

Computer Related Inventions (CRI) Guidelines Issued on 19-Feb-16 – Review &

Analysis of Examples

April – 2016

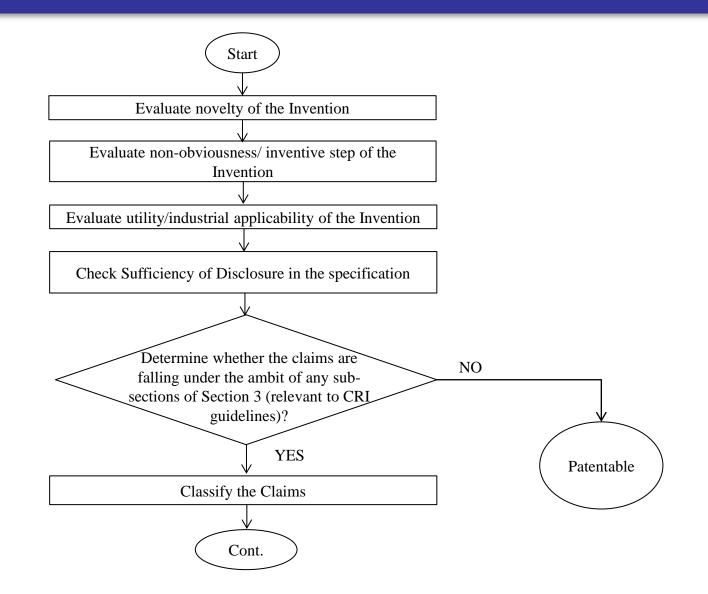
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- On 19 Feb 16, the Indian patent office has instituted new guidelines for evaluation of computer related inventions.

- The guidelines are available at: http://www.ipindia.nic.in/iponew/GuidelinesExamination_CRI_19February2016.pdf

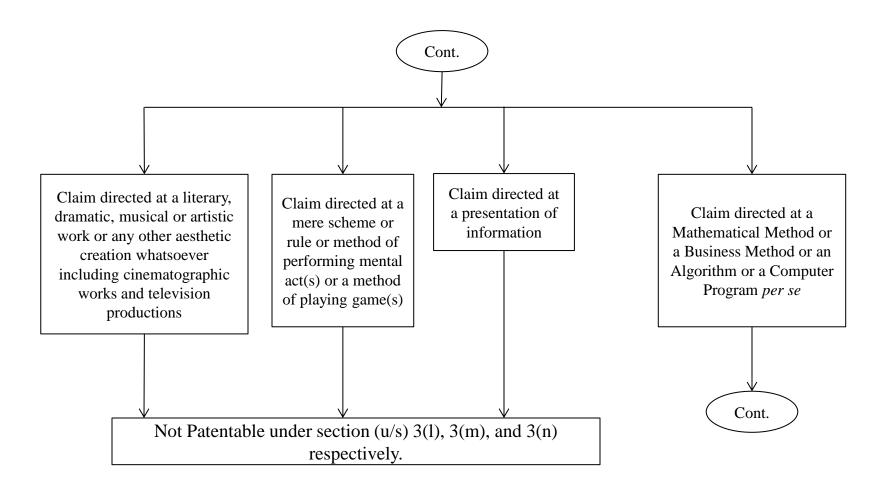
- The official patent office order no. CG/ Office Order/ 2016/179 mandates all the patent examiners to use these guidelines to evaluate the patentability of software patent applications.
- The new guidelines provide various criteria for patentability of Computer Related Inventions. However, according to new guidelines, computer program in itself has been suggested to be not patentable.
- This presentation reviews the various examples of ineligible claims as per Section 6 of the CRI guidelines.

