PATENT PROTECTION OF SOFTWARE-RELATED TECHNOLGOY IN CHINA

For 2009 Mid-Winter Meeting of AIPLA

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In China, software and network technology may be protected by patent law and copyright law.

Copyright Protection for software and network-related works

Subject covers: Software; Digitalization of and network communication of copyrighted works; and electronic database.

Not extend to the ideas, processing, operating methods, mathematical concepts or the like used in software development.

Patent Protection for Software and network related inventions

Subject covers: any technical solutions for a product, a process or improvement thereof.

1. Legal Basis of Non-patentable subject matter

Article 25.1 (2) of the Patent Law

No patent rights shall be granted for “rules and methods for mental activities”.

Rule 2.1 of the Implementing Regulation of the Patent Law

“Invention in the patent law means any new technical solution relating to a product, a process or improvement thereof.”

The Guideline for Patent Examination (Revision of 2006)

The “new technical solution” is construed as a general definition of the subject matter in respect of which an application may be filed for patent for invention as is provided for in Rule 2 of the Implementing Regulations of the Patent Law, rather than the specific standards for assessing novelty and inventiveness.

2. Claims for pure rules and methods for mental activities under Article 25.1 (2) of the Patent Law

This category can be divided into three types:

1). Methods or rules of various mental activities, such as games and entertainment; methods of managing organization, production, commercial activities; rules of classifying books; methods of searching information, operating instructions of an instrument or an apparatus; rules of coding Chinese characters; methods of teaching, lecturing, training; methods of statistics, accounting, or bookkeeping; and so on; (See the unpatentable samples hereunder)

2). An algorithm, rules or methods for mathematical computation, (See the unpatentable samples hereunder)

3). A computer program per se (See the samples of unpatentable claim formats hereunder)

3. Claims for methods or products defined by both mental activities and technical features under Rule 2.1

The second type of program-related inventions, does not fall into the category of Article 25.1 (2) of the Patent Law, because it may possess both rules or methods for mental activities and technical features (including hardware features). But it may be un-patentable under Rule 2.1 of the Implementing Regulations, provided that it does not meet the requirements for technical solution.

Standard for determination of "technical solution"

Three-element criterion: a technical solution is a solution for solving technical problem by using technical means, and being able to achieve technical results or effects. A technical solution has to possess the three elements at the same time.

4. Claim formats

1) Samples of acceptable claim formats

-A process or method for doing something, comprises the steps of: doing something,….

-A product or system for doing something, comprises: means plus function, ….

2) Samples of un-acceptable claim formats

- A computer readable medium stored with a computer program, said program including the steps of: …..

- A computer program ….

- A product or system, comprising …storage means stored with a program which includes the steps of…, (and names of other hardware elements without functional or relationship limitations).

- A product or system, comprising …(hardware elements), said product or system includes the program or steps of: …

- A method for calculating a value by making use of a computer program, comprising the steps of: …

- A business method for doing something, including: names of computer hardware or network elements (such as server, a hub, and terminal computer, a sensor and printer), …(without limitation of the functions of the elements and/or how the business method works).

5. Samples for examination provided in the Patent Examination Guideline

1) Non-patentable samples in the category of Article 25

Sample 1, Claim: A method of automatically computing the coefficient of kinetic friction μ using computer programs, characterized in that it includes the following steps: calculating the ratio of the position variables, S_1 and S_2 of the friction plate; calculating the logarithm, $\log S_1/S_2$, of the ratio S_1/S_2; solving the ratio of the logarithm $\log S_1/S_2$ to e.

Analysis: The claim does not involve an improvement of the measurement method but a numerical computing method executed by a computer program, although what to be solved relates to physical quantity.

Sample 2, Claim: A general transition method for global language characters by computers, which includes the following steps:

forming corresponding auxiliary language of the input language by first using consonant word-notation, then consonant sentence-notation uniformly after words; completing language transition using the corresponding relationship between inter-language and auxiliary language of the input language, and the said inter-language are Esperanto and Esperanto auxiliary language; characterized in that the said methods for word-notation and sentence notation of input language are the same as those of forming Esperanto auxiliary language, the said word-notation method is: -m means noun, -x means adjective, -y means plural, -s means quantifier, -f means adverb; the said sentence-notation method is –z means subject, -w means predicate, -d means attribute, -n means object, -b means complement including predicative, and –k means adverbial modifier.

Analysis: The solution relates to the re-regulation and re-definition of the transition rules for language characters based on the inventor’s own subjective understanding, and merely embodies the unifying of the corresponding relationship between the auxiliary language of the input language and the inter-language into the word-notation and sentence-notation rules of the Esperanto auxiliary language, thus essentially rules and methods for mental activities.

