

Title: Input, Method for Computerized Chinese
Characters

The present invention is related to a simple input method for computerized Chinese characters, and more particularly to an input/output method which features an easy applicability and short learning period for either professionals or non-professionals in data entry, instant information enquiry, program design, special symbols generation, and selection of commonly used phrases through direct terminal operations with a modified keyboard of a digital computer system.

It is known that Chinese characters have intrinsic limitations for being processed in a computer. The main problem in data entry for the Chinese characters is how to select a definite character among an immense quantity of Chinese vocabulary. For solving this problem, a Chinese indexing method has been developed based upon different techniques such as the index systems adopted by most Chinese dictionaries by means of "radicals", "strokes", "phonetic symbols", etc. However, these indexing methods are not ideal, and have been considered inconvenient by the ordinary dictionary users. In order to meet the data processing requirements of the computer with a great quantity of Chinese characters, a variety of keyboards and input methods have also been introduced by the data managing businessmen, such as "the input method with large keyboard", "character-root composition method", and "three-corner coding input method", to name a few. There are advantages and disadvantages for each of these noted methods, but their main defect is that

they are usually designed for data processing professionals. Consequently, an extensive training program for operating personnel is normally required to obtain desirable results. This may be suitable for professionals, 5 but it is difficult for non-professionals who usually engage themselves in instant information and data processing within a limited time frame.

Moreover, the generally used Chinese computer does not have the function of the selection of commonly used 10 phrases such as " 有限公司 " (Ltd. Co.), " 股份有限
公司 " (joint-stock Ltd., Co.), " 台灣省 " (Taiwan Province), " 公司 " (Company), " 中山北路 " (Chung Shan N. Road), etc. They must key in and process these phrases one character at a time. The generally used 15 Chinese computer also does not have the function of processing special symbols, including the upper case and lower case letters in English, causing much inconvenience during use and a low processing speed.

Accordingly, the present invention provides an input 20 method for computerised characters using a digital computer system comprising the steps of:

(a) preparing a character stroke form code table of the Chinese characters;

(b) establishing a number of character splitting and

and coding rules to divide the Chinese characters into a plurality of groups according to the following rules:

(1) characters with splitable structures of top, bottom, right and left, the left highest strokes of the character being a "head" stroke and the right lowest stroke a "tail" stroke;

(2) characters with internal/external structures, the external structure being the "head" stroke while the internal structure is the "tail" stroke;

(3) for characters bearing several possible "head" and "tail" strokes, the character comprising the most strokes being taken in first order;

(4) when the strokes of a character are all taken as a "head", with no stroke being duplicated as a "tail" stroke, and no strokes being left for the "tail", a zero or a blank is supplemented therewith;

(5) regardless of "head" and "tail", any characters enclosed on four sides are grouped into "囧", and those enclosed on three sides are grouped into "凵";

(6) all characters having the left strokes in a cross form are grouped into "十".

(7) all radicals of "冫" and "礻" are grouped into "尸";

(c) setting Chinese character input rules according to said "head" code, "tail" code, phoneme code, frequency code, and sequence code, wherein the first two codes are

common to all characters while the last three codes are applied only to selected characters;

(d) setting a symbol input rule which utilizes the input of an initial key and a symbol key in series to index said symbol;

(e) setting a phrase selection rule which utilizes the input of at least one keyword to select a plurality of satisfactory phrases, and then index a desired phrase from said satisfactory phrases; and

(f) preparing an input keyboard for being operated in conjunction with said stroke form code table, said symbol input rule, and said phrase selection rule;

whereby, the input operation can be performed by persons in handling information with computerized characters.

The present invention is further described hereinafter by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a schematic flow chart illustrating the preferred steps of an input method for processing the computerized Chinese characters according to the present invention; and

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Figure 2 is an illustrative view of a keyboard arrangement for performing the input method according to

the present invention.

