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## **Patents**

### **New Examination Guidelines for Computer Software Related Inventions in Taiwan**

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The "Computer Software Related Inventions" chapter ("Software Chapter") of the Patent Examination Guidelines in Taiwan was added in 1998 and then amended in 2008. It was further amended in 2013, and the amendments came into force on January 1, 2014.

Highlights of the 2013 amendments are as follows.

#### **Guidelines for Identifying an Invention**

Under the amendments, in determining whether an invention for which a patent is sought meets the statutory definition of an invention, the examiner should look at what has been invented rather than the format in which the claims are written. If only a *part* of the claimed invention does not utilize a law of nature, the claimed invention may still meet the statutory definition of an invention.

#### **Patentability of Business Methods Clarified**

The section entitled "Mere Processing by Use of Computers" has been renamed as "Simple Use of Computers", and the patent eligibility of a business method implemented through computer software or hardware has been clarified.

Business methods are man-made rules such as rules of society, rules of experiences or rules of economy; therefore, business methods do not meet the statutory definition of an invention since they do not involve technical ideas utilizing a law of nature.

Before the 2013 amendments, the Software Chapter provided that if a business method was performed using computer technology, and the technical means of such invention did not reside in the business method itself, but a specific method of doing business based on computer hardware or software for achieving a certain business objective or function, such invention should be deemed as technical means in the relevant art and thus meets the statutory definition of an invention.

Under the amendments, a business method will not meet the statutory definition of an invention simply by including computer software or hardware in the claims. A business method will be deemed to meet the statutory definition of an invention only if it can be demonstrated that it can overcome the difficulty of a technical problem or uses technical means to solve a technical problem, thereby having a technical effect on the overall system. This could include increasing information system security, or improving system performance efficiency, visual recognition precision or system stability.

#### **Patentability of User Interface, Data Format**

The new amendments have added a section entitled "Mere Presentation of Information" which specify provisions on the patent eligibility of a user interface and data format.

For a claimed invention related to a mere presentation of information, the claimed invention is not a creation of technical ideas and thus does not meet the statutory definition of an invention. The "General Provisions" chapter of the Guidelines provides a general definition of a mere presentation of information, and guidelines on the patent eligibility of a mere presentation of information.

For a computer software related invention directed to a mere presentation of information, the Software Chapter, before the amendments, stated that if the computer program or data disclosed is mechanically read into the computer and is inter-connected, either functionally or structurally, with the computer's processing, then it should be considered to involve a technical idea rather than a mere presentation of information.

The amendments use user interface and data format, which are two of the computer software related inventions that are usually related to a mere presentation of information, as two examples to further explain the above rule. According to the amendments, if the interaction between the user interface and the algorithm can yield any technical effect, e.g. increasing the precision of the input device or reducing the user's burden of recognition when operating the computer so that the user interface can function as an efficient man-machine interface, the user interface is considered to have a technical character. If the interaction between the data format (or data structure) and the computer's software or hardware yields any technical effect, e.g. enhancing data processing, storage efficiency or security after execution, the data format is considered to have a technical character, thus meeting the statutory definition of an invention.

### **Claims Written in Means/Step-Plus Function Language**

Since the provisions regarding claims written in means/step-plus-function language have been included in the "General Provisions" chapter of the Guidelines, the amendments have removed identical provisions from the Software Chapter.

Before the amendments, the Software Chapter did not provide any rules for determining whether the specification of a computer software invention whose claims are written in means/step-plus-function language meets the enablement requirement; however, the Software Chapter provided and still provides rules for determining whether a computer software invention could be made based on the disclosure of the specification. For example, if the embodiments disclosed in the specification merely describe the claimed invention by an abstract method or function, but do not describe how the method or function can be performed by use of certain software or hardware, the specification will be considered not to meet the enablement requirement.

