**Abstract Title:** Linear slide rule for decoding symbolic data

A linear slide rule is used to decode symbolic data and preferably comprises a plurality of slidably mounted, inter-changeable data fascia plates 3, 4. The data fascia plates 3, 4 may contain symbolic data series, such as I Ching trigrams transcribed from data sources such as circular disks. The data may be embossed, cut or drilled on or into the data fascia plates 3, 4, which may be fabricated from a variety of materials such as plastic, wood or metal. The information contained in the data fascia plates 3, 4 is preferably decoded using a sliding cursor 5 divided into a grid comprising a specific pattern of opaque and transparent grid squares. The data that can be observed through the transparent grid squares of the cursor 5 may be tabulated into groups of data to form computer pixels, which may then be used to generate pictorial information. Mechanical, electrical, pneumatic or computing devices may be used to automate the decoding process.
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<th>West</th>
<th>N.W.</th>
<th>North</th>
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<td>Chen</td>
<td>Sun</td>
</tr>
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</table>

Figure 4

---

**PLAN VIEW**

---

**SIDE VIEW**

---

**END VIEW**

Figure 5
Figure 6

Figure 7
Figure 8
GRAPHICAL REPRESENTATION OF HEXAGRAM CONSTRUCTION
[ H - CURSOR AT SOUTH POSITION ]

EARLIER HEAVEN
MANDALA
LATER HEAVEN

H - CURSOR

KEY CODE MATRIX

ab c def gh

Figure 9

GRAPHICAL REPRESENTATION OF HEXAGRAM CONSTRUCTION
[ H - CURSOR AT NORTH WEST POSITION ]

EARLIER HEAVEN
MANDALA
LATER HEAVEN

H - CURSOR

KEY CODE MATRIX

ab c def gh

Figure 10
7/10

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**Figure 13**

- Top Trigram of Hexagram
- Bottom Trigram of Hexagram
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Figure 14
1

SYMBOLIC DATA SYSTEM

This invention relates to an ancient cryptographic language which is symbolic and numeric in origin. It incorporates patterns of trigrams which are related to the I Ching, the Chinese book of changes. The patterns consist of circular sequential arrangements of trigram symbols. They are found on a variety of archeological artifacts. For research purposes, many of them have been categorized and individually identified, either by name or by a unique identification code or a numeric, binary, or bar code.

For the purpose of this document, these trigram symbolic patterns are referred to herein as trigram data discs. They store data in a symbolic manner, similar to our modern day diskettes which store data in a magnetic manner. In the past decade, there has been only archeological and artistic interest in them. No one, as far as the writer of this document is concerned, has realized that they contain data in an unusual manner. The symbolic information contained within these patterns has never been decoded or deciphered, because the means, methodology and/or the technology required to do so, has not been available.

The I Ching is a book used exclusively for divination purposes. Its text includes two trigram patterns known as the Earther Heaven and Later Heaven arrangements and an illustration of a matrix board known as the key for identifying hexagrams. The text also contains, amongst other things, sixty-four hexagram oracle readings which may be addressed by utilizing one of the known methods to construct a hexagram symbol and thereby obtain a specific reading. There are a number of different oracle methods which may be employed for divination purposes. For example, a hexagram may be constructed line by line by using the yarrow stalk or the coin method or alternatively, by the selection of two trigram symbols placed one above the other. In each case, the hexagram is created in a random manner which is unrepeatable.

The trigrams mentioned above are three lined linear symbols, whilst hexagrams are six lined linear symbols, as shown within this document. There are eight different trigram symbols, which by mathematical permutation can form sixty-four hexagram symbols. Each hexagram is identified either by name or numerically or by a unique binary code. The identification is incorporated within the text of this ancient book.

The object of this invention is to provide the means to create groups of hexagrams in a logical, scientific and repeatable manner. These groups are used to extract coded scientific and mathematical data from a number of different trigram data discs and respective trigram symbolic patterns, which can be displayed on a visual display unit.