Based on the flow chart shown in Fig. 1, the input method of this invention comprises the steps of:

a. Establishing a stroke form code table as shown in
5 Table 1 by grouping the commonly used Chinese characters into thirty-three "head" codes and thirty-three "tail" codes respectively for being arranged in a Table of Sortation to which five kinds of basic strokes are added, together with the strokes that share the same key on the
10 keyboard and are separately grouped thereat.

b. Establishing character splitting and coding rules to divide the Chinese characters into three groups, i.e. the splitable, the non-splitable and the internal/external groups, which are made according to:

15 1. Characters with splitable structures of top, bottom, right and left, the left highest stroke of the character is the "head" and the right lowest stroke is the "tail". For example, the character "冷" (cold) has a head stroke "丶" and a tail stroke "丶".

20 2. Characters with internal/external structures, the external is the "head" stroke while the internal is the "tail" stroke. For example, the character "國" (nation) has a head stroke "口" and a tail stroke "戈".

25 3. When characters bearing several possible "head" and "tail" strokes, the one with more strokes takes the first order. For example, the character "士" takes priority over the character "+", "小" takes priority over "丿", "丿" takes priority over "丨", "乚" takes

priority over "乚", and so forth.

4. If the strokes of a character are all taken as a "head", the "tail" will not take the stroke in duplicate thereof, and if no stroke is left for the "tail", a zero of a blank is supplemented therewith. For example, the character "玉" has taken "王" as a "head", and the "tail" is "、"; but, the character "中" takes the "丨" as the head stroke and the "丨" as the tail in duplicate because characters like this have their strokes all crossing through the "head" and "tail" thereof and so an exception is made in such cases.

5. Regardless of "head" and "tail", any characters that are enclosed on all four sides are grouped into the "囧", pronounced as "日", and those enclosed on three sides are grouped into "月", pronounced as "月".

6. All characters that have their left strokes in cross form are grouped into "+", such as "𠂇", "車" and its kind. For example, the character "在" has a head stroke of "+" and a tail stroke of "士".

7. All radicals of "門" and "鬥" are grouped into "尸", pronounced as "門". For example, the character "間" has a head stroke "門" and a tail stroke "日".

c. Establishing input rules based on the above-mentioned simple coding system and inputting the codes thereof through the keyboard shown in Fig. 2. The inputting codes are as follows:

"Head" codes, "tail" codes, [initial phoneme codes

], [character frequency codes], [character sequence codes], wherein the "head" codes and the "tail" codes are the basic input pattern of this invention, and hereinafter called "head-tail" codes (basic pattern), and
5 the [] denotes that that inputting code can be used on a selective basis or just ignored.

In the aforesaid input rules the three options of inputting codes, i.e. the one which can be selected, the one which can be omitted, and the one which cannot be
10 omitted, are designed to enable the input method of this invention to be widely accepted for popular use and also to facilitate the adjustment of the input speed in keeping with the efficiency state of the users.

In view of the fact that some identical codes and
15 duplicate characters may be produced in the basic input pattern of this "head-tail" coding system and affect the input speed, an initial phoneme code is provided for selection.

The above-said initial phoneme defines the first
20 phonetic symbol as either a consonant sound or a vowel sound set on a Chinese character. For example, the initial phoneme for the character "不" is "ㄅ", the character "人" is "ㄖ" and for the character "餓" is "ㄜ". It should be noted that for the special pronoun-
25 ciations of many Chinese characters with different meanings, this rule can also be applied.

Furthermore, for making direct input through the ASCII keyboard, a slightly modified Romanization system

is adapted to establish a check list for Chinese phonetic symbols and the English alphabet as shown in Table 2 wherein the significant modification is that the easily mistaken tones of the Chinese retroflexions, such as "P" and "ㄗ"; "ㄙ" and "ㄘ"; "ㄨ" and "ㄣ"; etc., are all set to correspond with the same English alphabet. For example, the phonetic symbols "ㄗ" and "ㄘ" are set to correspond to the English alphabet "Z"; "ㄨ" and "ㄣ" to "S", and so forth.