Examination procedure relating to New CRI guideline – Flow Chart

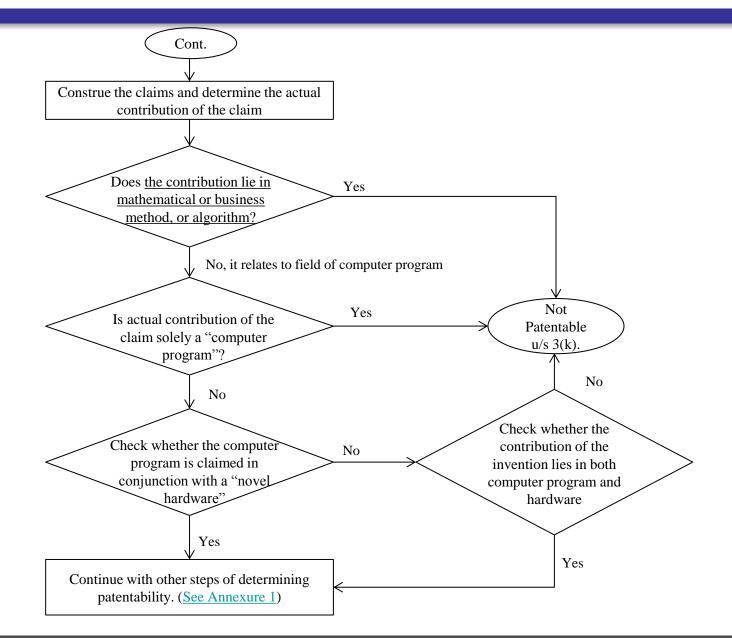


The flowchart above summarizes the examination standards according to the New CRI guidelines dated 19 Feb 16

Examination procedure relating to New CRI guideline – Flow Chart



Test to Determine Patentability as in Section 5 of New CRI guidelines



Examples of Ineligible Claims According to New CRI Guidelines

A method of scoring compatibility between members of a social network, said method comprising the steps of:

preparing interest compatibility scores based on expressed Interests of the members of the social network; and

computing a compatibility score between a first member of the social network and a second member of the social network based on expressed interests of the first member, expressed interests of the second member, and the interest compatibility scores between the expressed interests of the first member and the expressed interests of the second member.

Analysis

The above claim "A method of scoring compatibility between members of a social network, said method comprising the steps of" is a business method meant for finding compatibility among members in a social network and this compatibility score can be used for commercial purposes.

Further, the calculation of compatibility scores is based upon some mathematical model.

Such inventions claiming business methods or mathematical models are not allowed under Section 3(k) of the Indian Patents Act.

Example 2 of Ineligible Claims and its Analysis

Example 2

A method of operating a computer network search apparatus for generating a result list of items representing a match with information entered by a user through an input device connected to the computer network, the search apparatus comprising a computer system operatively connected to the computer network and the method comprising:

storing a plurality of items in a database, each item comprising information to be communicated to a user and having associated with it at least one keyword, an information provided and a bid amount;

receiving a keyword entered by a user though an input device;

searching the stored items and identifying items representing a match with the key word entered by the user;

ordering the identified items using the bid amounts for the identified items, and generating a result list including the ordered, identified items;

providing the result list to the user;

receiving a request from the user for information regarding an item selected from the result list;

charging to an account of the information provider associated with the selected item the bid amount associated with the selected item; and

providing information providers with authenticated login access to permit an information provider to modify at least the bid amount associated with the information provider's listing;

wherein the computer system sends an indication of the status of the information provider's account to the information provider in response to the occurrence of a predetermined condition.

Analysis

Although the above claim "a method of operating a computer network search apparatus for generating a result list of items" involves the term "apparatus", and is claiming a method to match pre-stored information with a user input along with other steps, it merely relates to a business method which may be used commercially and is not patentable under Section 3(k) of the Act. Even though, the method includes a smart way of doing business but its contribution remains non-technical and hence not patentable.

Source: Page 20 of 35 of CRI Guidelines Feb 2016

A method of classifying telecommunications network event description records in a mediator system of a telecommunications network by means of a computer program product, comprising

a) receiving records containing several fields, the fields of which records contain values,

b) reading the values contained in at least two specified fields from each received record, and

c) classifying the received records using a classification structure containing conditions, wherein the conditions have been formed based on conditional statements for the classes, said conditional statements having differing accuracies, in which the accuracy tells how many different fields of the record are used in the conditional statement of the class, and wherein the classification structure contains field-specific classification structures such that there is an own field-specific classification structure for each field according to the conditions of the classification structure, characterized in that for classifying the received records, the method comprises:

selecting field-specific classification structures corresponding to the specified fields and for each record:

searching from the selected classification structures a set of suitable classes for each of the specified fields, wherein the suitable classes correspond to the value read from the field, and

adding each set of suitable classes into a field-specific table, performing an intersect operation between the field specific tables and selecting a class based on the result thereof by performing the steps of:

collecting in a valid-set table the numbers of occurrences of the various classes in the field specific tables, and

selecting the class having the greatest number of occurrences and for which the number of occurrences is the same as the number of different fields appearing in the conditional statement of the class, and

classifying the record into the selected class.