This invention consists of:

- Trigram data discs
- A central processing unit (C.P.U.)
- A visual display unit (V.D.U.)
- Analytical Tables

Trigram Data Discs:
Symbolic data is extracted from trigram patterns and is transferred onto a number of new trigram data discs. The new disc format has a recognizable, regular and uniform shape, with the eight trigram symbols singularly arranged in a logical sequential order, either along the periphery face or along the edge (rim) at each cardinal compass point position. Each new disc is uniquely identified and is individually assigned as a reference data or programmable data disc and its placement on the C.P.U. is determined accordingly. The data is then transformed into a linear format, which is subsequently transcribed onto individual fascia data plates for the C.P.U. to decode.
There are more than 40320 trigram patterns. The symbolic data contained within these patterns can be directly transformed into individual data fascia plates for classification and decoding purposes. Each trigram pattern can be represented as a single reference or a programmable fascia plate of symbolic data which can be manually or automatically inter-changed within the C.P.U. mentioned herein.

The Central Processing Unit (C.P.U.):
The C.P.U consists of a symbolic linear slide rule. Its purpose is to select from three trigram symbolic patterns a combination of trigram symbols, which can be placed above the other, to form a specific series of hexagrams from the symbolic data that has been encoded within the trigram patterns or the respective trigram data discs.

It has two inter-changeable outer data fascia plates which contain the reference data and one inter-changeable sliding data fascia plate that contains the programmable data. Each individual fascia plate is inter-changeable so that it can be easily removed and replaced by other different fascia plates.

Each individual data fascia plate can be mounted onto any one of the C.P.U. base units. The fascia plate comprises a linear representation of the symbolic data which has been extracted from a specific trigram pattern or trigram data disc. It has two data sections, a small section for identification and a larger section for the placement of symbolic data.

A unique sliding template, called an - H - cursor is placed above, over and across all three data fascia plates. It is so designed that it can move freely sideways along the slide rule from one end to the other.

The cursor has a unique face plate which acts as a cursor-mask. The design of the mask enables a new mathematical permutation methodology to be utilized for the selection of trigrams. It is based on seven lower case alphabetical letters i.e., a to g inclusive, where each letter represents a single trigram data cell selected from one of the three trigram patterns or data discs.

Its use and purpose, which is graphically illustrated herein, shows that data extracted from one trigram data cell placed above the data extracted from another trigram data cell, will create a series of twelve hexagram symbols. Repeating this procedure for each cardinal compass point position will enable ninety-six hexagrams to be created. All the hexagrams created in this manner are numerically identified from their respective trigram components by utilizing the matrix grid the key for identifying the hexagrams, which is illustrated herein.

Comparison of the I Ching and the Invented Symbolic System:
The divinatory symbolic system of the I Ching utilizes sixty-four hexagrams. These are singularly and individually created by the practitioner, using an oracle method to obtain a divinatory reading. The particular oracle text is found by utilizing the key for identifying hexagrams, where each hexagram formed is identified either by name or by its unique identification number or by the respective trigram components from which it was created.

The invented symbolic system differs from existing I Ching symbolic system, as the combinatorial nature of the cursor's selection of data cells, together with a selection of differing reference and programmable data fascia plates, has been designed and developed to create a specific series of ninety-six hexagrams.

Each hexagram formed in this manner represents a single computer pixel. This hexagram pixel is identified by either its unique identification number or by its respective binary/denary code or its alphanumeric code or by the V.D.U. address location or by the respective trigram components from which it was formed.

To create a pictographic image on the V.D.U. specific and anomalous groups of hexagrams are used.
The specific hexagram groups are created by mathematically summing the ninety-six hexagrams into selected groups. Each group is based on the number of times an individual hexagram has been selected by the C.P.U.

The anomalous hexagram group comprises hexagrams that have been omitted from the selection process. These are determined and identified, by comparing the total number of different hexagrams created by the C.P.U. with the number of hexagrams mentioned in the I Ching.

Each specific and anomalous hexagram represents a computer pixel and each individual pixel’s address and its actual position on the V.D.U. can be located by utilizing the key for identifying hexagrams.

This key identifies the screen position for each pixel by use of an alpha-numeric or a unique binary/denary code and as such, individual groups formed from either the specific and/or anomalous hexagrams can be displayed on the V.D.U. to form a unique pictographic image.