10 With the "head" code, "tail" code and the initial phoneme code as hereinbefore described and illustrated, one may encounter many similar characters stored under an identical code during the input and output operation because among the approximately 50,000 Chinese
15 characters, many characters bear the same head and tail strokes. However, as the commonly used characters number about 5,000, the identical codes and similar characters produced by the above method are a mixture of commonly used ones and rarely used ones. Therefore, a Character
20 Sequence is introduced into this method, i.e. a volume of 16,000 Chinese characters are divided into three sets: the frequently used (set A -- about 5,000 character); the less frequently used (set B -- about 7,000 characters); and the rarely used (set C -- about 4,000 characters).
25 During the keying operation, if the character frequency is not indicated, it is assumed that the characters to be processed are the frequently used ones. By typing the

<space bar> on the keyboard, the less frequently used and the rarely used characters that bear the same codes as those of the frequently used characters will be displayed for the user to select. But if the user knows what kind of "frequency" the character belongs to, he can directly indicate the character frequency in the simple codes of this invention for increasing the operation speed.

With the above described "head" code, "tail" code, initial phoneme code and character-frequency code, if the use of an identical code cannot be avoided, a skilled user of this invention will know from experience, from which location in the identical codes the character is to be retrieved, and can apply the fastest method in directly indexing the character therefrom with a "character sequence" for achieving the quickest operation speed. Various conditions of the input patterns of this invention are further exemplified as follows:

a. "Head" code + "tail" code (basic pattern).

For example: the character "崔" has a head code "山" and a tail code "佳".

b. "Head" code + "tail" code + initial-phoneme code (three code pattern).

For example: the character "劉" has a head code "丩", a tail code "𠂔" and an initial-phoneme code "L" (ㄌ).

c. "Head" code + "tail" code + initial-phoneme code + frequency code (four code pattern).

For example: the character "劉" has a head code

" / ", a tail code " || ", an initial-phoneme code "L" (ㄌ) and a frequency code "frequency 1".

d. "Head" code + "tail" code + initial-phoneme code + frequency code + sequence code (five code pattern).

5 For example: the character "劉" has a head code " / ", a tail code " || ", an initial-phoneme code "L" (ㄌ), a frequency code "frequency 1" and a sequence code "1".

The above established four methods can be used on a
10 selective basis depending upon the skill of the user. Thus, the three-code pattern as in b. above can be changed as "head" code + "tail" code + frequency code, or as "head" code + "tail" code + sequence code, and four-code pattern as in c. above can be changed as "head" code
15 + "tail" code + initial-phoneme code + sequence code, etc.

The characters retrieved each time by any one of the patterns comprise three groups, each of the groups having three characters and being respectively separated
20 by a blank from the adjacent group.

The input method of this invention is simply carried out through a terminal. Description of the practical operations is given in conjunction with Fig. 2 and a Table 3 wherein the Table 3 is a logic sequence of the input.

Shown in Fig.2 is a modified ASCII keyboard 10, and it is divided into three parts: a. Head-tail phoneme keys 11; b. frequency keys 12; and c. character selecting keys 13.

The head-tail phoneme keys 11 includes 30 keys with the ordinary English alphabet from A to Z and the functional keys "<", ">", and "?".

The strokes of the "head" and "tail" and the phonetic symbols may share the same key as follows:

key "A" marked with "𠂇" and the phonetic symbols 丫, 𠂇, 乚, 乚, 乚, and 乚;

key "B" with "乚" and "𠂇" and the phonetics 乚;

key "C" with "竹", "八" and the phonetics 𠂇, and 𠂇;

key "D" with "山" and the phonetics 𠂇;

key "E" with "人" and "一";

key "F" with "金" and 匚;

key "G" with "木" and ㄥ;

key "H" with "水", "小" and 厂;

key "I" with "才", "止" and "一";

