

Draft  
Revised EXAMINATION GUIDELINES  
FOR  
INDUSTRIALLY APPLICABLE  
INVENTIONS

ATTENTION

This is a provisional translation of Japanese text of “ Draft revised EXAMINATION GUIDELINES FOR INDUSTRIALLY APPLICABLE INVENTIONS”. When any ambiguity of interpretation is found in this translation, the Japanese text shall prevail.

JAPANESE PATENT OFFICE  
EXAMINATION STANDARDS OFFICE

## II. REQUIREMENTS FOR PATENTABILITY

### *Chapter 1. Industrially Applicable Inventions*

The first sentence in Patent Law Section 29(1) reads:

*“Any person who has made an industrially applicable invention may obtain a patent therefor ...”.*

It has been long established, in theory and practice, to consider that the above provision requires an invention to be "statutory", as well as be "industrially applicable." These Guidelines, following this established rule, give explanations to the two requirements, i.e., being statutory and industrially applicable.

#### **1. Statutory Invention**

Patent Law Section 2(1) defines the statutory invention as a highly advanced creation of technical ideas utilizing natural laws. It should be noted, however, that the term "highly" has been introduced in the definition to differentiate "invention" from "device" under the Utility Model Law, and this term is disregarded in judging on the statutory invention.

The following is the list of non-statutory inventions.

##### 1.1 Non-statutory Inventions

Since it is not a "creation of technical idea utilizing natural laws," any one of the followings is not considered statutory.

###### (1) Natural laws as such

Since statutory inventions shall utilize natural laws, natural laws as such like the laws of preservation of energy or the law of universal gravitation, are not considered statutory.

###### (2) Mere discoveries

One of the requirements for a statutory invention is that it is a "creation", and thus, mere discoveries, such as discoveries of natural things like an ore or natural phenomena, for which an inventor does not consciously create any technical ideas, are not considered statutory.

However, if things in nature such as chemical substances or microorganisms have been isolated artificially from their surroundings, then those are creations and considered statutory.

(3) Those contrary to natural laws

If a matter necessary to define an invention involves any means contrary to natural laws, the claimed invention is not considered statutory (see Example 1 attached). The so-called perpetual motion is an example contrary to the second law of thermodynamics.

(4) Those in which natural laws are not utilized

If a claimed invention is any laws other than natural laws (economic laws for example), arbitrary arrangements (rules for playing game as such for example), mathematical methods or mental activities, or utilizes only these laws (methods for doing business as such for example), the invention is not considered statutory because it does not utilize natural laws (see Examples 2-4 attached).

[Example]

1. Computer programming languages
2. The method of collecting electric charges, a gas charge, and so on by rounding off the one under 10 yen in the levy amount of money

Even if some matters to define an invention stated in a claim utilize natural laws, when it is judged that the claimed invention as a whole does not utilize natural laws, the claimed invention is not considered as statutory.

[Example]

3. Plying method of a container vessel to transport a large amount of fresh water from a region where crude oil is expensive and fresh water is inexpensive to another region where crude oil is inexpensive and fresh water is expensive, and after unloading fresh water, to transport a large amount of crude oil instead on the homeward voyage.
4. Billboard advertisement method using utility poles, characterized by forming in advance groups A, B, C, D, ... with a prescribed number of poles in each group, placing a holding frame to post thereon a billboard for each pole, and posting groups of billboards consisting of different types for groups of poles in circulation in a certain time interval. (Showa 31 (gyou na) No. 12, Court Ruling)

On the contrary, even if matters to define an invention stated in a claim do not utilize natural laws, when it is judged that the claimed invention as a whole utilizes natural laws, the claimed invention is considered as statutory. (see Examination Guidelines for Inventions in Specific Fields, Chapter 1. Computer Software Related Inventions, 2.2 Statutory Invention, Examples)

As stated above, in what cases a claimed invention as a whole is considered utilizing natural laws should be determined taking into consideration the technical properties of the

claimed invention.

Notes:

An inventions relating to a method for performing business or playing game should be carefully examined, even a part of it utilizes a physical thing, an apparatus, a device, a system, etc., there are some cases where the claimed invention as a whole does not utilize natural laws. (see Examples 5 to 7 attached)

For determination of computer software related inventions, see "Examination Guidelines for Inventions in Specific Fields, Chapter 1. Computer Software Related Inventions, 2.2 Statutory Invention."