The Visual Display Unit (V.D.U.):
The V.D.U. is formed from the key to identifying hexagrams. The resolution of the V.D.U. is incorporated within an eight by eight square matrix that comprises sixty-four square hexagram cells. Each cell address is identified, either by its assigned hexagram number or from its respective upper and lower trigram components, or by an alphabetic and/or numeric code, using lower case alphabet letters.

The eight columns and rows that form the V.D.U. are identified by trigram symbols or by an alpha-numeric code. The sequential vertical and horizontal arrangements of these trigram symbols are identical in all respects, i.e., the sequential arrangement is such that the top horizontal sequence of trigrams commences at the top left hand side and finishes at the top right hand side of the matrix, whilst the vertical sequence of trigrams commences at the top left hand side and finishes at the bottom left hand side of the matrix.

Each group of specific hexagram pixels created by the C.P.U., and/or the anomalous group of omitted hexagrams, can be individually displayed on the V.D.U. in a number of different ways, which will create differing pictographic images.

Each hexagram cell of the V.D.U. can be completely highlighted to form a square image or alternatively, the central point or other points within the hexagram cell may be addressed by utilizing a unique V.D.U. location address.

Analytical Tables:
The use of the cursor effectively creates a bridge that forms a link between each series of trigram data cells in a scientific and mathematical manner as it interacts simultaneously with all three respective trigram patterns or data discs.

The analytical table shown herein has been specifically created. The table demonstrates and shows by example that the C.P.U. can be used to create specific groups of hexagrams. It can also be used to indicate the anomalous hexagrams which were omitted from the selection process of the C.P.U.

Universal Analytical Tables may be created later by utilizing the mathematical permutation methodology developed for this invention. These may obviate the need of the C.P.U. described herein.

Origin of Reference and Programmable Data:
The reference data used within the analytical tables shown herein was extracted from the I Ching. The data is contained within the Earlier Heaven and Later Heaven trigram arrangements. The symbolic programmable data was extracted from a Tibetan sacred treasury Mandala.

Details of these trigram patterns can be obtained from the internet (refer to the chingmaster.co.uk)
It should be noted that reference and programmable discs of symbolic data can be selected and extracted from over 40320 different trigram patterns or data discs by utilizing combinatorial mathematics.

It is not necessary to obtain every possible trigram pattern or data disc or similar archeological artifact to recreate the complete ancient library of pictographic images. All that is required is for practitioner(s) to realize that they are dealing with a combinatorial series of trigram patterns or data discs.

Manufacture:
Preferably the C.P.U. slide rule is made from metal or plastic material, but it may instead be made from card, wood (or other suitable material) or from a combination of materials.

A preferred embodiment of the invention will now be described with reference to the accompanying drawing in which

FIGURE 1 shows the eight trigram symbols arranged in a linear format

FIGURE 2 shows trigram symbols on the face of a trigram data disc

FIGURE 3 shows trigram symbols on the edge (rim) of a trigram data disc

FIGURE 4 shows the linear format of three trigram patterns or data discs

FIGURE 5 shows the plan, side and end view of the C.P.U. static base unit and two inter-changeable reference data fascia plates

FIGURE 6 shows the plan, side and end view of the C.P.U. sliding base unit and an inter-changeable programmable data fascia plate.

FIGURE 7 shows the plan, side and end view of an additional C.P.U. sliding base unit with different inter-changeable data fascia plate.

FIGURE 8 shows the plan, side and end view of the C.P.U. base units (fitted with the reference and programmable fascia plates) aligned with their respective cardinal compass point positions, with the - H - cursor in the South West position

FIGURES 9 and 10 show by graphical illustration and example, the type of pictographic images created by an anomalous group of hexagrams which were omitted from the selection process of the C.P.U.

FIGURE 11 shows by graphical illustration and example, a pattern of pictographic images, created by summing all the anomalous groups of hexagrams together.

FIGURE 12 shows by graphical illustration, the combinational mathematical permutation used for the creation of ninety-six specific hexagrams.

