

**Patentability of Business Method Inventions in Japan
Compared with the US and Europe
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By:

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1. Introduction

This paper describes business method patents in Japan comparing them to those in the United States and Europe. First, the basic requirements for patents and examination guidelines in Japan will be described. Then, hypothetical claims are used to illustrate the differences between Japan, the US and Europe. I also include “Examples of examinations on inventions related to Business Methods” which was issued on April, 2003 by the Japan Patent Office (hereinafter referred to as JPO).

2. History of Expansion of Patentable Business Method Inventions

2.1 History of expansion of patent eligibility of business and software inventions in Japan

Business method inventions are patentable in Japan if they are realized using computers. Thus, we have to know about patent protection of software inventions in Japan to understand patent protection of business method inventions. First, we will examine the evolution of this standard.

(1) Method of Advertising on Utility Poles (1956)¹

The invention in this case was a method by which a employee would exchange advertisement boards on utility poles. The Tokyo high court said that the method applied was not the subject matter of a patent, because it did not utilize laws of nature.

(2) Examination Guidelines for Computer Related Inventions –vol. 1- (1975)²

These guidelines, no longer in use, showed that computer program related inventions could be the subject matter of patents if the program handled technical operations. Thus, methods of handling technical operations carried out by computer programs can be patented. For example, in these guidelines, methods implemented by computer programs which control manufacturing machines are subject to patent. However, if a computer program does not handle technical operations but non-technical process such as pure mathematical or economical algorithm is not patentable. At that time, computer program related inventions

¹ Tokyo high court decision of December 25, 1956, 1956(Gyo-Na)No.12, Gyosei Saibanrei-shu vol.7 No.12 Page 3157

² This is out of print now. You can find this guideline (Japanese version) on my web site. <http://www.furutani.co.jp/office/ronbun/soft-standard-1.pdf>

could be patented as method patents but not as apparatus patents.

(3) Method for Controlling Operation of a Computer (1980)³

The invention in this case related to a method for classifying data using a computer. The appeal board of the JPO said that the essence of the invention was not controlling the operation of a computer, but a mathematical operation. Thus, the invention was not statutory subject matter of a patent.

(4) Method for Displaying Objects (1980)⁴

The invention in this case was a display method using a computer. The appeal board of the JPO said that the essential part of the invention was the computer program carrying out mathematical operation, and thus the invention could not be subject matter of a patent.

(5) Examination Guidelines, part VII, chapter 1 (1993)⁵

Those guidelines said that in addition to computer programs which handled technical operations, computer programs which handled non-technical operations such as word processor programs were also statutory inventions if such computer programs carried out operations utilizing hardware resources of computers or hardware resources outside computers. These guidelines made it possible to obtain patents for business methods implemented by computers. Further, these guidelines clearly denies applying the Point of Novelty Approach in which the judgement of whether an invention was statutory subject matter was based only on the novel part of the invention. The guidelines said the invention as a whole should be considered when an examiner judges whether the inventions are statutory or not.

(6) Examination Guidelines, part VII, chapter 1 (1996)

These guidelines allowed that a computer readable medium storing a program was one possible form of claim object. After these guidelines, applicants could make computer readable medium claims (Beauregard type claim).

(7) Examination guidelines, part VII, chapter 1 (2000)⁶

These guidelines, which are still valid, allow that a computer program itself is

³ Appeal No. 4535 of 1969

⁴ Appeal No. 8546 of 1966

⁵ This is out of print now.

⁶ English version is available at

http://www.jpo.go.jp/tetuzuki_e/t_tokkyo_e/1312-002_e.htm

one possible form of claim object. By these guidelines, programs themselves are treated as tangible entities. Since these guidelines came into effect, applicants have been able to make computer program claims.

(8) Patent Law Amendment (2002)

This law allows that a computer program shall be deemed as a tangible entity⁷. Although this was not clearly stated in the Patent Law of 1959, it was indicated in Examination Guideline, part VII, chapter 1 (2000). The Patent Law Amendment of 2002 confirms that this interpretation is correct.

2.2 History of Expansion of Patent Eligibility of Business and Software Inventions in the United States

(1) Hotel Security Checking Co. v. Lorraine Co. (1908)⁸

In this case, the court said that “art” in Patent Law did not include abstract ideas of business methods. It is not clear whether the court thought the invention was statutory subject matter or not. The court decided that the invention was not novel.

(2) Gottschalk v. Benson (1972)⁹

The Supreme Court decided that mathematical algorithms having no practical application were not statutory subject matter.

(3) Diamond v. Diehr (1981)¹⁰

The Supreme Court decided that a process for curing synthetic rubber which included the use of a mathematical formula and a programmed digital computer was patentable subject matter under § 101. The Supreme Court said that in determining the eligibility of claimed processes for patent protection under § 101, their claims must be considered as a whole, and that it was inappropriate to

⁷ Section 2, paragraph 3 defines “working” as follows:

“Working of an invention in this Law means the following acts:

- (i) in the case of an invention of a product (including computer program or the like), acts of manufacturing, using, assigning or the like (this means assigning and leasing and in case of computer program including providing it through communication line, importing or offering for assigning or the like (including showing for assigning or the like).

⁸ Hotel Security Checking Co. v. Lorraine Co., 160 F. 467 (2d Cir. 1908)

⁹ Gottschalk v. Benson, 409 U.S 63, 175 U.S.P.Q 673 (1972)

¹⁰ Diamond v. Diehr, 450 U.S 175, 209 U.S.P.Q 1 (1981)

dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis.

(4) Freeman-Walter-Abele Test (1981)¹¹

USPTO revised its Manual of Patent Examining Procedure¹² (hereinafter referred to as MPEP) to introduce the Freeman-Walter-Abele Test. This test is a 2-step test. Step 1 - determine whether the claim directly or indirectly recites an algorithm. If “yes” then proceed to Step 2. Step 2 – determine whether, even if inoperable or less useful, the claim would be otherwise statutory without the algorithm.

(5) Paine, Webber, Jackson & Curtis Inc. v. Merrill Lynch, Pierce, Fenner & Smith Inc. (1983)¹³

The invention in this case was directed to a Securities Brokerage-Cash Management System. The court decided the invention was not a mathematical algorithm. The court concluded that the business methods were patentable in the form of a suitably programmed computer system.

(6) In re Alappat (1994)¹⁴

Alappat’s invention was a means for creating a smooth waveform display in a digital oscilloscope. The court said that this invention is not a disembodied mathematical concept which may be characterized as an “abstract idea”, but rather a specific machine to produce a useful, concrete, and tangible result.

(7) In re Beauregard (1996)¹⁵ and Examination Guidelines for Computer-Related Inventions¹⁶

The court did not make a decision, because reconciliation was made between

¹¹ In re Freeman, 573 F. 2d 1237, 197 U.S.P.Q. 464 (C.C.P.A. 1978), In re Walter, 618 F. 2d 758, 205 U.S.P.Q. 397 (C.C.P.A. 1980), In re Abele, 684 F. 2d 902, 214 U.S.P.Q. 682 (C.C.P.A. 1982),

¹² MPEP2110

¹³ Paine, Webber, Jackson & Curtis Inc. v. Merrill Lynch, Pierce, Fenner & Smith Inc., 564 F. Supp. 1358, 218 U.S.P.Q. 212 (D. Delaware, 1983)

¹⁴ In re Alappat, 33 F. 3d 1526, 31 U.S.P.Q. 2d 1545 (Fed. Cir. 1994),

¹⁵ In re Freeman, 573 F. 2d 1237, 197 U.S.P.Q. 464 (C.C.P.A. 1978), In re Walter, 618 F. 2d 758, 205 U.S.P.Q. 397 (C.C.P.A. 1980), In re Abele, 684 F. 2d 902, 214 U.S.P.Q. 682 (C.C.P.A. 1982),

¹⁶

<http://www.uspto.gov/web/offices/com/hearings/software/analysis/computer.html>

IBM and USPTO. According to the reconciliation, USPTO issued "Examination Guidelines for Computer-Related Inventions". This guideline allowed that a computer readable medium storing a program was one possible form of claim object. The guidelines say that Claims should not be categorized as methods of doing business. Instead such claims should be treated like any other process claims.

(8) State Street Bank and Trust Co. v. Signature Financial Group, Inc. (1998)¹⁷

In this case, the patent is directed to a data processing system for implementing an investment structure which was developed for use in Signature's business as an administrative and accounting agent for mutual funds. The court said business methods have been, and should have been, subject to the same legal requirements for patentability as applied to any other process or method. The court also said that the business method exception has never been invoked by this court, or the CCPA, to deem an invention unpatentable. The court said that the system claimed was for providing "useful, concrete and tangible result" and thus was statutory subject matter.

(9) Training Materials Directed to Business, Artificial Intelligence, and Mathematical Processing Applications¹⁸

This was issued after the State Street Bank decision to illustrate how to apply Examination Guidelines for Computer-Related Inventions. The materials presented a claim directed to a computer program embodying a carrier wave as the subject matter of a patent.

2.3 History of Expansion of Patent Eligibility of Business and Software Inventions in Europe (EPO)¹⁹

¹⁷ State Street Bank and Trust Co. v. Signature Financial Group, Inc., 149 F. 3d 1368, 47 U.S.P.Q. 2d 1596 (Fed. Cir. 1998), cert. Denied. 525 U.S. 1093(1999)

¹⁸ <http://www.uspto.gov/web/offices/pac/compexam/examcomp.htm>

¹⁹ Only decisions of the EPO are mentioned. There are important decision in each county such as Dispositionsprogramm case (GRUR 1977,96 X ZB23/74), Automatic Sales Control Decision (20W(pat)8/99) in Germany and System for trading shares (FSR564), Merrill Lynch Case ([1989]RPC.561,CA.) in the UK.

(1) Examination Guidelines²⁰ (1978)

The guideline said that if the contribution to the known art resided solely in a computer program then the subject matter was not patentable in whatever manner it might be presented in the claims.

(2) Vicom decision²¹ (1986)

In this case, the invention was directed to digital filters. The EPO board of appeal decided that a claim directed to a technical process which was carried out under the control of a program (whether by means of hardware or software), was not the same thing as a computer program as such²².

