

Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

4. Cases pertinent to Novelty (Article 29(1) of the Patent Act)

In order to make clear the examination practice in relation to the novelty, the outline of the determination thereon, as well as the measures of the applicant is explained below based on specific examples.

(Points to Note)

These cases have been prepared with an aim to describe the examination practice. Therefore, it should be noted that modification such as clarification is added to the claims etc. in the above cases to ease explanation.

List of Cases

(In the list, "○" means involving novelty. In contrast, "×" means not involving novelty.)

Case No.	Title of Invention	Remarks	Determination
Case 1	Lens		○
Case 2	Annular seal structure		○
Case 3	Projector and projection system	Function or characteristics, etc.	○/×
Case 4	Polarizing plate	Function or characteristics, etc. (Reasonable doubts)	×
Case 5	Zoom lens	Function or characteristics, etc. (Reasonable doubts)	×
Case 6	Deformation degree measuring instrument	Function or characteristics, etc. (Reasonable doubts)	×
Case 7	Seal member	Function or characteristics, etc. (Reasonable doubts)	○
Case 8	Ceramic heater	Function or characteristics, etc. (Reasonable doubts)	×
Case 9	Vinyl chloride resin particle	Function or characteristics, etc. (Reasonable doubts)	×
Case 10	Biaxially oriented polyester film	Function or characteristics, etc. (Reasonable doubts)	×
Case 11	Laminated film	Function or characteristics, etc. (Reasonable doubts)	×

Case 12	Silica fine particle for compounding plastic	Function or characteristics, etc. (Reasonable doubts)	×
Case 13	Rubber composition for tires	Function or characteristics, etc. (Reasonable doubts)	×
Case 14	Ethylene - propylene copolymer	Function or characteristics, etc. (Reasonable doubts)	×
Case 15	Polyester film for magnetic recording medium	Function or characteristics, etc. (Reasonable doubts)	×
Case 16	Polyethylene-2,6-naphthalate film	Function or characteristics, etc. (Reasonable doubts)	×
Case 17	Method for cultivating shiitake mushroom and container for cultivating shiitake mushroom	Limitation of use	○/×
Case 18	Floor face curing material for asbestos removing work	Limitation of use	×
Case 19	Reference pattern for alignment	Limitation of use	×
Case 20	Speaker for wall surface reflections	Limitation of use	○/×
Case 21	Ink cartridge	Subcombination	○/×
Case 22	Toner cartridge	Subcombination	×
Case 23	Navigation system, mobile communication terminal and server	Subcombination	○/×
Case 24	Chemical container	Subcombination	○
Case 25	Location Information server	Subcombination	×
Case 26	Content delivering system	Subcombination	○/×
Case 27	Network system	Subcombination	○/×
Case 28	Monitoring system	Subcombination	○/×
Case 29-1	Measuring method, manufacturing method and glass	Expression specifying a product by a manufacturing process (Reasonable doubts)	○/×
Case 29-2	Panel having dual structure	Expression specifying a product by a manufacturing process	○

Case 30	Food composition for preventing periodontal disease	Use invention of foods	○/×
Case 31	Food for decreasing blood pressure	Use invention of foods	○
Case 32	Chlorella vulgaris for born-strengthening	Use invention of foods	×
Case 33	Food composition for improving bloodstream	Use invention of foods	×
Case 34	Saltiness enhancer	Use invention of foods	○
Case 35	Robot Apparatus	Subcombination (IoT related technology)	○/×
Case 36	Water Treatment Apparatus	Subcombination (IoT related technology)	○
Case 37	Healthcare System and Terminal	Subcombination (IoT related technology)	○/×
Case 38	Drone Monitoring System and Drone	Subcombination (IoT related technology)	○/×

[Case 1] (Invention has novelty)

Description	Prior art
<p>Title of Invention</p> <p>Lens</p>	<p>Title of Invention</p> <p>Ireflection lens</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A lens comprising a material A layer formed in thickness from 5μm to 6μm, a material B intermediate layer formed evenly in thickness from 1μm to 2μm, and a glass substrate.</p> <p>Overview of the description</p> <p>Conventionally, it has been proposed that a material B is provided as an intermediate layer between a material A layer and a glass substrate in order to control reflection. However, if thickness of the material B intermediate layer is equal to or less than 5μm, the thickness cannot be measured. Thus, it is difficult to form evenly a thin intermediate layer.</p> <p>The applicant found that the thickness can be measured for the thin intermediate layer by using a C interferometer. Moreover, it was found that forming evenly the intermediate layer in thickness from 1μm to 2μm results in controlling reflection most. The detailed description of the C interferometer is provided below. ...</p>	<p>Overview of the description</p> <p>An irreflection lens having a material A layer is known that is coated in 5μm thickness. However, the reflected light cannot be controlled completely with long wavelength.</p> <p>It was successful to control reflection for a wide wavelength by providing a material B intermediate layer whose thickness is 7μm or less.</p> <p>It goes without saying that it is desirable to find the optimal thickness of intermediate layer by measurement. For example, the thickness may be approximately 1μm.</p>

[Conclusion]

The invention of claim 1 has novelty.

[Explanation]

The cited document discloses that the material B intermediate layer is provided whose

thickness is 7 μ m or less, and the thickness may be approximately 1 μ m as one example.

However, the cited document does not disclose how the material B intermediate layer is provided evenly in 1 μ m. Besides, it is common general knowledge that the thickness cannot be measured in the material B intermediate layer whose thickness is 5 μ m or less as filing of application. Thus, it is difficult to provide the material B intermediate layer in which the thickness is controlled within a range from 1 μ m to 2 μ m.

Therefore, it cannot be said that a person skilled in the art has been configured the lens of the claimed invention based on the statement of cited document and common general knowledge as filing of application. Thus, the intermediate layer whose thickness is 5 μ m or less cannot be considered as "cited invention", the invention of claim 1 has novelty.

[Case 2] (Invention has novelty)

Description	Prior art
<p>Title of Invention</p> <p>Annular seal structure</p>	<p>Title of Invention</p> <p>...</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A seal structure comprising a shaft (12) having an annular seal member on an outer periphery thereof and a shaft hole into which the shaft (12) is inserted,</p> <p>wherein the annular seal member has a base part (1), annular lip (2), and a first convex part (3) which is provided at a face of the base part (1) facing the seal mating face and which diametrically protrudes to contact with the seal mating face due to a fitting interference.</p>	
<p>Overview of the description</p> <p>... The first convex part 3 is provided on a face (an outer periphery of the base part 1 in Fig. 1) of the base part 1 facing the seal mating face so that it protrudes diametrically. An outer diameter of the first convex part 3 at a free state is larger than a hole diameter of the shaft hole. By this setting, an area exceeding the hole diameter is enabled as a fitting interference to diametrically compress the base part 1, so that the inner periphery of the base part is pressed to an outer periphery of the shaft with a straining force, thereby sealing the outer periphery of the shaft.</p> <p>... since the first convex part 3 has the fitting interference, the base part 1 is diametrically compressed, and then an inner diameter side of the base part is pressed toward the outer periphery of the shaft 12 with a straining force, so that an interface between</p>	<p>Overview of the description</p> <p>... the main lip 5 extends externally to the outside in a radial direction toward the front so as to be open, and its tip outside diameter is formed larger than the cylinder inside diameter and has the compression allowance d at the time of mounting. In contrast, the outside diameter of sub-lip 8 is formed of almost the identical to the cylinder inside diameter.</p> <p>... the circumferential end of sub-lip 8 is just slightly contacted.</p>

the base part and an outer periphery 12a of the shaft 12 is sealed so that the fluid is not leaked.

Drawing

Fig.1

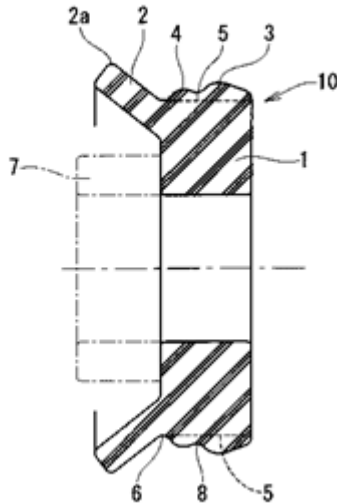


Fig.2

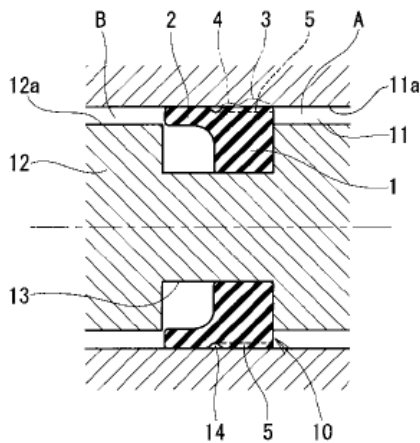
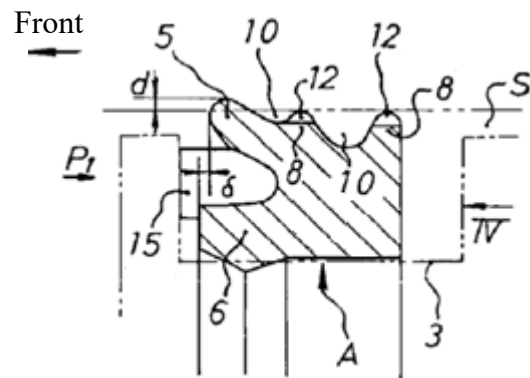


Fig.1



- 5 Main lip
- 8 Sub-lip
- 10 Grease reservoir groove
- 12 Notch
- 15 Projection

[Conclusion]

The invention of claim 1 has novelty.

[Explanation]

Since, in the invention of claim 1, contact of the "first convex part" with the seal mating face has the functionality as fitting interference, it is recognized that the outer diameter of the "first convex part" at a free state is larger than the hole diameter of the shaft hole. In contrast,

since, in the invention of cited document, the "sub-lip" just contacts with the cylinder, it is recognized that the outer diameter of the "sub-lip" at a free state is not larger than the inside diameter of the cylinder, Thus, the "sub-lip" disclosed in the cited document does not correspond to the "first convex part" of the present invention.

Therefore, there is difference between the invention of claim 1 and the invention of cited document, and the invention of claim 1 has novelty.

[Case 3] Function or characteristics, etc. (Invention lacks/has novelty)

Description	Prior art
<p>Title of Invention</p> <p>Projector and projection system</p>	<p>Title of Invention</p> <p>Projector</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A projector of projecting a light to a irradiation target surface according to an image signal,</p> <p>the projector directing a light entering into the irradiation target surface in a direction along the irradiation target surface, and</p> <p>wherein an image projected from the projector and an image projected from other projector can superimposed on the irradiation target surface.</p> <p>[Claim 2]</p> <p>A projection system having a first projector and a second projector that project a light to a irradiation target surface according to an image signal,</p> <p>wherein the first and second projectors direct a light entering into the irradiation target in a direction along the irradiation target surface, and</p> <p>an image projected from the first projector and an image projected from the second projector are superimposed on the irradiation target surface.</p>	
<p>Overview of the description</p> <p>As shown in Fig. 1, conventional projector 48 performs a proximity projection from the vertically upper side on the irradiation target surface S1. However, there is a problem in which the contact with the irradiation target</p>	<p>Overview of the description</p> <p>As shown in Fig. 1, the projector 48 performs a proximity projection from the vertically upper side on the irradiation target surface S1. The contact with the irradiation target surface S1 by hand, pointer and so on</p>

surface S1 by hand, pointer and so on leads to obstruction of light from the projector 48, which results in an object shadow 49 under the object on the irradiation target surface S1.

As shown in Fig. 2, the projection system of the present invention consists of a first projector 11 and a second projector 12. The contact with the irradiation target surface S1 by an object leads to unreachable for a light from the first projector 11 to a predetermined region h1 vertically lower from a position of the object. But, a light from the second projector 12 is entered into such region h1, thus, the region h1 is not shadowed.

leads to obstruction of light from the projector 48, which results in an object shadow 49 under the object on the irradiation target surface S1.

Drawing

Fig. 1

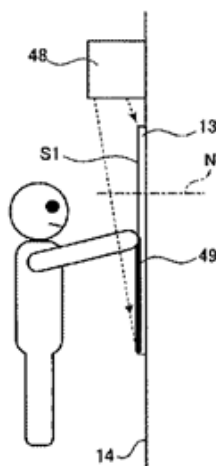
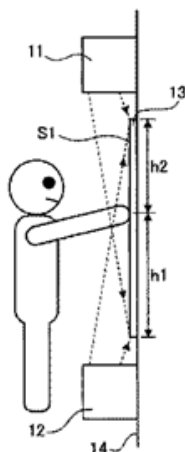
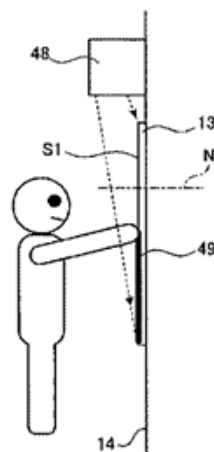


Fig. 2



Drawing

Fig. 1



[Conclusion]

The invention of claim 1 lacks novelty.

The invention of claim 2 has novelty.

[Explanation]

- Claim 1

Claim 1 states that the projector is specified using the functionality of the projector such as "an image projected from the projector and an image projected from other projector can be superimposed on the irradiation target surface."

This statement is constructed that it means all projector having such functionalities (e.g. front projector).

The prior art discloses the "projector 48" as a front projector, and the projector 48 has the functionality in which "an image projected from the projector and an image projected from other projector can be superimposed on the irradiation target surface."

Therefore, there is no difference between the invention of claim 1 and the cited invention, thus the invention of claim 1 lacks novelty.

- Claim 2

Although, the invention of claim 2 has the "first projector" and "second projector", the cited invention has only one projector.

Therefore, there is difference between the invention of claim 2 and the cited invention, thus the invention of claim 2 has novelty.

[Measures of the applicant]

At least the reason for rejection for lack of novelty is overcome by canceling claim 1.

Also, the reason for rejection for lack of novelty is overcome by amending claim to recite a method of projecting an image by superimposing images projected from two projectors, as an invention of method.

[Case 4] Function or characteristics, etc. (Reasonable doubts) (Invention lacks novelty)

Description	Prior art
<p>Title of Invention</p> <p>Polarizing plate</p>	<p>Title of Invention</p> <p>Polarizing plate having adhesive layer</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A polarizing plate having a layer of adhesive characterized in that a layer of acrylic resin adhesive agent containing 20 to 500 ppm solvent is provided at least one of outer sides of a laminate comprising a polyvinyl alcohol polarizing film and a cellulosic protective layer.</p>	
<p>Overview of the description</p> <p>... the polarizing plate having the layer of adhesive according to the present invention is obtained by adding the layer of adhesive and the release film to at least one of outer sides of the laminate mainly comprising the polyvinyl alcohol polarizing film and the protective layer. ... since the layer of adhesive in which the content of the solvent in the layer of acrylic resin adhesive is controlled within the range of 20 to 500 ppm is provided, not only durability that foaming and peeling of the layer of adhesive is not occurred is superior, but also the optical property is not decreased even in standing it for the long term under the circumstance of high temperature and high humidity. ...</p>	<p>Overview of the description</p> <p>... [Example] The following compositions were introduced in a vessel for polymerizing reaction, the temperature was increased to 60°C while substituting with nitrogen, then polymerized for 5 hours. Compositions: butyl acrylate 890 g, 2-hydroxy ethyl methacrylate 10 g, benzyl methacrylate 100 g, ethyl acetate 3000 g. After finishing the polymerization, toluene was added to be 15% in solid content, and the mixture was filtered with glass filter to obtain an adhesive. 100 g of the adhesive was applied on a release film comprising polyester film, and the film was dried such that the content of the remaining solvent was 100 ppm to prepare a pressure sensitive adhesive film. A side of the layer of adhesive in the pressure sensitive adhesive film which was prepared above was laminated on one surface of a polarizing plate in which both surfaces of polyvinyl alcohol polarizing film having 25 μm in thickness was covered with triacetic cellulose film</p>

having 80 μm in thickness, dried for 2 minutes at 60 °C to prepare a polarizing plate having an adhesive layer. ...

[Conclusion]

The invention of claim 1 lacks novelty. (A prima facie case against novelty is made.)

[Explanation]

The invention according to claim 1 contains matters specifying the invention of "a layer of acrylic resin adhesive containing 20 to 500 ppm solvent" which is expressed by a function or characteristics, etc. The polarizing plate in the cited document is that a pressure sensitive adhesive film comprising an adhesive in which the remaining solvent is 100 ppm on a separating film is laminated on one surface of a polarizing plate and dried for 2 minutes at 60 °C. Here, it is known that ethyl acetate and toluene both of which are solvent components contained in the adhesive agent has about 77 °C and about 110 °C in boiling point, respectively. Accordingly, it cannot be recognized that 100 ppm in the remaining solvent is evaporated to be less than 20 ppm even in the adhesive after heating for 2 minutes at 60 °C, and there is a high probability that the remaining solvent is within the range of 20 to 500 ppm.

Therefore, the reason to doubt to be prima facie is realized that the polarizing plate of the present invention according to claim 1 is the same as the polarizing plate stated in the cited document.