(5) Those not regarded as technical ideas

(a) Personal skill (which is acquired through personal experience and can not be shared with others as a knowledge due to lack of objectivity.)

[Example]

A method of throwing a split-fingered fast ball characterized in the way of holding the ball in fingers and the way of throwing the same.

(b) Mere presentation of information (where feature resides solely in the content of the information, and the main object is to present information .)

[Example]

A written manual for instructing an operation of a machine or directing the use of a chemical substance, an audio compact disc (where feature resides solely music recorded thereon), a image data taken with a digital camera, a program of the athletic meet made by the word processor, or a computer program listing (representation of program codes by means of printing them on paper, displaying them on a screen, etc.).

However, technical feature resides the presentation of information (presentation per se, a means for presentation, a method for presentation, etc.), claimed inventions are not considered as mere presentation of information .

[Examples]

1. A test chart for use in checking the performance of a television set. (where technical feature resides the test chart per se)
2. A plastic card on which information is recorded with characters, letters and figures embossed on it. (this card enables one to copy the information by

affixing the card on a paper, and in this sense technical feature resides the means for presentation)

(c) Aesthetic creations

[Example]

Paintings, carvings, etc.

(6) Those for which it is clearly impossible to solve the problem to be solved by any means presented in the claim.

[Examples]

A method for preventing explosion in a volcano by forming balls of neutron-absorbing material (eg., boron) covered with substance of high melting temperature (eg., tungsten) and throwing them into the volcanic vent.(this invention allegedly works on the assumption that volcanic explosion is caused by nuclear fission of substances like uranium at the bottom of the volcanic vent)

## **2. Industrial Applicability**

Here, the word "industry" is interpreted in a broad sense, including mining, agriculture, fishery, transportation, telecommunications, etc., as well as manufacturing.

The following is the list of industrially inapplicable inventions. In principle, an invention which does not correspond to any one of the following is considered industrially applicable.

### **2.1 Industrially Inapplicable Inventions**

(1)Methods for treatment of human body by surgery or therapy and diagnostic methods practiced on the human body

Methods for treatment of human body by surgery or therapy and diagnostic methods practiced on the human body have been termed "medical act", and are normally practiced by physicians or persons directed by them.

An instrument or apparatus for use in such methods, or a pharmaceutical substance is patentable. On the other hand, an operating procedure on human body by means of such an instrument (scalpel, etc) or a method for treating of the human body with a pharmaceutical substance is considered industrially inapplicable and is thus not patentable.

Further, methods for treatment of samples that have been removed from the human

body (eg., blood, urine, tissues, or hairs), or methods of gathering data by analyzing the same, are not excluded from patentability. However, if the treatment of these samples is performed on the presumption that they will be returned to the same body (eg., a treatment of blood by dialysis), then, such methods are considered methods for treating the human body which are excluded from patentability.

The above principle also applies to methods for contraception or delivery.

A claim directed at the treatment of an animal body by surgery or therapy and diagnostic methods practiced on the animal body are considered to fall within the methods for treatment of the human body by surgery or therapy and diagnostic methods practiced on the human body, unless it is clear that the human body has been excluded (eg., the human body is expressly disclaimed in the specifications).

1) Methods for treatment of human body by surgery

This includes methods for surgical operations and drawing blood. Cosmetic treatment is also included in surgical methods, even when its purpose is not therapeutic or diagnostic but cosmetic provided that it is accompanied with treatment by surgery. Further, preparatory treatment for surgery, such as anesthetic treatment, is included in surgical methods because it is inevitably associated with surgical operations.

2) Methods for treatment of human body by therapy

Those include the following:

- (i) Methods for giving or injecting medicine, or giving physical treatment to a patient for cure or restraint of a disease;
- (ii) Methods for transimplanting or implanting substituting organs such as artificial international organs and artificial arms;
- (iii) Methods for prophylactic treatment of disease (eg., methods for preventing tooth decay, or methods for preventing influenza).

Methods for treatment for the maintenance of physical health (method for massage or finger pressure therapy) are also considered to fall within the methods for treatment of the human body by therapy.