(3) Sohei decision²³ (1995)

The EPO board of appeal said that an invention comprising functional features implemented by software (computer programs) was not excluded from patentability under Article 52(2)(c), (3) EPC, if technical considerations concerning particulars of the solution of the problem the invention solved were required in order to carry out that same invention. The board also said that Non-exclusion from patentability could not be destroyed by an additional feature (methods for doing business) which as such would itself be excluded.

(4) IBM decision²⁴ (1998)

The EPO board of appeal said that a computer program product was not excluded from patentability under Article 52(2) and (3) EPC if, when it was run on a computer, it produced a further technical effect which went beyond the "normal" physical interactions between program (software) and computer (hardware)".

²⁰ This is out of print now. You can find this guideline at the following web site. <http://swpat.ffii.org/papers/epo-gl78/index.en.html>

²¹ T208/84

²² EPC 52(2) describes as follows:

(2) The following in particular shall not be regarded as inventions within the meaning of paragraph 1:

(a) discoveries, scientific theories and mathematical methods;

(b) aesthetic creations;

(c) schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers;

(d) presentations of information.

²³ T769/92

²⁴ T1173/97

The board also said a computer program itself should not be excluded from patentability.

(5) Picture Retrieval System²⁵ (2000)

The EPO board of appeal said that a record carrier characterised by having functional data recorded thereon was not a presentation of information as such and hence not excluded from patentability.

(6) Controlling Pension Benefits System²⁶ (2000)

The EPO board of appeal said that an apparatus constituting a physical entity or concrete product, suitable for performing or supporting an economic activity, was an invention within the meaning of Article 52(1) EPC. However, the board also said that the improvement envisaged by the invention according to the application is an essentially economic one i.e. lies in the field of economics, which, therefore, cannot contribute to the inventive step.

(7) Guidelines for examination²⁷ (2000)

The guidelines were amended in 2000. The purpose of the amendment was to bring the guidelines into line with the above mentioned decisions.

(8) SIM/COMVIK²⁸ (2002)

In this decision, the Board set forth a modified problem/solution approach, in which only those features contributing to resolution of technical problems are to be considered in determining “inventive step”.

2.4 Two Issues in Expansion Trend of Patent Eligibility of Business and Software Inventions

There are two issues I would like to explore with regard to the expansion trend of patent eligibility of business methods and software. One issue (the issue of the nature of invention) is whether the nature of software and business method related inventions can be the subject matter of patents. For example, the case regarding an advertising method on utility poles in Japan, the Diehr case and the State Street Bank case in the US, the Vicom case and Pension Benefits case in Europe relate to this issue.

²⁵ T1194/97

²⁶ T0931/95

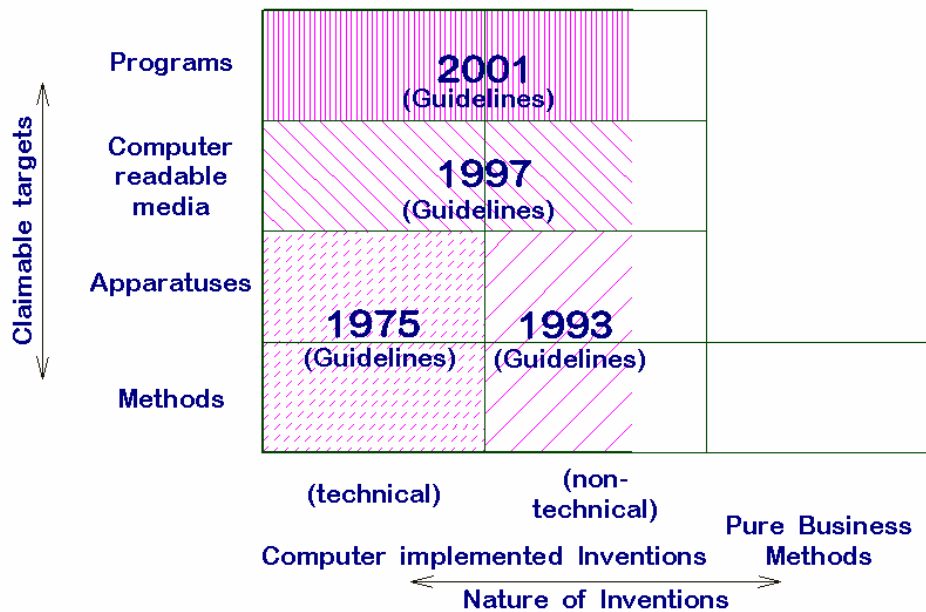
²⁷ http://www.european-patent-office.org/legal/gui_lines/e/index.htm

²⁸ T641/00

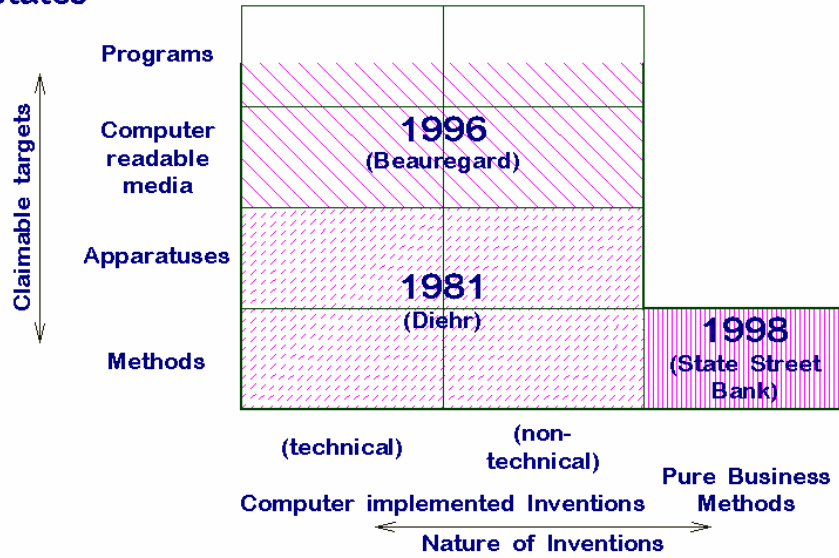
The other issue (claimable target issue) is the question of what claims can be directed to: methods, apparatus, computer readable medium or program itself. For example, Examination guidelines, part VII, chapter 1 (1993) and Examination guidelines, part VII, chapter 1 (1996) in Japan, the Beauregard case in the US, the IBM case (T1173/97) in Europe dealt with this issue.

The Figure below compares the expansion of patent eligibility of business and software inventions in Japan, the United States and Europe. The vertical direction shows the expansion of claimable targets and horizontal direction shows the expansion of the nature of patentable inventions.

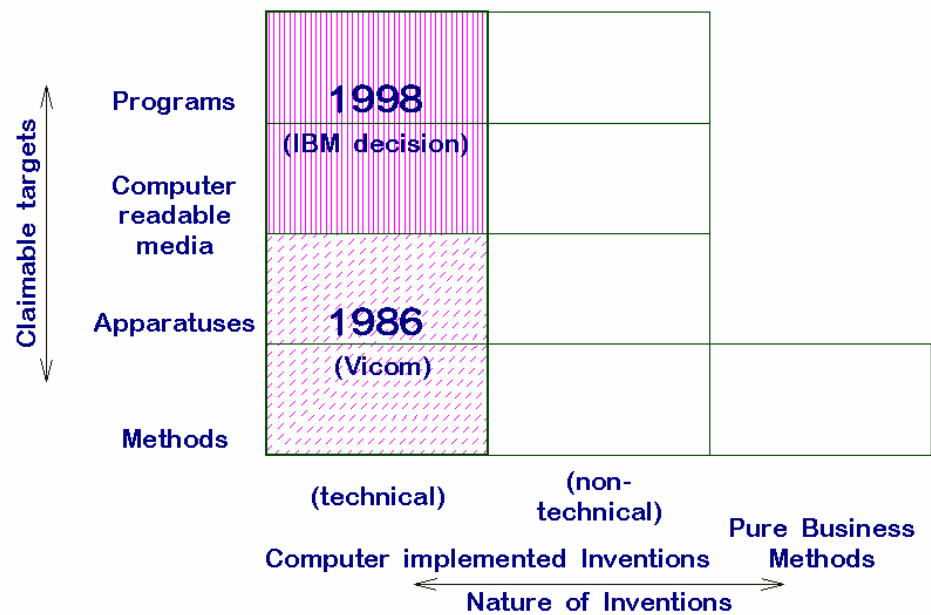
Japan



The United States



Europe



3. Requirements to obtain a patent in Japanese Patent Law

The requirements to obtain a patent in Japanese Patent Law are as follows:

(1) Invention described in the patent application must fall within the scope of statutory subject matter (Section 2(1)).

(2) Invention described in the patent application must be novel (Section 29(1)).

(3) Invention described in the patent application must have an inventive step (Section 29(2)).

3.1 Statutory Subject Matter

(1) In Japan

Japanese Patent Law, Section 2(1) defines statutory inventions as follows:

“An invention” in this law means the highly advanced creation of technical ideas by which a law of nature is utilized. Therefore, business method inventions are not statutory inventions, because business methods themselves do not have technical aspects but only economic aspects.

Examination guidelines, part VII, chapter 1 (2000)²⁹ show that where information processing by software is concretely realized using hardware resources, the software invention is a statutory subject matter³⁰. This means that if, as a result of reading the software, the computer is transformed into an information processing machine (or operational method thereof) which is particularly suitable for given purpose which contains concrete means in which software and hardware resources are cooperatively working so as to realize arithmetic operations or the manipulation of information depending on said purpose, then the software invention is a statutory subject matter.

Although business methods themselves are excluded from statutory

²⁹ This guideline also says that software carrying out one of the following process is a statutory invention:

i) control of an apparatus (rice cooker, washing machine, engine, hard disk drive, etc.), or related processing; or
ii) information processing based on the physical or technical properties of an object (rotation rate of engine, rolling temperature, etc.)

³⁰ 2.2.1 (1)

inventions, when the information processing machine (or operational method thereof) contains concrete means, the computer systems for business methods or business methods carried out by computers *are* patentable.

(2) Comparison with the US and Europe

The differences between Japan, US and Europe are as follows:

In Japan, to meet the requirement for statutory subject matter, business methods must use computers which provide concrete means in cooperation with software.

In the US, to meet the requirement for statutory subject matter, business methods must provide a useful, concrete and tangible result, but they do not need to use computers.

In Europe, to meet the requirement for statutory subject matter, business methods must have a technical character. Specifically, business methods need not only use computers or computer programs, but also exhibit further technical effects³¹.