FIGURE 13 explains by graphical illustration and example, the new mathematical permutation methodology that is incorporated within the formula developed specifically for the unique - H - cursor design.

FIGURE 14 shows by graphical illustration, the key for identifying hexagrams utilized as a V.D.U.
FIGURES 15 to 18 inclusive, show examples of the pictographic images created by the specific groups of hexagrams, as determined from the list of hexagrams tabulated in Table 1 herein.

The pictographic image illustrated in Figure 15 was obtained by using the 1 off Hexagram Nos. extracted from Table 1.

The pictographic image illustrated in Figure 16 was obtained by using the 2 off Hexagram Nos. extracted from Table 1.

The pictographic image illustrated in Figure 17 was obtained by using the 3 off Hexagram Nos. extracted from Table 1.

The pictographic image illustrated in Figure 18 was obtained by using the 4 off Hexagram Nos. extracted from Table 1.

FIGURES 19 to 24 inclusive, show examples of the pictographic patterns created by the anomalous group of hexagrams which were extracted from Table 1. These individual patterns contain graphical data of a mathematical and scientific nature, which includes the irrational mathematical constant values for Pi, epsilon and the golden section ratio.

As shown in Figure 1, there are eight trigrams symbols which can be identified by name. A combination of the eight trigram symbols placed one above the other, will create sixty-four hexagram symbols.

Figure 2 shows trigrams symbols and their respective cardinal compass point positions, sequentially arranged on the face of a new trigram data disc.

Figure 3 shows the trigram symbols and their respective cardinal compass point positions, sequentially arranged on the edge or rim of a new trigram data disc.

Figure 4 shows an example of trigram symbols, which have been extracted from three trigram patterns or data discs, arranged with their respective cardinal compass point positions in a sequential linear format.

As shown in Figures 5, 6, 7 and 8, the C.P.U. has a typical slide rule design. It comprises two longitudinal blocks 2 placed onto and rigidly attached to a base plate 1 with a third sliding longitudinal block 6 which can move freely sideways from one end to the other, placed between them.

Thin fascia plates of symbolic data 3, 4, 7 (and 9 including other fascia plates not mentioned, illustrated or shown herein) are attached to the upper surface face of the static and sliding base blocks in such a manner that they can be easily removed and replaced.

Data cells containing trigram symbols, their respective cardinal compass point positions and the identification code of the trigram pattern or trigram data disc (from which the data was extracted) and any other similar data, is printed or embossed onto the upper surface face of each fascia plate.

The two outer data fascia plates 3 and 4 of the C.P.U. contain the reference symbolic data, whilst the inner sliding data fascia plate 7 (and 9 including other fascia plates not mentioned, illustrated or shown herein), contain the programmable symbolic data.

Each data fascia plate contains a linear representation of the symbolic data which has been extracted from a specific trigram pattern or data disc. It consists of two data sections, a small section for identification and a larger section for the placement of symbolic data.
The small right hand section contains the sequence identification of the data disc (from which the data was obtained). This identification may consist of a name, a numeric or binary number or a bar code.

The larger left hand section is sub-divided and split into ten equally spaced and uniformly sized cells, which are identified by their respective cardinal compass point positions.

The cells at each end of the larger section are overlap cells which enables data to be readily read off at each end of the sequential series of eight cardinal compass point positions.

The symbolic data in the form of eight individual trigram symbols is placed into its respective data cell in a sequential and logical order, to reflect the symbol’s position on the respective trigram pattern or data disc, as shown.

The data cells (excluding the overlap cells) are assigned to the South, sequentially followed by South West, West, North West, North, North East, East and South East respectively.

It should be noted, that the two reference data fascia plates of symbolic data may also be interchanged by replacing either one or both data fascia plates by using different data fascia plates to those that are shown within this document. They can even be replaced by utilizing the programmable data fascia plates as reference data fascia plates and vice versa.

This inter-changeability of both the programmable and reference data fascia plates of symbolic data associated with the C.P.U. changes this unique C.P.U. into a cryptographic coding and decoding device, which may be used to create a vast number of hexagram pixels and a library of pictographic images.