- (iv) Preparatory methods for treatment by therapy, (eg., skin disinfection methods before injections), auxiliary methods for improving treatment results (eg., rehabilitation methods), or methods for nursing associated with the treatment (eg., preventive methods for bedsores).

3) Diagnostic methods practiced on human body

"Diagnostic methods practiced on the human body" implies methods for

measuring or examining the structure or function of the human body by physicians (or persons directed by them) for the purposes of recognizing or judging the physical condition of the human body, and/or judging the condition of diseases based on data gathered through the measurement or examination.

These include:

- (i) Methods for measuring the conditions of the human body interior or exterior, or the shape or size of internal organs, for the purpose of operation, therapy, or diagnosis;

[Examples]

1. A method for measuring the conditions of internal organs of the human body by X-ray.
2. A method for measuring the degree of skin inflammation.

- (ii) Preparatory methods for diagnosis

[Example]

A method for arranging electrodes for taking an electro-cardiogram.

It is noted, however, that methods for measuring the structure or functions of the human body for purposes other than operation, treatment or diagnosis however, are not considered diagnostic methods in the sense of the above, and are thus not excluded from patentability.

[Examples]

1. A method for measuring human skin for cosmetic treatment (except for those by surgery).
2. A method for measuring physical dimensions for tailoring clothes.
3. A method for measuring a finger for making a ring.

Notes:

In a case where methods for treatment of human body by surgery or therapy and diagnostic methods practiced on the human body mentioned in 1) - 3) above constitute a part of a particular method, and where that method has a technical feature like in the example below, it will be treated as a method for treatment of human body by surgery or therapy and diagnostic methods practiced on the human body.

[Example]

A method for examining an of electro-cardiogram, which has been taken by instilling both a vasodilator and vasoconstrictor at regular intervals.

<Explanation>

Although the example is an invention of a method for examining an electro-cardiogram, and does not directly appear to be an invention of a diagnostic method practiced on the human body, the invention comprises a technical feature in the area of diagnostic method practiced on the human body namely how to take an electro-cardiogram. Therefore, the method given as an example is deemed a diagnostic method practiced on the human body.

## (2) Commercially inapplicable invention

An invention which concerns marketable or tradable subject matter is considered commercially applicable. On the other hand, the inventions indicated in (i) and (ii) below are regarded as commercially inapplicable, and hence industrially inapplicable.

- (i) An invention applied only for personal use, such as a method of smoking
- (ii) An invention applied only for academic or experimental purposes

it is noted that such an invention as a "method for waving hair", which is to be used in the beautician field while being personally applied, is not considered an "invention applied only for personal use."

Likewise, a "kit for scientific experiments", which is to be used in experiments at school, is not considered an "invention applicable only for academic or experimental purposes," because it is marketable or tradable.

## (3) Practically inapplicable inventions

An invention for which practically can not work is not considered an "industrially applicable invention" even if it works theoretically.

[Example]

A method for preventing an increase in ultraviolet rays associated with the destruction of the ozone layer by covering the whole earth's surface with an ultraviolet ray absorbing plastic film.

## 3. Notes

The burden of proof regarding the requirements for industrial applicability is placed on the

applicant. However, upon noticing that the claimed invention does not comply with the requirements for industrial inapplicability, the grounds should be indicated as specifically as possible in the notice of rejection.

#### 4. Examples

[Example 1] (contrary to natural laws)

Title of the invention:

Method of plating copper with iron

Claim:

A method of plating copper with iron comprising the step of immersing a copper piece in an aqueous solution containing iron ions, thereby forming an iron layer on said copper piece.

Excerpt from the detailed description of the invention:

The electroplating has been a conventional method for plating copper with iron. The present invention provides a method which makes possible the plating of a copper piece with hard iron layer by only immersing the copper piece in an aqueous solution containing iron ions such as iron sulfate, using a simpler equipment than conventional one.

(Explanation to Example 1)

It is the common general knowledge that iron has a higher tendency of ionization than copper. Therefore it is impossible to form a hard iron layer over a copper piece by only immersing it in an aqueous solution containing iron ions such as iron sulfate.

This implies that the claimed invention involves a means to solve the problem which is contrary to natural laws and it is impossible to solve the stated object, causing the claimed invention to be non-statutory.