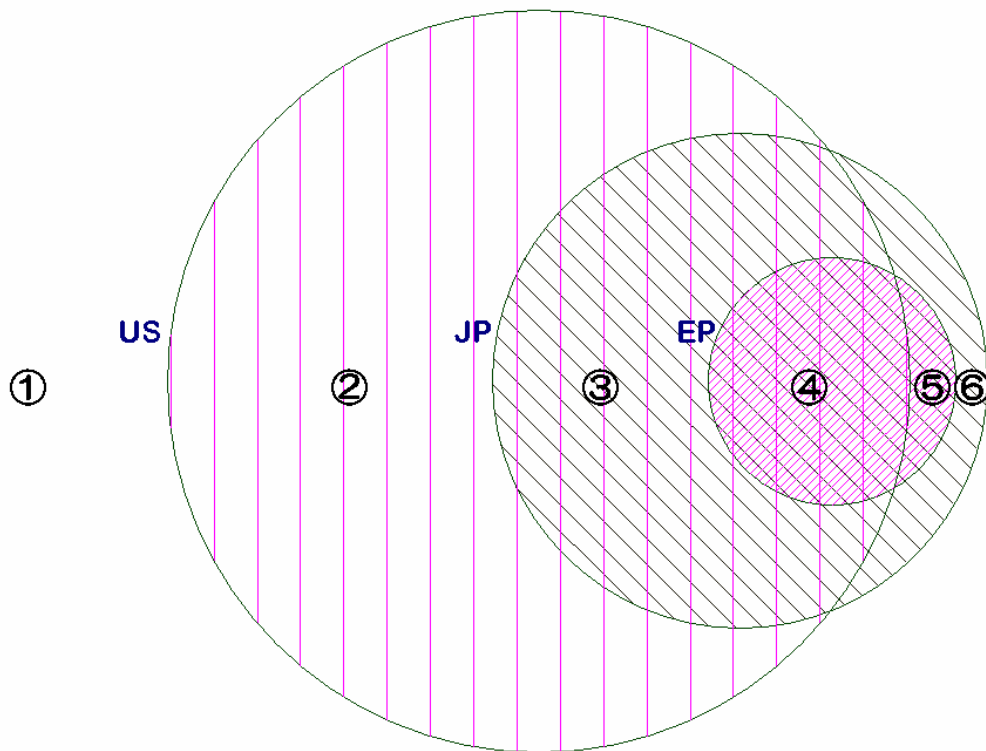
As shown below, generally patent eligibility in the US is broader than that in Japan and Europe, because the requirement to use computers or to have further technical effects is stricter than to provide useful, concrete and tangible results. However, there are inventions using computers that do not provide useful, concrete and tangible results (see category 6 in below figure). In such cases, patent eligibility in Japan is broader than that in the US³².

Patent eligibility in Japan is broader than that in Europe, because in Europe a further technical effect or technical contribution is needed for an invention to be considered statutory.

³¹ Guidelines for examination amended in 2000 said the further technical effect may be known in the prior art.

³² “Report on Comparative Study Carried Out Under Trilateral Project B3b” includes such case. http://www.jpo.go.jp/saikine/tws/b3b_start_page.htm

Comparison of Statutory Subject Matter



Note: Each circle shows the scope of statutory subject matter

3.2 Novelty

The Japanese Patent Law, Section 29(1) describes the condition whereby an invention lacks novelty:

Any person who has made an invention which is industrially applicable may obtain a patent therefor, except in the case of the following inventions:

- (i) inventions which were publicly known in Japan or elsewhere prior to the filing of the patent application;
- (ii) inventions which were publicly worked in Japan or elsewhere prior to the filing of the patent application;
- (iii) inventions which were described in a publication distributed or available to the public through electrical communication in Japan or elsewhere prior to the filing of the patent application.

I will not spend much time on Novelty here, because Statutory subject matters and the Inventive step are more useful for our discussion of business method inventions.

3.3 Inventive step

(1) In Japan

The Japanese Patent Law, Section 29(2) describes the inventive step:

Where an invention could easily have been made, prior to the filing of the patent application, by a person³³ with ordinary skill in the art to which the invention pertains, on the basis of an invention or inventions referred to in any of the subparagraphs of section 29(1), a patent shall not be granted for such an

³³ Examination guidelines, part VII, chapter 1 (2000) defines “a person having ordinary skill in the art” as follows:

A person skilled in the art of software-related inventions is expected:

to have common general knowledge both of the applied field of the said software-related inventions and computer technology (e.g. systematization technology);

to use ordinary technical means for research and development;

to exercise ordinary creative activity in changing design; and

to be able to comprehend all the state of the art in the field of technology to which the invention pertains (state of the art in the applied field of the said software and the computer technology) as of the filing.

invention notwithstanding section 29 (1).

Here is a question whether a computer system for a business method or a business method carried out by a computer, in which the business method is unobvious and the technical aspect of the computer system is known, is patentable or not.

Examination guidelines, part VII, chapter 1 (2000) says for the inventive step test “Since the invention should be viewed as a whole, it is inappropriate to deal with the claimed invention separating the aspect of artificial arrangement and that of automation technique³⁴.” Therefore, inventions must be dealt as a whole. Business methods are one such artificial arrangement.

From those guidelines, I think this type of business method invention has an inventive step. In many applications, the JPO decides that this type of business method invention has an inventive step³⁵. However, Mr. Yoshiaki Aida, JPO examiner, says that even if a business method is not obvious for person skilled in the art, and it lacks a technical means especially suitable for the business method, the invention should be treated as being obvious³⁶.

(2) Comparison with the US and EP

In Japan, once an invention is judged statutory subject matter, whether the inventive step exists or not is judged based on the invention as a whole. In this regard, business methods, which use computers which provide concrete means in cooperation with software, can contribute to the inventive step, in Japan. In other words, economic aspect of the business method inventions can contribute to the inventive step.

In the US, all aspects of the invention including business aspects and technical aspects can contribute to unobviousness.

In Europe, even if the invention includes computer, if the improvement envisaged by the invention is an essentially economic one, then the invention does

³⁴ 2.3.1 (2)

³⁵ Committee No.1, PIPA Japanese Group “Investigation of Inventive Step in Business Method Patents” Intellectual Property Management, p761, vol. 52, No.12 (2002)

³⁶ Minoru TAKEDA et. al. “Principal and problem of patent examination and appeal” page 27, JIII 2002

not have inventive step. In other words, economic improvement cannot contribute to inventive step³⁷. Only those features solving a technical problem can be considered for determining the existence of an inventive step³⁸.

3.4 Definiteness of claim

(1) In Japan

The Japanese Patent Law, Section 36(6)(ii) describes definiteness as follows:

The statement of the patent claim(s) under 36(2) shall comply with each of the following items as being:

(ii) statements setting forth the invention(s) for which a patent is sought and which is clear (definite);

For business method inventions, it is necessary to describe in the claim how the business method is carried out using a computer and how hardware resources are used to carry out the business method.

(2) Comparison with US and EP

In the US, Section 112, paragraph 2 requires that the patent application particularly point out and distinctly claim the invention. In Europe, Article 84 EPC says that the claims shall ... be clear and concise and be supported by the description. They are similar to Japanese requirement of Definiteness of claim (Section 36(6)(ii)).

3.5 Enablement

(1) In Japan

Japanese Patent Law, Section 36(4) describes the enablement as follows:

The detailed description of the invention under 36(3)(iii) shall state the invention, as provided for in an ordinance of Ministry of Economy, Trade and Industry, in a manner sufficiently clear and complete for the invention to be carried out by a person having ordinary skill in the art to which the invention pertains.

(2) Comparison with US and EP

³⁷ Controlling Pension Benefits System (T0931/95)

³⁸ SIM/COMVIK (T641/00)

In the US, Section 112, paragraph 1 indicates that the specification and drawings must provide sufficient information on the invention so as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same. In Europe, Article 84 EPC says that the European patent application must disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art. They are similar to the Japanese requirement of Enablement (Section 36(4)) except only the US has the “best mode requirement”.

4. Hypothetical Claims for Illustrating the Differences among Japan, the US and Europe

I will compare the examination of statutory subject matter in Japan, the US and Europe on hypothetical claims. These hypothetical claims are made based on hypothetical claims directed to mutual fund shown in “Training Materials Directed to Business, Artificial Intelligence, and Mathematical Processing Applications³⁹” issued by the USPTO. Each claim is classified into 6 categories which are shown in the afore mentioned Figure “Comparison of Statutory Subject Matter”.

Please note that the probable examination results are made by author’s consideration but are not authorized by any government.

Each category is defined as in the table below:

	Japan	The United States	Europe
Category 1	NO	NO	NO
Category 2	NO	YES	YES
Category 3	YES	YES	NO
Category 4	YES	YES	YES
Category 5	YES	NO	YES
Category 6	YES	NO	NO

Note: “NO” means non-statutory subject matter, “YES” means statutory subject matter

4.1 Hypothetical claim 1 : Category 1 (*JP:NO, US:NO, EU:NO*)

³⁹ <http://www.uspto.gov/web/offices/pac/compexam/examcomp.htm>

A method of allocating funds for a mutual fund among a plurality of funds in a group, comprising the steps of:

- a. receiving at least one fund identifier for each of said plurality of funds;
- b. receiving at least one risk ranking factor for each of said plurality of funds;
- c. receiving at least one set of allocation parameters which correspond to the desired allocation of funds relative to a profile of said ranking factors;
- d. recording the fund identifiers, the risk ranking factors and the allocation parameters on a piece of paper;
- e. receiving an initial investment value which is to be invested in the funds;
- f. receiving an incremental investment allotment value and a period for the incremental investment allotment value;
- g. receiving an indication of allowable level of investor risk; and
- h. using the recorded fund identifiers, the risk ranking factors and the allocation parameters in combination with the initial investment value, the incremental investment allotment value, the period for the incremental investment allotment value, and the indication of allowable level of investor risk to provide an optimum account allocation between the funds in the group.

The JPO will say that the invention according to claim 1 lacks the statutory invention requirement of Section 29(1), because claim 1 does not describe specific technical matter but human acts which do not utilize a computer.

The invention according to claim 1 does not seem to be statutory subject matter in the US, because the claimed invention merely calculates an optimum account allocation for the funds in the mutual funds. It does not optimally allocate the funds. The claimed invention does not provide a concrete and tangible result.