[Case 5] Function or characteristics, etc. (Reasonable doubts) (Invention lacks/has novelty)

Description	Prior art
Title of Invention	Title of Invention
Zoom lens	Zoom lens
What is claimed is:	Overview of the description
[Claim 1]	...
<p>A zoom lens comprising a first lens group having positive refraction, a second lens group having negative refraction, an aperture stop, a third lens group having positive refraction and a fourth lens group having positive refraction, in the order from an objective side to an image side, and</p>	<p>The zoom lens of Example 1 comprises, as shown in Fig. 1, in the order from an objective side to an image side, a first lens group L1 having positive refraction, a second lens group L2 having negative refraction, a third lens group L3 having positive refraction and a fourth lens group L4 having positive refraction, and an aperture stop is positioned at forward of the third lens group L3.</p>
<p>varying a distance between each neighboring lens group when zooming from a wide angle end to a telephoto end,</p>	<p>In addition, when the variable power is changed from a wide angle end to a telephoto end, the first lens group L1 and the third lens group L3 are fixed in the direction of optical axis, and the second lens group L2 and the fourth lens group L4 are moved into the image side, as indicated by an arrow.</p>
<p>wherein the first lens group has one negative lens and when refractive indices of the negative lens the at d line, g line, F line are defined as n_d, n_g and n_F, respectively, an Abbe number at d line of a material constituting the negative lens is defined as v_d and a partial dispersion ratio of the material is defined as $\theta_g F = (n_d - n_g)/(n_g - n_F)$, the following formulae (1) to (3) are satisfied:</p>	<p>In addition, the first lens group L1 comprises, in the order from the object side to the image side, a negative lens G11, a positive lens G12, a positive lens G13, and a positive lens G14.</p>
$n_d > 1.80 \quad (1)$...
$v_d < 35.0 \quad (2)$	Example 1
$\theta_g F < -0.0027v_d + 0.679 \quad (3).$	f (focal distance) 7.83 to 70.01
[Claim 2]	...
<p>The zoom lens according to claim 1, wherein the following formulae (1a) to (3a) are further satisfied:</p>	r: curvature radius
$n_d > 1.85 \quad (1a)$	d: spacing distance,
$v_d < 30.0 \quad (2a)$	nd: refractive index at d line,
$\theta_g F < -0.0027v_d + 0.675 \quad (3a).$	vd: Abbe number at d line

Overview of the description

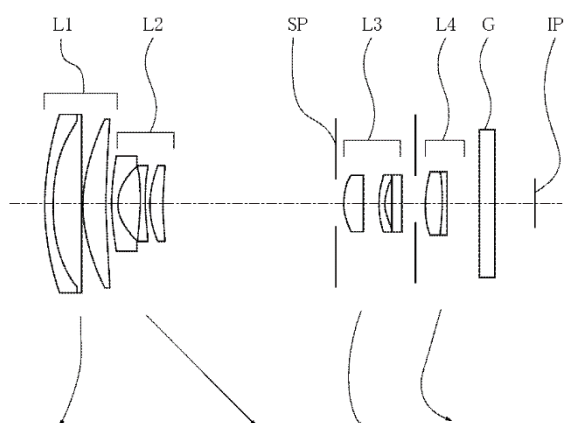
...

Corresponding value of the formulae in Examples

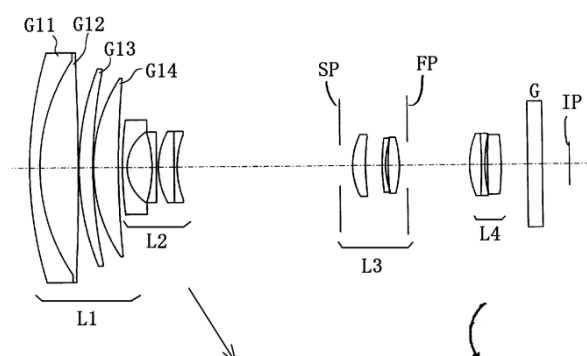
	Example 1	Example 2
(1),(1a)	2.0033	1.8061
(2),(2a)	28.3	33.3
Left side of (3) and (3a)	0.598	0.588
Right side of (3)	0.603	0.589
Right side of (3a)	0.599	0.585

Number	r	d	nd	νd	
1	86.825	2.20	1.806100	33.3	G11
2	42.152	8.20	1.496999	81.5	G12
3	-553.228	0.20			
4	58.170	2.90	1.487490	70.2	G13
5	104.170	0.20			
6	35.956	5.20	1.496999	81.5	G14
7	215.663	Variable			

Drawings



Drawings



A catalog for optical glasses made by A company states $nd = 1.806100$, $\nu d = 33.3$, and $\theta_g F = 0.5883$ as properties of the optical glass having N-11 in type number.

[Conclusion]

The invention of claim 1 lacks novelty. (A prima facie case against novelty is made.)

The invention of claim 2 has novelty.

[Explanation]

- Claim 1

While Prior art states that there is the negative lens, which is met with the formulae (1)

and (2), in the first lens group, the negative lens of the cited document appears to be unclear whether it is satisfied the formula (3), since the value of the partial dispersion ratio $\sigma_g F$ of the negative lens is not stated in the cited document.

However, optical materials (optical glass, optical resin material and the like) which are used for a lens constituting a lens system such as zoom lens and the like can be specified in its use according to a combination of refractive index and Abbe number of the material.

In addition, there is a high probability that the material of the negative lens in the cited document uses an optical glass having N-11 in type number (made by A company) from the value of the refractive index and the value of Abbe number. The partial dispersion ratio $\sigma_g F$ of the optical glass having N-11 in type number is 0.5883, according to a leaflet on optical glass products from A company.

Hence, since the value at the right side of the formula (3) of the negative lens in the cited document is 0.58909 and there is a high probability in the negative lens in the cited document to satisfy the formula (3), a reason to doubt to be prima facie is realized that the zoom lens according to the invention of claim 1 is the same as the zoom lens stated in the cited document.

- Claim 2

The zoom lens stated in the cited document does not satisfy the formulae (1a) and (2a) for the invention according to claim 2.

Therefore, since there is a difference between the invention according to claim 2 and the invention stated in the cited document, the invention according to claim 2 has a novelty.

[Measures of the applicant]

Since the zoom lens stated in the cited document does not satisfy the formulae (1a) and (2a) recited in claim 2 and there is a low probability to satisfy the formula (3a), at least, the reason for refusal of lack of novelty can be avoided by specifying that either of the formulae (1a) to (3a) is satisfied in the invention according to claim 1.

In addition, the reason for refusal can be avoided by deleting claim 1.

[Case 6] Function or characteristics, etc. (Reasonable doubts) (Invention lacks novelty)

Description	Prior art
Title of Invention	Title of Invention
Deformation degree measuring instrument	Extensometer
What is claimed is:	
[Claim 1]	
<p>A deformation degree measuring instrument comprising a metal, a means for applying a predetermined voltage to the metal, a means for detecting a current in the metal, and a means for calculating a deformation degree in the metal based on the voltage applied to the metal and the current in the metal.</p>	
Overview of the description	Overview of the description
<p>The deformation in metal leads to change in sectional area, which results in change in the relation of current in metal. The deformation degree in the metal can be comprehended by examining the relation by computer.</p>	<p>Since the resistance of iron changes due to extensibility, the extensibility can be measured by resistant meter.</p>
	<p>For example, a scale indicating extensibility degree is added to a scale of a tester, thereby the tester can be utilized as an extensometer by measuring a tester switch to a resistance measuring mode.</p> <p>Also, the resistance may be measured in a digital method other than analog tester, and extensibility degree may be directly digitally displayed based on the resistance measuring result.</p>

[Conclusion]

The invention of claim 1 lacks novelty. (A prima facie case against novelty is made.)

[Explanation]

Since, the electric resistance is a physical quantity defined by (voltage/current), the resistance measuring result disclosed in the cited document states the relation between voltage

and current.

Moreover, the cited document discloses that the extensibility degree is displayed directly based on the result measured in digital method. It is a common general knowledge to use an operational circuit in a digital measuring instrument. Thus, it can be reasonably supposed that the digital measuring instrument of the cited document has a means for calculating the extensibility degree based on the measuring result.

Therefore, the reasonable doubts are conditioned in that the deformation degree measuring instrument of the invention of claim 1 is the identical to the extensometer disclosed in the cited document.

[Case 7] Function or characteristics, etc. (Reasonable doubts) (Invention has novelty)

Description	Prior art
<p>Title of Invention</p> <p>Seal member</p>	<p>Title of Invention</p> <p>Sealing rubber composition and seal member</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A seal member having a cross-linked fluorine-contained rubber layer obtained by crosslinking a fluorine-contained rubber composition including fluorine-contained rubber and carbon black,</p> <p>wherein the cross-linked fluorine-contained rubber layer has the loss modulus E'' that is within the range between 700kPa and 7000kPa in a dynamic viscoelasticity test (measurement temperature: 170°C, stretching strain: 1%, initial weighting: 160cN, frequency: 10Hz)</p>	
<p>Overview of the description</p> <p>... the seal member of the present invention is manufactured through the manufacturing processes consisting of α step, β step, γ step, and δ step. The seal member having the loss modulus E'' that is in the above range can be manufactured by providing the δ step in the manufacturing processes.</p> <p>(The detailed description of invention discloses that the plurality of embodiments stating the seal member manufactured through the manufacturing processes consisting of α step to γ step and having the loss modulus E'' that is in the above range, and the comparison examples of the seal member manufactured through the manufacturing processes consisting of α step to γ step and</p>	<p>Overview of the description</p> <p>... A sealing rubber composition and a seal member having a layer of the sealing rubber composition, the sealing rubber composition has a fluorine-contained rubber 100 weight parts, a carbon black of 10-80 weight parts, and a cross-linker of a 0.1-10 weight parts.</p> <p>... The seal member is manufactured through the manufacturing processes consisting of α step, β step and γ step.</p>

having the loss modulus E'' that is out of the above range.)

[Conclusion]

The invention of claim 1 has novelty. (A prima facie case against novelty is not made.)

[Explanation]

The present invention and the cited invention have the commonality in terms of the seal member having a cross-linked fluorine-contained rubber layer obtained by crosslinking a fluorine-contained rubber composition including fluorine-contained rubber and carbon black.

In the present invention, the loss modulus E'' that is within the range between 700kPa and 7000kPa in a dynamic viscoelasticity test (measurement temperature: 170°C, stretching strain: 1%, initial weighting: 160cN, frequency: 10Hz) with respect to the characteristic of the fluorine-contained rubber layer.

Moreover, the detailed description of invention of the present application discloses that the seal member of the present invention is manufactured through the manufacturing processes consisting of α step to δ step, and the seal member having the loss modulus E'' that is in the above range can be manufactured by providing the δ step in the manufacturing processes with reference to the plurality of embodiments and the comparison examples.

In contrast, the seal member of the cited invention is manufactured through the manufacturing processes consisting of α step to γ step except for δ step. Thus, it is supposed that the loss modulus E'' of the cross-linked fluorine-contained rubber layer compositions through the above steps is out of the range between 700kPa and 7000kPa.

Therefore, the reasonable doubts are not conditioned that the seal members are identical between the invention of claim 1 and the cited invention.

[Case 8] Function or characteristics, etc. (Reasonable doubts) (Invention lacks novelty)

Description	Prior art
<p>Title of Invention</p> <p>Ceramic heater</p>	<p>Title of Invention</p> <p>Ceramic heater</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A ceramic heater comprising a ceramic body (3) having a metal layer (6) as an outermost layer and a lead member (10) jointed to the metal layer (6) with Ag-Cu-containing brazing material (11), wherein the Cu is scattered about the Ag in the brazing material.</p>	
<p>Overview of the description</p> <p>When BAg-8(JIS Z3261) of the Ag-Cu brazing material is used, a dissolution temperature (melting point) of the BAg-8 is 780°C. It is preferable to set the temperature between 780°C and 800°C and holding time 5-40 minutes in brazing. By setting them in the above range, the Cu can be scattered about the Ag inside the brazing material (11). ... with respect to the brazing material (11) consisting of Ag and Cu, no less than five minutes of the holding time in the brazing temperature can allow for sufficient melting of the brazing material.</p>	<p>Overview of the description</p> <p>The wicking 11 is an alumina-based ceramic. BAg-18 (melting point temperature 720°C) of Ag-Cu brazing filler is used as a brazing material 17, and the nickel lead wire 16 is joined to the nickel plating layer 14a. The temperature of the brazing material 17 is 750°C in jointing, and the holding time is between 5-30 minutes.</p>
<p>Drawing</p>	<p>Drawing</p>

|

[Conclusion]

The invention of claim 1 lacks novelty. (A prima facie case against novelty is made.)

[Explanation]

In the cited invention, it is unclear whether Cu is scattered about the Ag in the brazing material 17. However, it is a common general technical knowledge as filing of application that the brazing material is sufficiently melted and the metal compositions are sufficiently mixed in the brazing material by holding the brazing material above several minutes beyond this melting temperature. The cited document discloses that BAg-18 having the dissolution temperature 720°C is used as the brazing material 17, and the temperature of the brazing material 17 is set to 750°C and the holding time is set between 5-30 minutes. Thus, it is highly probable that Cu is scattered about the Ag in the brazing material also in the cited invention based on the above common general technical knowledge.

Therefore, the reasonable doubts are conditioned that both inventions are identical.

[Case 9] Function or characteristics, etc. (Reasonable doubts) (Invention lacks novelty)

Description	Prior art
<p>Title of Invention</p> <p>Vinyl chloride resin particle</p> <p>What is claimed is:</p> <p>[Claim 1]</p> <p>A vinyl chloride resin particle having an average particle diameter R of 150 to 190μm, and pore volume A (cc/g) satisfying the following expression;</p> $0.15 \log R - 0.11 < A < 0.34$	<p>Title of Invention</p> <p>Method of granulating vinyl chloride resins</p> <p>Overview of the description</p> <p>..... a polyvinyl chloride resin particles having an average particle diameter of 180μm and 27% in porosity was produced by a suspension polymerization method. And this particle of polyvinyl chloride resin,</p>

[Conclusion]

The invention of claim 1 lacks novelty. (A prima facie case against novelty is made.)

[Explanation]

When the value of the average particle size of the particles of polyvinyl chloride resin described in the cited document is assigned to a left-hand side of the claimed expression, it can be $0.15 \log 180 - 0.11$ nearly equal to 0.228.

Also, as the specific density (d) of the polyvinyl chloride resin is normally from 1.16 to 1.55, the pore volume A (cc/g) of the polyvinyl chloride resin whose porosity is 27% can be determined by "pore volume per unit volume" / "weight per unit volume," that is to say, $0.27 / (1 - 0.27) d$ and it can be "A = 0.239 - 0.319."

Accordingly, as the particles of polyvinyl chloride resin described in the cited document satisfies the claimed expression, reasonable doubts are conditioned that the particles of

polyvinyl chloride resin described in the cited document is prima facie identical to the claimed one.

[Measures of the applicant]

If the calculation result is incorrect due to the fact that the resin particle described in the cited document is out of the range of density (d) indicated by the examiner, at least the reason for rejection for lack of novelty can be overcome by stating the calculation result and clarifying that the resin particle described in the cited document does not satisfy the claimed expression.

However, if it cannot be clarified that the calculation result indicated by the examiner is incorrect, and the examiner is convinced that the claimed invention lacks novelty, the reason for rejection for lack of novelty will not be overcome.

[Case 10] Function or characteristics, etc. (Reasonable doubts) (Invention lacks novelty)

Description	Prior art
<p>Title of Invention</p> <p>Biaxially oriented polyester film</p>	<p>Title of Invention</p> <p>Biaxially oriented polyester film</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A biaxially oriented polyester film, containing 0.1 to 0.6 weight% of an inorganic particle as a small diameter particle having 0.03 to 0.2 μm in average particle diameter and 0.002 to 0.03 weight% of an inorganic particle as a large diameter particle having 0.3 to 1.2 μm in average particle diameter, in the film, a difference in the average particle diameter between the large diameter particle and the small diameter particle being 0.2 μm or more, a thickness of the film being 6.0 to 10.0 μm and a heat shrinkage ratio of the film being 0.8% or lower when the film is stood for 1 hour at 90°C.</p>	
<p>Overview of the description</p> <p>..... In the film of the claimed invention, it is necessary that the heat shrinkage ratio of the film is 0.8% or lower when the film is stood for 1 hour at 90°C. When the heat shrinkage ratio is larger than the same, it is not preferable since the heat irreversible change is occurred in the film even after forming a film ...</p>	<p>Overview of the description</p> <p>[Example]</p> <p>A polyethylene terephthalate containing 0.5 weight% of silica particle having 0.1 μm in average particle diameter and 150ppm calcium carbonate particle having 0.5 μm in average particle diameter was extruded to prepare a non-elongated film.</p> <p>The film was stretched in the machine direction at 150°C with 3.9 folds, then stretched in the transverse direction at 130°C with 4.0 folds and fixed by heat for 6 seconds at 200°C to obtain a film having 8μm in thickness.</p> <p>Upon measuring the heat shrinkage ratio when the film is stood for 1 hour at 150°C,</p>

| the ratio was 1.4%.

[Conclusion]

The invention of claim 1 lacks novelty. (A prima facie case against novelty is made.)

[Explanation]

Since a temperature for heating for measuring the heat shrinkage ratio is different in the film of claimed invention and the film stated in the cited document, their heat shrinkage ratios cannot be compared with each other.

However, since a heat shrinkage ratio generally becomes lower in a polyester film demanding heat stability, as the temperature for measuring is lowered, there is a high probability that the heat shrinkage ratio is within the range recited in the claimed invention if the heat shrinkage ratio of the polyester film stated in the cited document is measure at 90°C.

Therefore, the reason to double to be prima facie is realized that the film of the claimed invention is the same as the film stated in the cited document.

[Measures of the applicant]

The reason for refusal due to lack of novelty is at least overcome, when the applicant shows in a certificate of experimental results that a biaxial oriented polyester film which is based on the condition for manufacturing the film of Example in the cited document is out of the range in the heat shrinkage ratio stated in claim 1 of the present application.

Alternatively, where a conviction that the film of the invention according to claim 1 of the present application is the same as the film stated in the cited document cannot be obtained by the Examiner by specifically clarifying, in a written opinion instead of the certificate of experimental results, that the heat shrinkage ratio recited in claim 1 of the present application in the biaxially oriented polyester film based on the condition for manufacturing in the Example of the cited document, the reason for refusal is overcome.