2) Samples of non-patentable solutions in category of Rule 2.

Sample 1, Claim: A computer game method featured with both grown-up type and question-and-answer type for users, characterized in that it includes: questioning step, selecting question materials corresponding to the game progress from stored question materials, answer materials corresponding to the said question materials and game progress materials when users enter the game environment of the computer game through computer game devices, and display the question materials to users; score determining step, determining whether or not answers input by users are the same as the stored answer materials corresponding to the said questions based on presented question materials, if yes, then go to the next step, if no, then go back to the questioning step; changing game status step, determining the level, equipment, or environment of game roles run by users in the game based on the result in the score determining step and stored score recording materials for question and answer, if the number of right answers reaches certain level, then the level, equipment or environment thereof will be upgraded or increased accordingly; if the number of right answers does not meet certain requirements, the level, equipment or environment thereof will not be changed.

Analysis: What the solution aims to solve is how to combine characteristics of two types of games based on human will, and thus does not constitute a technical problem. What it utilizes is not technical means but to combine both question-and-answer and grown-up type games based on man-made activity rules. What is obtained is merely the effect of management and control of combining process of question-and-answer type game and grown-up type game. The gaming devices are well-known gaming devices, control over the said game process neither improves the internal performance of game devices nor causes any technical changes to the composition or function of the game devices.

Sample 2, Claim: A system for learning foreign language with active selection of learning contents characterized in that it includes:

learning machine, into which a user input selected learning materials; file receiving module, receiving language files input by the user; file dividing module, dividing the said language file into at least one independent sentence; sentence dividing module, dividing the said independent sentences into multiple divided units; sentence-making language learning module, outputting the said divided units to the user, receiving reordered sentences from the user, comparing the said independent sentences with reordered sentences input by the user, scoring based on preset score criteria, and outputting to score to the user.

Analysis: What the system aims to solve is how to determine learning contents based on user's objective will and thus does not constitute a technical problem. What it utilizes is making learning rules artificially and following these rules without restriction of the laws of nature, not a technical means. And no technical effects.

3) Samples of patentable solutions in the category of Rule 2.

Sample 1, Claim: A method for enlarging storage capacity of mobile computing devices using virtual device file systems characterized in that it includes the following steps:

building up a virtual device file system module on a mobile computing device, and hanging it on the operating systems of the mobile device;

providing virtual storage space to applications on the mobile computing device through the virtual device file system module, and sending read/write request on the virtual storage space to the remote server through network;

converting read/write request from the mobile computing device to read/write request on local storage devices on the remote server, and sending read/write result back to the mobile computing device through network.

6. Application samples, a case of Patent Reexamination Board with decision in Sept. of 2007

Claim: A delivering device for music information delivering music information to an external device connected to a network, comprising:

a storing component for storing a first music information; a receiving component for receiving a request to deliver the music including at least music identifying information and music quality information from the external device connected to a network; a reading component for reading the first music information from the storing component based on the music identifying information; a quality transforming component for transforming the first music information to a second music information different form the first music information by referring to a transforming table based on the music quality information, wherein the transforming table defines each type of quality information composing the music information; and a sending component for sending the first or second music information to the external device based on the content of the request to delivery the music.

The Patent Office rejected the application under Article 25, as the method was an electronic purchase method reflecting essentially an electronic business operated on known network, without solving technical problem and achieving technical effects.

The Patent Reexamination Board considers that in view of the technical features such as a storing component, a receiving component,…, the claim, as a whole, is not a rule or method for mental activities, not belonging to the category of Article 25.1(2). Further under Rule 2.1, the Board considers that the claimed invention is a technical solution, because the solution involves transforming quality information of music information and sending the information to external device, which solves the technical problem of how to reducing the data storage volume of the storage component in the music information delivering device (without need to pre-store multiple types of music information of a piece of music) and uses the technical means of the quality transforming component not used in the prior art. The rejection is withdrawn for further examination of the Patent Office.

7. Comments on the claim 1 of Bilski case

It is believed that the Claim 1 of Bilski case is not a patentable subject matter under the standard of Chinese Patent law.

The reasons are:

1) The claim are defined by pure business steps
2) No technical features are found in the claim.

Thus, the claim would be rejected under Article 25 for “rules and method for mental activities”, without the need for further examination of technical solution under Rule 2.

That’s all. Thank you for your patience.

If any questions, you may contact me at robinzhao@jeekai.com.