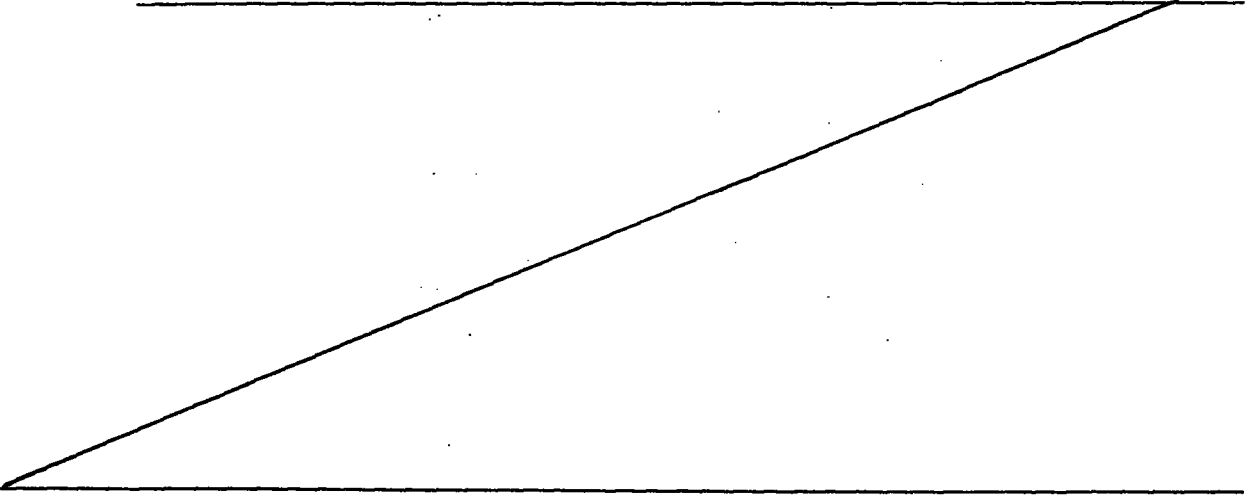
key "J" with "火" and 𠂇;

key "K" with "土" and 𠂇;

key "L" with "石", "弋" and 𠂇;

key "M" with "厂", "寸" and 冂 ;
key "N" with "夕", "丿" and ㄣ ;
key "O" with "言", "佳" and ㄣ·又 ;
key "P" with "王", "夂" and ㄣ ;
key "Q" with "虫" and ㄣ ;
key "R" with "女", "囧" and ㄣ ;
key "S" with "网", "尸", and ㄣ ;
key "T" with "心" and ㄣ ;
key "U" with "耳" and ㄣ ;
key "V" with "卿", 厶 , and ㄣ ;
key "W" with "十" and ㄣ ;
key "X" with "入", "乂" and ㄣ ;
key "Y" with "口" and ㄣ ;
key "Z" with 冂 , 又 , ㄣ , and ㄣ ;
key "6" with "雨";
key "7" with "馬";
key "8" with "車".

Each key is marked



with the frequently used "head" strokes and the "tail" strokes. If the "head" and the "tail" of the frequently used strokes are identical, the identical keys are arranged with the "head" and "tail" strokes respectively marked thereon, which include 14 keys as 虫, +, 人, 女, 心, 口, 耳, 囟, 月, 山, 金, 木, 水, 火, and 土. The remaining keys 112 are separately marked with the basic pattern of "head" code on the upper left and the "tail" code on the lower right on each keytop. In addition, the head-tail phoneme keys 11 are arranged in three rows. The first row 100 is assigned with the basic pattern concerning mankind and living things such as 虫 (worm), 人 (mankind), 女 (woman), 心 (heart), 口 (mouth), etc. The second row 101 is disposed with the basic pattern concerning the nature and inanimate things such as 日 (sun), 月 (moon), 山 (hill), 石 (stone), 金 (gold), 木 (wood), 水 (water), 火 (fire), 土 (earth), etc. The last row 102 is allocated with imperfect forms of the basic strokes but frequently used "head" and "tail" codes such as 門, 竹, 艸, 乚, etc. In addition, a fourth row 103 of the head-tail phoneme keys 11 is provided to include 5 numeral keys 113 similar to that of the standard English keyboard, and other keys for the basic strokes such as 丶, 一, |, 丿, and ㇏, for being used as an auxiliary method in the event that the above set of "head" codes and "tail" codes cannot satisfy the input requirement. Furthermore, corresponding Chinese phonetic symbols are respectively designated on the left

side of each of the letter keys from A - Z for being used in selection with character tones, and some undistinguishable phonemes in the Table 1 such as "ㄣ, ㄖ"; "ㄉ, ㄊ"; "ㄙ, ㄌ"; "ㄋ, ㄌ, ㄋ"; "ㄘ, ㄙ"; etc.;
5 are separately disposed on the same key 114, 115, 116, 117 and 118.