I think in the EPO, the invention according to claim 1 is not statutory subject

matter, because the invention is merely a method of doing business.

4.2 Hypothetical claim 2 : Category 2 (JP:NO, US:YES, EU:NO)

The method of claim 1: further comprising

- i. showing the optimum account allocation on an investor monthly account summary report to an investor or broker.

The JPO will say that the invention according to claim 2 lacks the statutory invention requirement of Section 29(1), because claim 2 does not describe specific technical matter but human acts which do not utilize a computer.

The invention according to claim 2 seems to be statutory subject matter in the US, because a summary report has real world value and provides immediate benefit. The claimed invention is also limited to the practical application of displaying the optimal account allocation to the investor. The claimed invention provides concrete and tangible result.

I think in the EPO, the invention according to claim 2 is not statutory subject matter, because the invention is merely a method of doing business.

4.3 Hypothetical claim 3 : Category 2 (JP:NO, US:YES, EU:NO)

A method of allocating funds for a mutual fund among a plurality of funds in a group using computer system which comprises recording part, receiving means, generating means, storing means, providing means and displaying means, comprising the steps of:

- a. receiving by said receiving means, at least one fund identifier for each of said plurality of funds;
- b. receiving by said receiving means, at least one risk ranking factor for each of said plurality of funds;
- c. generating by said generating means, at least one set of allocation parameters which correspond to the desired allocation of funds relative to a profile of said ranking factors;

- d. storing by said storing means, the fund identifiers, the risk ranking factors and the allocation parameters on said recording part;
- e. receiving by said receiving means, an initial investment value which is to be invested in the funds;
- f. receiving by said receiving means, an incremental investment allotment value and a period for the incremental investment allotment value;
- g. receiving by said receiving means, an indication of allowable level of investor risk;
- h. providing an optimum account allocation between the funds in the group using the recorded fund identifiers, the risk ranking factors and the allocation parameters in combination with the initial investment value, the incremental investment allotment value, the period for the incremental investment allotment value, and the indication of allowable level of investor risk;
- i. displaying the optimum account allocation on an investor monthly account summary report to an investor or broker.

The JPO will say that the invention according to claim 3 lacks the statutory invention requirement of Section 29(1), because claim 3 includes a computer system and describes the operation (providing an optimum account allocation using several data) to be carried out by the computer system, but fails to describe how the computer carries out the operations using several data and hardware resources thereof concretely.

The invention according to claim 3 seems to be statutory subject matter in the US, because a summary report has real world value and provides immediate benefit. The claimed invention is also limited to the practical application of displaying the optimal account allocation to the investor. The claimed invention provides concrete and tangible result.

I think in the EPO, the invention according to claim 3 is not statutory subject matter, because a further technical effect is not found. Even if the invention of claim 3 is statutory subject matter, the important factor of claim 3 i.e. how to provide an optimal account allocation cannot contribute to the inventive step.

4.4 Hypothetical claim 4 : Category 3 (JP:YES, US:YES, EU:NO)

The method of claim 3, wherein

said step (h) of providing an optimum account allocation between the funds in the group is obtained by the following steps:

obtaining plural sets of allocation parameters by changing at least one parameter of said at least one set of allocation parameters;

obtaining an initial individual investment value for each fund of each set of allocation parameters based on said initial investment value and said allocation parameters;

obtaining average level of risk for each of said plural sets of allocation parameters by calculating average of risk factors weighed according to said initial individual investment value;

selecting sets of allocation parameters which have lower average levels of risk than allowable level of investor risk from all of said plural sets of allocation parameters;

selecting a set of allocation parameters which has best profit per day calculated by initial investment value, the incremental investment allotment value, and the period for the incremental investment allotment value.

The JPO will say that the invention according to claim 4 satisfies the statutory invention requirement of Section 29(1), because claim 4 includes a computer system and how the computer carries out the operation using hardware resources thereof to provide an optimum account allocation.

The invention according to claim 4 seems to be statutory subject matter in the US, because a summary report has real world value and provides immediate benefit. The claimed invention is also limited to the practical application of displaying the optimal account allocation to the investor. The claimed invention provides a concrete and tangible result.

I think in the EPO, the invention according to claim 4 is not statutory subject matter, because a further technical effect is not found. Even if the invention of claim 4 is statutory subject matter, the important factor of claim 4 i.e. how to provide an optimal account allocation cannot contribute to the inventive step.

4.5 Hypothetical claim 5 : Category 4 (*JP:YES, US:YES, EU:YES*)
(has not been made yet)

4.6 Hypothetical claim 6 : Category 5 (*JP:YES, US:NO, EU:YES*)
(has not been made yet)

4.6 Hypothetical claim 7 : Category 6 (*JP:YES, US:NO, EU:NO*)

A method of allocating funds for a mutual fund among a plurality of funds in a group using a computer system which comprises recording part, receiving means, generating means, storing means, providing means and displaying means, comprising the steps of:

- a. receiving by said receiving means, at least one fund identifier for each of said plurality of funds;
- b. receiving by said receiving means, at least one risk ranking factor for each of said plurality of funds;
- c. generating by said generating means, at least one set of allocation parameters which correspond to the desired allocation of funds relative to a profile of said ranking factors;
- d. storing by said storing means, the fund identifiers, the risk ranking factors and the allocation parameters on said recording part;
- e. receiving by said receiving means, an initial investment value which is to be invested in the funds;
- f. receiving by said receiving means, an incremental investment allotment value and a period for the incremental investment allotment value;

g. receiving by said receiving means, an indication of allowable level of investor risk;

h. providing an optimum account allocation between the funds in the group by following steps:

obtaining plural sets of allocation parameters by changing at least one parameter of said at least one set of allocation parameters;

obtaining an initial individual investment value for each fund of each set of allocation parameters based on said initial investment value and said allocation parameters;

obtaining average level of risk for each of said plural sets of allocation parameters by calculating average of risk factors weighed according to said initial individual investment value;

selecting sets of allocation parameters which have lower average levels of risk than allowable level of investor risk from all of said plural sets of allocation parameters;

selecting a set of allocation parameters which has best profit per day calculated by initial investment value, the incremental investment allotment value, and the period for the incremental investment allotment value.

The JPO will say that the invention according to claim 7 satisfies the statutory invention requirement of Section 29(1), because claim 7 includes a computer system and how the computer carries out the operation using hardware resources thereof to provide an optimum account allocation.

The invention according to claim 7 does not seem to be statutory subject matter in the US, because the claimed invention merely calculates an optimum account allocation for the funds in the mutual fund. It does not optimally allocate the funds. The claimed invention does not provide concrete and tangible result.

I think in the EPO, the invention according to claim 7 is not statutory subject matter, because a further technical effect is not found. Even if the invention of claim 7 is statutory subject matter, the important factor of claim 7 i.e. how to provide an optimal account allocation cannot contribute to the inventive step

5. Examples of Examination on the Inventions Related to Business Methods

These examples were published by JPO on April, 2003. Five examples are included to illustrate examinations of Statutory subject matters, Inventive step, Definiteness and Enablement. English translation⁴⁰ of these examples are attached in this paper.

5.1 Example 1 : Category 2 (JP:NO⁴¹, US:YES⁴², EP:NO)

(1) Claim 1

Claim 1 of example 1 is as follows:

An application document receipt processing system having an agent that performs preparation and submission of application documents, and a public institution that receives the submitted documents, characterized in that

the agent performs the process of preparing the application documents by filling in forms corresponding to the application documents with necessary items such as the name and address of the applicant and sending the application documents to the public institution through the postal service or communication lines, and

the public institution performs the process of checking whether or not omission is present in the submitted documents, providing a receipt serial number in case no omission is present, and sending the receipt serial number to the agent, the source of the application, through the postal service or communication lines.

The JPO says the invention according to claim 1 lacks the statutory invention requirement of Section 29(1). In my interpretation of the JPO's explanation, claim 1 does not describe specific technical matter but social system which does not utilize a computer.

In my opinion, the invention according to claim 1 seems to be statutory subject matter in the US, because sending a reception number to an agency has a real

⁴⁰ The translation was completed by Hideo FURUTANI and is not authorized by JPO.

⁴¹ The results in Bold are governments' judgements.

⁴² The results in Italics are my speculations.

world value. I think in the EPO, the invention according to claim 1 is not statutory subject matter, because the invention is merely a method of doing business.

(2) Claim 2 : Category 2 (JP:NO, US:YES, EP:NO)

Claim 2 of example 1 is as follows:

An application document receipt processing system having an agent that performs preparation and submission of application documents, and a public institution that receives the submitted documents, characterized in that

the agent uses computers to perform the process of preparing the application documents by filling in forms corresponding to the application documents with necessary items such as the name and address of the applicant and sending the application documents to the public institution through communication lines,

the public institution uses computers to perform the process of checking whether or not omission is present in the submitted documents, providing a receipt serial number in case no omission is present, and sending the receipt serial number to the agent, the source of the application, through the communication lines.

The JPO says the invention according to claim 2 lacks the statutory invention requirement of Section 29(1). Claim 2 includes a computer, but the computer is used as just a tool. In my interpretation of the JPO's explanation, the important process for achieving the aim underlying the invention is carried out by humans and thus information processing equipment (machine) particularly suitable for a given purpose is not created.

In my opinion, an invention according to claim 2 seems to be statutory subject matter in the US, because sending a reception number to an agency has a real world value. I think in the EPO, the invention according to the claim 2 is not statutory subject matter, because a further technical effect is not found.

(3) Claim 3 : Category 2 (JP:NO, US:YES, EP:NO)

Claim 3 of example 1 is as follows:

An application document receipt processing system having an agent

terminal installed on the side of an agent that performs preparation and submission of application documents, and a public institution computer installed in the public institution that receives the submitted documents and is connected to the agent terminal through a communication network, characterized in that the public institution computer comprises:

means for receiving application document data coming sent from the agent terminal;

means for checking whether or not an omission of data is present in the received application document data; and

means for providing a receipt serial number in case no omission is present, and sending the receipt serial number to the agent terminal through the communication network.

The JPO says an invention according to claim 3 lacks the statutory invention requirement of Section 29(1). Claim 3 describes the operation (finding any omissions on the document.) to be carried out by the computer system, but fails to describe how the computer carries out the operations using the hardware resources thereof.