[Case 11] Function or characteristics, etc. (Reasonable doubts) (Invention lacks novelty)

Description	Prior art
<p>Title of Invention</p> <p>Laminated film</p>	<p>Title of Invention</p> <p>Laminated film</p>
<p>What is claimed is:</p> <p>[Claim 1]</p>	<p>What is claimed is:</p> <p>...</p>
<p>A laminated film in which an A layer comprising a thermoplastic resin containing a particle is laminated on a B layer comprising polyester not containing a particle, wherein a protrusion having 0.12 μm or less in average height is formed on a surface of the A layer with a ratio of 1.6×10⁴ to 1.6×10⁵ numbers/mm², and its three-dimensional Roughness Average SRa is 0.002 to 0.02 μm.</p>	
<p>Overview of the description</p> <p>..... The surface roughness was measured by using a high precision surface roughness meter ΔΔ produced by ×× manufacturing Co. Ltd. under the conditions of cut-off value 0.25mm and Δ×. The three-dimensional Roughness Average SRa is obtained from the following expression, where a portion of area SM is cut off from the rough surface on the center surface, and the axis orthogonal to the center surface of the portion is expressed by the Z-axis and a value obtained from the expression is expressed by the unit μm.</p> $SRa = 1/S_M \int_0^{L_X} \int_0^{L_Y} f(X,Y) dx dy$ <p>(In this formula, LX•LY=SM)</p> <p>.....</p>	<p>Overview of the description</p> <p>..... the Roughness Average Ra is obtained in the unit μm from the expression shown below, where a value is measured by using a high precision surface roughness meter ○○ produced by ×× manufacturing Co. Ltd. according to JIS B0601, a chart is written under the conditions of cut-off value 0.08 mm and ○×, a portion having L in a length for measuring is removed from a surface roughness curve of film at a direction of its center line and a center line of the removed portion is assigned as X axis, its vertical direction is assigned as Y axis and the roughness curve is expressed as Y=f(X).:</p> $Ra = 1/L \int_0^L f(X) dx$ <p>This measurement value is obtained by carrying out the measurement 4 times with a standard length of 1.25 mm as and averaging</p>

the measurements.

[Example]

Polyethylene containing 40 weight% of talc particle having 0.05 μm in average particle diameter and polyethylene terephthalate not containing a particle were co-extruded under the condition of 1:9 in ratio of thickness of layers and 100 μm in layer thickness, and stretched and treated with heat to obtain a biaxially oriented film having 9.8 μm in thickness.

Fine protrusions were formed on the surface of the polyethylene layer with a ratio of 55,000 numbers/ mm^2 , and its Roughness Average Ra was 0.009 μm .

[Conclusion]

The invention of claim 1 lacks novelty. (A prima facie case against novelty is made.)

[Explanation]

Since methods for evaluating a surface roughness are different for the film according to the claimed invention and the film stated in the cited document, these results cannot be directly compared.

However, there is no statement in the description of the present application or citations that the surface roughness on the film has an orientation and a specific distribution and it can be predicted in a common film which does not have the orientation and the specific distribution for the surface roughness that the value of the three-dimensional Roughness Average SRa and the value of Roughness Average Ra are almost the same even in consideration of the difference of the specific condition for measurement.

Accordingly, if the surface roughness of the film stated in the cited document is evaluated by the three-dimensional Roughness Average SRa, there is a high probability that the value is within the range of the value recited in the claimed invention.

Therefore, the reason to doubt to be prima facie is achieved that the film according to the claimed invention is the same as the film stated in the cited document.

[Measures of the applicant]

The reason for refusal due to lack of novelty is at least overcome, when the applicant shows in a certificate of experimental results that a layered film based on the condition for manufacturing in the Example of the cited document is prepared and the three-dimensional

Roughness Average is out of the range recited in the invention according to claim 1 of the present application.

Alternatively, where a conviction that the film according to the claimed invention and the film stated in the cited document are the same cannot be obtained by the Examiner by specifically clarifying, in a written opinion instead of the certificate of experimental results, that the three dimensional center surface average roughness of the layered film as prepared based on the condition for manufacturing in Example of the cited document is out of the range recited in the invention according to claim 1 of the present application, the reason for refusal is overcome.

[Case 12] Function or characteristics, etc. (Reasonable doubts) (Invention lacks novelty)

Description	Prior art
<p>Title of Invention</p> <p>Silica fine particle for compounding plastic</p>	<p>Title of Invention</p> <p>Filler</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A silica fine particle for compounding plastic, wherein the average particle diameter of the particle is within a range of 0.02 to 1 μm, the area ratio for a circumscribed circle defined in the following formula is 90% or more, and the standard deviation of the particle diameter is 1.1 to 1.2.</p> <p>Area ratio for a circumscribed circle =</p> $\frac{\text{Projected area of the particle}}{\text{Area of the circumscribed circle for the particle}} \times 100$	<p>Overview of the description</p> <p>..... The spherical silica fine particle constituting the filler for plastic has a spherical shape with a very high sphericity in each shape, and the particle is evaluated for the particle diameter ratio b/a of the short diameter b to the long diameter a. An electron microscope picture is used for the measurement of the particle diameter ratio. .</p>
<p>Overview of the description</p> <p>..... The particle shape of silica is important and using a particle having a spherical shape makes it possible to obtain a sheet which is superior in slidability and abrasion resistance. The area ratio for the circumscribed circle is used as a method for evaluating the sphericity. Specifically, 20 particles were arbitrarily selected from the electron microscope images used for measuring the average particle diameter, and the projected area of each particle was measured by an image analyzer. In addition, the area ratio was determined by calculating an area of circle for each particle.</p>	<p>[Examples]</p> <p>..... The shape and the particle diameter of the filler comprising these silica fine particles are shown as follows.</p>

	Average particle diameter (μm)	Ratio of particle diameter b/a	Value of standard deviation
Example 1	0.025	0.90	1.1
Example 2	0.035	0.89	1.2
Example 3	0.050	0.88	1.3

[Conclusion]

The invention of claim 1 lacks novelty. (A prima facie case against novelty is made.)

[Explanation]

The silica fine particle according to the invention of claim 1 and the silica fine particle stated in the prior art are different from each other in its method for evaluating the sphericity, and both cannot be compared. However, since the silica fine particle stated in the prior art has high sphericity and is fine, the area ratio can be calculate in an approximate manner into the projected sectional shape as an ellipse. In addition, since the silica particle according to the claimed invention is also fine, the effect on the area ratio of the surface shape is extremely little. Accordingly, there is a high probability that if the sphericity of the silica fine particle stated in the prior art, in which the particle diameter ratio is 0.9, is measured by the area ratio recited in the claims, it would be encompassed within the range of the claimed invention. Therefore, the silica fine particle according to the invention of claim 1 is prima facie identical to the silica fine particle stated in the prior art.

[Case 13] Function or characteristics, etc. (Reasonable doubts) (Invention lacks novelty)

Description	Prior art																								
<p>Title of Invention</p> <p>Rubber composition for tires</p> <p>What is claimed is:</p> <p>[Claim 1]</p> <p>A rubber composition for tires which is superior in wear resistance, in which 30 to 60 weight parts of a carbon black having 70 to 123 m²/g in CTAB adsorption specific surface area and 110 to 155 ml/100g in DBP oil absorption amount is blended to 100 weight parts of at least one type of a rubber selected from natural rubber and diene based synthetic rubber.</p> <p>Overview of the description</p> <p>..... A carbon black with significantly fewer surface pores is used in the rubber composition for tires of the claimed invention, to improve the abrasion resistance.</p> <p>.....</p> <p>[Example]</p> <p>The following carbon black was used in the Example of the present application.</p> <table><tr><td>No</td><td>1</td><td>2</td><td>3</td></tr><tr><td>CTAB(m²/g)</td><td>72</td><td>96</td><td>105</td></tr><tr><td>DBP(ml/100g)</td><td>143</td><td>146</td><td>138</td></tr></table> <p>* CTAB adsorption specific surface area (CTAB: cetyltrimethylammonium bromide) ASTM D3765-80</p> <p>* DBP (dibutyl phthalate) JIS K6221</p>	No	1	2	3	CTAB(m ² /g)	72	96	105	DBP(ml/100g)	143	146	138	<p>Title of Invention</p> <p>High wear resistance carbon black</p> <p>Overview of the description</p> <p>..... The carbon black of the claimed invention is superior in wear resistance, since the number of pores in its surface is little.</p> <p>.....</p> <p>[Example]</p> <p>..... The nitrogen adsorption specific surface is (N₂SA) and DBP oil absorption amount of the carbon black as prepared were as follows.</p> <table><tr><td>No</td><td>1</td><td>2</td><td>3</td></tr><tr><td>N₂SA (m²/g)</td><td>99</td><td>125</td><td>138</td></tr><tr><td>DBP(ml/100g)</td><td>143</td><td>149</td><td>121</td></tr></table> <p>* N₂SA ASTM D3037-88</p> <p>* DBP JIS K6221</p> <p>45 weight parts of the above-mentioned carbon black was blended to 100 weight parts of the diene based synthetic rubber to prepare</p>	No	1	2	3	N ₂ SA (m ² /g)	99	125	138	DBP(ml/100g)	143	149	121
No	1	2	3																						
CTAB(m ² /g)	72	96	105																						
DBP(ml/100g)	143	146	138																						
No	1	2	3																						
N ₂ SA (m ² /g)	99	125	138																						
DBP(ml/100g)	143	149	121																						

a rubber composition, and a tire was manufactured using the same according to the conventional method. The wear resistance of these tires was measured under the following condition.

[Conclusion]

The invention of claim 1 lacks novelty. (A prima facie case against novelty is made.)

[Explanation]

The prior art does not state the value of CTAB adsorption specific surface area of carbon black.

Usually, the CTAB adsorption specific surface area indicates the effective specific surface area not including the surface pores on the carbon black. On the other hand, while the nitrogen absorption specific surface area indicates the total specific surface area including the surface pores on the carbon black. If the carbon black has a superior abrasion resistance and fewer surface pores, it can be considered that the values of CTAB adsorption specific surface area and nitrogen absorption specific surface area are at an almost identical level to each other. Accordingly, if the CTAB adsorption specific surface area of carbon black stated in the prior art is measured, there is a high probability that the value is encompassed within the range of the claimed invention. Therefore, the rubber composition according to the invention of claim 1 is prima facie identical to the rubber composition stated in the prior art.

[Case 14] Function or characteristics, etc. (Reasonable doubts) (Invention lacks novelty)

Description	Prior art
<p>Title of Invention</p> <p>Ethylene - propylene copolymer</p> <p>What is claimed is:</p> <p>[Claim 1]</p> <p>An ethylene-propylene copolymer wherein the polymerization degree is 100 to 300, ethylene content is 20 to 40 weight%, and drawdown property is 20 to 50 m/min.</p> <p>[The drawdown property means the winding speed of a ropy object at the time of cut-off when the winding speed of a winding roller is increased gradually while winding after the melted olefin resin heated to 200 °C is extruded in the shape of a rope at the constant speed of 1 mm/s from a die with 2 mm width and 5 mm length in aperture cross section, and then, the ropy object is passed through a feeding roller positioned above a tension detecting pulley positioned below the nozzle.]</p> <p>Overview of the description</p> <p>In order to obtain the ethylene - propylene copolymer whose drawdown property is 20 to 50 m/min or less, usually, an ethylene - propylene copolymer with 100 to 300 of polymerization degree and 20 to 40% of ethylene content is stirred in a reactor, the reactor is substituted with inert gas, and then, 5 to 10 mmol/kg of the peroxide is added to the resin and is reacted at 100 to 120 °C for about 5 to 7 minutes, while continuing to stir.</p>	<p>Title of Invention</p> <p>Ethylene - propylene copolymer</p> <p>Overview of the description</p> <p>[Example]</p> <p>The ethylene-propylene copolymer is obtained by adding 0.8 mmol peroxy carbonate to 100 g of the ethylene - propylene copolymer (with 200 in polymerization degree and 30 weight% of ethylene content) in a reactor, reacting them at 90 °C for 10 minutes while continuing to stir under the argon gas, and then stopping the reaction.</p>

[Conclusion]

The invention of claim 1 lacks novelty. (A prima facie case against novelty is made.)

[Explanation]

While the prior art does not state the drawdown property of the ethylene-propylene copolymer, the ethylene-propylene copolymer stated in the prior art is obtained by using the same starting ingredient as those in the claimed invention to prepare according to almost the same manufacturing step. Therefore, the ethylene-propylene copolymer according to the claimed invention is *prima facie* identical to the ethylene-propylene copolymer stated in the prior art.

[Measures of the applicant]

If it is explained in the written opinion and the like that the drawdown property of the ethylene-propylene copolymer stated in the prior art is not necessarily within the specific range of the present application while indicating the technical common knowledge at the time of filing the present application, and if the Examiner cannot reach a conviction that the ethylene-propylene copolymer according to the invention of claim 1 and the ethylene-propylene copolymer stated in the prior art are the same, the reason for refusal due to lack of novelty will be at least overcome.

if the correspondence made by the applicant asserting the following points is considered, and if the Examiner cannot reach a conviction that the invention according to claim 1 lacks novelty, the reason for refusal due to lack of novelty is overcome.

(1) Explanation that the method for manufacturing the ethylene-propylene copolymer stated in the prior art is different from the method of manufacturing stated in the detailed description of the invention in the present application in various conditions including the temperature for heating and the reaction time, and explain a reasonable reason indicating that it is indispensable to react at the various conditions including the temperature for heating and the reaction time stated in the description of the invention in the present application in order to manufacture the ethylene-propylene copolymer having the drawdown property as specified in the claimed invention.

(2) Explanation of a rational reason indicating that the ethylene-propylene copolymer stated in the prior art does not have the drawdown property as specified in the claimed invention.

[Case 15] Function or characteristics, etc. (Reasonable doubts) (Invention lacks novelty)

Description	Prior art
<p>Title of Invention</p> <p>Polyester film for magnetic recording medium</p>	<p>Title of Invention</p> <p>Polyester film for magnetic recording medium</p>
<p>[Claim 1]</p> <p>A polyester film for magnetic recording medium, containing 3 to 15 weight% of an inert particle and having 20 μm or less in thickness, wherein a ratio d/t of an average particle diameter d of a particle as contained and a thickness t of a substrate film is 0.01 to 0.04, and a relationship between a planar orientation coefficient N_s and an average refractive index n_a is:</p> $N_s \geq 1.53n_a - 2.33.$	
<p>Overview of the description</p> <p>..... The film which is met with the relationship of $N_s \geq 1.53n_a - 2.33$ has a high Young's modulus in height and width directions as 750 kg/mm^2 or more. When it is met with the above-mentioned relationship, the film has a superior electromagnetic conversion property of +2.0 dB or more, when used as a magnetic tape.</p>	<p>Overview of the description</p> <p>[Example]</p> <p>The un-stretched film of 180μm was obtained by the process that polyethylene terephthalate containing 10 weight% of titanium oxide whose average particle diameter is 0.2 μm was melted and extruded at 300 °C, and then rapidly cooled and solidified. This film was stretched at the temperature of 150 °C with 3.7 folds in both MD and TD, then treated with heat at 210°C for 10 seconds to obtain a oriented film having 6.5 μm in thickness.</p>
<p>[Example 1]</p> <p>..... When the Young's modulus of the polyethylene terephthalate film obtained in this way was measured, it was read as 850 kg/mm^2 in height directions and 750 kg/mm^2 in width direction, and the electromagnetic conversion property was read as +2.0 dB.</p>	<p>The Young's modulus of this film was 870 kg/mm^2 in the longitudinal direction and 900 kg/mm^2 in the transverse direction, and the electromagnetic conversion property was read as +3.0 dB.</p>

[Example 2]

..... When the Young's modulus of the polyethylene-2,6-terephthalate film obtained in this way is measured, it was read as 750 kg/mm² in the longitudinal direction and 870 kg/mm² in the transverse direction, and the electromagnetic conversion property was read as +2.2 dB.

[Conclusion]

The invention of claim 1 lacks novelty. (A prima facie case against novelty is made.)

[Explanation]

There is no statement in the prior art that the relationship of $N_s \geq 1.53n_a - 2.33$ with the planar orientation coefficient N_s and the average refractive index n_a is met. However, the detailed description of the invention in the specification of the present application states that the Young's modulus the longitudinal direction and the transverse direction and the electromagnetic conversion property are improved as an effect obtained by meeting with the relationship and its specific values are the same level with the values of Young's modulus and the electromagnetic conversion property of the film stated in the prior art. Therefore, the reason to double to be prima facie, that the film according to the claimed invention is identical to the film stated in the prior art, which provides the equivalent effect with an advantageous effect by meeting with the above-mentioned relationship between the planar orientation coefficient N_s and the average refractive index n_a , is realized.

[Measures of the applicant]

At least the reason for refusal due to lack of novelty is overcome by clarifying in a certificate of experimental results that a oriented film based on the condition for manufacturing in the Example of the prior art is prepared, the planar coefficient and the average refractive index are measured and these values are not met with the relationship as specified in the invention of claim 1 of the present application.

Alternatively, where a conviction, that the film according to the invention of claim 1 and the film stated in the prior art are identical each other, cannot be obtained by the Examiner by specifically clarifying in the written opinion instead of the certificate of experimental results that the planar orientation coefficient N_s and the average refractive index n_a of the stretched film as prepared based on the condition for manufacturing in the Example of the prior art are not met with the relationship as specified in the invention of claim 1, the reason for refusal is overcome.