The frequency keys 12 are divided into three keys -- the "less-frequently-used" key 121, the "rarely-used" key 122, and the "frequently-used" key, in this embodiment of
10 the present invention the space bar is also utilized as the "frequently-used" key. As being described hereinbefore, the Chinese characters are set in three groups -- the frequently used group with about 5,000 characters; the less-frequently-used group with about 7,000 characters;
15 and the rarely used characters with about 4,000 characters. During input operation, first, the frequently-used key is used for inputting operations. If the character cannot be located in the frequently-used group, then, the less-frequently-used key 121 or the
20 rarely-used key 122 is used for accomplishing the input work therewith. This order need not necessarily be followed all the way through, because an experienced operator can quickly identify the exact character in the three groups according to this invention.

25 The character selecting keys 13 are comprised of the numeral keys 0 - 9 which are the same as the English keyboard on the right side and a "repetition" key 131.

When working with any one of the above-described patterns [head, tail], [head, tail, initail phoneme], [head, tail, initial phoneme, frequency], some identical "head" codes and "tail" codes will be simultaneously displayed on the bottom line of the CRT, and usually at most nine identical codes are to be displayed thereat. If the identical codes are more than nine, a "+XX" message will appear to indicate the number of the remaining identical codes after the ninth identical code thereof. At this time, the <space bar> is used to select the right identical key required for the input operation. If an error is made, a "Ø" key is used to indicate the error and repeat the character finding operation.

d. In the rules establishing for inputting the special symbols which are divided into five species, each species utilizes one predetermined key as the initial key to indicate the specific species of the special symbols. Referring to Fig. 2, the function key 中/英 (CHINESE / ENGLISH) is first pressed, and one key representing the special symbol is then pressed.

(A) The general symbol inputting rule utilizes the " / " key as the initial key, and one key representing one of the general symbols, which include 94 symbols as shown in Table 4, is then pressed. For example:

P → " / " p	" → " / " "
q → " / " q	# → " / " #
r → " / " r	Y → " / " Y

$S \rightarrow " , " s$ $\% \rightarrow " , " \%$
 $! \rightarrow " , " !$

wherein the symbols on the left hand side are the symbols desired to be index by the operator, and the keys which must be pressed in sequence are indicated on the right hand side.

(B) The numeral symbol inputting rule utilizes the "=" key as the initial key. The numeral symbols are also divided into two kinds as follows:

(B1) double-character numeral symbol which includes 100 symbols as shown in Table 5, for example:

$01 \rightarrow = 01$ $\sim$ $99 \rightarrow = 99$
 $02 \rightarrow = 02$

(B2) special numeral symbol which includes 96 symbols as shown in Table 6, for example:

$1 \rightarrow = .1$ $\textcircled{1} \rightarrow = \bigcirc 1$
 $2 \rightarrow = .2$ $\textcircled{2} \rightarrow = \bigcirc 2$
 $(1) \rightarrow = (1$ $[-] \rightarrow = [1$
 $(2) \rightarrow = (2$ $[\text{二}] \rightarrow = [2$

(C) The phonetic symbols inputting rule utilizes the "-" key as the initial key to input one of the phonetic symbols which include 40 symbols as shown in Table 7, for example:

$\text{ㄟ} \rightarrow - F$ $\text{ㄎ} \rightarrow - D$

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± → - T

カ → - L

3 → - N

(D) The special graphed symbols inputting rule utilizes the "\" key as the initial key to input one of the special graphed symbols which include 179 symbols as shown in Table 8, for example:

℃ → \ O C

§ → \ S S

\$ → \ S.