In my opinion, the invention according to claim 3 seems to be statutory subject matter in the US, because sending a reception number to an agency has real world value. I think in the EPO, the invention according to claim 3 is not statutory subject matter, because a further technical effect is not found.

(4) Claim 4 : Category 3 (JP:YES, US:YES, EP:NO)

Claim 4 of example 1 is as follows:

An application document receipt processing system having an agent terminal installed on the side of an agent that performs preparation and submission of application documents, and a public institution computer installed in the public institution that receives the submitted documents and is connected to the agent terminal through a communication network, characterized in that the public institution computer comprises:

application document storing means for storing submitted application document data, an agent ID, and a receipt serial number;

means for writing in succession the application document data and

the agent ID sent from the agent terminal onto the application document storing means;

means for reading in succession the application document data and the agent ID out of the application document storing means and for detecting an omission in writing the application contents according to whether or not a NULL code is included in the application document data; and

means, in case no omission is detected, for providing a receipt serial number and storing it in the application document storing means, and for sending the receipt serial number to the agent terminal on the basis of the agent ID through the communication network.

The JPO says an invention according to claim 4 satisfies the statutory invention requirement of Section 29(1). Claim 4 describes how the computer carries out the operation using hardware resources thereof to find omissions based on the existence of NULL codes in the documents. In this way the information processing equipment (machine) particularly suitable for a given purpose is created.

In my opinion, the invention according to claim 4 seems to be statutory subject matter in the US, because once again sending a reception number to an agency has real world value. I think in the EPO, the invention according to claim 4 is not statutory subject matter, because a further technical effect is not found.

(5) My opinion about the JPO's judgement

In my opinion, if the problem to be solved by the invention is not that of finding omissions on the document but that of to realize in a computer system which can accept petition documents through agents (in condition that how to find omissions is well known technique), then in addition to claim 4, claim 3 also satisfies the statutory invention requirement of Section 29(1). This is because claim 3 describes how the computer carries out the operation to realize such a system.

I have omitted Example 2, because this Example deals with similar situation to Example 1.

5.2 Example 3 : Category 2 (JP:NO, US:YES, EP:NO)

(1) Claim 1

Claim 1 of example 3 is as follows:

An advertisement mediating system mediating between an advertisement client and an advertisement agent, comprising:

idea registering function for registering the idea information of the advertisement agent;

idea searching function for searching for the registered idea information; and

providing function using the idea searching function for searching for idea information corresponding to the needs information of the advertisement client, providing the idea information to the advertisement client, and providing the needs information to the advertisement agent.

The JPO says an invention according to claim 1 lacks the definitive requirement of Section 36(6)(ii). In claim 1, it is not clear whether the registering function, searching function and providing function are obtained by the function of a computer or obtained by human action.

The JPO says the invention of claim 1 also lacks the statutory invention requirement of Section 29(1). If the functions are not obtained by the function of a computer, it is a social system which does not utilize a computer. Even if the functions are obtained by the function of a computer, it fails to describe how the computer carries out the operations using hardware resources thereof.

In my opinion, the invention according to claim 1 seems to be statutory subject matter in the US, because providing idea information for advertisement to a client and providing needs information for advertisement have real world value. I think in the EPO, the invention according to claim 1 is not statutory subject matter, because the invention is a method of doing business.

(2) Claim 2

Claim 2 of example 3 is as follows:

An advertisement mediating system in which client-side computers separately owned by plural advertisement clients and agent-side computers separately owned by plural advertisement agents are separately connected to an advertisement mediating computer through a communication network, characterized in that the advertisement

mediating computer comprises:

idea information storing means for storing the advertisement agent's idea information as related to an agent ID and idea classifying data for indicating, with bit positions, at least one target commodity category;

idea information registering means for registering the agent ID, the idea information, and the idea classifying data sent from the agent-side computer at the idea information registering means;

means for receiving, from the client-side computer, mediation request data including a client ID, needs information, and needs classifying data of the same format type as the idea classifying data;

idea extracting means for searching and extracting acceptable idea by performing, upon receiving the mediation request data, on all the idea information stored in the idea information storing means, a series of processes including:

process of reading the agent ID, the idea information, and the idea classifying data from the idea information storing means and storing them in an operational storing means;

process of implementing an AND operation of the idea classifying data and the needs classifying data;

process of implementing a EXCLUSIVE-OR operation of the calculated results of the logical multiplication and the needs classifying data; and

unacceptable idea deleting process of deleting, from the operational storing means, the agent ID, the idea information, and the idea classifying data as unacceptable in the case that the calculation of the exclusive logical addition results in other than zero; and

idea providing means for sending, when the process with the idea extracting means is over, the idea information stored in the operational storing means to the client-side computer along with sending the needs information to the agent-side computer corresponding to the agent ID stored in the operational storing means.

The JPO says the invention according to claim 2 satisfies both of the statutory invention requirement of Section 29(1) and the definitive requirement of Section 36(6)(ii). In claim 2, it is clear that registering means, searching means and providing means are obtained by function of a computer. Claim 2 describes how the computer carries out the operation using hardware resources thereof to realize the intermediary service.

In my opinion, the invention according to claim 2 seems to be statutory subject matter in the US, because providing idea information for advertisement to a client and providing needs information for advertisement to an agent have real world value. I think in the EPO, the invention according to claim 2 is seems to be statutory subject matter, because a further technical effect is found.

(3) My opinion about the JPO's judgement

I think there is a wide margin between claim 1 and claim 2, and neither claim 1 nor claim 2 are on the border line. In my opinion, the following claim satisfies the statutory invention requirement of Section 29(1) and the definitive requirement of Section 36(6)(ii) in Japan.

An advertisement mediating system in which client-side computers separately owned by plural advertisement clients and agent-side computers separately owned by plural advertisement agents are separately connected to an advertisement mediating computer through a communication network, characterized in that the advertisement mediating computer comprises:

idea information storing means for storing the advertisement agent's idea information as related to the agent ID and idea classifying data for indicating at least one target commodity category;

idea information registering means for registering the agent ID, the idea information, and the idea classifying data sent from the agent-side computer at the idea information registering means;

means for receiving, from the client-side computer, a client ID, needs information, and mediation request data including needs classifying data for indicating at least one target commodity category;

means for selecting idea information data, from the stored idea information data, which have at least one same target category with one of target categories of the needs information, upon receiving the mediation request data;

means for sending the selected idea information to the client-side computer and sending the needs information to the agent-side computer corresponding to the agent ID.

5.3 Example 5 : Category 4 (JP:YES, US:YES, EP:YES)

(1) Claim 1

Claim 1 of example 5 is as follows:

A system for selling children's bicycles to provide commodity information on children's bicycles through the Internet, comprising:

means for entering information about what user desires including at least color and cartoon character desired by users,

means for entering physical information about user such as the height of users,

means for searching commodity information according to the information about what the user desires and determining the size information of the commodity according to the physical information about user,

means for creating made-to-order information according to the information about what the user desires and physical information about user in case the commodity choosing means cannot determine the commodity, and

means for receiving an order for the commodity chosen with the commodity choosing means or an order for the commodity according to the made-to-order information created with the made-to-order information creating means.

(2) Reference

Reference discloses the following features:

- A commodity selling system through the Internet to provide commodity information on clothing to a consumer's computer.
- A user interface is employed for the user to choose commodity information on clothing and to enter information about what the user desires such as color and design to decide favorite commodity, and physical information about user such as height to decide the size of the commodity.
- The commodity selling system searches the commodity information database (see FIG. 1) using the information about what the user desires and physical information about user sent from the consumer's computer as search keys and, if a commodity that conforms to the conditions is present, sends the information to the consumer's computer.
- In case no commodity is present that matches the conditions, the commodity

selling system creates information about a made to order matching the conditions and sends the information to the consumer's computer.

- The consumer's computer employs a user interface to output to the display any commodity information received from the commodity selling system and to give order instructions for purchasing the commodity.

FIG. 1

Commodity	Size	Design	Suitable height	Color
Sweater	S	V-neck	140 – 150	Red, Navy blue
Sweater	M	V-neck	150 – 160	Pink, Light navy blue
Sweater	L	V-neck	160 – 170	Dark red, Dark navy blue
Sweater	S	Turtle	130 – 155	Dark orange, Dark purple
Sweater	M	Turtle	150 – 175	Orange, Purple
Sweater	L	Turtle	170 – 185	Light orange, Light purple
...

(3) Inventive step

The JPO says the invention according to claim 1 lacks the inventive step requirement of Section 29(2).

The differences between an invention according to claim 1 and disclosed matter in the reference are i) the difference of goods to be sold i.e. children's cycle VS clothes, ii) the difference of request information (claim allows users to order commodities with popular cartoon character's drawing or not).

It would be obvious to make the claimed invention from reference invention by exchanging clothes with bicycles. The selecting goods based on what cartoon character is common knowledge.

In my opinion, also in the US an invention according to claim 1 seems to be obvious from the reference. I think in the EPO, the invention according to claim 1 lacks the inventive step, because the differences i) and ii) do not contribute the inventive step.

6. Other Examples of Examination for Comparison

I will compare the examination of statutory subject matter on a few more

claim examples.