[Example 2] (not utilizing natural laws)

Title of the invention:

Method for calculating the sum of natural numbers n to n+k

Claim:

A method for calculating the sum of natural numbers n to n+k in accordance with the formula:

$$s = (k+1)(2n+k)/2.$$

Excerpt from the detailed description of the invention:

The sum of natural numbers  $n$  to  $n+k$ , noted as  $s$ , is expressed by:

$$s = n+(n+1)+(n+2)+ \dots +(n+k). \quad \dots(1)$$

The equation remains unchanged if the summing order changes. Thus, the sum is expressed in a different way as follows by reversing the sequence in the right side of the equation:

$$s = (n+k)+(n+k-1)+(n+k-2)+ \dots +(n+1)+n. \quad \dots(2)$$

The summing of equations (1) and (2) makes

$$2s = (2n+k)+(2n+k)+(2n+k)+ \dots +(2n+k).$$

The right side of the equation consists of  $(k+1)$  times  $(2n+k)$ , and therefore it follows that the sum is simply calculated by

$$s = (k+1)(2n+k)/2.$$

(Explanation to Example 2)

A calculating method is a mathematical process for processing given numbers or equations representing certain relations in mathematics or other fields of science in accordance with mathematical algorithm.

A mere mathematical processing based on the formula,

$$s = (k+1)(2n+k)/2,$$

is carried out in the claimed invention, and the invention utilizes solely laws or the like other than natural laws. Thus the claimed invention is non-statutory.

[Example 3] (not utilizing natural laws)

Title of the invention:

Teaching method in science and mathematics courses

Claim:

A teaching method in science and mathematics courses, characterized in that the time ratio for introduction, development, and summary is to be 3:2:1 in teaching lower grade children.

Excerpt from the detailed description of the invention:

Conventionally, education to lower grade children has been executed in sequence of

introduction, development and summary, and the time was allocated to the three sessions at the ratio of 1:4:1. The present invention is to improve the teaching performance of science and mathematics by changing the ratio into 3:2:1 taking account of the reasoning and memorizing ability of children.

(Explanation to Example 3)

Since teaching means giving instruction some knowledge, it belongs to a kind of mental activity.

This invention, considering the reasoning and memorizing ability of children, employs the time ratio of 3:2:1 for introduction, development and summary in teaching lower grade children in order to improve teaching performance in science and mathematics courses.

Thus, it follows that the claimed invention utilizes solely laws or the like other than natural laws and considered non-statutory.

[Example 4] (not utilizing natural laws)

Title of the invention:

Method for drawing a regular N-polygon inscribed in a given circle

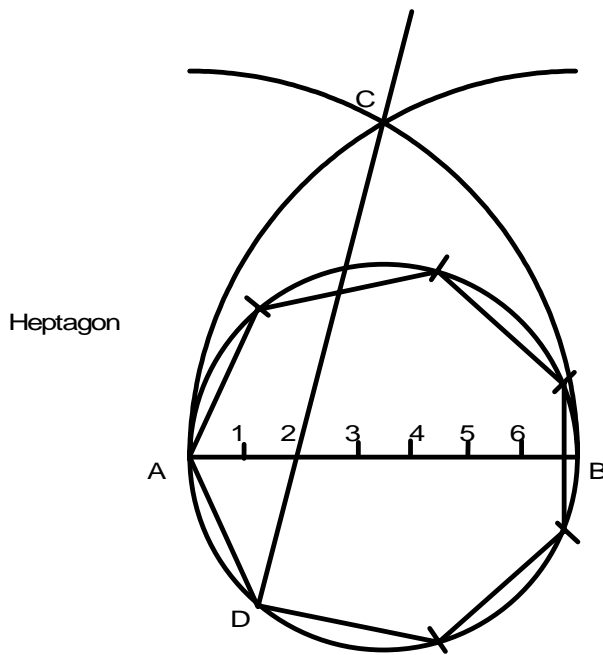
Claim:

A method for drawing a regular N-polygon inscribed in a circle characterized in that:  
diameter AB of a given circle is set to be the radius and circles having said radius are drawn with A and B as centers; one of the intersecting points thereof is denoted as C;  
the intersecting point of the given circle and the linear line connecting the second point from the A on the N equipartition points of the diameter is denoted as D;  
the circumference of the circle is equipartitioned by a length equal to AD; and  
equipartitioned points on the circumference is connected successively with linear lines to construct a regular N polygon.