Nu → \ N O

○ → \ O X

☆ → \ *

ℓ → \ C /

★ → \ B *

£ → \ L -

% → \ % Ø

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(E) The symbols for reporting form inputting rule utilizes the "+" key as the initial key to input one of the reporting form symbols which include 76 symbols as shown in Table 9, for example:

—— → + -

+ → + 55

—— → + B -

┘ → + 33

It should be noted that in Tables 4 to 9 the upper lines show the special symbols, and the lower lines indicate the keys which have to be pressed according to this embodiment of the present invention.

e. A rule is established for the selection of special phrases which can be used in the selection of both English and Chinese phrases. Referring to Fig. 2,

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the function key " 詞 " (phrase) is first pressed, and then the desired keyword or keywords are pressed. The selectable phrases, including the phrases preset by the operator himself in the setting process, or the phrases downloaded from the host computer, are displayed by way of inputting one keyword or several keywords. The keywords used in the selection of the Chinese phrase are the letters of the English alphabet corresponding to the first phonetic symbols of those Chinese keywords, whereas the keywords used in the selection of the English phrase are the English words themselves. The maximum number of keywords one is allowed to input for one phrase is limited to eight letters of the alphabet, and the ambiguous character input also can be incorporated for some satisfactory phrases. When several satisfactory phrases are selected, the first satisfactory phrase will be displayed for the operator to choose. If that phrase is the one he wanted, the <RETURN> key is pressed to index that phrase; otherwise, the <space bar> is pressed to search the next satisfactory phrase until the wanted phrase appears, then, the <RETURN> key is pressed.

The ambiguous character input utilizes the symbol "*" to represent any characters used in the digital computer system. For example, there are four phrases as follows:

- | | |
|----------|-----------|
| (1) ACDF | (2) CBDE |
| (3) BCDE | (4) ACRFE |

When the inputting keywords are "A*", the phrases

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(1) and (2) are the satisfactory phrases. When the inputting keyword is "*", the phrases (1) to (4) are all the satisfactory phrases. When the inputting keywords are "*B", only the phrase (2) is the satisfactory phrase.

5 For further understanding, several commonly used phrases is exemplified as follows:

(1) 神通電腦股份有限公司

(2) 華光電腦股份有限公司

10 If you want to index the phrase (1), merely input the keywords "ST" (S is the first phonetic symbol of the character "神", and T of the character "通"). If you want to index the phrase (2), merely input the keywords "HG". It should be noted that in case keywords are selected so as to input less than the total number of
15 characters of a phrase like those above, the remaining characters will be processed by the ambiguous character input.

(3) 財政廳

(4) 財政司

20 (5) 財政部

(6) 台灣省財政廳

When you select "C" which is the first phonetic symbol of the "財" as the input keyword, the phrases (3) to (6) are all the satisfactory phrases. The phrase (3)
25 is first displayed for the operator to choose, the <RETURN> key is pressed to index phrase (3) if desired, or the <space bar> is pressed to check the next

satisfactory phrase (4). At this time, either the
<RETURN> key is pressed to index the phrase (4), or the
<space bar> is pressed to check the next satisfactory
phrase (5). The index of the phrase (5) or the display
5 of the phrase (6) is processed in the same way as the
above examples, thus further description is unnecessary.

As shown in Table 10, the head-tail codes determined
by the professionals according to the above established
rules are certainly acceptable in the digital computer
10 system of the present invention. But the head-tail codes
determined by the non-professional who is not yet skilled
in those rules as shown in Table 10 are also acceptable
only if those head-tail codes are included in the stroke
form code shown in Table 1.

15 The input method of this invention can easily be
mastered by any non-professional in data processing
through a Chinese computer, and it is also convenient for
professionals when designing programs.

Having thus described the invention, it is to be
20 understood that many changes and modifications thereof
will suggest themselves without departing from the

scope of this invention. Therefore, it is intended
that the specification and drawings be interpreted as
illustrative rather than as limited.