[Case 16] Function or characteristics, etc. (Reasonable doubts) (Invention lacks novelty)

Description	Prior arts																				
<p>Title of Invention</p> <p>Polyethylene-2,6-naphthalate film</p> <p>What is claimed is:</p> <p>[Claim 1]</p> <p>A polyethylene-2,6-naphthalate film, wherein number of protrusions having h (mm) in height formed on the surface of the film is within a range of:</p> <p>1≤h<100: 1,000 to 20,000 numbers/mm²</p> <p>100≤h: 0 to 50 numbers/mm²</p> <p>and, a Roughness Average Ra of the film is 2 to 10 nm.</p> <p>Overview of the description</p> <p>..... The film in which the relationship of 1≤h<100: 1,000 to 20,000 numbers/mm², 100≤h: 0 to 50 numbers/mm² is met is good in handling as the base film and the transport stability when it is used as a magnetic tape.</p> <p>..... In addition, the film whose surface roughness Ra is within the range of 2 to 10 nm is good in handling as the base film and the transport stability when it is used as a magnetic tape. ...</p> <p>[Examples]</p> <table><tr><th></th><th>Example 1</th><th>Example 2</th><th>Comparative example 1</th><th>Comparative example 2</th></tr><tr><td>Number of protrusions on the surface 1≤h<100 100≤h</td><td>15,325 10</td><td>3,840 14</td><td>22,389 120</td><td>21,309 21</td></tr><tr><td>Ra(nm)</td><td>8</td><td>6</td><td>29</td><td>12</td></tr><tr><td>Running durability</td><td>○</td><td>○</td><td>×</td><td>△</td></tr></table>		Example 1	Example 2	Comparative example 1	Comparative example 2	Number of protrusions on the surface 1≤h<100 100≤h	15,325 10	3,840 14	22,389 120	21,309 21	Ra(nm)	8	6	29	12	Running durability	○	○	×	△	<p>Title of Invention</p> <p>Film for magnetic recording medium</p> <p>What is claimed is:</p> <p>[Claim 1]</p> <p>A film for magnetic recording medium, wherein ..., and a Roughness Average Ra is 3 to 8 nm.</p> <p>Overview of the description</p> <p>..... The film which is met with the surface roughness of the claimed invention is good in handling as the film and the transport stability when it is used as a magnetic tape. In addition, even where the range of the surface roughness is met with those in the scope of the claimed invention, it is preferable not to contain a rough and large protrusion since the remarkably high protrusion will have a negative effect on the running when it is used as a magnetic tape.</p> <p>[Example]</p> <p>..... was oriented and treated with heat under the condition of to manufacture a polyethylene-2,6-naphthalate film.</p> <p>The Roughness Average Ra of this film was 5 nm. The transport stability when used as the magnetic tape was extremely superior in comparison with</p>
	Example 1	Example 2	Comparative example 1	Comparative example 2																	
Number of protrusions on the surface 1≤h<100 100≤h	15,325 10	3,840 14	22,389 120	21,309 21																	
Ra(nm)	8	6	29	12																	
Running durability	○	○	×	△																	

those in the conventional tape, and the winding was also good when manufacturing the tape.

[Conclusion]

The invention of claim 1 lacks novelty. (A prima facie case against novelty is made.)

[Explanation]

The prior art does not state that a relationship of a height and numbers of protrusions are met with the range of $1 \leq h < 100:1,000 \sim 20,000$ numbers/mm² and $100 \leq h$: 0 to 50 numbers/mm². According to the detailed description of the invention in the present application, the effect obtained by specifying the relationship between the height and numbers of the protrusion is the same as the effect obtained by specifying the range of the surface roughness (improving the handling for film and the transport stability), and an example where both conditions of the relationship between the height and the numbers of the protrusion and of the range of the surface roughness are not met is only listed as the comparative example for the present application. Accordingly, the single effect obtained by specifying the relationship between the height and the numbers of the protrusion cannot be confirmed.

On the other hand, since the prior art also states that the transport stability is badly affected when there is a remarkable height of the protrusion even if the condition for the range of the surface roughness is met, the problem to be solved that the transport stability is improved and the means for solving the problem to be necessary to control both of the surface roughness and the rough and large protrusion have been recognized. In addition, the film stated in the prior art provides the effect relating to the transport stability and the handling for tape. Therefore, since it cannot be recognized that there is substantial difference between the problem to be solved and the effect by specifying the relationship between the height and the numbers of the protrusion and the problem to be solved and the effect of the film stated in the prior art, the reason to doubt to be prima facie that the film according to the claimed invention is identical to the film stated in the prior art is realized.

[Measures of the applicant]

At least the reason for refusal due to lack of novelty is overcome by clarifying in a certificate of experimental results that a magnetic recording film based on the condition for manufacturing in the Example of the prior art is prepared and the relationship between the height and the numbers of the protrusion is out of the range specified in the invention according to claim 1 of the present application.

Alternatively, where a conviction that the film according to the invention of claim 1 and the film stated in the prior art are identical each other cannot be obtained by the Examiner by specifically clarifying in the written opinion instead of the certificate of experimental results

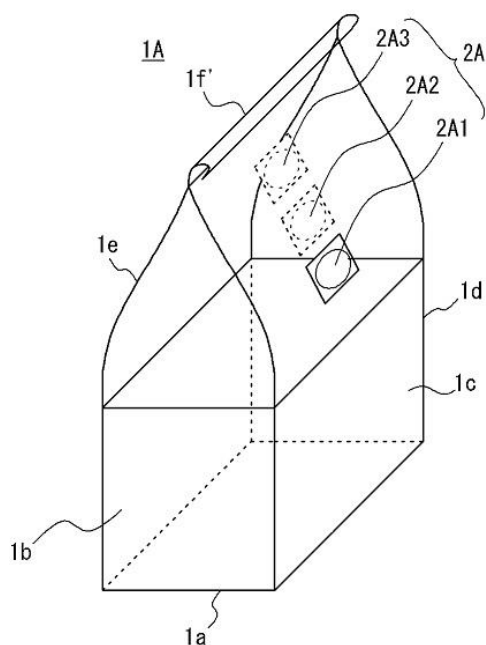
that the relationship between the height and the number of the protrusions of the magnetic recording film as prepared based on the condition for manufacturing in the Example of the prior art is out of the range specified in the invention of claim 1.

[Case 17] Limitation of use (Invention lacks/has novelty)

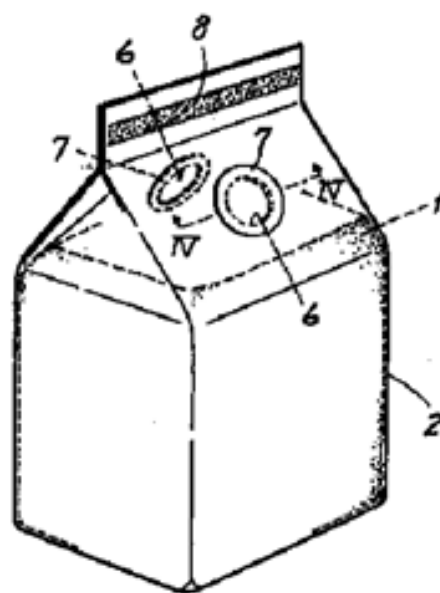
Description	Prior art
Title of Invention	Title of Invention
Method for cultivating shiitake mushroom and container for cultivating shiitake mushroom	Container for artificial cultivating shiitake mushroom
What is claimed is:	
[Claim 1]	
A method for cultivating shiitake mushroom through predetermined steps in which a cultivating container comprising a filter, medium cultures are filled in the cultivating container, comprising:	
preparing a plurality types of cultivating containers for which the filters are placed in respective distance from surface of the medium cultures as the cultivating container;	
selecting the filter placed far from the surface of the medium cultures as the cultivating container under a humid cultivating environment; and	
selecting the filter placed near from the surface of the medium cultures as the cultivating container under a dry cultivating environment.	
[Claim 2]	[Examples]
The container for cultivating shiitake mushroom used in the method for cultivating shiitake mushroom of claim 1, the container comprising a bottom (1a) and side walls (1b-1e) founded having a predetermined height, upper ends of the side walls being opened,	The container used for artificial cultivation of shiitake mushroom utilizes a square-shaped polypropylene film container (2) whose the base surface is 130 mm square and height is 300 mm. Such bag container has respective holes of diameter 10 mm that are formed with a blanking punch as an air flowing hole (6) at upper surfaces in two side walls facing each other. Circular batches (7) are covered for each hole, the circular batches are formed by punching a breathable and water repellent film at 20 mm diameter constituted of
wherein side walls are segmented into a medium cultures filling part in which the medium cultures are filled from the bottom	

to the predetermined height, and a space part in which an upper part of the medium cultures filling part serves as a space, and

in at least one side wall of the side walls, an air hole is punched upward in a predetermined distance from the medium cultures filling part to the opening, and an opening hole of the air hole is blocked with a filter (2A).



drawn porous PTFE film, and the holes are covered by thermocompression bonding at 160°C using a cylindrical heating pressure fixture along the hole at peripheral edge of the batches. Moreover, the mark is set at the height for which the medium cultures are filled in lower part of the bag container.



[Conclusion]

The invention of claim 1 has novelty.

The invention of claim 2 lacks novelty.

[Explanation]

- Claim 1

The invention of claim 1 is not identical to the cited invention in the terms of the claimed method for cultivating shiitake mushroom. There is difference between the invention of claim 1 and the cited invention, thus, the invention of claim 1 has novelty.

- Claim 2

The "container for cultivating shiitake mushroom" claimed in claim 2 has the structure specified in that "the container comprising a bottom and side walls founded having a predetermined height, upper ends of the side walls are opened, wherein side walls are

segmented into a medium cultures filling part in which the medium cultures are filled from the bottom to the predetermined height, and a space part in which an upper part of the medium cultures filling part serves as a space, and in at least one side wall of the side walls, an air hole is punched upward in a predetermined distance from the medium cultures filling part to the opening , and an opening hole of the air hole is blocked with a filter."

Further the "container for cultivating shiitake mushroom" of the invention of claim 2 is limited to use for the "method of claim 1 for cultivating shiitake mushroom." However, it cannot be constructed that the statement of this limitation of use means the structure suitable for this use based on the specifications and drawings, and the common general knowledge as filing of application. Moreover, the invention of claim 2 does not fall under invention of use. Therefore the statement of this limitation of use does not mean that the "container for cultivating shiitake mushroom" of claim 2 is further limited.

The cited invention has the matters specifying the invention of "the container comprising a bottom and side walls founded having a predetermined height, upper ends of the side walls are opened, wherein side walls are segmented into a medium cultures filling part in which the medium cultures are filled from the bottom to the predetermined height, and a space part in which an upper part of the medium cultures filling part serves as a space, and in at least one side wall of the side walls, an air hole is punched upward in a predetermined distance from the medium cultures filling part to the opening , and an opening hole of the air hole is blocked with a filter." Thus, cited invention is identical to the invention of claim 2.

Therefore, there is not difference between the invention of claim 2 and the cited invention as the container for cultivating shiitake mushroom, thus, the invention of claim 2 lacs novelty.

[Measures of the applicant]

With respect to claim 2, at least the reason for rejection for lack of novelty will be overcome by specifying a new invention as a set of container for cultivating shiitake mushroom consisting of containers in which filters are provided at different positions in terms of height from the surface of the medium cultures.

[Case 18] Limitation of use (Invention lacks novelty)

Description	Prior art
<p>Title of Invention</p> <p>Floor face curing material for asbestos removing work</p>	<p>Title of Invention</p> <p>Waterproof construction method</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A floor face curing material for asbestos removing work, comprising a waterproof sheet defined in A6008 of Japanese Industrial Standards, and which can follow up the movement of a substrate.</p>	
<p>Overview of the description</p> <p>[Conventional example]</p> <p>In the treatment of asbestos, there are methods of using a lot of amounts of an aqueous asbestos scattering inhibitor and of spraying ultrahigh pressure water on a lining material containing asbestos to remove it.</p> <p>In order to prevent to spread asbestos fiber out of a working area, a resin sheet and the like is installed on ceiling, wall and floor as a curing material.</p> <p>The resin sheet as the curing material for the floor surface may be damaged by the working for removing within the working area.</p> <p>In the treatment for asbestos using a lot of water, the contaminated water containing the asbestos fiber may be leaked out of the working area, if the resin sheet of the curing material for the floor surface is damaged.</p>	<p>Overview of the description</p> <p>[Solution for the problem to be solved]</p> <p>In the waterproof construction method according to the present invention, a waterproof sheet following up the deformation of the substrate surface is used. The waterproof function of the waterproof sheet is not lost even for the rapid change such as cracking on the substrate, within the range of elongating the waterproof sheet.</p> <p>[Mode for carrying out the invention]</p> <p>Here, as the waterproof sheet, a vulcanized rubber comprising ethylene propylene rubber or butyl rubber as a main raw material can be used, and specifically, those which is generally well-known according to JIS standard (A6008-1997) and the like can be used.</p>
<p>[Example]</p>	

A synthetic polymer roofing sheet JIS A 6008, which is a waterproof sheet defined in Japanese Industrial Standard (JIS), is used as the floor surface curing material for asbestos removing work according to the present invention.

...

The above-mentioned waterproof sheet has a superior durability and follow up the movement of the substrate, and would be not damaged by the shock and the like from the outside of the asbestos removing work.

[Conclusion]

The invention of claim 1 lacks novelty.

[Explanation]

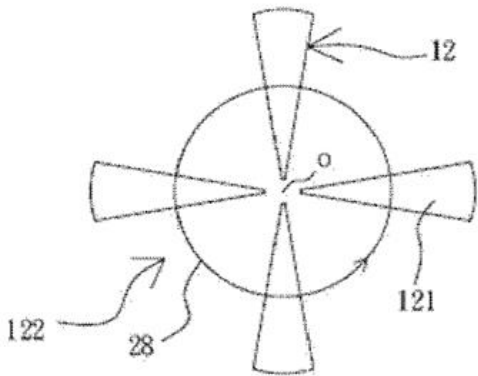
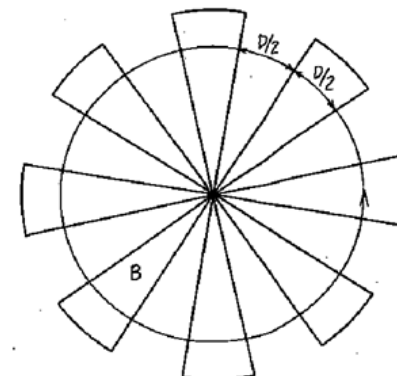
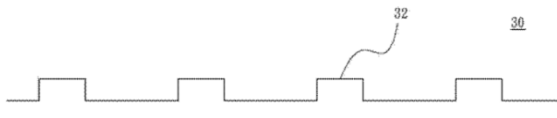
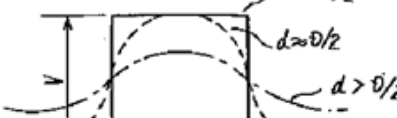
The "waterproof sheet" according to the invention of claim 1 is limited in "a floor face curing material for asbestos removing work" as a use. However, even in consideration of the statement of the description and the drawings and the common general knowledge at the time of filing the present application, the statement of such a limitation of use cannot be construed to mean a structure and the like which is specifically suitable for its use. In addition, the invention according to claim 1 does not also constitute the use invention. Therefore, the statement of such a limitation of use does not have any meanings specifying the "waterproof sheet" recited in claim 1.

In addition, the invention according to claim 1 and the waterproof sheet stated in the prior art are not different from each other except the limitation of use as the "floor face curing material for asbestos removing work".

Hence, since it cannot be said that the invention according to claim 1 is different from the waterproof sheet stated in the prior art in its structure and the like, it cannot be concluded that both are the distinct inventions.

Therefore, there is no difference between the invention according to claim 1 and the invention stated in the prior art, and the invention according to claim 1 does not have novelty.

[Case 19] Limitation of use (Invention lacks novelty)

Description	Prior art
Title of Invention	Title of Invention
Reference pattern for alignment	Reference pattern for focusing
What is claimed is:	
[Claim 1]	
<p>A reference pattern for alignment in which a plurality of fan-shaped marks are formed radially at even intervals on a base plate.</p>	
Overview of the description	Overview of the description
<p>A reflected electron is detected while an electron beam is scanned around a reference pattern on circumference of a circle as shown in Fig. 1. As shown in Fig. 2, the alignment is performed between a center of the reference pattern and scanned center of the electron beam by adjusting the position of the electron beam such as the pulse width of reflected electron strength is a constant value.</p>	<p>A reflected electron is detected while an electron beam is scanned around a reference pattern on circumference of a circle as shown in Fig. 1. As shown in Fig. 2, the focusing the electron beam is performed by adjusting the focus point of the electron beam such as the pulse shape of reflected electron strength is a high contrast.</p>
Drawing	Drawing
	
Figure 1	Figure 1
	
Figure 2	Figure 2

[Conclusion]

The invention of claim 1 lacks novelty.

[Explanation]

The "reference pattern" of the invention of claim 1 is limited to use for "alignment". However, it cannot be constructed that the statement of this limitation of use for "alignment" means the structure suitable for this use based on the specifications and drawings, and the common general knowledge as filing of application. Moreover, the invention of claim 1 does not fall under invention of use. Therefore, the statement of this limitation of use does not mean to specify the "reference pattern" of the invention of claim 1.

Also, the invention of claim 1 and the cited invention have commonality except for this limitation of use.

As such, it cannot be said that the invention of claim 1 and the cited invention have different structures. Thus, both cannot be regarded as different inventions.

Therefore, there is no difference between the reference pattern of the invention of claim 1 and the reference pattern for "focusing" of the cited invention. Thus, the invention of claim 1 lacks novelty.

[Measures of the applicant]

The invention of claim 1 can be distinguished from the cited invention by incorporating the limitation reciting that the width of fan-shaped mark and the width of adjacent mark are different. Thus, at least the reason for rejection for lack of novelty will be overcome.

[Case 20] Limitation of use (Invention lacks/has novelty)

Description	Prior art
<p>Title of Invention</p> <p>Speaker for wall surface reflections</p>	<p>Title of Invention</p> <p>Speaker</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A speaker for wall surface reflections comprising of:</p> <p>a cabinet having an opening at a rear part;</p> <p>and</p> <p>a speaker unit placed in the opening.</p> <p>[Claim 2]</p> <p>A speaker for wall surface reflections comprising of:</p> <p>a cabinet having an opening only at a rear part; and</p> <p>a speaker unit placed in the opening.</p>	
<p>Overview of the description</p> <p>A conventional speaker has an opening at a front part (in the direction toward user) of a cabinet, and emits sounds by placing a speaker unit in the opening. For such structure, the speaker unit placed at the front part of the cabinet restricts the design.</p> <p>In the present invention, the opening is provided at the rear part of the cabinet. By placing such speaker by the wall, the sound wave emitted from the speaker unit is reflected on the wall surface and reaches to a user. Thereby, since it is unnecessary to provide the speaker unit at the front part of the cabinet, the front part of the cabinet is enabled to be designed freely.</p>	<p>Overview of the description</p> <p>The cited document discloses that the cabinet has the openings at both front and rear parts, and the speaker units are placed in each opening.</p>

[Conclusion]

The invention of claim 1 lacks novelty.

The invention of claim 2 has novelty.

[Explanation]

- Claim 1

The "speaker" of invention of claim 1 is limited to use for "wall surface reflections." However, it cannot be constructed that the statement of this limitation of use means the structure suitable for this use based on the specifications and drawings, and the common general technical knowledge as filing of application. Because, when the speaker is placed indoors and with facing the wall surface, the sound wave emitted from the speaker is reflected on the wall surface in general. Moreover, the invention of claim 1 does not fall under invention of use. Therefore the statement of this limitation of use does not mean to specify the "speaker" of the invention of claim 1.