Analysis

The claimed Invention is directed towards a method for classification of telecommunications network events by means of a computer program. The method comprises few steps of receiving records, reading values, classifying records on the basis of conditional statements. The method claim is directed to an algorithm for classification of data. Hence, it is concluded that the actual contribution of the claimed Invention is an algorithm and is not patentable u/s 3 (k) of the Act.

Example 4 of Ineligible Claims and its Analysis

Example 4

A data processing system (100) for repetitively determining a resource amount for counterbalancing the transfer of a failure risk pertaining to a bundle of constructs that may individually fail, the system comprising:

a data storage (110, 120, 130) for storing continuously updated spread values for each construct in the bundle for each distinct individual time instance during said resource amount determination, said spread values indicating a difference between a continuously updated value of the respective construct and a continuously updated value of a respective reference construct or reference bundle of constructs; and a calculation unit (140) connected to said data storage for calculating a value of said resource amount for an individual time instance based on said spread values, wherein said data storage is further arranged for storing

.....,

wherein said calculation unit is further arranged for disregarding the spread values of constructs having experienced a failure event, when calculating said value of said resource amount,

wherein said calculation unit is arranged for obtaining a first spread value for each construct relating to a given time instance and not having experienced a failure event,

wherein said calculation unit is arranged for[calculation steps].....,

wherein said data storage is further arranged for storing weights,

wherein said calculation unit is further arranged for calculating said value,

wherein said calculation unit is further arranged for calculating the calculated value of said resource amount is a value of a futures contract that is based on the basket of credit default swaps as underlyings.

Analysis

The claim relates to a system for determining failure risk. The claimed system solely relies on the calculation performed to determine risk which is actually an algorithm and not patentable u/s 3 (K) of the Act. Further, the said system also performs a series of computational steps to assess and counterbalance the risk and therefore is a business method and falls under excluded subject matter.

An apparatus for controlling a pension benefits system comprising:

a data processing means which is arranged to receive information into a memory from each subscriber employer defining the number, earnings and ages of all enrolled employees, said data processing means including a processor which includes:

average age computing means for determining the average age of all enrolled employees;

life insurance cost computing means for determining the periodic cost of said life insurance for all enrolled employees of said subscriber employer;

administrative cost computing means for estimating all administrative, legal, trustee, and government premium yearly expenses for said subscriber employer;

the apparatus being arranged to produce, in use, information defining each subscriber employer's monetary contribution to a master trust; the face amount of each life insurance policy to be issued and made payable to said master trust by a life insurer on the life of each enrolled employee and to be maintained in full force and effect until the death of the said employee; and periodic benefits payable by said master trust to each enrolled employee upon death, disability, or retirement.

Analysis

The claim discloses an apparatus for controlling a pension benefit system. The said apparatus comprises a data processing means for receiving information into a memory from users. Further, this data processing means contains other means such as average age computing means, life insurance cost computing means etc. which are nothing but set of instructions or can be called as computer programs for determining pension related details. Hence, the apparatus is mere a memory and/or a processor and <u>main contribution of the invention is the instructions/ algorithm</u> which is again not patentable u/s 3 (K) of the Act.

A method performed by a computer system (100; 110) for identifying an item definition that matches an item description, the item definition and item description having attributes with values, the item definitions being stored in an item definition table (101), the method comprising:

a) providing one or more rules (211) that specify how to generate a similarity score based on similarity between the values of the attributes of an item definition and an item description, wherein at least one rule specifies a criterion for identifying candidate item definitions;

b) identifying one or more candidate item definitions in accordance with the rules using indexes (212) of attributes into the item definitions in the item definition table, each index for an attribute mapping values of that attribute to the item definitions; for each of the one or more candidate item definitions,

c) generating a similarity score for the candidate item definition and the item description in accordance with the rules (403, 902), wherein said generating comprises assigning a score to the attributes of the candidate item definition and the item description, and aggregating scores of the attributes to derive the similarity score (909); and

d) selecting the candidate item definition whose generated similarity score indicates it is most similar to the item description as the matching item description.