Excerpt from the detailed description of the invention:

This method makes possible the easy drawing of a regular N polygon in a given circle.

(Drawings)



(Explanation to Example 4)

Generally, the term "drawing" is used with the meaning of depicting a figure which satisfies given conditions in geometry. In order to depict a figure satisfying given conditions, it is prerequisite to assume that several basic constructions (known as postulates) and several axioms are true. A set of the determined postulates and axioms make possible certain constructions, and the change in the postulates and axioms inevitably leads to the change in the constructions. Therefore, pure geometric construction is nothing but an operation based on the assumed postulates and axioms and utilizes any law other than natural laws.

The application of above considerations to this example follows that the claimed invention is nothing more than a pure geometric construction and utilizes solely laws or the like other than natural laws, thereby causing the claimed invention to be non-statutory.

[Example 5] (not utilizing natural laws)

Title of the invention:

Method of playing game

Claim:

A method of playing a game comprising the steps of:

piling up from larger to smaller several pieces having similar shape but different sizes at one of the given three positions;

moving the pieces on top one by one to other positions without placing a large piece on a small piece, thereby moving all the pieces to another position in the least number of moves.

Excerpt from the detailed description of the invention:

The present invention enable players to enjoy an interesting intellectual game regardless the number of players.

(Explanation to Example 5)

A game is generally performed by following artificial rules unrelated to natural laws, relying on human intellectual ability of reasoning, memorization, skill, luck, inspiration, chance and other mental ability.

Rules employed in the claimed invention, such as moving of pieces and the prohibition rules, are artificial arrangement to perform the game among players, and natural laws are not utilized here.

Thus the claimed invention is considered non-statutory.

[Example 6] (not utilizing natural laws)

Title of the invention:

Method for determination of selling price of a commodity

Claim:

A method for determination of selling price of a commodity by attaching a label on the product to indicate the production time of the product , the selling period and the list price at the production time, and to calculate the selling price at the selling time based on the formula

$$\text{selling price} = f(\text{selling time}) \times \text{list price},$$

where, the function 'f' is a monotonous decreasing function satisfying the condition

$$0 \leq f \leq 1.$$

Excerpt from the detailed description of the invention:

In the past, products of the same kind were place on the same self for selling even if their production times differed. Therefore, those customers who prefer the freshness of product tend to check the production time and select one most recent, so that old products remained. As a result, those products which expired the selling period lost the commercial value, and the cost to discard them as garbage was generated and this resulted in a loss of profit for the shop owner.

Then, in order to increase the probability of selling the old products, the shop owner

tried to relocate the products in a certain time interval in such a manner that old ones are placed at the front side of the self and new ones at the rear side. However, as the shop floor space becomes larger, the cost for rearranging the products in a certain time interval increased, and it always involved a risk that customers had a bad impression when they saw the rearrangement work.

Therefore, the problem to be solved by this invention is to provide a method for determination of selling price of a commodity in that a lower selling price of the product can be set depending on the length of lapsed selling time by calculating the selling price using the formula

$$\text{selling price} = f(\text{selling time}) \times \text{list price}$$

where, the function 'f' is a monotonous decreasing function satisfying the condition

$$0 \leq f \leq 1,$$

in order to reduce the number of products which expired the selling period as fewer as possible and to save the costs for rearrangement of the products on the self and for discarding the old products remained as garbage, without giving a bad impression created by the rearrangement to the customers. By this invention, the number of old products which will remain otherwise can be reduced even without relocating the products on the self, because it is expected that those customers who prefer the freshness will buy relatively expensive new products while those customers who prefer thrift will buy relatively economical old products. Furthermore, because the selling price of the products which expired the selling period becomes zero and those customers who are conscious of thrift may take out some of the products of no selling price, so that a part of the cost for discarding the old products remained can be reduced.

At this time, the function 'f' can be set based on the following formula:

$$f(\text{selling time}) = \log_{10} \left( 1 + 9 \max \left[ \frac{\text{selling period} - \text{selling time}}{\text{selling period} - \text{production time}}, 0 \right] \right)$$

(Explanation to Example 6)

A method for determination of selling price of a commodity defined in the claim is a matter using a label as an object, but since it is relying on economic laws or artificial arrangement, the claimed invention as a whole is not using natural laws.