Also, the invention of claim 1 and the cited invention have commonality except for this limitation of use.

As such, it cannot be said it is different between the "speakers" of the invention of claim 1 and the cited invention. Thus, both cannot be regarded as different inventions.

Therefore, there is no difference between the invention of claim 1 and the cited invention. Thus, the invention of claim 1 lacks novelty.

- Claim 2

Claim 2 states that the opening and speaker unit are provided only on the rear part of the cabinet. Thus, the invention of claim 2 is different from the cited invention in terms of the above.

Therefore, there is difference between the invention of claim 2 and the cited invention. The invention of claim 2 has novelty.

[Case 21] Subcombination (Invention lacks/has novelty)

Description	Prior art
<p>Title of Invention</p> <p>Ink cartridge</p>	<p>Title of Invention</p> <p>Ink cartridge</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>An ink supply system comprising:</p> <p>(a) an ink cartridge for storing ink and a printer device having an cartridge attachment part to which an ink cartridge is attached removably, wherein</p> <p>(b) the cartridge attachment part has a wall part forming an inserting space in which the ink cartridge is inserted and a first contact point provided in a side wall part along a direction in which the ink cartridge is inserted in the wall part,</p> <p>(c) the ink cartridge is provided on one side wall along the inserted direction, and has a second contact point contacting with the first contact point to conduct an attachment completion state to the cartridge attachment part,</p> <p>(d) an elastic body is provided for biasing the ink cartridge to the wall part that forms the inserting space of the cartridge attachment part in the inserting space,</p> <p>(e) in the inserting space, the ink cartridge is configured to take a first posture in the attachment completion state, and a second posture in which the ink cartridge is leaned toward the first posture by biasing force of the elastic body in an attachment intermediate state prior to the attachment completion state,</p> <p>(f) the second contact body, when the ink cartridge is in the second posture, is provided in a location far from the side wall comparing</p>	

to in the first posture.

[Claim 2]

An ink cartridge of the ink supply system according to claim 1 having,

(g) a part in which the second contact point is provided on one side surface of an end point in the inserted direction, and in which a force is applied, by the elastic body, to a position opposite to the one side surface of the end part in the inserted direction when in the attachment intermediate state prior to the attachment completion state.

Overview of the description

... When the ink cartridge 20 is inserted in an insertion space 30 formed in the cartridge attaching part 5 by pressing a part to be pressed 56 provided at the base end part of the ink cartridge 20, the lower end part of the leading end part is biased toward the base end part by a spring 34 provided on the cartridge attaching part 5 in the state in which the ink cartridge 20 has not been completely mounted in the cartridge attaching part 5.

Accordingly, the ink cartridge 20 is rotated with a moment generated by a force of pressing the part to be pressed 56 and an biasing force of the spring 34, then, inclined such that the portion located closer to the leading end goes more downward, and the second contact point 54a provided on the upper surface at the leading end part of the ink cartridge 20 is separated from the first contact point 35a of a connector 35 provided on the upper wall part 31b of the cartridge attaching part 5. ...

Overview of the description

... The plate-like slide plates 53 along the vertical direction are biased frontward by the spring (not shown) at each of the attachment parts 38a-38d respectively at the front position of the rear wall part 36c in the rear part on a base plate 35, and attached slidably in the inserting and removing direction (front and rear direction) of the ink cartridge 14. That is, the slide plates 53, when the ink cartridge 14 is attached to the holder body 34, moves backward by being pushed by the leading end surface 14b (see Fig. 6) for which the cartridge 14 is inserted earliest of each side wall of the ink cartridge 14, and when the ink cartridge 14 is removed, moves frontward by the biasing force of the spring. ...

... When the ink cartridge 14 is pushed into the holder body 34 as well as the pin part 70 enters the latch groove 62, the pin part 70 moves, by the biasing force of the second spring 67, along the uneven part 76 positioned in the left part of the first groove 62a. Moreover, the first groove 62a has the rear-down rear inclined surface 73. Thus, the pin part 70 pushes gradually the ink cartridge 14

upward in the vertical direction (up and down direction), and moves forward within the first groove 62a. ...

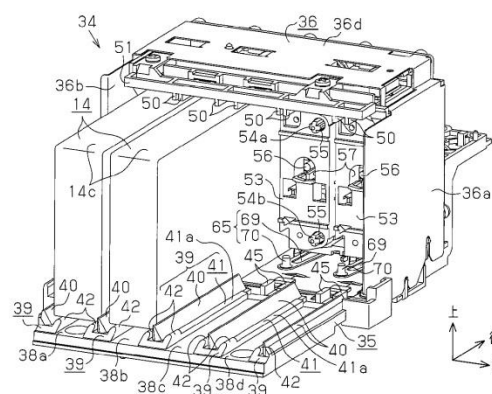
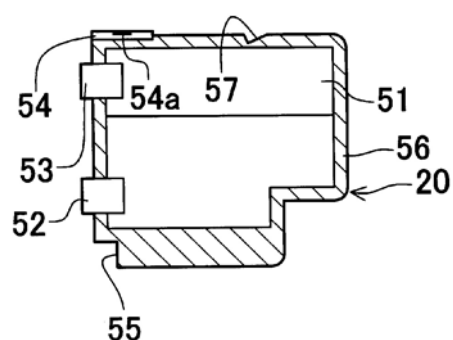
... With respect to the ink cartridge 14, the aligning pins 54a, 54b are inserted respectively into the aligning holes 59a, 59b formed on the leading end surface 14b under the condition in which longitudinal direction dislocation is restrained by the segmenting part 40 and the aligning part 45. ...

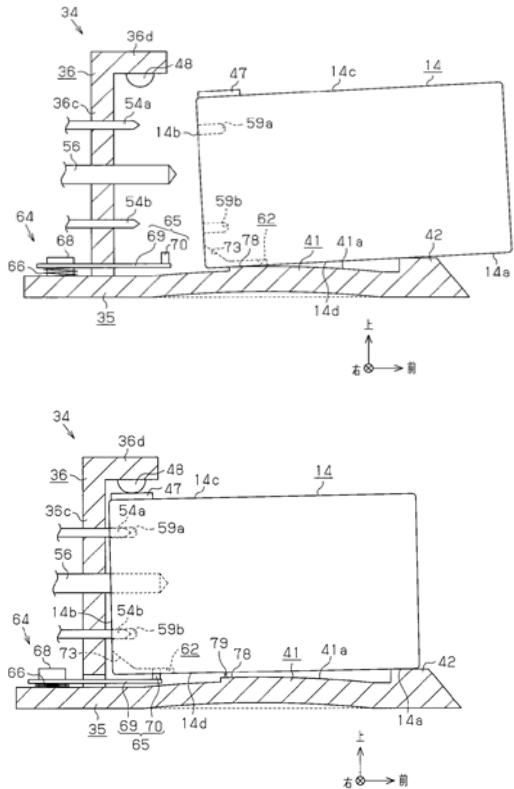
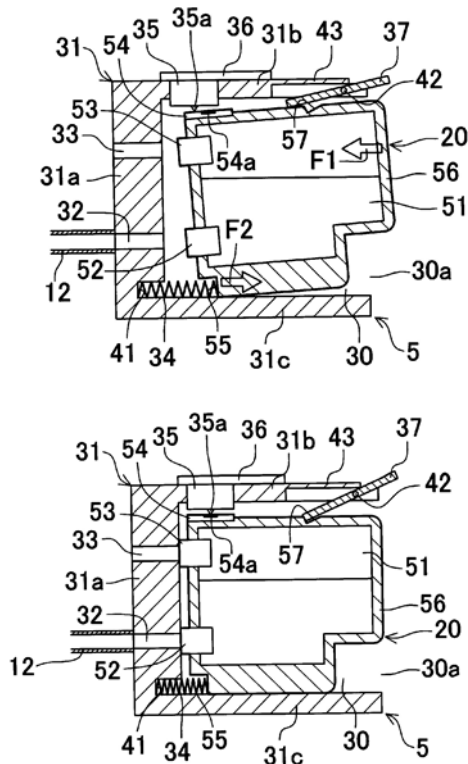
In this case, the ink cartridge 14 is inserted with being inclined such as the leading end (rear) inserted prior to the rear end (front) is positioned lower than the rear end. ...

... When the ink cartridge 14 is inserted as such, as the lock mechanism 64, the pin part 70 enters the latch groove 62, and biases the ink cartridge 14 by the biasing force of the first spring 66. ...

... The ink cartridge 14 rotates counterclockwise shown in figure by the pushing force based on the biasing force of the first spring 66 by the pin part 70, and the end terminal 47 provided on the upper side surface 14c is pushed toward the connecting part 48. ...

Drawing





[Conclusion]

The invention of claim 1 has novelty.

The invention of claim 2 lacks novelty.

[Explanation]

- Claim 1

The ink supply system of the invention of claim 1 has the configuration (e), thus has the difference from the cited invention.

Therefore, there is difference between the invention of claim 1 and the cited invention. The invention of claim 1 has novelty.

- Claim 2

The ink cartridge of the invention of claim 2 is dependent on the ink supply system of the invention of claim 1. The configuration of the ink cartridge is specified by the configuration of printer body constituting on the ink supply system and the operation in the time of attaching to the printer body as well as the ink cartridge. Respective configurations (a) - (e) specify the structures and functionalities of the ink cartridge as below.

The configuration (a) specifies that the ink cartridge is to store the ink.

The configuration (b) specifies the structure of the printer device, and does not specify the structures or functionalities of the ink cartridge.

The configuration (c) specifies the position of the second contact point of the cartridge in association with the first contact point of the printer body.

The configuration (d) specifies the structure of the printer device, and does not specify the structures or functionalities of the ink cartridge.

The configuration (e) specifies the posture relative to the printer body of the ink cartridge, and clarify the configuration of the ink supply system in which the printer body and the ink cartridge cooperate, and the second posture in the attachment intermediate state of the cartridge is inclined against the first posture in the attachment completion state by biasing force of the elastic body provided in the wall part of the printer body. However, the configuration (e) does not specify the configuration of the cartridge itself to take the second posture. Therefore the configuration (e) does not specify the structures or functionalities of the ink cartridge.

The configuration (f) specifies the position of the second contact point of the ink cartridge by comparing the first posture and the second posture.

The configuration (g) specifies the configuration of the ink cartridge that has a part in which the force can be applied by the elastic body of the printer device in the attachment intermediate state in the position opposite to one side surface in which the second contact point of the ink cartridge is provided.

Therefore, the configurations (a), (c), (f) and (g) only specify the structures or functionalities of the ink cartridge in claim 2.

Comparing the invention of claim and the cited invention, there is difference caused by descriptions and expressions, but no difference in structures or functionalities except for the configurations (a), (c), (f) and (g). Then, the configurations (a), (c), (f) and (g) are reviewed as below.

The ink cartridge of the cited invention is to store the ink. Thus, the configuration (a) of the invention of claim 2 is identical to that of the cited invention. The "end terminal 47" provided at the "ink cartridge 14" of the cited invention corresponds to the "second contact point" of the invention of claim 2, and the "inclined surface 73" of the cited invention corresponds to the "part in which the force is applied by the elastic body". Thus, the configurations (c), (f) and (g) of the invention of claim 2 are identical to those of the cited invention.

Therefore, there is no difference between the invention of claim 2 and the cited invention. The invention of claim 2 lacks novelty.

[Case 22] Subcombination (Invention lacks novelty)

Description	Prior art
<p>Title of Invention</p> <p>Toner cartridge</p> <p>What is claimed is:</p> <p>[Claim 1]</p> <p>A toner cartridge used for an image-forming device, the image-forming device feeding toner to a developing device using the toner cartridge, controlling a toner feeding operation from the toner cartridge to the developing device based on information on environments stored in the toner cartridge, and forming an image by an electrographic,</p> <p>the toner cartridge having a rewritable memory in which information on the past use environments.</p>	<p>Title of Invention</p> <p>Toner cartridge</p> <p>[Cited invention]</p> <p>A toner cartridge removable to an image-forming device and, having at least a photoreceptor, a developing means for which toner is fed from the toner cartridge and a detecting means for detecting humidity around the developing means,</p> <p>the toner cartridge having a rewritable storing means in which predetermined time information of the image-forming device and information on the humidity around the developing means at a plurality of times are stored.</p>

[Conclusion]

The invention of claim 1 lacks novelty.

[Explanation]

Claim 1 states the matter on other subcombination of "controls a toner feeding operation from the toner cartridge to the developing device based on information on environments stored in the toner cartridge". However, the matter relates to the usage of environment information at the image-forming device after reading, by the image-forming device, the environment information stored in the memory, and does not specify the structures or functionalities of the cartridge.

Comparing the invention of claim and the cited invention, there is difference caused by descriptions and expressions for the above matter on other subcombination, but no difference in structures or functionalities.

Therefore, there is no difference else between the invention of claim 1 and the cited invention. The invention of claim 1 lacks novelty.

[Case 23] Subcombination (Invention lacks/has novelty)

Description	Prior art
Title of Invention	Title of Invention
Navigation system, mobile communication terminal and server	Mobile information terminal
What is claimed is:	
[Claim 1]	
A navigation system comprising a mobile communication terminal and a server capable of communicating each other, wherein	
the mobile communication terminal comprising a position measuring means for measuring a current position at a predetermined time interval, a terminal side communicating means for transmitting the current position and receiving image information for route guide, and a displaying means for displaying the received image information,	
the server comprising a map database, a server side communicating means for receiving the current position and transmitting the image information, and an image generating means for generating the image information, and wherein	
the image generating means generates the image information by performing (A) processing for map information stored in the map database based on the received current position.	
(Note: the technical feature that the server comprises the image generating means for performing (A) processing has novelty.)	
[Claim 2]	
The mobile communication terminal used for the navigation system of claim 1 comprising:	

a position measuring means for measuring a current position at a predetermined time interval; a terminal side communicating means for transmitting the current position to the server and receiving from the server image information for route guide generated by performing (A) processing for map information based on the current position; and a displaying means for displaying the received image information.

[Claim 3]

The mobile communication terminal of claim 2, wherein the predetermined time interval is a time interval set by the server, and the server transmits the time interval that is set variably based on the current position received from the mobile communication terminal in conjunction with the image information, and the position measuring means measures a current position at the set variably time interval.

Overview of the description

Problem to be solved by the invention

To provide route guide information understandable for the user even in a mobile communication terminal without any expensive graphic processing function and massive amount and current map data.

[Description of the Best Example]

[Example 1]

The server receives the current position from the mobile communication terminal, and transmits to the mobile communication terminal the image information comprising the image data generated by performing (A) processing for the map information. ...

The mobile communication terminal comprises the GPS receiver, and upon a

Overview of the description

It relates to a mobile information terminal capable of transmitting current information to a server, receiving map information from the server, and displaying the map information on a display. ... this mobile information terminal comprises a GPS receiver, measures the current position per predetermined time. ... the measured current position information is transmitted over a communication line. ... at the server, map information including the current position is extracted from a current map database provided, image data is serially generated turning upward in a traveling direction on center of the current information, and the data is transmitted to the mobile information terminal over the communication line. ... at the mobile information terminal, a

navigation mode being selected by user, measures the current position at a predetermined time interval. The measured current position is transmitted to the server, and the image data is received at the server for route guide and displayed to user. ...

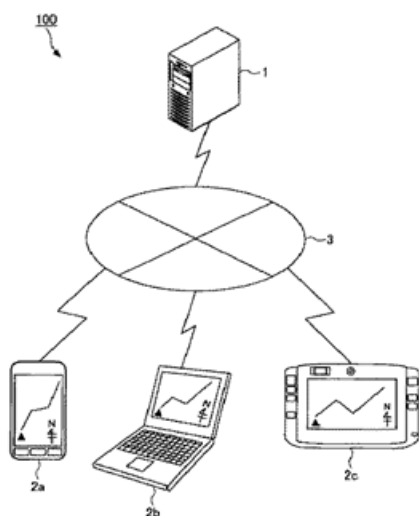
[Example 2]

In embodiment 2, the functionality for changing the frequency for measuring the current position is provided for saving power consumption in addition to embodiment 1. The server determines whether or not a demand frequency is high to update display of the route guide information such as map based on the received current position, for example by determining whether in the urban area or mountain area, and changes the time interval at which the mobile communication terminal measures the current position. ...

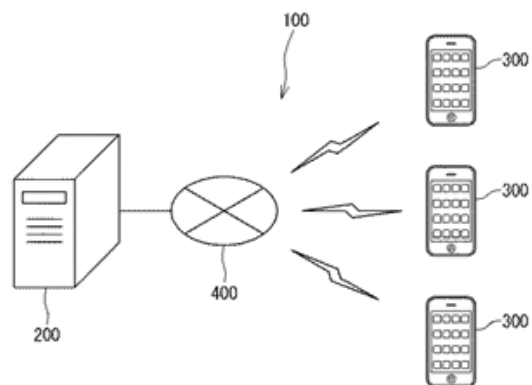
The mobile communication terminal receives the GPS signal from the GPS satellite at the time interval specified by the server and measures the current position, ... upon received a new time interval, measures the current position at the current time interval immediately. ...

map around the current position is provided to the user by displaying the received image data without change. Also, it is capable to receive and display the image data in which the route information to the destination is superimposed by registering the destination information in the server.

Drawing



Drawing



[Conclusion]

The invention of claim 1 has novelty.

The invention of claim 2 lacks novelty.

The invention of claim 3 has novelty.

[Explanation]

- Claim 1

The technical feature that the server comprises the image generating means for performing (A) processing has novelty. Thus, the invention of claim 1 has novelty.

- Claim 2

Claim 2 related to the mobile communication terminal states the matter of the server as another subcombination of "receiving from the server the image information for route guide generated by performing (A) processing for map information based on the current position." However, the map information is generated at the server, and the characteristic function is with the server for generating the image information. That is, the matter of other subcombination does not specify the structures, functionalities and so on of the mobile communication terminal.

Comparing the invention of claim 2 and the cited invention, there is difference caused by descriptions and expressions, but no difference in structures, functionalities and so on.