Analysis

The claimed invention is method for generating matching items corresponding to item attributes. Moreover, the said invention relates to generating a similarity score on basis of similarity between values of attributes. Although the method is performed by a computer system, it merely an algorithm and the claimed invention merely projects a method for identification of item definition. The essence of the invention is an algorithm which is not patentable. Hence, it is concluded that the present invention is not patentable under Section 3(k) of the Act.

A method of editing a business graphic chart in a data processing system having a display, a keyboard comprising the steps of:

a) initiating (21) the display of a determined business chart composed of graphic objects by using data extracted from an existing data base file or keyed by an operator, said initiation involving the creation of a link between said business chart and the data used for creating the chart,

b) displaying (21) said business chart in one predetermined form depending on a selection made by an operator on a display, said displaying also involving the use of a cursor such as an arrow movable by said operator,

c) tracking said cursor in order to determine an individual object over which said cursor moves,

d) in response to said tracking, highlighting said individual object in order to provide a visual feedback to said operator

e) monitoring (22) the operator's inputs on said keyboard to determine whether an action has to be performed on said individual object,

f) performing (27) in response to said monitoring the action selected by said operator on said keyboard,

g) checking whether the results of said actions have made the chart incompatible with the data used to generate the business chart,

h) displaying (29) in response to said checking step a message on said displaying to inform the operator that the displayed business chart is no longer consistent with the data from which it was created.

Analysis

The claimed invention relates to a method of editing business graphics chart in a data processing system. The steps form an algorithm for processing a non-technical input into a non-technical output. Algorithms are not patentable u/s 3 (K), and therefore, the claimed invention is not patentable u/s 3(k).

Apparatus (10) for rebalancing a capitalization weighted stock index comprising:

means (18, 19, 20) adapted to receive as input a data feed of information relating to stocks in a stock index;

means (12, 42, 60) adapted to classify stocks in the index as a Large Individual Stock if a stock has a capitalization weight above or equal to a first threshold or as a Small Individual Stock if the stock has a capitalization weight below the first threshold;

means (12, 44, 64, 66) adapted to scale down the Large Individual Stocks by an excess capitalization weight of the large stocks;

means (12, 48) adapted to distribute an aggregated excess capitalization weight of the Large Individual Stocks over the capitalization weights of the Small Individual Stocks; and

means (12, 14, 30) adapted to output data (50, 52) corresponding to redistributed capitalization weights of the stock index.

Analysis

The claimed invention relates to an apparatus for rebalancing a capitalized weighted stock index by classifying, scaling down and distributing excess capitalization weight of large individual stocks. Although the claim recites the invention as an "Apparatus", the said claim actually comprises various means for performing different exercise. Reading the above independent claim, it appears that the means which are performing the different exercise are mere computer programs. Hence, it is not patentable u/s 3 (K) of the Act.

A system enabling subscribers of a wireless Telecom Operator to execute financial transactions with a mobile phone, in which a subscriber has one or several open Financial Transaction Accounts being managed by the Telecom Operator, which can receive monetary deposits and on which debit and credit operations can be executed, the system comprising:

a) a Transaction Processing Platform which is a software system running on computers of the Telecom Operator and which is interfaced at least with a subscribers' database, a wireless telephone network, an accounting system and other elements of a Telecom Operator infrastructure, the Transaction Processing Platform comprising means for: receiving and interpreting financial transaction orders transmitted over the wireless telephone network via the mobile phone, and b. executing the ordered financial transactions and managing the related movements and operations including debiting and/or crediting related Financial Transaction Accounts, confirming transactions, establishing statements of accounts, reporting transactions to Financial Transaction Account owners, sending and receiving transaction related data through the wireless communication network to/from the mobile phones, and

b) a client software program which can run on a mobile phone or on the Subscriber Identity Module inserted in the mobile, said client software program being arranged to perform the following functions: a. allowing authentication of the subscriber through password input via the mobile phone; b. enabling capture or validation by the subscriber of the financial transaction related data and display thereof on the mobile phone; c. enabling via the mobile phone, sending or receiving transaction related data or financial transaction account information to/from the Transaction Processing Platform through the wireless telephone network, wherein the financial transactions are executed between the mobile phones of at least two users connected to the system via the wireless telephone network and the Transaction Processing Platform.

