indicated with “yw” radical. “yw” is derived from the first letter of phonetic spelling for English, ying1wen2. For example, clone.yw and the pronunciation suffixed after the clone.yw as clone.yw.ketlunk.

Introducing The “ Method of Dialectal Syllable + u Prefix to Standard Parent Alphabetic Chinese Spelling Writing Words ”.

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Certain dialects are interesting and rich languages, with abundant of wisdom. In another embodiment of the present invention further comprising a pronunciation indicator in front of the ACSW word whenever the content of the ACSW writing needs to be read out in the dialectal language.

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The “Dialectal Syllable +u prefix” is specified to place in front of the standard ACSW words. The “u” prefix is selected because the “u” is not recommended as any of the tone marks for the Dialectal Syllable, and therefore it will not be confused as the tone mark of the syllable and, at the same time standard ACSW word never start with “u”. It therefore followed that “u” is very suitable to be used as the separator between the intended Dialectal spelling’s tone marks and the standard ACSW word.

For example, in Cantonese Phonetic, there are six tone levels of 1,2,3,4,5 and 6 and may be conveniently replaced with r, k, i, v, t, o which have shown special empty rows and/or empty columns characteristics in Figure 5. We may look at an example 中 to understand how it works. The character 中 is having standard form of ACSW as zhongrgz, while the Cantonese is having the 中 spelt as dzung1. We recommend the mutated Cantonese style ACSW to be dzungruzhongrgz. This technique is another mutation technique of ACSW whereby the original standard one to one slave-master relationship between standard ACSW and Chinese character in Xiandai Hanyu Cidian is always maintained while allowing the actual pronunciation of that particular character to be mutated freely according to ACSW grammar Note that “u” is selected as the prefix because in Xiandai Hanyu Cidian, not a single standard ACSW word is started with “u” letter.

The “Dialectal Syllable +u prefix” may be useful to express the actual pronunciation in parts of a putonghua (普通话) or official Chinese language essay but not for the entire essay because that may be very laborious. The future of using “Dialectal Syllable +u prefix” for the whole dialects writing after the introduction of ACSW may not look bright because of the labour involved. Converting to Spelling Writing without connecting to Hanzi or Putonghua ACSW also may not be viable because it may start off cultural separation between different dialectal clans. The ultimate solution to the dialectal writing may still be the old solution of sticking to the original Chinese characters without changing into spelling writing so as to maintain the common writing with the majority of the Chinese population.

Methodology of the present invention can always fit in with any dialects or Chinese characters based languages that desire a spelling writing by just fitting in the spelling and tone mark before a “u” and the standard ACSW words to form the mutated co local ACSW words; and; at the same time remained tie-up with the mainstream Chinese writing of ACSW.

Languages having close historical tie with the Chinese characters such as some East Asian languages and the co local Chinese dialects if being processed as mutated ACSW using “

Method of Dialectal Syllable + u Prefix to Standard Parent Alphabetic Chinese

Spelling Writing Words ”will quicken the learning process of these languages for those already understand ACSW. This is because they share almost one-to-one relationship with the Chinese Language while other languages do not.

The [Symbol-Encapsulated Alphabetic Chinese Spelling Writing] As The Alphabetic Chinese Spelling Writing For Traditional Chinese Writing.

The method according to the present invention further comprising an indication symbol such as a number encapsulated preferably after the consonant, vowel and tone components for conversion of character in between traditional, simplified or a variant form thereof.

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By way of example, the spelling writing for the radical 麦 (麥), a number, for example 2 is encapsulated in the standard Chinese Spelling Writing of the radical 麦 (mait mc) to become mait2mc], which implied that it is the Alphabetic Chinese Spelling Writing 2nd Form. This developed into the [2-encapsulated Alphabetic Chinese Spelling Writing for Traditional Chinese Characters]. The "2-encapsulated Alphabetic Chinese Spelling Writing" is a highly appropriate form of Chinese spelling writing for traditional Chinese characters especially in a computer environment. The reasons are as follows:

a. Encapsulating the “2” within the body of standard Chinese Spelling Writing such as [mait mc] to become [mait2mc] and not outside the body as mait mc2] or [2mait mc] can avoid creating confusion between the word of Chinese Spelling Writing and the

numerical value 2. While [mait mc2] can be mistaken as maitmc No.2; and [2mait mc] can be mistaken as 2 Numbers maitmc; mait2mc will not be mistaken as mait x 2mc because in Chinese Spelling Writing there is always a radical behind the tone mark, which in this case is t (the 4th tone of Chinese character), that is “mc”, and therefore mait2mc] will not be mistakenly conceived as two different entities of mait and 2mc.

- b. We can achieve transforming the whole Simplified Chinese Characters document into Traditional Chinese Characters document, especially in a computer environment, by only 2-encapsulating the standard Alphabetic Chinese Spelling Writing, which is meant for Simplified Chinese Character set. (However, the reader shall understand that Simplified Chinese Character Set and Traditional Chinese Character Set are having a lot of common and identical character because only a limited numbers of Chinese characters are simplified.)
- c. It enable a freely mixable Chinese character writing environment especially in a computer environment whereby Simplified and Traditional Chinese can easily and freely co-exist in one document by only “with or without 2-encapsulating” the standard Alphabetic Chinese Spelling Writing. This feature is highly required in writing academic Chinese Language text so that Chinese Language can be easily discussed in academic text.