Figure 8 shows the unique cursor 5 placed above and across all three fascia data plates 3, 4 and 7 of symbolic data. (The cursor can also be placed in a similar manner above other fascia data plates not mentioned, illustrated or shown herein) It is retained on the slide rule and can move freely sideways from one end of the slide rule to the other end. It is used to select at each cardinal compass point position a specific arrangement of trigram data cells from all three fascia data plates.

The face of the cursor is marked with a matrix-mask, so that each individual square cell can be accurately aligned with a set number of reference and programmable trigram data cells. This matrix-mask of individual square cells segregates its face into nine separate cell segments, seven of which are transparent, whilst two are opaque or blacked out. (For descriptive purposes only, each cursor segment is uniquely identified and represented in a numerical manner from 1 to 9).

The cursor matrix-mask effectively creates the cursor formula. Its design effectively permits the user to only select a pre-determined number of trigrams for each cardinal compass point position, in a repeatable, mathematical and scientific manner. This pre-selection of the trigram data cells has been determined by utilizing a new mathematical permutation methodology, which has been specifically developed for use with this C.P.U.

Figure 9 shows a pictographic image created by the anomalous group of hexagrams omitted from the selection process of the C.P.U. with cursor at the South position.

Figure 10 shows a pictographic image created by the anomalous group of hexagrams omitted from the selection process of the C.P.U. with cursor at the North West position.

Figure 11 shows a pictographic pattern created by graphically summarizing the anomalous groups of hexagrams which were omitted from the selection process of the C.P.U. for all eight positions of the cursor.
Figure 12 shows the combinational mathematical permutation of hexagrams created by utilizing three trigram data fascia plates and the C.P.U. symbolic slide rule. (For descriptive purposes only, each trigram data cell of the C.P.U. has been uniquely identified and represented by an upper case alphabetical letter).

Figure 13 shows in a graphical manner the cursor face matrix-mask of individual square cells, which effectively create the cursor formula by segregating its face into nine separate cell segments. Seven are transparent which PERMITS the respective data fascia plate cells on the C.P.U. to be selected. Whilst the two opaque or blacked out segments STOP and PREVENT the user from selecting the respective data fascia plate cells which are positioned immediately below the opaque or blacked out segments.

Figure 14 shows a graphical arrangement of the Visual Display Unit (V.D.U.). It is designed that the numerical numbers that are used to identify each square within the matrix are not normally displayed. as they represent the hidden addresses of the hexagram pixels.

Individual pictographic images are formed by high-lighting each set of individual hexagram pixel addresses. The images can be created manually, by either graphically drawing lines between each individual pixel point or automatically, by using mechanical, or electrical, or electronic, or biological, or chemical methods that link the pixels together to form a solid shape.

Additional and different pictographic images can also be created from the same set group of highlighted pixels, by simply inter-changing the respective upper and lower sequential arrangement of trigrams that form the hexagram cells of the V.D.U. In this manner, a library of different pictographic images may be created from a small number of trigram patterns or data discs.

Figure 15 to 18 inclusive, show the pictographic images created from each group of specific hexagrams formulated from the details shown in Table 1, as an example of the C.P.U. operation. Each image has been individually superimposed onto the V.D.U and the addressed hexagram pixels link together as shown to form a pictographic pattern.

Figure 19 to 24 inclusive, show the pictographic images created by the anomalous group of hexagrams which were omitted by the C.P.U. selection process. The individual hexagram pixel squares in this particular example, have been completely high-lighted to give the pattern shown herein.

C.P.U. Modes of Operation
This slide rule arrangement creates two C.P.U. modes of operation, one static and the other rotational, which can be utilized to create a large number of different hexagram pictographic images.

C.P.U. Static Mode:
With the C.P.U. arranged in a static mode the two reference data fascia plates 1 together with the single programmable data fascia plate 7 (and 9 including other fascia plates not mentioned, illustrated or shown herein) are aligned with each other at the same cardinal compass point positions.