6.1 Report on Comparative Study Carried Out Under Trilateral Project B3b⁴³

(1) Hypothetical Claim Set A

For this claim set, the JPO and the USPTO showed the examination result for their study. I will hypothesize probable results of an examination by EPO.

i) Claim 1 Category 1 (JP:NO, US:NO, EP:NO)

A service method of granting points in accordance with an amount of the merchandise transaction, comprising the steps of:
designating by a customer, a name of a person to whom points issued in accordance with the amount of the merchandise transaction are to be granted;

selecting, in response to the name of the designated person, the address of the designated person from a customer list;
registering the address of the designated person in a customer list if the address is not available;

storing the value of the points granted to the designated person in the customer list; and

sending a notice that the points were granted, to the address of the designated person.

ii) Claim 2 Category 1 (JP:NO, US:NO, EP:NO)

A service method, wherein points are granted in accordance with an amount of the merchandise transaction made by a customer at a shop on the Internet, comprising the steps of:
designating by the customer, a name of a person to whom points issued in accordance with the amount of the merchandise transaction are to be granted;

selecting, in response to the name of the designated person, the e-mail address of the designated person from a customer list;
registering the e-mail address of the designated person in a customer list

⁴³ http://www.jpo.go.jp/saikine/tws/b3b_start_page.htm

if the e-mail address is not available;

storing the value of the points granted to the designated person in the customer list; and

sending a notice that the points were granted, to the e-mail address of the designated person.

iii) Claim 3 Category 6 (JP:YES, US:NO, EP:NO)

A service method for granting points in accordance with an amount of the merchandise transaction at a shop on the Internet, comprising the steps of:

designating to a server, a name of a person to whom points issued in accordance with the amount of the merchandise transaction are to be granted;

selecting by the server, in response to the name of the designated person, the e-mail address of the designated person from a customer list storage unit, which is provided on the server;

registering by the server, the e-mail address of the designated person in a customer list storage unit if the e-mail address is not available;

storing by the server, the value of the points granted to the designated person in the customer list storage unit; and

sending by the server, a notice that the points were granted, to the e-mail address of the designated person.

iv) Claim 4 Category 6 (JP:YES, US:NO, EP:NO)

A service method for granting points in accordance with an amount of the merchandise transaction at a shop on the Internet, comprising the steps of:

designating to a server, a name of a person to whom points issued in accordance with the amount of the merchandise transaction are to be granted;

selecting by the server, in response to the name of the designated person, the e-mail address of the designated person from a customer list storage unit, which is provided on the server;

registering by the server, the e-mail address of the designated person in a customer list storage unit if the e-mail address is not

available;

storing by the server, the value of the points granted to the designated person in the customer list storage unit; and

sending by the server, a notice that the points were granted, to the e-mail address of the designated person, and

the steps being characterized in that:

the points issued against the merchandise transaction are calculated as those issued against the cost of the merchandise transaction inclusive of taxes.

v) Claim 5 Category 6 (JP:YES, US:NO, EP:NO)

A service method for granting points in accordance with an amount of the merchandise transaction at a shop on the Internet, comprising the steps of:

designating to a server, a name of a person to whom points issued in accordance with the amount of the merchandise transaction are to be granted;

selecting by the server, in response to the name of the designated person, the e-mail address of the designated person from a customer list storage unit, which is provided on the server;

registering by the server, the e-mail address of the designated person in a customer list storage unit if the e-mail address is not available;

storing by the server, the value of the points granted to the designated person in the customer list storage unit; and

sending by the server, a notice that the points were granted, to the e-mail address of the designated person, and

the steps being characterized in that:

the number of points awarded are increased to 10 times the number of points normally awarded for that merchandise transaction in one out of every twenty transactions.

vi) Claim 6 Category 4 (or 3) (JP:YES, US:NO, EP:YES)

A service method for granting points in accordance with an amount of the merchandise transaction at a shop on the Internet, comprising the steps of:

designating to a server, a name of a person to whom points issued in accordance with the amount of the merchandise transaction are to be

granted;

selecting by the server, in response to the name of the designated person, the e-mail address of the designated person from a customer list storage unit, which is provided on the server;

registering by the server, the e-mail address of the designated person in a customer list storage unit if the e-mail address is not available;

storing by the server, the value of the points granted to the designated person in the customer list storage unit;

calling by the server, a comprehensive list of merchandise from a merchandise information storing means for storing a list of merchandise corresponding with the name and price of the merchandise purchased or the number of points necessary for the purchase thereof;

converting by the server, the comprehensive list of merchandise into a list, such that the merchandise available merely by redeeming the value of the points can be distinguished from other merchandise; and

sending by the server, a notice that the points were granted, attaching thereto the comprehensive list of merchandise as converted, to the e-mail address of the designated person.

(2) Hypothetical Claim Set B

For this claim set, JPO and USPTO showed the examination result for study. I make probable results of examination by EPO.

i) Claim 1 Category 1 (JP:NO, US:NO, EP:NO)

A method for approving the settlement of charges with a forward exchange contract by an individual consumer, the method being characterized in that it comprises:

issuing an invitation by a credit card issuing company A to a user of a credit card issued by company A to apply for a forward exchange contract of a currency D on a specified date, wherein the user is scheduled to make settlement of a small amount in a foreign currency;

application by the user for a forward exchange contract with company A for the purchase of a specified amount of currency D by submission of the user's name and credit card number to company A, said user becoming a participant in an application invitation program run by company A if the application is accepted;

performance by company A of a forward exchange contract for the

purchase of currency D on a specified date for an amount at least equal to the forward exchange contracts of all participants in the application invitation program;

performing by a participant in the application invitation program of a transaction with a member shop in the program which can settle the transaction in the currency D;

submission by member shops of charges associated with the participant transactions to company A after a check of the participant status with company A has been completed;

totaling by company A, as closed on a specified date, of charges submitted by the member shops and determining the amount of the total charges in currency D; and

totaling the required settlements of the participant in currency D;

where the settlement amount is smaller than the amount of the forward exchange contract that was applied for by the participant approving the settlement amount at the exchange rate on a specified date, and in the event that it is greater than the amount of the forward contract applied for approving the settlement amount up to the amount of the forward exchange contract applied for at the exchange rate on a specified date, and computing the excess at the exchange rate at the closing day used as the basis for charges.

ii) Claim 2 Category 3 (or 4) (JP:YES, US:YES, EP:NO)

A method for processing data on computer system to implement a forward exchange contract by an individual consumer, wherein the data processing for the forward exchange contract is characterized in that it comprising of the steps of:

issuing an invitation by a web server of a credit card issuing company A to a user of a credit card issued by company A to apply for a forward exchange contract of a currency D on a specified date, wherein the user is scheduled to make settlement of a small amount in a foreign currency;

application by the user terminal for a forward exchange contract with company A for the purchase of a specified amount of currency D by submission of the user's name and credit card number to company A, said user becoming a participant in an application invitation program run by company A if the application is accepted;

performance by a forward exchange contract system of company A of a forward exchange contract for the purchase of currency D on a

specified date for an amount at least equal to the forward exchange contracts of all participants in the application invitation program;

performing of a transaction with a participant in the application invitation program by a system of a member shop in the program which can settle the transaction in the currency D;

submission by a system of member shops of charges associated with the participant transactions to company A after a check of the participant status with company A has been completed;

totaling by the business system of company A, as closed on a specified date, of charges submitted by the systems of the member shops and payment of the charges by the business system of company A to the systems of the member shops in currency D; and

totaling by the business system of company A settlements of the participant in currency D;

where the settlement amount is smaller than the amount of the forward exchange contract that was applied for by the participant charging the settlement amount at the exchange rate on a specified date, and in the event that it is greater than the amount of the forward contract applied for computing the settlement amount up to the amount of the forward exchange contract applied for at the exchange rate on a specified date, and computing the excess at the exchange rate at the closing day used as the basis for charges.

iii) Claim 3 Category 3 (or 4) **(JP:YES, US:YES, EP:NO)**

The method of claim 2 for processing data on computer system to implement the forward exchange contract by an individual consumer, the method being characterized in that it further comprises:

the providing of the invitation includes posting an advertisement on the web server of company A to invite users who own credit cards that were issued by the company A and who are scheduled to make a small amount of settlement in a foreign currency, to apply for a forward exchange contract and receiving the name and credit card number as well as the number of currency units entered from the user terminal in an application form on the display screen on their user terminal that appears when the users click on the advertisement page on the browser;

the application by the user terminal include inviting the applicant to close a forward exchange contract and accepting the application for the currency exchange contract if the credit card is valid and if the number of currency units is found to be within the credit limit of the credit card

and;

upon acceptance of the application for the forward exchange contract closing the forward exchange contract in the currency D through negotiation between the forward exchange contract processing system of the company A and the forward exchange contract processing system of an exchange broker;

wherein the step for totaling charges on the settlement system of the company A includes totaling data on charges submitted via a charging system of the member shops as closed on a specified date after the participant in the application invitation program has performed the transaction with the member shops which can settle the transaction in the currency D, and after paying the charges in the currency D totaling transaction settlements by credit card in the currency D regarding the participant in the application invitation program.

iv) Claim 4 Category 3 (or 4) **(JP:YES, US:YES, EP:NO)**

The method of Claim 3 for processing data on a computer system to implement the closing of a forward exchange contract by an individual consumer, the method being characterized in that the validation step of the credit card comprising of:

Checking if the applicant is a gold card owner, and rejecting the applicant is not a gold card owner.

v) Claim 5 Category 3 (or 4) **(JP:YES, US:YES, EP:NO)**

The method of Claim 3 for processing data on a computer system to implement the closing of a forward exchange contract by an individual consumer, the method further comprising the processing of settling the transaction at the exchange rate on the closing day being used as the basis of charges in the event that a credit card owner with the transaction record of more than a specified value has declared that he or she will not close any forward exchange contract against a certain transaction.

vi) Claim 6 Category 3 (or 4) **(JP:YES, US:YES, EP:NO)**

The method of Claim 3 for processing data on a computer system to implement the closing of a forward exchange contract by an

individual consumer, the method further comprising the process, wherein in the event that, when a merchandise transaction application is sent using the terminal of a credit card owner with a transaction record of greater than a specified value, to the on-line member shop on the Internet of the company A, data on the exchange rate fluctuations for a certain period in the past can be extracted, by an exchange rate forecast system in the on-line shop, from the database and then an applet for graphically indicating the exchange rate fluctuations will be sent to the browser on the terminal of the credit card owner, whereas if the credit card owner should send, using the terminal, a notice to the effect that he or she will not close any forward exchange contract for a certain transaction, the transaction can then be settled at the exchange rate on the designated date.

6.2 Training Materials Directed to Business, Artificial Intelligence, and Mathematical Processing Applications⁴⁴

(1) Mutual Fund

i) Claim 1 Category 1 (JP:NO, US:NO, EP:NO)

A computerized method of allocating funds for a mutual fund among a plurality of funds in a group, comprising the steps of:

- a. receiving at least one fund identifier for each of said plurality of funds;
- b. receiving at least one risk ranking factor for each of said plurality of funds;
- c. receiving at least one set of allocation parameters which correspond to the desired allocation of funds relative to a profile of said ranking factors;
- d. storing the fund identifiers, the risk ranking factors and the allocation parameters on a computer readable medium;
- e. receiving an initial investment value which is to be invested in the funds;
- f. receiving an incremental investment allotment value and a period for the incremental investment allotment value;
- g. receiving an indication of allowable level of investor risk; and

⁴⁴ <http://www.uspto.gov/web/offices/pac/compexam/examcomp.htm>

h. using the stored fund identifiers, the risk ranking factors and the allocation parameters in combination with the initial investment value, the incremental investment allotment value, the period for the incremental investment allotment value, and the indication of allowable level of investor risk to provide an optimum account allocation between the funds in the group.

ii) Claim 2 Category 2 (JP:NO, US:YES, EP:NO)

The method of claim 1, further including the step of displaying the optimum account allocation on an investor monthly account summary report to an investor or broker.

iii) Claim 3 Category 2 (JP:NO, US:YES, EP:NO)

The method of claim 1, further including the step of transferring funds between the mutual funds in the group according to the optimum account allocation.