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claims

1. An input method for computerized characters using a digital computer system comprising the steps of:

(a) preparing a character stroke form code table of
5 the Chinese characters

(b) establishing a number of character splitting and coding rules to divide the Chinese characters into a plurality of groups according to the following rules:

(1) characters with splitable structures of top,
10 bottom, right and left, the left highest stroke of the character being a "head" stroke and the right lowest stroke a "tail" stroke;

(2) characters with internal/external structures, the external structure being the "head" stroke while the
15 internal structure is the "tail" stroke;

(3) for characters bearing several possible "head" and "tail" strokes, the character comprising the most strokes being taken in first order;

(4) when the strokes of a character are all taken as a
20 "head" with no stroke being duplicated as a "tail" stroke, and no strokes being left for the "tail", a zero or a blank is supplemented therewith;

(5) regardless of "head" and "tail", any characters enclosed on four sides are grouped into "☒", and those
25 enclosed on three sides are grouped into "☐";



(6) all characters having the left strokes in a cross form are grouped into " + ";

(7) all radicals of " 門 " and " 冂 " are grouped into " 尸 ";

5 (c) setting Chinese character input rules according to said "head" code, "tail" code, phoneme code, frequency code, and sequence code, wherein the first two codes are common to all characters, while the last three codes are applied only to selected characters;

10 (d) setting a symbol input rule which utilizes the input of an initial key and a symbol key in series to index said symbol;

(e) setting a phrase selection rule which utilizes the input of at least one keyword to select a plurality of satisfactory phrases, and then index a desired phrase from said satisfactory phrases; and

(f) preparing an input keyboard for being operated in conjunction with said stroke form code table, said symbol input rule, and said phrase selection rule;

20 whereby, the input operation can be performed by persons in handling information with computerized characters

2. The method as claimed in claim 1, wherein said step (a) comprises the step of grouping the frequently used Chinese characters into thirty-three "head" stroke forms and thirty-three "tail" stroke forms, respectively, and arranging them in a table (Table 1) for use as a coding



reference.

3. The method as claimed in claim 1 or 2, wherein said step (a) further comprises the step of grouping identical strokes for sharing identical keys on said keyboard.

5 4. The method as claimed in claim 1, 2, or 3, wherein said step (a) further comprises the step of providing an additional five basic strokes of " \ ", " - ", " | ", " _ ", " , ", and " \ " for the characters not having the frequently used strokes.

10 5. The method as claimed in any of claims 1 to 4, wherein said step (b) is characterized in that when the "head" and "tail" strokes of a character physically intersect with each other, the same stroke is taken as the "tail" stroke and the "head" stroke.

6. The method as claimed in any of claims 1 to 5, wherein said step
15 (c) further comprises the step of coding each character in:

"head" code , "tail" code -- basic pattern; or

"head" code , "tail" code , sequence code (or
initial phoneme code or frequency code) --three-code

20 pattern; or

"head" codes, "tail" codes, initial-phoneme code,
frequency code (or sequence code) -- four-code pattern;

"head" code , "tail" code , initial-phoneme code,
25 frequency code, sequence code -- five-code pattern.



7. The method as claimed in claim 6, wherein said initial-phoneme code comprises a Romanized system combined with the Chinese phonetic symbols.

8. The method as claimed in claim 6 or 7, wherein said
5 frequency code is based on the grouped Chinese characters of the frequently used, the less frequently used and the rarely used; during input operation, if no frequency code is designated, it will be automatically assumed that the frequently-used codes are in use so as to expedite the
10 input operation.

9. The method as claimed in claim 6, 7 or 8 wherein the Chinese characters retrieved each time by any one of said patterns comprise three groups, each of said groups having three characters and being respectively separated
15 by a blank from the adjacent group.

10. The method as claimed in claim 6, 7, 8 or 9 wherein said sequence code is characterized in that the character display order obtained by this input method is made in numeral sequence from 1 to 9, so that, by comprehending the sequence
20 during input operation, the sequence numerals can be directly inputted to display the right character in one operation.



11. The method as claimed in any of claims 1 to 10, wherein said step
(f) comprises the step of respectively marking the
phonetic symbols of said "head" and "tail", said
character selected, and said basic strokes on the keytops
5 of each key for input operation.