C.P.U Rotational Mode:
With the C.P.U. arranged in a rotational mode, the programmable data fascia plate 7 (and 9 including other fascia plates not mentioned, illustrated or shown herein) can be moved sideways, so that its inherent trigram data symbols and its respective cardinal compass point positions may be realigned with different reference trigram data symbols and different cardinal compass point positions. This effectively creates and simulates a rotation of the programmable data disc, which results in the creation of additional hexagrams.
For Automatic Mode Use:
The sideways movement of the cursor and programmable sliding section of the C.P.U. slide rule can be motorized.

The inner face of the cursor and each fascia plate of symbolic data can be modified, equipped and fitted with a variety of different transmitter and respective receiver type devices, which represent or recognize each individual tigram symbol by utilizing either a mechanical, or an electrical, or an electronic, or a biological/chemical sensor and its respective sensor reaction device.

These sensors and sensor reaction devices can be so designed that they give a specific and unique output signal for each individual hexagram created, which in turn may be applied to a computer system containing a comparator which will effectively read off the hexagrams created and automatically plot them onto an electronic or other similar visual display unit.
Example:
The hexagrams in the analytical tables shown below have been created by utilizing the three trigram patterns or data disks known as the Earlier Heaven, Later Heaven and Mandala trigram cyclic arrangements. The reference data was selected from the Earlier Heaven and Later Heaven trigram patterns and the programmable data was selected from the Mandala trigram pattern, as mentioned herein.

This example demonstrates that analytical tables can replicate a situation where the data fascia plates of the C.P.U are arranged in the STATIC MODE (where all trigram data cells are aligned with their respective cardinal compass point positions) with the cursor aligned at the respective cardinal compass position shown below.

At each cardinal compass point position, the trigram symbols in the respective data cells ‘a to g’ as shown in Figure 13 have been read off and placed one above the other, as indicated in the permutation formula, which effectively creates the hexagrams stated. The hexagrams have been numerically identified by utilizing the key for identifying hexagrams from their component trigrams, as mentioned previously.

### WITH CURSOR AT CARDINAL COMPASS POSITION - SOUTH

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### WITH CURSOR AT CARDINAL COMPASS POSITION - SOUTH WEST

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WITH CURSOR AT CARDINAL COMPASS POSITION - NORTH

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WITH CURSOR AT CARDINAL COMPASS POSITION - NORTH EAST

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WITH CURSOR AT CARDINAL COMPASS POSITION - SOUTH EAST

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Hex. Nos.  58  58  28  61  49  38  17  54  43  10  49  38

The resultant hexagrams obtained in this manner were summarized as follows:

a) For hexagrams with a lower trigram of Ch'ien we have

Upper trigrams of Ken, Ch'ien, K'an, Tu, K'un and Li with trigrams - Sun and Chen omitted 1 e Hexagram Nos 9 and 34

b) For hexagrams with a lower trigram of Chen we have

Upper trigrams of Li, Chen, Ken, Tu, Sun and K'An with trigrams - Ch'ien and K'un omitted 1 e Hexagram Nos 25 and 24

c) For hexagrams with a lower trigram of K'an we have

Upper trigrams of K'un, Ken, Ch'ien, K'an, Chen and Sun with trigrams - Li and Tu omitted 1 e Hexagram Nos 64 and 47

d) For hexagrams with a lower trigram of Ken we have

Upper trigrams of Chen, K'an, Tu, Sun, K'un, Ken and Ch'ien with trigram - Li omitted 1 e Hexagram No 56

e) For hexagrams with a lower trigram of K'Un we have

Upper trigrams of Li, Sun, K'Un, Ch'ien, Ken, K'an and Tu with trigram - Chen omitted 1 e Hexagram No 16

f) For hexagrams with a lower trigram of Li we have

Upper trigrams of Tu, Ch'ien, Li, Sun, K'Un and Chen with trigrams - K'an and Ken omitted 1 e Hexagram Nos 63 and 22

g) For hexagrams with a lower trigram of Sun we have

Upper trigrams of Chen, Tu, Li, K'Un, Ken and K'an with trigrams - Sun and Ch'ien omitted 1 e Hexagram Nos 57 and 44

h) For hexagrams with a lower trigram of Tu we have

Upper trigrams of Tu, Sun, Li, Ch'ien, Chen, K'Un and Ken with trigram - K'an omitted 1 e Hexagram No 60