Examples of examinations on inventions related to Business Methods
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(Note) Translations contained herein are not authorized by JPO.

Example 1: Application document receipt processing system (An example case of determining according to Article 29(1) of Japanese Patent Law)

[Claim 1] (A social system not deemed to be patentable)

An application document receipt processing system having an agent that performs preparation and submission of application documents, and a public institution that receives the submitted documents, characterized in that

the agent performs the process of preparing the application documents by filling in forms corresponding to the application documents with necessary items such as the name and address of the applicant and sending the application documents to the public institution through the postal service or communication lines, and

the public institution performs the process of checking whether or not omission is present in the submitted documents, providing a receipt serial number in case no omission is present, and sending the receipt serial number to the agent, the source of the application, through the postal service or communication lines.

[Explanation]

This claim describes, in relation to an “application document receipt processing system” having an agent that performs preparation and submission of application documents, and a public institution that receives the submitted documents, nothing more than the definition of details of the handling operations performed by the agent, preparing the application documents by filling in forms corresponding to the application documents with necessary items such as the name and address of the applicant and sending the application documents to the public institution through the postal service or communication lines, and the definition of details of the handling operations performed by the official agent, checking whether or not omission is present in the submitted documents, providing a receipt serial number in case no omission is present, and sending the receipt serial number to the agent, the source of the application, through the postal service or communication lines. This claim does not describe any technical items to be specified.

In view of the above, the invention understood from the items described in this claim is not the so-called “computer system” but nothing more than an artificial arrangement, or social “setup” (social system). Therefore, the invention as a whole is not a creation of a technical idea utilizing a law of nature.

Therefore, this invention is not an “invention” as defined in Article 2 of the Patent Law, and does not fulfill the requirements specified in Article 29(1) of the Patent Law.

[References]

- Examination Guidelines for patents and utility models
Part II, Chapter 1, “Inventions having industrial applicability” 1.1(4)
- “Examples of business-related unpatentable inventions”
Example 1-1

[Claim 2] (An example that is still a social system and not deemed to be patentable in spite of using computers)

An application document receipt processing system having an agent that performs preparation and submission of application documents, and a public institution that receives the submitted documents, characterized in that

the agent uses computers to perform the process of preparing the application documents by filling in forms corresponding to the application documents with necessary items such as the name and address of the applicant and sending the application documents to the public institution through communication lines,

the public institution uses computers to perform the process of checking whether or not an omission is present in the submitted documents, providing a receipt serial number in case no omission is present, and sending the receipt serial number to the agent, the source of the application, through the communication lines.

[Explanation]

This claim describes, in relation to an “application document receipt processing system” having an agent that performs as deputy preparation and submission of application documents, and a public institution that receives the submitted documents, the definition of details of the handling operations performed by the agent, using computers to prepare the application documents by filling in forms corresponding to the application documents with necessary items such as the name and address of the applicant and sending the application documents to the public institution through the communication lines, and the definition of details of the handling operations performed by the public institution, using computers to check whether or not an omission is present in the submitted documents, providing a receipt serial number in case no omission is present, and sending the receipt serial number to the agent, the source of the application, through the communication lines. However, the contents understood from the above description are nothing more than performing various handling operations using the computer as a tool.

In view of the above, the invention understood from the items described in this claim is not the so-called “computer system” but nothing more than an artificial arrangement, or social “setup” (social system). Therefore, the invention as a whole is not a creation of a technical idea utilizing a law of nature.

Therefore, this invention is not an “invention” as defined in Article 2 of the Patent Law, and does not fulfill the requirements specified in Article 29(1) of the Patent Law.

[References]

- Examination guidelines for inventions and utility models
Part II, Chapter 1, “Inventions having industrial applicability” 1.1(4)
- “Examples of business-related unpatentable inventions”
Example 1-1, Example 1-2

[Claim 3] (An example not deemed to be patentable, in spite of being a

computer system, because the information processing using software is not concretely realized using hardware resource)

An application document receipt processing system having an agent terminal installed on the side of an agent that performs preparation and submission of application documents, and a public institution computer installed in the public institution that receives the submitted documents and is connected to the agent terminal through a communication network, characterized in that the public institution computer comprises:

means for receiving application document data coming sent from the agent terminal;

means for checking whether or not an omission of data is present in the received application document data; and

means for providing a receipt serial number in case no omission is present, and sending the receipt serial number to the agent terminal through the communication network.

[Explanation]

This claim describes “an agent terminal installed on the side of an agent that performs as deputy preparation and submission of application documents, and a public institution computer installed in the public institution that receives the submitted documents and is connected to the agent terminal through a communication network” and this invention is understood to be a so-called “computer system” having plural computers and a computer network.

It is true that this claim states explicitly that the “public institution computer” is provided with functional means: ‘a means for receiving application document data coming sent from the agent terminal,’ ‘a means for checking whether or not an omission of data is present in the received application document data,’ and ‘a means for providing a receipt serial number in case no omission is present, and sending the receipt serial number to the agent terminal through the communication network.’ However, the explicit statement of every functional means remains within the scope of explicitly stating the operational functions to be fulfilled with those means but does not state explicitly how those means are technical means realized concretely to

fulfill the operational functions using hardware resource of the computer. In effect, while the claim explicitly states the operational functions to be fulfilled with the “public institution computer”, no explicit statement is made how the information processing is concretely realized by means of software executed on the public institution computer to fulfill the operational functions and how the hardware resource of the computer is used to do so. The rest of the description in this claim does not either state explicitly that the information processing by means of software is what is concretely realized using the hardware resources of the computer.

In other words, this claim does not make any explicit statement that the information processing by means of software is concretely realized as a computer system using hardware resources.

Therefore, the invention as understood from the items described in this claim cannot be deemed to be a creation of a technical idea utilizing a law of nature.

Therefore, this invention is not an “invention” as defined in Article 2 of the Patent Law, and does not fulfill the requirements specified in Article 29(1) of the Patent Law.

[References]

- Examination guidelines for inventions and utility models
Part VII, Chapter 1, “Computer software related inventions” 2.2
- “Examples of business-related unpatentable inventions”
Example 1-3

[Claim 4] (An example deemed to be patentable)

An application document receipt processing system having an agent terminal installed on the side of an agent that performs preparation and submission of application documents, and a public institution computer

installed in the public institution that receives the submitted documents and is connected to the agent terminal through a communication network, characterized in that the public institution computer comprises:

application document storing means for storing submitted application document data, an agent ID, and a receipt serial number;

means for writing in succession the application document data and the agent ID sent from the agent terminal onto the application document storing means;

means for reading in succession the application document data and the agent ID out of the application document storing means and for detecting an omission in writing the application contents according to whether or not a NULL code is included in the application document data; and

means, in case no omission is detected, for providing a receipt serial number and storing it in the application document storing means, and for sending the receipt serial number to the agent terminal on the basis of the agent ID through the communication network.

[Explanation]

This claim describes “an application document receipt processing system having an agent terminal installed on the side of an agent that performs preparation and submission of application documents, and a public institution computer installed in the public institution that receives the submitted documents and is connected to the agent terminal through a communication network” and this invention is understood to be a so-called “computer system” having plural computers and a computer network.

This claim explicitly states that the public institution computer is provided with functional means: ‘an application document storing means for storing submitted application document data, an agent ID, and a receipt serial number,’ ‘a means for writing in succession the application document data and the agent ID sent from the agent terminal onto the application document storing means,’ ‘a means for reading in succession the application document data and the agent ID out of the application document storing means and for detecting omission in writing the application contents according to whether or not a NULL code is included in the application document data,’ and ‘a means,

in case no omission is detected, for providing a receipt serial number and storing in the application document storing means, and for sending the receipt serial number to the agent terminal on the basis of the agent ID through the communication network.’ This description explicitly states that the various functional means provided in the public institution’s computer for performing the application document receipt handling process are technical means realized concretely by arranging that the data such as the “application document data” are written and stored in succession in the application document storing means which is a hardware resource of the computer, the stored data are read in succession and omission in writing the application contents is detected according to whether or not a NULL code is included in the application document data. This claim explicitly describes that information processing by means of software is what is concretely realized using hardware resource of the computer.

In view of the above, the invention understood on the basis of the items described in this claim is a creation of a technical idea utilizing a law of nature.

[Reference]

- Examination guidelines for inventions and utility models
Part VII, Chapter 1, “Computer software related inventions”

Example 2:

(Translation of example 2 is omitted.)

Example 3: Advertisement mediating system (An example illustrating the intention of Article 36(6)(ii) and Article 29(1) of the Patent Law)

[Claim 1] (An example, [although whether it is a social system or a computer system is not clear,] not deemed to be patentable)

An advertisement mediating system mediating between an advertisement client and an advertisement agent, comprising:

idea registering function for registering the idea information of the advertisement agent;

idea searching function for searching for the registered idea information; and

providing function using the idea searching function for searching for idea information corresponding to the needs information of the advertisement client, providing the idea information to the advertisement client, and providing the needs information to the advertisement agent.