12. The method as claimed in claim 11, wherein said
step of marking on each key comprises the step of marking
the Chinese phonetic symbols on each English alphabet key
from A to Z, including four additional keys of ":", "<",
10 ">", and "?" in which the strokes of said "head" and
"tail" and said phonetic symbols may share the same key,
being exemplified as follows:

key "A" marked with "囗" and the phonetic symbols
丫, 丂, 乚, 乚, 乚, and 乚;
15 key "B" with "乚" and "丂" and the phonetics
乚;
key "C" with "竹", "八" and the phonetics ㄣ, and
ㄣ;
key "D" with "山" and the phonetics ㄣ;
20 key "E" with "人" and "-";
key "F" with "金" and 匚;
key "G" with "木" and ㄣ;
key "H" with "水", "小" and 厂;
key "I" with "才", "止" and "-";
25 key "J" with "火" and ㄣ;
key "K" with "土" and ㄣ;
key "L" with "石", "弋" and ㄣ;



- key "M" with "厂", "寸" and 冂 ;
key "N" with "夕", "丿" and ㄣ ;
key "O" with "言", "佳" and ㄣ·又 ;
key "P" with "王", "夂" and 夂 ;
5 key "Q" with "虫" and 乚 ;
key "R" with "女", "囧" and ㄣ ;
key "S" with "风", "尸", and 乚 ;
key "T" with "心" and ㄣ ;
key "U" with "耳" and ㄣ ;
10 key "V" with "艸", 厶 , and ㄣ ;
key "W" with "十" and 乚 ;
key "X" with "入", "乂" and ㄣ ;
key "Y" with "口" and 乚 ;
key "Z" with 冂 , 又 , ㄣ , and ㄣ ;
15 key "6" with "雨";
key "7" with "馬";
key "8" with "車".

13. The method as claimed in claim 12, wherein said marking step is characterized in that the strokes related
20 with mankind and living things such as 虫 , 人 , 女 , 心 ,
and 冂 , are disposed on a first row corresponding to the
English alphabet keys Q W E R T Y U I O P; the strokes
related with natural and inanimate things such as 日 ,
月 , 山 , 石 , 金 , 木 , 水 , 火 , 土 , are disposed on a middle
25 row corresponding to the English alphabet keys A S D F G
H J K L; and the strokes concerning the imperfect forms
but frequently used strokes such as 門 , 竹 , 艸 , and



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, are disposed on the rear row corresponding to the English alphabet keys Z X C V B N M.

14. The method as claimed in claim 11, 12 or 13 wherein said frequency keys are arranged on the right side of the
5 keyboard and designated with two keys as "less-frequently-used" key and "rarely-used" key, and the space bar as "frequently-used" key.

15. The method as claimed in claim 11, 12, 13 or 14 wherein said sequence keys are represented by the numerals 1 2 3 4 5 6
10 7 8 9 of the English keyboard respectively.

16. The method as claimed in any of claims 1 to 15, wherein said basic strokes are separated by the numeral keys 1 for
" ` ", 2 for " - ", 3 for " | ", 4 for " / ", and 5 for
" \ ".

15 17. The method as claimed in any of claims 1 to 16, wherein said step (e) includes an ambiguous character input which utilizes the symbol "*" to indicate any characters used in said digital computer system, the <RETURN> key to index one currently displayed satisfactory phrase of said
20 satisfactory phrases, and the <space bar> to check another phrase next to the currently displayed satisfactory phrase.

18. The method as claimed in any of claims 1 to 17, wherein said step (d) includes setting the " / " key as said initial key
25 for 94 general symbol keys



19. The method as claimed in any of claims 1 to 18, wherein said step (d) includes setting the "=" key as said initial key for 196 numeral symbol keys.

20. The method as claimed in any of claims 1 to 19, wherein
5 said step (d) includes setting the "-" key as said initial key for 40 phonetic symbol keys.

21. The method as claimed in any of claims 1 to 20,
wherein said step (d) includes setting the "\" key as
said initial key for 179 graphed symbol keys.
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22. The method as claimed in any of claims 1 to 21,
wherein said step (d) includes setting the "+" key as
said initial key for 76 reporting form symbol keys.

23. An input method substantially as hereinbefore
described with reference to the accompanying drawings.