In order to extract as much information as possible from the specific hexagrams created by using the methodology stated herein, the hexagrams created were categorized and tabulated into four distinct groups as shown in TABLE 1 below.
### TABLE 1 - SUMMARY OF HEXAGRAMS CREATED FROM THREE CYCLIC SEQUENCES

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The above table of hexagrams formulated by the permutation of trigrams selected from the three cyclic sequences (using the above methodology for the formulation of hexagrams) shows that there were thirteen anomalous hexagrams i.e. hexagrams Nos. 9, 16, 22, 24, 25, 34, 44, 47, 56, 57, 60, 63 and 64, which have been omitted from the above table.

The graphical representation of pictographic images determined from each group of specific hexagrams (which have been superimposed onto the key code matrix visual display board) is as shown in Figure 15 to Figure 18 inclusive.

Similarly, the graphical representation of pictographic images determined from the thirteen anomalous hexagrams, is shown in Figure 19 to Figure 24 inclusive.

This example, shown within this document, conclusively proves that the invention mentioned herein accurately decodes the symbolic data encoded in a symbolic format on each trigram pattern or data disc.

**Universal Analytical Tables and Computer Software Programs:**
Universal analytical tables and computer software program can be written, based on the analytical tables and information mentioned herein, which will obviate the use of the manual or automatic C.P.U and associated symbolic data fascia plates stated herein. However, it should be noted that the reference data used by the analytical tables is based on the Earlier Heaven and Later Heaven trigram arrangements and the use of any differing reference data will necessitate the creation of a new set of analytical tables and revised software programs.

**Reservation of Copyright and Patent Development Rights:**
The inventor reserves all copyright and patent development rights to the new mathematical methodology and C.P.U mentioned within this document.
CLAIMS:

SYMBOLIC DATA SYSTEM

1. A symbolic data system which consists of data discs, a symbolic linear slide rule which acts as a central processing unit, a visual display unit and analytical tables forms a universal cryptographic coding and decoding device.

2. A symbolic data system according to claim 1, in which symbolic data is placed either on the periphery face of a data disc or on the edge/rim of the disc in a sequential and logical manner.

3. A symbolic data system according to claim 2, in which data from a number of data discs is transcribed onto individual identified inter-changeable reference and programmable data fascia plates which can be mounted and/or fitted onto or within a symbolic linear slide rule in such a manner so that they can be easily removed and replaced by other different data fascia plates of a similar nature.

4. A symbolic data system according to claim 3, in which the inter-changeability of the data fascia plates enables the symbolic linear slide rule to be used as a cryptographic coding and decoding device, which can be utilized to create computer pixels and/or a library of pictographic images and/or mathematical permutations and/or other different and diverse symbols and characters.

5. A symbolic data system according to claim 4, in which data fascia plates can be designed to permit the coding and decoding of other different and diverse data which may consist of characters or symbols or signs associated with different languages, alphabetical letters, numeric numbers, chemical and/or biological and/or nuclear configurations and/or formulas.

6. A symbolic data system according to claim 3, 4 and 5, in which data extracted from an individual data disc or other objects or documents is placed onto and/or within reference and programmable data fascia plates.

7. A symbolic data system according to claim 6, in which each individual data fascia plate is divided into separate sections and/or data cells.

8. A symbolic data system according to claim 7, in which sections and/or the data cells of individual data fascia plates are individually identified, equally and uniformly sized and are spaced out along the respective data fascia plate.

9. A symbolic data system according to claim 8, in which data cells and the data placed within the data cells of the respective data fascia plate is formed, as an integral part or printed or embossed or cut or drilled on and/or into the plate which is fabricated and/or manufactured from a variety of many different materials.

10. A symbolic data system according to claim 9, in which the data contained within the data cells is mathematically manipulated and/or selected by utilizing a number of different masked matrix cursors.