Therefore, there is no difference other than the above between the invention of claim 2 and the cited invention. The invention of claim 2 lacks novelty.

- Claim 3

Claim 3 related to the mobile communication terminal states the matter of the server as another subcombination that "the predetermined time interval is a time interval set by the server, and the server transmits the time interval that is set variably based on the current position

received from the mobile communication terminal in conjunction with the image information."

In the above statement of the server as another subcombination, the matter that the time interval is set variably based on the current position received from the mobile communication terminal is completed with the server, and therefore the matter does not specify the structures, functionalities and so on of the mobile communication terminal.

The matter, on the other hand, that the time interval that is set variably is transmitted to the mobile communication terminal is specified the structures, functionalities and so on of the mobile communication terminal in terms of the fact that the time interval for measuring a current position is set variably by the server. Accordingly, the examiner specifies the invention of claim 3 on the premise that the mobile communication terminal is specified as such.

The claimed invention 3 of the mobile communication terminal has novelty since it is different from the invention of the cited reference describing that the mobile communication terminal measures the current position at a predetermined time interval not set by the server.

[Measures of the applicant]

For example, at least the reason for rejection due to lack of novelty is overcome by incorporating limitation of the matters specifying the invention recited in claim 3 into the invention of claim 2.

- Claim 2

The mobile communication terminal used for the navigation system of claim 1 comprising:

a position measuring means for measuring a current position at a predetermined time interval set by the server; a terminal side communicating means for receiving from the sever image information for route guide generated by performing (A) processing for map information based on the current position after transmitting the current position to the server and for receiving from the server a time interval that is set variably based on the current position; and a displaying means for displaying the received image information.

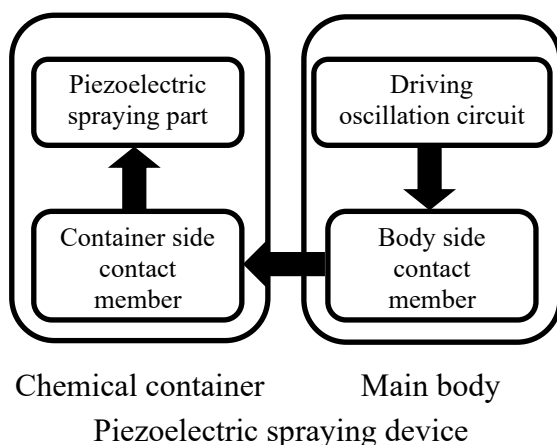
(Remarks)

However, the technical features of "receiving the image information for route guide generated by performing (A) processing for map information based on the current position" and of "setting the time interval variably based on the current position" cannot be recognized as difference. As such, it is noted that if the documents are found stating "the navigation system in which the server set the time interval variably and the mobile communication terminal measures the current position at the time interval", the invention of claim 2 after amendment not necessarily to involve the patentability.

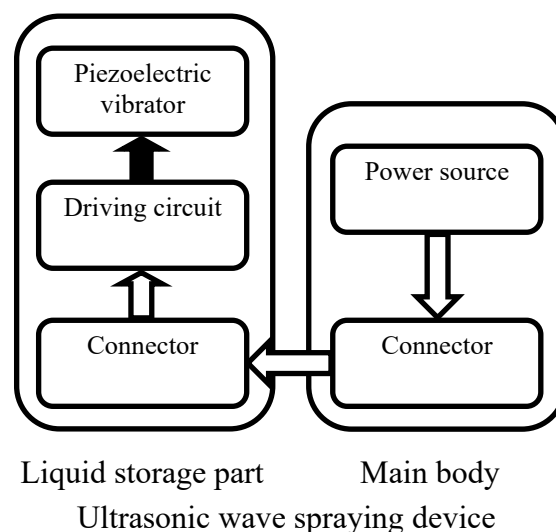
[Case 24] Subcombination (Invention has novelty)

Description	Prior art
<p>Title of Invention</p> <p>Chemical container</p>	<p>Title of Invention</p> <p>Ultrasonic wave spraying device</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A chemical container comprising a piezoelectric spraying part to which an electrical signal is supplied via a container side contact member in mounting,</p> <p>the chemical container being removably mounted in a piezoelectric spraying device body, wherein the piezoelectric spraying body comprises a driving oscillation circuit for supplying the electrical signal to the piezoelectric spraying part and a body side contact member.</p>	
<p>Overview of the description</p> <p>... The driving oscillation circuit for supplying the electrical signal to the piezoelectric spraying part is provided in the piezoelectric spraying device body, and when mounting the chemical container in the body, the contact members are provided in the chemical container and the piezoelectric spraying device body respectively such that the chemical container contacts the body via the contact members. Such structure allows the body side contact member pulled from the driving oscillation circuit to contact the container side contact member when the chemical container is mounted in the piezoelectric spraying device body, and the electrical signal is supplied to the piezoelectric spraying part. ...</p>	<p>Overview of the description</p> <p>... The ultrasonic wave spraying device consists of a liquid storage part comprising a piezoelectric vibrator and a driving circuit, and a main body comprising a power source.</p> <p>... It is capable of atomizing effectively liquid (chemicals etc.) in the liquid storage part by applying an AC signal from the driving circuit.</p> <p>... Using a connector for connection between the power source and the driving circuit, the liquid storage part can be replaced easily. ...</p>

Drawing



Drawing



[Conclusion]

The invention of claim 1 has novelty.

[Explanation]

Claim 1 states the matter of other subcombination of "an electrical signal is supplied via a container side contact member in mounting." The chemical container of the invention of claim 1 specifies the structures, functionalities and so on of the chemical container in that the electrical signal is supplied via a container side contact member from the driving oscillation circuit of the piezoelectric spraying device body in mounting.

Comparing the invention of claim 1 and the cited invention, there is difference in that the "electrical signal" can be supplied from the body side in invention of claim 1 while the "power source" can be supplied from the body side to the liquid storage in the cited invention.

The chemical container of the invention of claim 1 is mounted removably in the piezoelectric spraying device body comprising the driving oscillation circuit and the body side contact member, thereby the container side contact member is connected to the body side contact member as stated in the detailed description of invention, and the electrical signal can be supplied from the driving oscillation circuit in the main body to the piezoelectric spraying part in the container.

In contrast, the connector in the liquid storage of the cited invention cooperates with the connector in the main body. The cited invention has the functionality in which the electricity is supplied from the power source in the main body to the driving circuit in the liquid storage. However, AC signal supply to piezoelectric vibrator in the liquid storage corresponding to the piezoelectric spraying part in the container of the invention of claim 1 is made from the driving circuit in the liquid storage separately.

Thus, the container side contact member of the invention of claim 1 and the liquid storage

side connector of the cited invention are different in functionalities.

Therefore, there is difference between the chemical container of the invention of claim 1 and the liquid storage part of the cited invention. The invention of claim 1 has novelty.

[Case 25] Subcombination (Invention lacks novelty)

Description	Prior art
<p>Title of Invention</p> <p>Location Information server</p>	<p>Title of Invention</p> <p>Information providing system</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A location information server for receiving location information from a mobile terminal of a user and transmitting reference information specific to a location indicated by the location information to the mobile terminal of the user, wherein</p> <p>the mobile terminal obtains the location information automatically and transmits the obtained location information to the location information server.</p>	
<p>Overview of the description</p> <p>When obtaining the user information, the mobile terminal of user utilizes the GPS function operating on the mobile terminal. The GPS function obtains the user location information automatically at a predetermined time interval, and transmits the location information to the location information server. The location information server, upon receiving the location information from the mobile terminal, obtains the reference information specific to a location indicated by the location information and transmits the location information to the user mobile terminal. The reference information specific to the location includes information about the restaurant and sightseeing area in vicinity of the user.</p>	<p>Overview of the description</p> <p>When a user of a mobile terminal uses service of the information providing server, the user of mobile terminal pushes the location information obtaining button displayed on the screen of the mobile terminal. Upon detecting push of the location information obtaining button, the mobile terminal starts the GPS function to obtain the current location information (latitude and longitude), and transmits the obtained location information to the information providing server. The information providing server, upon receiving the location information from the mobile terminal of user, creates the list of shops in vicinity of the location indicated by the location information, and transmits the created list to the mobile terminal.</p>

[Conclusion]

The invention of claim 1 lacks novelty.

[Explanation]

Claim 1 states the matter of other subcombination of "the mobile terminal obtains the location information automatically." However, obtaining, by the mobile terminal, the location information automatically does not specify the structures, functionalities and so on of the location information server.

Comparing the invention of claim 1 and the cited invention, there is difference caused by descriptions and expressions in the matter of other subcombination, but no difference in structures, functionalities and so on.

Therefore, there is no difference between the invention of claim 1 and the cited invention else. The invention of claim 1 lacks novelty.

[Case 26] Subcombination (Invention lacks/has novelty)

Description	Prior art
<p>Title of Invention</p> <p>Content delivering system</p>	<p>Title of Invention</p> <p>...</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A content delivering system including a first server, a client device and a second server,</p> <p>the first server comprising:</p> <p>a delivery scheme determining part configured to, upon receiving a content delivery request from the client device, obtain delivery frequency information corresponding to a content ID included in the content delivery request, determine to utilize delivery by the second server if the delivery frequency indicated by the delivery frequency information exceeds a predetermined threshold, and otherwise, determine to utilize direct delivery; and</p> <p>a delivery controlling part configured to, if the delivery scheme determining part determines to utilize the delivery by the second server, transmit a redirect instruction for instructing the client device to specify the second server as destination to which the content is obtained, and if the delivery scheme determining part determines to utilize the direct delivery, transmit to the client device the content corresponding to the content ID included in the content delivery request,</p> <p>the client device comprising:</p> <p>a content requesting part configured to transmit the content delivery request including the content ID to the first server;</p> <p>and</p>	

a redirect transmitting part configured to, if receiving a redirect instruction from the first server, transmit a content redirect request including the content ID to the second server, and

the second server comprising a content transmitting part configured to, upon receiving the content redirect request including the content ID from the client device, transmit the content corresponding to the content ID to the client device.

[Claim 2]

A client device communicating with a first server and a second server comprising:

a content requesting part configured to transmit a content delivering request including a content ID to the first server; and

a redirect forwarding part configured to, if receiving a redirect instruction from the first server, transmit a content redirect request including the content ID to the second server,

wherein the redirect instruction, if delivery frequency corresponding to the content ID exceeds a predetermined threshold in the first server, is transmitted from the first server.

[Claim 3]

The client device in the content delivering system of claim 1.

Overview of the description

The content requesting part, content obtaining part and redirect transmitting part of the client device are each configured to the well-known browser (transmitting/ receiving means) as filing of application.

The first server obtains content delivery frequency corresponding to the content ID based on the content ID included in the content delivery request from the client device.

Overview of the description

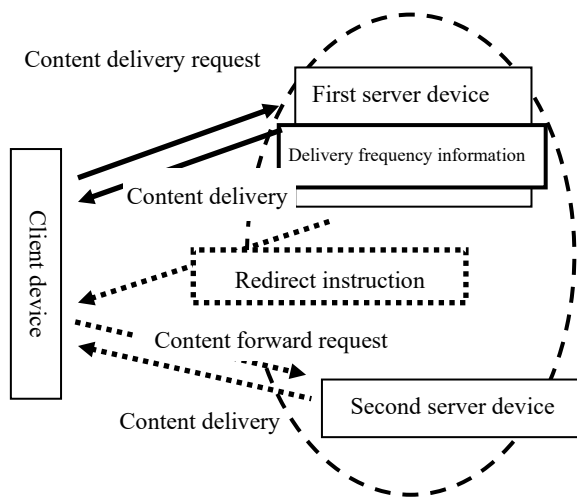
The first server, upon receiving the content delivery request including the content ID from the client device, calculates a load value from the server load information in the first server.

The first server, if the load value does not exceed a predetermined threshold, delivers corresponding content to the client device as request source, and if the load value exceeds the predetermined threshold, transmits the

The first server, if the delivery frequency does not exceed a predetermined threshold, delivers corresponding content to the client device as request source, and if the delivery frequency exceeds the predetermined threshold, transmits to the client device the redirect instruction instructing to be delivered from the second server.

The redirect instruction transmitted by the first server adopts a well-known redirect scheme (HTTP redirect etc.) for example.

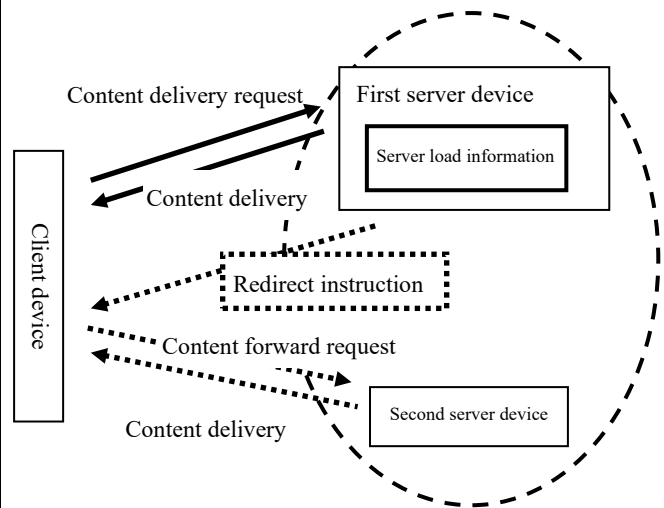
Drawing



redirect instruction (well-known redirect scheme. HTTP redirect etc.) instructing to be delivered from the second server to the client device as request source.

The browser of the client device, upon receiving the redirect instruction from the first server, transmits the content redirect request including the content ID to the second server and receives the content from the second server.

Drawing



[Conclusion]

The invention of claim 1 has novelty.

The invention of claim 2 and 3 lack novelty.

[Explanation]

- Claim 1

The invention of claim 1 and the cited invention are different in that the first server is configuration to, "upon receiving a content delivery request from the client device, obtain delivery frequency information corresponding to a content ID included in the content delivery request, determine to utilize delivery by the second server if the delivery frequency indicated by the delivery frequency information exceeds a predetermined threshold, and otherwise, determine to utilize direct delivery."

Therefore, there is difference between the invention of claim 1 and the cited invention,

thus the invention of claim 1 has novelty.

- Claim 2

Claim 2 states the matter on other subcombination of "if delivery frequency corresponding to the content ID exceeds a predetermined threshold in the first server, is transmitted from the first server."

The structures, functionalities and so on are not affected of the content requesting part and redirect transmitting part in the client device of claim 2 regarding the condition when the first server transmits the redirect instruction to the client device. Thus, the above matter does not specify the structures, functionalities and so on of the client device.

Comparing the invention of claim 1 and the cited invention, there is difference caused by descriptions and expressions with respect to the matter on other subcombination, but no difference in structures, functionalities and so on. Therefore, there is no difference between the invention of claim 2 and the cited invention. Thus, the invention of claim 2 lacks novelty.

- Claim 3

Claim 3 is dependent on claim 1, and claim 1 states the matter on other subcombination of the a delivery scheme determining part of the first server configured to, "upon receiving a content delivery request from the client device, obtain delivery frequency information corresponding to a content ID included in the content delivery request, determine to utilize delivery by the second server if the delivery frequency indicated by the delivery frequency information exceeds a predetermined threshold, and otherwise, determine to utilize direct delivery."

The operation by the delivery scheme determining part of the first server is to, upon receiving the content delivery request from the client device, determine whether to transmit the redirect instruction or the content depending on whether or not the content delivery frequency exceeds the predetermined threshold. The structures, functionalities and so on are not affected of the content requesting part and redirect transmitting part in the client device of claim 3. Thus, the above matter does not specify the structures, functionalities and so on of the client device.

Comparing the invention of claim 3 and the cited invention, there is difference caused by descriptions and expressions with respect to the matter on other subcombination, but no difference in structures, functionalities and so on.

Therefore, there is no difference between the invention of claim 3 and the cited invention else. Thus, the invention of claim 3 lacks novelty.

The same is applicable to the case that the claimed invention is the "client device for the content delivering system of claim 1" or the "client device used in the content delivering system of claim 1" in determining whether to have novelty.

(Reference)

See case 41 in "1. Cases in Requirements for Description (Article 36)" regarding the requirements for description.

[Case 27] Subcombination (Invention lacks/has novelty)

Description	Prior art
<p>Title of Invention</p> <p>Network system</p>	<p>Title of Invention</p> <p>...</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A network system having a database server, a connection controlling server and a provider server, comprising:</p> <p> a means for receiving an authentication request with ID and password from a client;</p> <p> an authentication means for authenticating the client;</p> <p> a notification means for notifying the client of access permission including an authentication key that is generated from the received ID and password if the client is authenticated;</p> <p> a means for receiving a content delivery request with content ID including the authentication key from the client that is notified the access permission; and</p> <p> a means for delivering the content corresponding to the content ID if determining that the authentication key matches the generated authentication key.</p> <p>[Claim 2]</p> <p>A provider server in a network system having a database server, a connection controlling server and a provider server,</p> <p> the network system comprising:</p> <p> a means for receiving an authentication request with ID and password from a client;</p> <p> an authentication means for authenticating the client;</p> <p> a notification means for notifying the client of access permission including an</p>	

authentication key that is generated from the received ID and password if authenticating the client;

a means for receiving a content delivery request with content ID including the authentication key from the client that is notified the access permission; and

a means for delivering the content corresponding to the content ID if determining that the authentication key matches the generated authentication key.

[Claim 3]

The provider server in the network system of claim 1.

Overview of the description

The present invention regards to the network system for delivering content to prevent spoofing by others, and is characterized in authentication process.

The network system of the present invention authenticates the client based on ID and password received from the client, notifies the access permission including the authentication key generated from the ID and password if authentication is successful, and upon receiving the content delivery request with the content ID including the authentication key from the client that is notified the access permission, controls delivery of the content corresponding to the content ID based on whether or not the received authentication key matches the generated authentication key.