Analysis

The invention as claimed is directed towards enabling a telecom operator to manage and complete financial transactions. Although the claim includes multiple hardware components, such as a mobile phone, a transaction processing platform, subscriber's database, and wireless communication network, in essence the invention is directed to perform and complete a financial transaction while managing the related movements of accounts. The invention claimed, viewed as a whole, is related to a non-technical field where the said non-technical field is related to a business method. Therefore, it is excluded under Section 3(k) of the Patents Act, 1970.

Source: Page 28 of 35 of CRI Guidelines Feb 2016

An automatic auction method executed in a server computer comprising the steps of: a) transmitting information on a product to be auctioned to a plurality of client computers via a network, each client computer belonging to a bidder; b) receiving a plurality of auction ordering information pieces, each including a desired price and a maximum price in competitive state, for purchase of said product, from the plurality of client computers via the network; c) storing the received auction ordering information pieces in the server computer for respective bidders; d) setting an auction price; e) determining whether there is any bidder who proposes a desired price equal to or higher than the auction price using the auction ordering information pieces stored in the server computer; f) if there is no bidder in the step e), lowering the auction price, and repeating the step e); g) if there is more than one bidder at step e), judging whether there is more than one bidder for whom the auction price is less than or equal to the desired price such that a competitive state occurs, increasing the auction price by a predetermined value; i) excluding the bidder who proposes acceptable a price lower than the increased auction price and specifying the other bidder or bidders using the auction ordering information; j) judging whether the competitive state occurs among the bidder or bidders specified in the step i); k) repeating the steps h), i) and j) and determining bidder as a successful bidder when there is no competitive state at step j); and l) if no competitive state occurs in the step g), determining bidder as a successful bidder as a successful bidder.

Analysis

The invention as claimed is a computer implementation of an auction method to identify a successful bidder for a product offered for sale at an auction. The method includes auction with preliminary steps of data exchange between the client computers and the server computer in order to collect bids from the participants. An auction price is set and successively lowered until it reaches the level of the highest bid or bids as determined by the "desired price". Hence, the scope of the invention as claimed in the claim encompasses a "business method" and, therefore, is excluded under Section 3(k) of the Act.

Source: Page 30 of 35 of CRI Guidelines Feb 2016

A computer based method of supporting the creation, servicing and payment of financial contracts and the operation of a plurality of financial accounts connected thereto having terms and conditions which provide repayment of monies tendered by one entity to another on a date or dates in the future, along with periodically provided compensation thereon, for the purpose of protecting the solvency of the issuing entity and providing reasonable compensation to contract holders said method comprising the steps of: a) storing the negotiated terms and conditions of a financial contract with an identified contract holder into at least one electronic database; b) periodically adjusting by an account management data processor coupled with the at least one electronic database the level of compensation on the financial contract to produce a rate of compensation tied to an external benchmark and to determined inputs based on such terms and conditions, c) allowing the issuing entity to establish a lower rate of compensation in any period in which its solvency or deteriorating credit quality, d) including with respect to the business activity to which the contract relates, is otherwise threatened in exchange for establishment of a higher rate of compensation during periods in which the results of a formula computation exceed certain pre agreed levels; e) the account management data processor creates and maintains one or more accounts in the at least one electronic database to which funds received on the issuance of the financial contract are allocated; and f) utilizing one or more computers to interact and update said accounts maintained in said memory means and report the data contained therein.

Analysis

The invention relates to a computer implemented method for processing of financial data. The method includes a sequence of computational steps and are directed to create financial contracts and administer them so as to obtain an improved adjustable rate structure for financial institution. Read in its entirety, the present claim is a set of rules or a sequential procedure to operate on non-technical business data related to financial contracts. The output is an improved adjustable loan structure. Therefore, the invention as claimed in the claim is a business method and is not patentable under Section 3(k) of the Patents Act, 1970.

Source: Page 31 of 35 of CRI Guidelines Feb 2016

Example 12 of Ineligible Claims and its Analysis

Example 12

A method for generating a page suitable for display on a mobile communication device(320) based on a webpage from a website server (330), said method comprising the steps of:

initiating at the mobile communication device (320) a request for the webpage from the website server (330); establishing a communication link (304) between the website server and the mobile communication device(320) on a direct end-to-end or secure communication path;

receiving (515) at least a portion of the webpage at the mobile communication device(320) over said communication link with said website server;

obtaining (511, 512) one or more transcoding instructions for the mobile communication device (320) from a server(310);

transcoding (516) said received portion of the webpage according to said one or more transcoding instructions; and

generating a page suitable for display on the mobile communication device (320) based on said transcoded webpage.