[Claim 2] (An example explicitly stated to be a computer system and deemed to be patentable)

An advertisement mediating system in which client-side computers separately owned by plural advertisement clients and agent-side computers separately owned by plural advertisement agents are separately connected to an advertisement mediating computer through a communication network, characterized in that the advertisement mediating computer comprises:

idea information storing means for storing the advertisement agent's idea information as related to an agent ID and idea classifying data for indicating, with bit positions, at least one target commodity category;

idea information registering means for registering the agent ID, the idea information, and the idea classifying data sent from the agent-side computer at the idea information registering means;

means for receiving, from the client-side computer, mediation request data including a client ID, needs information, and needs classifying data of the same format type as the idea classifying data;

idea extracting means for searching and extracting acceptable idea by performing, upon receiving the mediation request data, on all the idea

information stored in the idea information storing means, a series of processes including:

process of reading the agent ID, the idea information, and the idea classifying data from the idea information storing means and storing them in an operational storing means;

process of implementing an AND operation of the idea classifying data and the needs classifying data;

process of implementing a EXCLUSIVE-OR operation of the calculated results of the logical multiplication and the needs classifying data; and

unacceptable idea deleting process of deleting, from the operational storing means, the agent ID, the idea information, and the idea classifying data as unacceptable in the case that the calculation of the exclusive logical addition results in other than zero; and

idea providing means for sending, when the process with the idea extracting means is over, the idea information stored in the operational storing means to the client-side computer along with sending the needs information to the agent-side computer corresponding to the agent ID stored in the operational storing means.

[Explanation]

• Claim 1

(Decision with Article 36(6)(ii) of the Patent Law)

This claim explicitly states, as functions to be provided to the “advertisement mediating system” mediating between the ‘advertisement client’ and the ‘advertisement agent,’ the ‘idea registering function for registering the idea information of the advertisement agent’, ‘the idea searching function for searching the registered idea information’, and the ‘providing function using the idea searching function for searching the idea information corresponding to the needs information of the advertisement client, providing the idea information to the advertisement client according to the search result, and providing the needs information to the advertisement agent’. However, it is not clear whether the above description which explicitly states the functions is intended to specify the operational function (performed by humans) or the processing function performed by the computer.

Therefore, the invention related to this claim is not clear and does not fulfill the requirements specified in Article 36(6)(ii) of the Patent Law.

(Decision about Article 29(1))

If the description of the respective functions in this claim is assumed to specify the operational function performed by humans, the invention understood on the basis of the items described in this claim is not the so-called “computer system,” but nothing more than an artificial arrangement or a social “setup” (social system), and as a whole is not a creation of a technical idea utilizing a law of nature.

If the description of the respective functions in this claim is to specify the processing function performed by computers, then the description of any functional means provided in the ‘computer system’ is not more than specifying the operational function to be fulfilled with those means, and does not specify how the technical means is realized concretely using the hardware resource of the computer. In other words, since no description of information processing by means of software as a computer system realized concretely using the hardware resource of the computer is present in this claim, the invention understood on the basis of the items described in this claim is deemed not to be a creation of a technical idea utilizing a law of nature.

Therefore, in any case, since this invention is not an “invention” as specified in Article 2 of the Patent Law, it does not fulfill the requirements specified in Article 29(1) of the Patent Law.

• **Claim 2**

This claim describes an “advertisement mediating system in which client-side computers separately owned by plural advertisement clients and agent-side computers separately owned by plural advertisement agents are separately connected to an advertisement mediating computer through a communication network”. The invention is understood to be the so-called “computer system” as a network constituted with plural computers.

This claim specifies that the “advertisement mediating computer” comprises: ‘an idea information storing means for storing the advertisement agent’s idea information as related to idea classifying data for indicating, with bit positions, the agent ID and at least target commodity category’; ‘an idea information registering means for registering the agent ID, the idea information, and the idea classifying data sent from the agent-side computer at the idea information registering means’; ‘a means for receiving, from the client-side computer, the client ID, the needs information, and mediation request data including needs classifying data of the same format type as the idea classifying data’; ‘an idea extracting means for searching and extracting acceptable idea by performing, upon receiving the mediation request data, to all the idea information stored in the idea information storing means, a series of processes including: a process of reading the agent ID, the idea information, and the idea classifying data from the idea information storing means and storing them in an operational storing means; a process of calculating a logical multiplication of the idea classifying data and the needs classifying data; a process of calculating an exclusive logical addition of the calculated results of the logical multiplication and the needs classifying data; and an unacceptable idea deleting process of deleting, from the operational storing means, the agent ID, the idea information, and the idea classifying data as unacceptable in the case that the calculation of the exclusive logical addition results in other than zero; and an idea providing means for sending, when the process with the idea extracting means is over, the idea information stored in the operational storing means to the client-side computer along with sending the needs information to the agent-side computer corresponding to the agent ID stored in the operational storing means.

The above description specifies that the respective functional means provided to the advertisement mediating computer for performing the advertisement idea mediating process are technical means concretely realized by the processes of writing and storing in succession, in the idea information storing means which is a hardware resource of the computer, the “idea information”, the “agent ID”, and the “idea classifying data”, and searching and extracting the idea information matching the advertisement client’s needs by reading the stored data in succession and performing a logical calculation process on the ‘idea classifying data’ and the ‘needs classifying data’.

In this claim the information processing by means of software is concretely realized utilizing hardware resources of the computer.

Therefore, the invention understood on the basis of the items described in this claim is a creation of a technical idea utilizing a law of nature.

In this way, since the information processing by means of software is specified in claim 2 as what is concretely realized using the hardware resources of the computer, the failure of claim 1 to fulfill the requirements of definiteness and statutory subject matter is remedied.

[References]

- Examination guidelines for inventions and utility models
 - Part II, Chapter 1, “Inventions having industrial applicability” 1.1(4)
 - Part VII, Chapter 1, “Computer software related inventions” 2.2.2(1)
- “Examples of business-related unpatentable inventions”
 - Example 1-1, Example 1-2, Example 1-3,

Example 4:

(Translation of example 4 is omitted.)

Example 5: System for selling children’s bicycles (An example of determining the inventive step according to Article 29(2))

[Claim 1] (Example lacking inventive step)

A system for selling children’s bicycles to provide commodity information on children’s bicycles through the Internet, comprising:

means for entering information about what a user desires including at least color and cartoon character desired by users,

means for entering physical information about user such as the height of users,

means for searching commodity information according to the information about what the user desires and determining the size information of the commodity according to the physical information about user,

means for creating made-to-order information according to the information about what the user desires and physical information about user in case the commodity choosing means cannot determine the commodity, and

means for receiving an order for the commodity chosen with the commodity choosing means or an order for the commodity according to the made-to-order information created with the made-to-order information creating means.

[Detailed Description of the Invention]

(Omitted in original)

FIG. 1

Make	Commodity code	Wheel size	Frame type	Suitable height	Color	Character
A bike C	AM0118	18	A	100 - 130	Red, Blue	M
A bike C	AM0120	20	A	110 - 140	Red, Blue	M
A bike C	AM0122	22	A	120 - 150	Red, Blue	M
A bike C	BN0218	18	B	110 - 130	Orange, Purple	N
A bike C	BN0220	20	B	120 - 140	Orange, Purple	N
A bike C	BN0222	22	B	130 - 150	Orange,	N

					Purple	
...

FIG. 2

Step1: Enter info about what user desires such as color and character. Go to Step 2.

Step 2: Enter physical info about user such as height. Go to Step 3.

Step 3: Search commodity info according to info about what user desires. Go to Step 4.

Step 4: Can a commodity be found? If yes, go to Step 5. If no, go to Step 7.

Step 5: Determine size info according to physical info. Go to Step 6.

Step 6: Can suitable size be found? If yes, go to Step 8. If no, go to Step 7.

Step 7: Create made-to-order info. Go to Step 8.

Step 8: Receive order for commodity.

[Reference]

The following features are described in the reference:

- A commodity selling system through the Internet to provide commodity information on clothing to a consumer’s computer.

- A user interface is employed for the user to choose commodity information on clothing and to enter information about what the user desires such as color and design in order to select the desired commodity, and physical information about user such as height for deciding the size of the commodity.

- The commodity selling system searches the commodity information database (see FIG. 1) using the information about what the user desires and physical information about user sent from the consumer’s computer as search keys and, if commodity that conforms to the conditions is present, sends the information to the consumer’s computer.

- In case no commodity is present that matches the conditions, the commodity selling system creates made-to-order commodity information matching the conditions and sends the information to the consumer’s computer.

- The consumer's computer employs a user interface to output to the display any commodity information received from the commodity selling system and to give order instructions for purchasing the commodity.

FIG. 1

Commodity	Size	Design	Suitable height	Color
Sweater	S	V-neck	140 – 150	Red, Navy blue
Sweater	M	V-neck	150 – 160	Pink, Light navy blue
Sweater	L	V-neck	160 – 170	Dark red, Dark navy blue
Sweater	S	Turtle	130 – 155	Dark orange, Dark purple
Sweater	M	Turtle	150 – 175	Orange, Purple
Sweater	L	Turtle	170 – 185	Light orange, Light purple
...

[Explanation]

When the invention related to Claim 1 is compared with the invention described in the reference, they are the same with respect to:

“A selling system for providing commodity information through the Internet, comprising:

means for entering information about what user desires including at least color users desire,

means for entering physical information about user such as the height of users,

means for searching commodity information according to the information about what user desires and determining the size information of the commodity according to the physical information about user,

means for creating made-to-order information according to the information about what user desires and physical information about user in case the commodity choosing means cannot determine the commodity, and

means for receiving an order for the commodity chosen with the commodity choosing means or an order for the commodity according to the made-to-order information created with the made-to-order information creating means, and different with respect to:

(1) Target commodities for selling are bicycles for children on the one hand and

clothing on the other, and

(2) “Cartoon character” is used as the information about what user desires on one hand and not used on the other.

The above differences are examined: The difference in the commodities sold is nothing more than a change in the kind of commodities handled by the selling system. From another viewpoint, while the information about what user desires including “cartoon character” is used as a search key, choosing commodities by cartoon character is a common practice. Therefore, the invention of Claim 1, “A system for selling children’s bicycles,” is nothing more than an arrangement in which the target commodities of the “Clothing selling system,” (the invention described in the cited reference,) are changed and a generally known commodity choosing method is applied, which could have been easily created by those skilled in the art.

Therefore, the invention according to Claim 1 could have been easily devised by those skilled in the art on the basis of the invention described in the cited reference.

(Remarks: It should be noted that example 5 explains the method of determining inventive step and that, in actual examination practice, requirements of statutory subject matter etc. are also separately determined.)

[Reference]

- Examination guidelines for patents and utility models
Part II, Chapter 2, “Novelty, inventive step”
Part VII, Chapter 1, “Computer software inventions” 2.3
- “Examples of business-related un-patentable inventions”
Example 3-1, Example 3-2, Example 3-3