Moreover, The network system of the present invention has the database server, connection controlling server and provider server, and authentication for client, notification of access permission, reception of content delivery request and control of

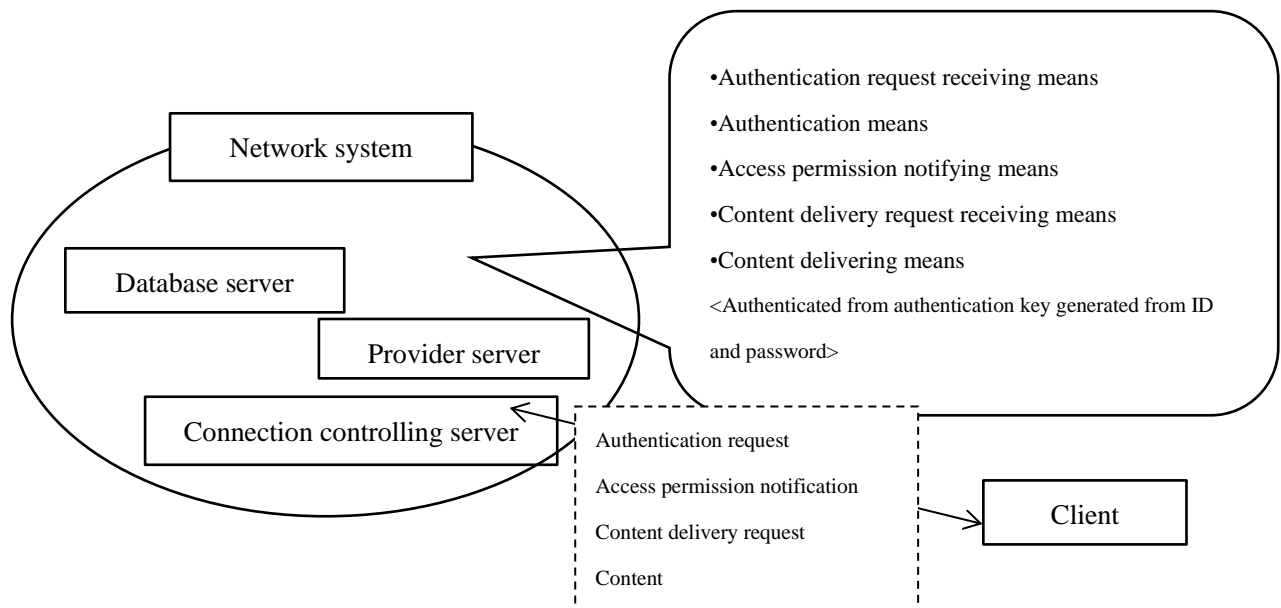
Overview of the description

The network system authenticates the client based on address information of the client, and delivers the content if authenticated. The network system comprises the authentication server and content delivery server.

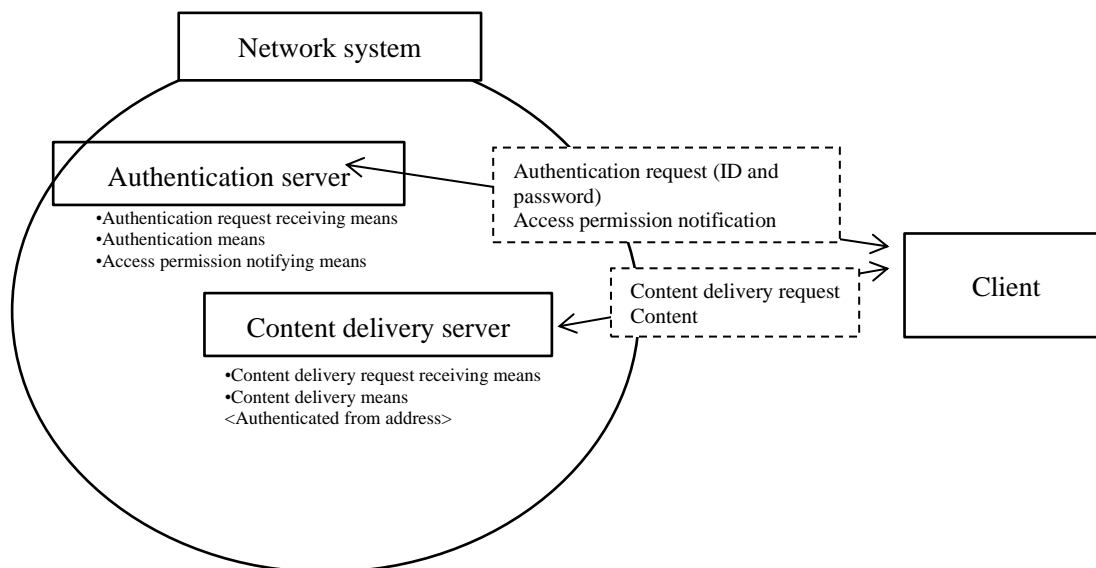
The authentication server comprises the authentication request receiving means for receiving the authentication request from the client, the authenticating means for authenticating the client and the access permission notifying means for storing the client address and notifying the access permission if authentication is successful. The content delivery server comprises the content delivery request receiving means for receiving the content delivery request from the client that is notified the access permission and the content delivering means for determining whether the client is authenticated based on the client address and, if authenticated, delivering corresponding content.

content delivery may be performed by either the database server, connection controlling server or provider server.

Drawings in the present application



Drawings in the prior art



[Conclusion]

The invention of claim 1 has novelty.

The inventions of claim 2 and 3 are not determined whether to have novelty.

[Explanation]

- Claim 1

The invention of claim 1 and the cited invention are different in that the invention of claim 1 comprises:

"the notification means for notifying the client of access permission including an authentication key that is generated from the received ID and password if authenticating the client;

the means for receiving a content delivery request with content ID including the authentication key from the client that is notified the access permission; and

the means for delivering the content corresponding to the content ID if determining that the authentication key matches the generated authentication key."

Therefore, there is difference between the invention of claim 1 and the cited invention, thus the invention of claim 1 has novelty.

- Claim 2

The means comprised in the network system of claim 2 can be specified clearly from the statement of "the network system comprising ..." of claim 2. However, it is unclear that what means comprised in the network system of claim 2 is comprised in what server, and it cannot be specified clearly whether or not the provider server of claim 2 has what means of each one comprised in the network system.

Therefore, the invention of claim 2 cannot be specified clearly whether the subcombination invention is specified from the statement not specifying invention directly, or how the invention is specified. Thus the invention of claim 2 is unclear.

The invention of claim 2 is unclear in reference to the detailed description of invention and drawings, thus it is not determined whether to have novelty.

Note that if the prior art document is found as the ground in denying novelty or inventive step concerning the invention of claim 1, the prior art document has the probability stating the provider server of claim 2 as the subcombination of the network system of the invention of claim 1. In this case, the reason for rejection can be issued for denying novelty or inventive step also for claim 2.

- Claim 3

Claim 3 is a dependent claim, and with reference to the cited claim, the invention of claim 3 is recognized as "A provider server in a network system,

the network system having a database server, a connection controlling server and the

provider server comprising:

a means for receiving the authentication request with ID and password from the client;

...

a means for delivering the content corresponding to the content ID if determining that the authentication key matches the generated authentication key."

From the statement that

"the network system having a database server, a connection controlling server and the provider server comprising:

a means for receiving the authentication request with ID and password from the client;

...

a means for delivering the content corresponding to the content ID if determining that the authentication key matches the generated authentication key,"

the means comprised in the network system of claim 3 can be specified clearly. However, it is unclear that what means comprised in the network system of claim 3 is comprised in what server, and it cannot be specified clearly whether or not the provider server of claim 3 has what means of each one comprised in the network system.

Therefore, the invention of claim 3 cannot be specified clearly whether the subcombination invention is specified from the statement not specifying invention directly, or how the invention is specified. Thus the invention of claim 3 is unclear.

The invention of claim 3 is unclear in reference to the detailed description of invention and drawings, thus it is not determined whether to have novelty.

If the prior art document is found as the ground in denying novelty or inventive step concerning the invention of claim 1, the prior art document has the probability stating the provider server of claim 3 as the subcombination of the network system of the invention of claim 1. In this case, the reason for rejection can be issued for denying novelty or inventive step also for claim 3.

(Reference)

See case 42 in "1. Cases in Requirements for Description (Article 36)" regarding the requirements for description.

[Case 28] Subcombination (Invention lacks/has novelty)

Description	Prior art
Title of Invention	Title of Invention
Monitoring system	...
What is claimed is:	
[Claim 1]	
A monitoring system consisting of host device, monitoring device and a plurality of monitored devices,	
the monitoring device having:	
a status information receiving means for receiving periodically status information from the plurality of monitored devices;	
a host device transmitting means for transmitting the status information to a host device; and	
a control information transmitting means for transmitting control information to the plurality of monitored devices respectively,	
the monitored device having:	
a status information transmitting means for transmitting periodically status information about the monitored device to the monitoring device; and	
a control information receiving means for receiving the control information from the monitoring device,	
wherein the host device transmitting means of the monitoring device determines whether the status information from the plurality of monitored devices has the same content or different content, if the number of status information having the same content is equal to or above than a predetermined number, aggregates the status information to transmit the aggregated status information to the host device, and if the number of status information having the same content is below the	

predetermined number, transmits the status information to the host device without aggregation.

[Claim 2]

A monitoring device comprising:

a status information receiving means for receiving periodically status information from a plurality of monitored devices;

a host device transmitting means for transmitting the status information to a host device; and

a control information transmitting means for transmitting control information to the plurality of monitored devices respectively,

wherein the host device transmitting means determines whether the status information from the plurality of monitored devices has the same content or different content, if the number of status information having the same content is equal to or above than a predetermined number, aggregates the status information to transmit the aggregated status information to the host device, and if the number of status information having the same content is below the predetermined number, transmits the status information to the host device without aggregation.

[Claim 3]

A monitored device configured to communicate with a monitoring device, wherein

the monitoring device determines whether status information from a plurality of monitored devices has the same content or different content, if the number of status information having the same content is equal to or above than a predetermined number, aggregates the status information to transmit the aggregated status information to a host device, and if the number of status information having the same

content is below the predetermined number, transmits the status information to the host device without aggregation, the monitored device having:

a status information transmitting means for transmitting periodically status information about the monitored device to the monitoring device; and

a control information receiving means for receiving the control information from the monitoring device.

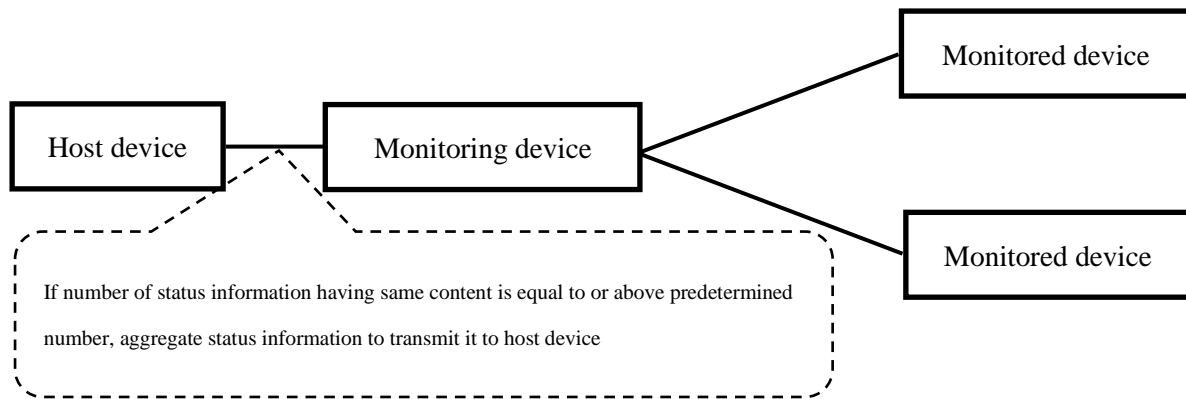
Overview of the description

In the monitoring system, the monitoring device comprises the means for receiving periodically status information from the plurality of monitored devices, the means for transmitting control information to the plurality of monitored devices respectively, and the means for transmitting to the host device the status information from the plurality of monitored devices, the means for transmitting to the host device determines whether status information from a plurality of monitored devices has the same content or different content, if the number of status information having the same content is equal to or above than a predetermined number, aggregates the status information to transmit the status aggregated information to the host device, and if the number of status information having the same content is below the predetermined number, transmits the status information to the host device without aggregation. Moreover, the monitored device comprises the means for transmitting status information about the monitored device to the monitoring device, and the means for receiving control information from the monitoring device.

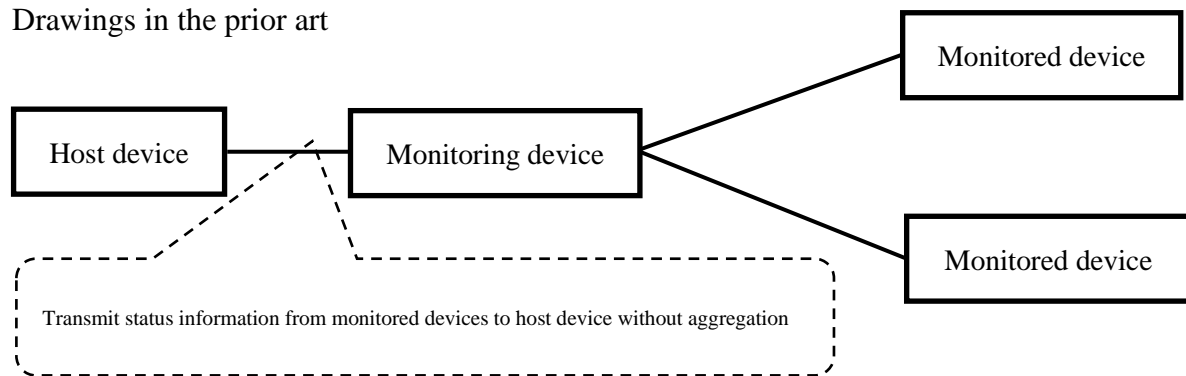
Drawings in the present application

Overview of the description

In the monitoring system, the monitoring device comprises the means for receiving periodically status information from the plurality of monitored devices, the means for transmitting control information to the plurality of monitored devices respectively, and the means for transmitting the status information from the plurality of monitored devices to the host device, and the monitored device comprises the means for transmitting periodically status information about the monitored device to the monitoring device, and the means for receiving control information from the monitoring device.



Drawings in the prior art



[Conclusion]

The inventions of claim 1 and 2 have novelty.

The invention of claim 3 lacks novelty.

[Explanation]

- Claims 1 and 2

The inventions of claim 1 and 2 are different from the cited invention in that the monitoring device determines whether status information from a plurality of monitored devices has the same content or different content, if the number of status information having the same content is equal to or above than a predetermined number, aggregates the status information to transmit the aggregated status information to the host device, and if the number of status information having the same content is below the predetermined number, transmits the status information to the host device without aggregation.

Therefore, the inventions of claims 1 and 2 are different from the cited invention and have novelty.

- Claim 3

Claim 3 states the matter on other subcombination of the configuration in which the monitoring device "determines whether status information from a plurality of monitored

devices has the same content or different content, if the number of status information having the same content is equal to or above than a predetermined number, aggregates the status information to transmit the aggregated status information to a host device, and if the number of status information having the same content is below the predetermined number, transmits the status information to the host device without aggregation."

However, the matter relates to the communication between the monitoring device and the host device, but does not relate to the communication between the monitoring device and the monitored device. Thus, the structures, functionalities and so on of the "monitored device" are not affected. Therefore, the above matter does not specify the structures, functionalities and so on of the monitored device.

Comparing the invention of claim 3 and the cited invention, there is difference caused by descriptions and expressions with respect to the matter on other subcombination, but no difference in structures, functionalities and so on.

Therefore, there is no difference between the invention of claim 3 and the cited invention. Thus, the invention of claim 3 lacks novelty.

(Reference)

See case 41 in "1. Cases in Requirements for Description (Article 36)" regarding the requirements for description.

[Case 29-1] Expression specifying a product by a manufacturing process (Reasonable doubts)
(Invention lacks/has novelty)

Description	Prior art
<p>Title of Invention</p> <p>Measuring method, manufacturing method and glass</p>	<p>Title of Invention</p> <p>Method for processing glass</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A measuring method comprising, irradiating laser beam to a measured object, cooling the measured object depending on strength of the laser beam, generating an interference light by interfering the laser beam to a light reflected from a surface of the measured object and a light reflected from a bottom surface, and imaging interference light and calculating thickness of the measured object.</p> <p>[Claim 2]</p> <p>The measuring method comprising measuring thickness of glass by the measuring method of claim 1, and processing the glass at constant thickness based on the measured thickness.</p> <p>[Claim 3]</p> <p>A glass manufactured by the method of claim 2.</p>	<p>Overview of the description</p> <p>[Example]</p> <p>... The glass is placed on a rack, and the glass is cut to the desired thickness while measuring the thickness of the glass with a laser interferometer that has the ability to irradiate and interfere within the glass.</p> <p>(No statement regarding to claim 1 of the present invention.)</p>
<p>Overview of the description</p> <p>... Since the glass is heated in proportion with the strength of the laser beam, the glass is cooled depending on the strength in order to suppress measurement error.</p>	

[Conclusion]

The inventions of claims 1 and 2 have novelty.

The invention of claim 3 lacks novelty. (Reasonable doubts are conditioned.)

[Explanation]

- Claims 1 and 2

In the step of cooling the glass in accordance with the strength of the laser beam, the inventions of claims 1 and 2 differ from the inventions described in the cited document.

Therefore, there is difference between the inventions of claims 1 and 2 and the cited document, thus the inventions of claims 1 and 2 have novelty.

- Claim 3

With respect to the glass of claim 3, since it does not state how product itself is structured such as processing shape and property of the glass in the claim, the glass that is cut to the desired thickness disclosed in the cited document can be said to be processed by comparing the desired thickness with the actual measured thickness. Therefore, the reasonable doubts are conditioned that the glass disclosed in the cited document is identical to the glass of claim 3.

[Measures of the applicant]

The reasonable doubts are overcome by proving that the step included in the measuring method of claim 1 affects the structure etc. of the glass that is the invention of claim 3 and has a special property compared to the glass disclosed in the cited document.