Therefore, the invention regarding the claim is considered as non-statutory.

(Reference)

When the statement of this claim is amended as follows,

"a method for determination of selling price of a commodity in a register, comprising:

a reading means to read two dimensional bar codes indicating the production time, the selling period and the list price of the product recorded on a label attached on the product;

a clocking means to output the current time;  
an arithmetic means to calculate the selling price;  
a display means to indicate the selling price; and  
a control means to control the reading means of the two dimensional bar codes, the clocking means, the arithmetic means, and the display means;

wherein,

said reading means includes a step to read the two dimensional bar codes recorded on a label attached to the product;

said control means includes a step to receive the information of the two dimensional bar codes outputted from said reading means;

said control means includes a step to output said received bar codes information and the current time obtained by said clocking means to the arithmetic means;

said arithmetic means includes steps to calculate the selling price of the product based on the formula

$$\text{selling price} = f(\text{selling time}) \times \text{list price}$$

where, the function 'f' is a monotonous decreasing function satisfying the condition

$$0 \leq f \leq 1$$

and to output the calculation result to said control means; and

said control means includes a step to indicate the calculation result on said display means",

even though a part of the amended claim is not using natural laws, the claimed invention as a whole is considered using natural laws. Therefore, the invention regarding the amended claim is statutory. (For practical judgment, see "Examination Guidelines for Inventions in Specific Fields, Chapter 1. Computer Software Related Inventions, 2.2 Statutory Invention.")

[Example 7] (not utilizing natural laws)

Title of the invention:

Method for holding a party

Claim:

A method for holding a party, comprising the steps of:

sending e-mails of invitation to the party with a message telling that those who responded early will receive a gift at the party to the members based on the invitation list;

receiving response e-mails confirming the attendance;

registering names of expected participants in the order the response e-mails received;

collecting the party fee at the party reception desk; and

giving a gift in the order registered in the entry after collecting the party fee.

Excerpt from the detailed description of the invention:

After calling for participation to the party, it is meaningless for the party planner if the actual number of participants is far less than expected. Then, just to be sure, the expected attendance will be confirmed in advance by e-mails for instance instead of return postcards, but this does not assure responses before the due date. Even responses received, it is uncertain if the members actually come to the party.

According to this invention, by telling the members that those who responded early will receive a good gift, the probability of participation will increase and quick responses can be expected. Therefore, by grasping the anticipated attendance early, loss of expenses for preparation of the party such as meals can be reduced.

The cost of the gifts may be appropriated by the reduced expenses, previously including in the party fee, or by donation from the sponsors on the condition that the sponsors' goods will be used in the party.

(Explanation)

A method for holding a party defined in the claim uses a system of e-mailing for the confirmation of attendance, but dependent on artificial arrangement to make the confirmation between the party planner and the participants and to give gifts in the entry order, and it is as a whole not using natural laws.

Therefore, the invention regarding the claim is considered non-statutory.

(Reference)

When the statement of this claim is amended as follows,

"an operation method of an information processing system for supporting party holding, comprising:

an input means;

an e-mail transmission and receiving means;

a storage means of anticipated participants list to memorize names, e-mail addresses, and the order of response e-mails confirming the attendance from the anticipated participants;

a storage means for memorizing a message telling that a gift will be given to the participants in the order of receiving the response e-mails;

a display means; and

a control means;

wherein, said control means comprising the steps of performing:

reading the e-mail addresses from said storage means of the anticipated participants list and the message stored in said message storage means;

transmitting said message as an invitation e-mail requesting attendance confirmation to said e-mail addresses by the e-mail transmission and receiving means;

detecting response e-mails received by said e-mail transmission and receiving

means;

memorizing a response e-mail received every time it is detected into said storage means of anticipated participants list in the order the response e-mails received; and

outputting all the names of anticipated participants of those who responded stored in said storage means of the anticipated participants list and the order of received response e-mails, when the instruction of the end of detection of response e-mails is sensed by said input means",

the invention of the amended claim as a whole is considered using natural laws.

(For practical judgment, see "Examination Guidelines for Inventions in Specific Fields, Chapter 1. Computer Software Related Inventions.")