The [2-Encapsulated Alphabetic Chinese Spelling Writing] can also be developed into “3-encapsulated”and “4-encapsulated”and other “numeral or symbol-encapsulated” forms to become the Alphabetic Chinese Spelling Writing for multiple numbers of variant Chinese characters, especially word processors and the like.

It should be understood that the foregoing description is only illustrative of the present invention. Various alternatives and modifications can be devised by those skilled in the art without departing from the invention. Accordingly, the present invention is intended to embrace all such alternatives, modifications and variances which fall within of the appended claims.

Claims

1. A method for converting a desired character of a non-alphabetic language in word processor comprising the steps of:
 - 5 a. presenting the consonant component of said character according to its phonetic spelling;
 - b. presenting the vowel component of said character according to said phonetic spelling;
 - c. indicating the tone component of said character with a fixed representation;
 - 10 d. assigning the radical component of said character with a predetermined set of alphabetic symbol; and
combining said represented components of said character to convert into the form of contextual information and linguistic patterns.
- 15 2. The method according to Claim 1, wherein said desired character is preferably a Chinese character.
3. The method according to Claim 1, wherein said tone component is preferably an alphabet having the nature of causing lesser confusion as a tone mark identity.
- 20 4. The method according to Claim 1, wherein said radical component or tone component is joined with other components or further distinguished from other components by a space, dot, hyphen, or other signs that have same function.
- 25 5. The method according to Claim 1, wherein said radical component is represented by a main radical part or a composite radical part.
6. The method according to Claim 5, wherein said composite radical part comprising of a main radical and a secondary radical.
- 30 7. The method according to Claim 6, wherein said main radical is followed by said secondary radical.

8. The method according to Claim 6 or 7, wherein said secondary radical is separated from the main radical by a least confusing separator whenever said secondary radical is in single letter.
- 5 9. The method according to Claim 8, wherein said a least confusing separator is preferably an "o".
- 10 The method according to Claims 5 to 8, wherein said main radical may be a single letter radical or binary letter radical.
- 10 11. The method according to Claim 10, wherein said binary letter radical is derived from the combination of at least one Chinese phonetic spelling letter of the subject radical and at least one Chinese phonetic spelling letter of another related Chinese character.
- 15 12. The method according to Claim 11, wherein said binary letter radical having the first alphabet letter of the subject radical preceding the first alphabet letter of another related Chinese character.
13. The method according to Claim 12, wherein said related Chinese character is a
- 20 character grouped under the family of the subject radical or having the strokes of the subject radical.
14. The method according to Claim 1, wherein said binary letter radical may be the first one or two letters of the Chinese Phonetic Spelling of the subject radical.
- 25 15. The method according to Claim 1, wherein said method further comprising assigning a pronunciation indicator for the particular pronunciation of multiple pronunciation characters.
- 30 16. The method according to Claim 15, wherein said pronunciation indicator is preferably an apostrophe (') to the tone mark.

17. The method according to Claim 1, wherein said method further comprising assigning a rolling tongue indicator for rolling tongue words.
18. The method according to Claim 17, wherein said rolling tongue indicator is preferably a “r” after the components.
19. The method according to Claim 1, wherein said method further comprising indicating a specific alphabetic code for uncommon Chinese Phonetic Spelling (Hanyu Pinyin).
20. The method according to Claim 19, wherein said specific alphabetic code is preferably uee as equivalent of ü; ue as equivalent of üe and e’ as equivalent of ê.
21. The method according to Claim 1, wherein said method further comprising representing a predetermined symbol for conversion of word in between traditional, simplified or variant forms of characters.
22. The method according to Claim 21, wherein said predetermined symbol is preferably a number.
23. The method according to Claim 1, wherein said method having one-to-one correspondence relationship with each and every Chinese character.
24. The method according to Claim 1, wherein said method further comprising indicating a language indicator of a phonetic spelling incorporating tone marks for different languages.
25. The method according to Claim 24, wherein said language indicator is preferable prefixed to the Chinese Phonetic Spelling according to any one of Claims 1 to 24.
26. The method according to Claim 1, wherein said method further comprising a Hanzi (Chinese character) indicator for non-radical-word when used together with an alphabetic language.

27. The method according to Claim 26, wherein said Hanzi indicator is preferably represented by "hz".
28. A desired character input apparatus in the form of input codes according to claim 1-27
5 wherein each component of said desired character are inputted comprising:
a. an input means for inputting the representative components of said character;
b. a memory means for storing a plurality of said character; and
c. a generating means which is responsive to said input means to generate said character
from said memory means corresponding to the inputted representative components of
10 said character.
29. A desired character pronouncing apparatus in the form of input codes according to
claim 1-27 wherein each component of said desired character are inputted
comprising:
15 a. an input means for inputting the representative components of said character;
b. a memory means for storing a plurality of said character;
c. a generating means which is responsive to said input means; and
d. a voice producing means to generate the pronunciation of said character from said
memory means corresponding to the inputted representative components of said
20 character..
30. The input apparatus according to Claim 28 or 29, wherein said representative
components are consonant, vowel, tone and radical of said character according to
Claim 1.
25
31. The input apparatus according to Claim 28 or 29, wherein said memory means is
database.