The amendments set out the rules for determining whether a computer software claim written in means/step-plus-function language can be achieved based on its specification. The amendments divide a computer software claim written in means/step-plus-function language into two categories: (a) computer software with general computing functions, and (b) computer software with specific computing functions. Thus, if a computer software claim recites general computing functions, such as

storage and transmission, the requirement of disclosing the corresponding structure in the specification will be satisfied if a general purpose computer is disclosed in the specification. If, however, a computer software claim recites specific computing functions, the corresponding structure disclosed in the specification must include algorithms to achieve such functions. Furthermore, the algorithms must be sufficiently disclosed in the specification. The applicant may express the algorithms in any understandable forms such as a flow chart, a written description, a mathematical formula, or in any other manner that provides sufficient structure corresponding to the claim. It is unnecessary to provide a list of source codes or a very detailed description of the algorithms.

If the algorithms disclosed in the specification can enable a person of ordinary skill in the art to design the program such that a computer can execute the necessary steps in the algorithms so disclosed, the algorithms will be deemed to have been sufficiently disclosed. If, on the other hand, the specification merely repeats the names and functions of the claimed means, or merely describes the desired results without disclosing the method for achieving such results, there is no sufficient disclosure of the algorithms.

### **Determining Definiteness of Functional Language Claims**

Claims directed to computer software inventions are usually written in functional language or means/step-plus-function language. The amendments set out in detail the rules for determining whether a computer software claim written in functional language or means/step-plus-function language meets the definiteness requirement.

For a claim written in functional language, the claim is deemed definite if a person of ordinary skill in the art can, based on the common technical knowledge available at the time of filing, think of a hardware or software that can perform the functions recited in the claim. For a claim written in means/step-plus-function language, the specification must describe the structure, materials or acts corresponding to the functions recited in the claim or the computer software algorithm(s) or hardware that can achieve such functions. Furthermore, the language used in the specification cannot be too broad, or the claim will be considered indefinite.

According to the records of the public hearings on the draft amendments, the reason for distinguishing functional claims from means/step-plus-function claims is that the examiner will firstly treat a claim as a functional claim when assessing definiteness and patentability; if the applicant later indicates that the claim is in fact a means/step-plus-function claim, the claim will be re-examined based on the rules applicable to means/step-plus-function claims. Therefore, in examining a claim written in means-plus-function language or functional language, the examiner should look into the intention of the applicant rather than the contents of the claim.

If, in order to overcome the indefiniteness issue, the applicant construes a claim as a means-plus-function or step-plus-function claim, the claim will be construed to include the corresponding structure, materials or acts described in the specification and the equivalents thereof. However, the scope of the claim will not be directly limited to the embodiments disclosed in the specification. The scope of the equivalents is limited to the extent by which they could be unambiguously determined by a person of ordinary skill in the art at the time of filing.

## **Features That Do Not Contribute to Technical Character of Claim**

Inventive step is as an essential patentability requirement under the Taiwan Patent Act, and an invention is considered to involve an inventive step if the means used to solve the technical problem has a technical character. For a computer software claim consisting of both technical features and non-technical features, the examiner should first determine whether the non-technical features can contribute to the technical character of the claim in assessing inventive step. If the non-technical features do not contribute to the technical character of the claim, they should be ignored in assessing inventive step. A subsection entitled "Features that do not contribute to the technical character of a claim" has been added to set forth the aforementioned provisions to provide further guidance on the inventive step assessment for computer software related inventions.

If the features recited in a computer software claim are technical, such features can naturally contribute to the technical character of the claim. If, however, the features are not technical (e.g. giving away of gifts for business purposes), the examiner should then determine whether they, when interacting with the technical features, can contribute to the technical character of the claim. If the features are not technical, and do not interact with the technical features for solving a technical problem, they should be considered prior art that can be easily combined with other prior art; such features do not contribute to the technical character of the claim.

Based on the above, in assessing the inventive step of computer software-related claims, the examiner should only consider the features that can contribute to the technical character of the claims, i.e. features that are technical, as well as the features that interact with the technical features for solving a technical problem. It is unnecessary to consider the features that do not contribute to the technical character of a claim.