Analysis

The invention relates to a method for optimizing and generating a web page for displaying on a mobile communication device. The method involves a set of exchange of communication between a mobile communication device and a website server. These set of communications also include transcoding a webpage according to transcoding instructions.

Although the invention claims the involvement of hardware components such as a mobile communication device and servers, the contribution of the claim lies in a software component for optimization and generation of optimized webpage. Hence the subject matter is considered to be non-patentable under Section 3(k) of the Patents Act, 1970.

A computer implemented method, of estimating a characteristic of a signal, the method executable by a computer processor (220) comprising the steps of:

allocating a plurality of measurements amongst numerically sequential primary partitions, each said measurement being associated with a characteristic of a signal, each said primary partition having a respective primary numerical range, a value of each said measurement being numerically within one of the primary numerical ranges;

allocating the measurements associated with one of the primary partitions amongst numerically sequential secondary partitions, one of the measurements associated with the one primary partition having a desired rank, the secondary partitions being disposed numerically within the primary numerical range of the one primary partition, each said secondary partition having a respective secondary numerical range, the value of each said measurement associated with each said secondary partition being within a respective one of the secondary numerical ranges; and selecting one of the secondary partitions in accordance with the desired rank, one of the measurements associated with the selected one secondary partition having the desired rank

Analysis

The claimed invention relates to a computer implemented method for estimating a characteristic of a signal. The said invention identifies the characteristics by undergoing a series of steps (i.e. computer program) stored in the memory and executed by the conventional processor. <u>Hence, the actual contribution of the claimed invention is in computer program (and hardware serving merely as memory element)</u>, therefore, the invention falls under section 3(k), *computer programme per se*, of the Act and is not patentable.

A method of determining, from transform coded data, an inverse transform to generate a number of bits required to represent an output value which would be obtained as a result of an inverse transform being performed on said transform coded data, said method comprising the steps of:

obtaining, at an MPEG decoder, a sum of coefficient values within said transform coded data (204); comparing, in the MPEG decoder, this sum to a pre-determined threshold value (206);

deciding, in the MPEG decoder, as a consequence of said comparison which inverse transform implementation, selected from an 8 bit inverse transform implementation, and a 9 bit inverse transform implementation, should be performed when decoding said transform coded data; and

performing in the MPEG decoder on the transform coded data, the decided inverse transform.

Analysis

The claim is directed at a method to calculate IDCT (used for compression of multimedia data). This is achieved by implementing inverse transform. So, the actual contribution of the invention lies in using inverse transform, which is a mathematical method and is not patentable u/s 3(k) of the Act. The claimed method merely involves a series of steps (i.e. algorithm) without the use of any (novel) hardware that contributes to the said method of calculating IDCT to be used in MPEG decoder

A system for managing a billing account, comprising: a wireless network (104); a server (106, 120, 122, 13 0); and a client device (102, 108, 110, 112) comprising:

a transceiver; and a computer platform (206) including:

a memory (212); and

at least one processor (208) coupled to the memory (212) to perform operations within the client device (102, 108, 110, 112) and further coupled to the server (106, 120,122,130) via the wireless network (104) and configured to establish at least one primary account associated with a first type of service, wherein the at least one primary account includes periodic fees that are charged to the billing account on a periodic basis, and to establish at least one secondary account associated with a second type of service, wherein the at least one secondary account represents an amount of prepaid service that is available for charging usage of the second type of service to the billing account, wherein the amount of prepaid service represented by the at least one secondary account is calculated by adding a prepaid service credit to the at least one secondary account at each of a set of billing periods and deducting charges from the at least one secondary account based on the usage of the second type of service during the set of billing periods.

Analysis

The claimed invention relates to a system involving both wireless and non-wireless devices for managing billing accounts. <u>Hence, the claimed invention uses a conventional client/server architecture to manage bills and services associated with accounts</u>, which is a business process and not patentable u/s 3 (k) of the Act. Moreover, there is no actual contribution of the hardware and it merely serves as a memory element to execute a set of instructions.

Determinants of Patentability as in Section 4 of New CRI Guidelines