11. A symbolic data system according to claim 10, in which the masked matrix cursors are retained and fitted above and across data fascia plates in such a manner so that the cursors can move sideways and can be aligned with a specific number and/or set of data cells at a number of pre-determined identified positions.
12. A symbolic data system according to claim 11, in which each individual cursor-mask incorporates a matrix formed by a number of individual square data cells which segregate the face of the cursor into separate and uniformly spaced cell-segments, which are of the same uniform size as the data cells associated with the respective data fascia plates.

13. A symbolic data system according to claim 12, in which the cell-segments of the cursor-mask are either transparent and/or opaque or blacked out which permit the user to only select a specific number and/or a pre-determined set of data cells containing data in a repeatable, mathematical and scientific manner.

14. A symbolic data system according to claim 13, in which the design of the cursor-mask incorporates and/or utilizes mathematical permutation methodologies which are developed specifically for the pre-selection of the data placed in the data cells of the respective data fascia plates.

15. A symbolic data system according to claim 14, in which symbolic data created by the linear slide rule is tabulated into specific groups of data to form groups of computer pixels.

16. A symbolic data system according to claim 15, in which specific groups of data created by the linear slide rule or data that has been omitted from the selection process (called anomalous groups of data) form groups and/or sets of computer pixels which are displayed on a visual display unit.

17. A symbolic data system according to claim 1, in which the visual display unit is used to display any data which is processed by the symbolic linear slide rule.

18. A symbolic data system according to claim 17, in which the x and y co-ordinates of the screen associated with the visual display unit are changed to create different images from the same set number of computer pixels.

19. A symbolic data system according to claim 1, in which the sliding mode (representing a rotational mode of a respective data disc or the sideways movement of a programmable data fascia plate) will increase the amount of data extracted from the respective data fascia plate.

20. A symbolic data system according to claims 4 and 5, in which the cryptographic symbols and/or numeric language encoded within circular trigram patterns or trigram data discs (which relate to the I Ching, the Chinese book of changes) are deciphered.

21. A symbolic data system according to claim 1, in which the symbolic data system is automated for universal use.

22. A symbolic data system according to claim 21, in which automatic and sensory devices are fitted to the linear slide rule.

23. A symbolic data system according to claim 22, in which the components forming the linear slide rule are fitted with mechanical, electrical or pneumatic and other electronic devices together with transmittable and receiving sensory devices and/or other sensitive components which automatically (a) interchange the fascia data plates and (b) move the respective programmable data fascia plates to any pre-determined position and (c) move the cursor(s) so that they accurately align with the respective data cells of the respective data fascia plates selected for processing and (d) change the cell configuration(s) of the cursor mask(s) which changes and/or alters the mathematical permutation methodology of the data selection process and (e) create a series of pixel output(s) from the processed data which are high-lighted and/or displayed as patterns and/or images on the visual display unit.
24. A symbolic data system according to claim 23, in which the data on the data fascia plates forms an integral part of the data fascia plate and/or is embedded into or onto the surface of the data fascia plate by utilizing lasers, electrical, electronic, magnetic, bio/chemical devices and/or other nano technological methods which enables the respective data within the data cells to be identified, measured and mathematically manipulated and/or compared with other reference data to create an output of processed data in the form of computer pixels which are displayed onto the visual display unit.

25. A symbolic data system in accordance with claim 1, in which data is incorporated and mathematically manipulated by the use of various analytical tables which utilize the mathematical methodology embedded into the cursor-mask(s) and associated data fascia plates to obviate the use of the manual and/or the automatic symbolic linear slide rule.

26. A symbolic data system in accordance with claim 25, in which universal analytical tables are incorporated within computer software which simulates data of a different and diverse nature which is synthesized into and/or onto visualized data discs for processing by a computerized symbolic data system which creates an output of computer pixel groups which are displayed on a computer monitor or a network of computer monitors(s) linked to analytical comparators and processors used for coding and deciphering purposes.
Application No: GB0700335.3
Examiner: Rhiannon Jenkins
Claims searched: All
Date of search: 22 April 2008

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

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Field of Search:
Search of GB, EP, WO & US patent documents classified in the following areas of the IPC:
G5X
Worldwide search of patent documents classified in the following areas of the IPC:
G06G: G09C
The following online and other databases have been used in the preparation of this search report:

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**International Classification:**

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