[Case 29-2] Expression specifying a product by a manufacturing process (Reasonable doubts)
(Invention has novelty)

Description	Prior art
<p>Title of Invention</p> <p>Panel having dual structure</p>	<p>Title of Invention</p> <p>...</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A panel having a dual structure manufactured by the method comprising, removing an oxide film coated on a surface of an iron member A by using an oxide film removing agent, and bonding the iron member A and a nickel member B by arc welding.</p>	
<p>Overview of the description</p> <p>... a panel having a dual structure of the present invention can be obtained by removing an oxide film coated on a surface of an iron member A by using an oxide film removing agent, and then by bonding the surface of the iron member A where the oxide film has been removed and a nickel member B by arc welding, ...</p>	<p>Overview of the description</p> <p>... a panel having a dual structure of the present invention can be obtained by removing an oxide film coated on a surface of an iron member A by using an oxide film removing agent, and then by bonding the surface of the iron member A where the oxide film has been removed and a nickel member B by using an adhesive agent, ...</p>

[Conclusion]

The invention of claim 1 has novelty.

[Explanation]

The arc-welded portion has a bonded structure in which a material to be bonded (a base material) itself is melted and bonded, whereas the portion bonded by an adhesive agent has a bonded structure in which a base material is bonded with the adhesive agent.

Therefore, a panel having a dual structure of the claimed invention 1 obtained by the manufacturing method including a bonding process by arc welding, and a panel having a dual structure in the invention of the prior art obtained by the manufacturing method including a bonding process using an adhesive agent are different in the structure of the portions bonded an

iron member A and a nickel member B resulted from the different bonding process of the two inventions. Thus, the claimed invention 1 is novel.

[Case 30] Limitation of use (Invention lacks/has novelty)

Description.	Prior art
Title of Invention Food composition for preventing periodontal disease	Title of Invention Ingredient A for decreasing LDL cholesterol in blood
What is claimed is:	
[Claim 1] A food composition for preventing periodontal disease comprising an ingredient A as an active ingredient.	
[Claim 2] A beverage composition for preventing periodontal disease comprising an ingredient A as an active ingredient.	
[Claim 3] An agent for preventing periodontal disease comprising an ingredient A as an active ingredient.	
[Claim 4] Grapefruit juice for preventing periodontal disease comprising an ingredient A as an active ingredient.	
[Claim 5] Grapefruit for preventing periodontal disease comprising an ingredient A as an active ingredient.	
[Claim 6] A food product for preventing periodontal disease comprising an ingredient A as an active ingredient.	
Overview of the description The inventor found that grapefruit juice has an antimicrobial effect against porphyromonas gingivalis which is a pathogen causing periodontal disease. Further, the inventor found that the ingredient A contained in grapefruit has an antimicrobial effect against porphyromonas gingivalis	Overview of the description The ingredient A as an ingredient that decreases LDL cholesterol in blood was isolated from grapefruit, and a chemical structure thereof was specified. Hyperlipemia can be prevented by the dairy intake of the composition for decreasing the LDL cholesterol in which the ingredient A as

which is a pathogen causing periodontal disease. Foods containing the ingredient A include grapefruit, grapefruit juice, and grapefruit jelly.

[Example]

The antimicrobial effect against the porphyromonas gingivalis was tested via a disk method by using 10 pathogen causingus, the

Culturing of bacteria was performed at a temperature of 37 givalis was tested via a disk method by using 10 pathogen causingus, the claimed invention 1

Further, the antimicrobial effect was tested by the disk method with respect to the ingredient A isolated from the grapefruit juice in the same manner. Where 0.5 mg of the ingredient A was dissolved in 10 µl of DMSO, and where formation of the inhibition ring was observed via the disk method, the grapefruit juice formed an inhibition ring having a diameter of 70 mm.

Still further, when the antimicrobial effect of the ingredient A was tested with respect to the porphyromonas gingivalis by means of microbroth dilution method, growth of bacteria was inhibited at concentration of 30 µtill further,

an active ingredient is contained, such as a food composition for decreasing LDL cholesterol and a beverage composition for decreasing LDL cholesterol, or an agent for decreasing LDL cholesterol in which the ingredient A as an active ingredient is contained.

[Example]

Decrease of LDL cholesterol was observed by the intake of a supplement containing the ingredient A or juice, produced by squeezing grapefruit, which contains the ingredient A.

[Conclusion]

The inventions of claim 1 to 4 have novelty.

The inventions of claim 5, 6 lack novelty.

[Explanation]

Regarding claims 1 to 4:

The use of “for preventing periodontal disease” in the inventions according to claims 1 to 4 was found by a discovery of unknown attribute that the ingredient A has the antimicrobial effect against the porphyromonas gingivalis which is a pathogen causing the periodontal disease. The use of “for preventing periodontal disease” which was discovered by the attribute

is admitted as the novel use that differs from the conventionally known use of “for decreasing LDL cholesterol” relating to food containing the ingredient A. As a result thereof, the inventions according to claims 1 to 4, together with the limitation of use of “for preventing periodontal disease”, shall be recongized.

In view of the above, the inventions according to claims 1 to 4 differ from the invention disclosed in the prior art in a point of presence/absence of the limitation of use of “for preventing periodontal disease”. Therefore, the inventions of claims 1 to 4 have novelty.

Regarding claim 5:

Claim 5 recites that “Grapefruit for preventing periodontal disease comprising an ingredient A as an active ingredient.” That is, claim 5 includes limitation of use of “for preventing periodontal disease”. However, the limitation of use of “for preventing periodontal disease” only indicates usefulness of the grapefruit as a plant. Therefore, the invention of claim 5 shall be interpreted as a mere description of grapefruit without limitation of use.

In view of the above, there is no difference between the invention according to claim 5 and the invention disclosed in prior art since the prior art discloses grapefruit containing the ingredient A. Thus, the invention of claim 5 lacks novelty.

Regarding claim 6:

Claim 6 recites “a food product for preventing periodontal disease comprising an ingredient A as an active ingredient”. The description discloses that “Examples of the food product include grapefruit, grapefruit juice, and grapefruit jelly.” The description further discloses that grapefruit contains the ingredient A, which matches the common general technical knowledge. Taking this into consideration, it is recognized that the “a food product ... comprising an ingredient A as an active ingredient” includes grapefruit, and thus the limitation of use of “for preventing periodontal disease” indicates mere usefulness of the grapefruit as a plant, and thus the invention according to claim 6 is to be interpreted as a food product of which use is not limited.

Further, since the prior art discloses the grapefruit containing an ingredient A, there is no difference between the invention according to claim 6 and the invention disclosed in the prior art. Therefore, the invention of claim 6 lacks novelty.

(Supplemental explanation)

In a case where a claim of invention regarding food includes limitation of use, the limitation of use is recognized as having meaning for specifying the invention according to the claim. However, when the limitation of use is provided to animals or plants themselves, since such limitation of use merely indicates the usefulness of the animals or plants themselves, the

invention is interpreted as the animals or plants as they include no limitation of use.

Incidentally, if the limitation of use is provided to an invention of animals and plants in the claim, the claim is to be interpreted including no limitation of use. The invention, on which determination of the novelty, the inventive step, etc. of the limitation of use is not made, should be limitedly interpreted.

This shall be determined specifically case by case in the course of examination based also on statement of the description and the common general technical knowledge as of filing the application. Examples of “invention which is interpreted as not including limitation of use” and “invention which is interpreted as including limitation of use” are listed below.

(Specific Examples)

Invention Which Is Interpreted as Not Including Limitation of Use

“banana for ...”, “fresh tea leaves for ...”, “mackerel for ...”, and “beef for ...”

Invention Which Is Interpreted as Including Limitation of Use

“banana juice for ...”, “tea beverage for ...”, “fish sausage for ...”, and “milk for ...”

(Points of Concern)

- i) Although the description of “agent for ...” is used in general field, it does not contain animals or plants themselves. In the field of food, as is the case with other fields, it indicates supplements and food additives, and thus can be determined as not containing animals or plants.
- ii) Description of “composition for ...” and “food composition for ...” usually indicates something obtained by mixing an ingredient suitable for this use via a certain technical means, and thus can be determined as not including animals or plants.
- iii) Description of “food product for ...” is interpreted as food product without limitation of use only when it is determined as including animals or plants based on statement of description and the common general technical knowledge as of filing the application.

[Case 31] Limitation of use (Invention has novelty)

Description	Prior art
<p>Title of Invention</p> <p>Food product for decreasing blood pressure</p> <p>What is claimed is:</p> <p>[Claim 1]</p> <p>A food product for decreasing blood pressure comprising an ingredient A as an active ingredient.</p> <p>Overview of the description</p> <p>According to a test using a rat, it was discovered that the intake of food product mixed with the ingredient A achieves decrease of blood pressure.</p> <p>Examples of such food product include margarine, dressing, and ice cream, etc.</p> <p>...The ingredient A is not a natural ingredient. The ingredient A used in the present invention was produced from a chemical compound <i>a</i> and a chemical compound <i>b</i> as raw materials by means of the Wittig reaction.</p> <p>[Example]</p> <p>A male spontaneously hypertensive rat of high blood pressure was preliminary kept and fed from four weeks age. The rat was fed on diet with the ingredient A mixed therewith from five weeks age. This was kept for the following eight weeks. Three groups were fed on diet containing the ingredient A by the rate of 0.05%, 0.1%, and 0.2%, respectively. A control group was fed on a normal diet. Each group was composed of eight rats. In the controlled group (eight rats), the rats were fed with the normal diet throughout the period. An automatic blood pressure measuring device for rats/mice was used.</p> <p>It became apparent that the intake of the</p>	<p>Title of Invention</p> <p>Emulsifiers</p> <p>Overview of the description</p> <p>The ingredient A can be mixed with margarine, dressing, ice cream, etc. as emulsifier. The ingredient A is not a natural ingredient but is an artificial ingredient.</p>

diet containing the ingredient A dose-dependently decreased the blood pressure of the rats. Further, after completion of the intake, the significant difference in blood pressure disappeared in about two weeks after the diet was return to the normal diet in comparison with the controlled group.

Further, in a case where 10 test subjects were caused to have three pieces of biscuit (5g for each piece), each piece containing the ingredient A by 2%, three times a day after meals for one month, the highest blood pressure decreased by 10 mmHg in average. For the sake of comparison, the same test was performed by using biscuits to which no ingredient A was added, but the decrease of blood pressure was not observed.

[Conclusion]

The invention of claim 1 has novelty.

[Explanation]

Claim 1 recites a food product for decreasing blood pressure that contains an ingredient A as an active ingredient. The detailed explanation of the invention in the present application states that “The ingredient A is not a natural ingredient. The ingredient A used in the present invention was produced by a chemical compound *a* and a chemical compound *b* as raw materials by means of the Wittig reaction.” Further, when considering the common general technical knowledge as of filing the present application, it is recognized that the ingredient A is not an ingredient found from animals or plants. If so, it is recognized that the “a food product for decreasing blood pressure comprising an ingredient A as an active ingredient” does not include animals or plants. Therefore, the invention according to claim 1, together with the limitation of use of “for decreasing blood pressure” shall be recognized.

The invention according to claim 1 includes the limitation of use of “for decreasing blood pressure”, whereas the invention disclosed in the prior art includes the limitation of use of “for emulsification”. Namely, both differs from each other, and thus the invention of claim 1 has novelty.

[Case 32] Limitation of use (Invention lacks novelty)

Description	Prior art
Title of Invention Chlorella vulgaris for born-strengthening	Title of Invention Chlorella vulgaris for intestinal regulation
What is claimed is: [Claim 1] Chlorella vulgaris for born-strengthening.	
Overview of the description It was confirmed that an intake of chlorella vulgaris achieves born-strengthening.	Overview of the description It was confirmed that an intake of chlorella vulgaris shows an intestinal regulation effect.
[Example] Chlorella vulgaris was ground, and an extract that was extracted from the chlorella vulgaris with ethanol was added to culture medium of osteoblastic cell by 5% to culture it for one day. In comparison with cells of a controlled group cultured on the normal culture medium, 2.3 times of proliferative effect was observed. Further, when 20 osteoporosis patients were caused to eat 60 g of cookies which contains chlorella vulgaris by 2% every day for 20 weeks, increase of bone density was observed. In the controlled group in which cookies without containing chlorella vulgaris were given, no such effect was observed.	[Example] 50 women suffered from chronic constipation were caused to eat 200 g of jelly which contains chlorella vulgaris by 5% three times a day for four weeks. For the sake of comparison, 50 women suffered from chronic constipation were caused to eat jelly which does not contain chlorella vulgaris in the same manner. As a result thereof, in the case of the group in which women took jelly containing chlorella vulgaris by 5%, the number of days with defecation was, in average, six days or more in one week. In the case of the controlled group, the number of days with defecation was 3 days or less in one week.

[Conclusion]

The invention of claim 1 lacks novelty.

[Explanation]

Claim 1 recites “Chlorella vulgaris for born-strengthening”. Namely, claim 1 includes the limitation of use of “for born-strengthening”. However, since the limitation of use of “for born-strengthening” indicates mere usefulness of chlorella vulgaris as a microorganism, the invention according to claim 1 shall be simply interpreted as chlorella vulgaris disregarding the limitation of use.

Further, since the prior art discloses chlorella vulgaris, there is no difference between the

invention according to claim 1 and the invention disclosed in the Cited Reference. Therefore, the invention of claim 1 lacks novelty.

[Measurement of the applicant]

If the applicant amends claim 1 to read “A food composition for born-strengthening comprising *chlorella vulgaris*”, claim 1 shall be recognized together with the limitation of use. This solves the reason for refusal relating to the lack of novelty.

[Case 33] Limitation of use (Invention lacks novelty)

Description	Prior art
Title of Invention	Title of Invention
Food composition for improving bloodstream	Food composition for decreasing blood viscosity
What is claimed is:	What is claimed is:
[Claim 1]	[Claim 1]
A food composition for improving bloodstream comprising an ingredient A as an active ingredient.	A food composition for decreasing blood viscosity comprising an ingredient A as an active ingredient.
Overview of the description	Overview of the description
In the morning fasting, seven test subjects were gathered and kept quiet for one hour and, in this condition, blood flow of the index finger of the right hand of each of the test subjects was measured (blood flow before intake). Then, the seven test subjects were caused to take 30 g of biscuits containing the ingredient A by 5%. One hour after the intake, the blood flow of each of the seven test subjects was measured again (blood flow after intake). For the sake of comparison, the same test subjects were caused to take biscuits which do not contain the ingredient A in another day, and blood flow of each of the test subjects was measured before and after the intake.	A food composition containing the ingredient A as an active ingredient has an effect of decreasing viscosity of blood. 10 test subjects were caused to take 20 g of sausage which contains the ingredient A by 3%. Two hours after the intake, viscosity of blood was measured by using a blood viscosity measurement device. For the sake of comparison, another 10 test subjects were caused to take 20 g of sausage which does not contain the ingredient A. Two hours after the intake, the viscosity of blood was measured by using the blood viscosity measurement device. There was no difference in viscosity in the groups of the test subjects before the intake. However, after the intake of the sausage, the blood viscosity significantly decreased in the group who took the sausage that contains the ingredient A.
In the comparison, blood flow became 1.3 times when the test subjects were caused to take the biscuits containing the ingredient A.	

[Conclusion]

The invention of claim 1 lacks novelty.

[Explanation]

The limitation of use of the invention according to claim 1 differs in terms of expression from the limitation of use of the invention disclosed in the prior art. It is, however, the

common general technical knowledge as of filing the present application that the decrease of blood viscosity naturally achieves the bloodstream improvement.

In view of the above, “a food composition for improving bloodstream comprising an ingredient A as an active ingredient” is a matter substantially equivalent to what is disclosed in the prior art. Therefore, the invention of claim 1 lacks novelty.

[Case 34] Limitation of use (Invention has novelty)

Description	Prior art
Title of Invention Saltiness enhancer	Title of Invention Leavening agent for bread
What is claimed is:	What is claimed is:
[Claim 1] A saltiness enhancer comprising an ingredient A as an active ingredient.	[Claim 1] A leavening agent for bread comprising a component A as an active ingredient.
Overview of the description The ingredient A has a saltiness enhancing effect and, even if salt is used less than the usual, satisfactory saltiness can be shown by mixture of the ingredient A. This can give the eating person satisfaction. Reduction of salt according to the present invention can realize a healthy eating habit that can suppress an intake of excessive salt. ...Examples of food containing the ingredient A include pickles, etc.	Overview of the description The ingredient A has a leavening effect. When the ingredient A is mixed with bread, a coefficient of cubic expansion of after baking to before baking becomes about 200-300%.
[Example] The saltiness enhancing effect was checked by a sensory test in which 30 professional panelists evaluate re of the ingredient A. This can give the e	[Example] Bread mixed with the ingredient A was baked, and, when a coefficient of cubic expansion of after baking to before baking was calculated, the coefficient of cubic expansion was about 250%.
The relative concentration of sodium chloridea sensory test in which 30 professional panelists evaluate evaluate concentration of sodium chloridechating person satisfaction. Reduction of salt according to the present invention can realize a healthy eating habit thatride was higher than the actual concentration of sodium chloride in the preparation, it was judged that saltiness was enhanced.	(Example) 100 of hard flour; 2 of yeast; 65 of water; 2 of salt; 6 of sugar; 2 of powdered skim milk; 5 of fat; and 2 of component A (part by weight)
As a result of the above described sensory test, all the 30 professional panelists judged that addition of the ingredient A showed enhancement of saltiness.	
Further, a trial product of pickles was	

prepared, and whether or not the addition of the ingredient A can save an addition of sodium chloride to the pickles was investigated. The sensory test with the trial product was performed in the manner that 10 professional panelists made a relative evaluation based on saltiness of a trial product of a control as being eductAs a result of the above described sensory test, it became apparent that addition of the ingredient A to pickles containing salt enhances saltiness and, upon showing the usual saltiness, addition of the ingredient A can save addition of sodium chloride to the pickles.

[Conclusion]

The invention of claim 1 has novelty.

[Explanation]

The invention according to claim 1 differs from the invention disclosed in the prior art in that the former is directed to “saltiness enhancer” and the latter is directed to “leavening agent for bread”.

Consequently, the invention of claim 1 has novelty since the invention according to claim 1 differs from the invention disclosed in the prior art.

[Case 35] Subcombination (IoT-related technologies) (Invention lacks/has novelty)

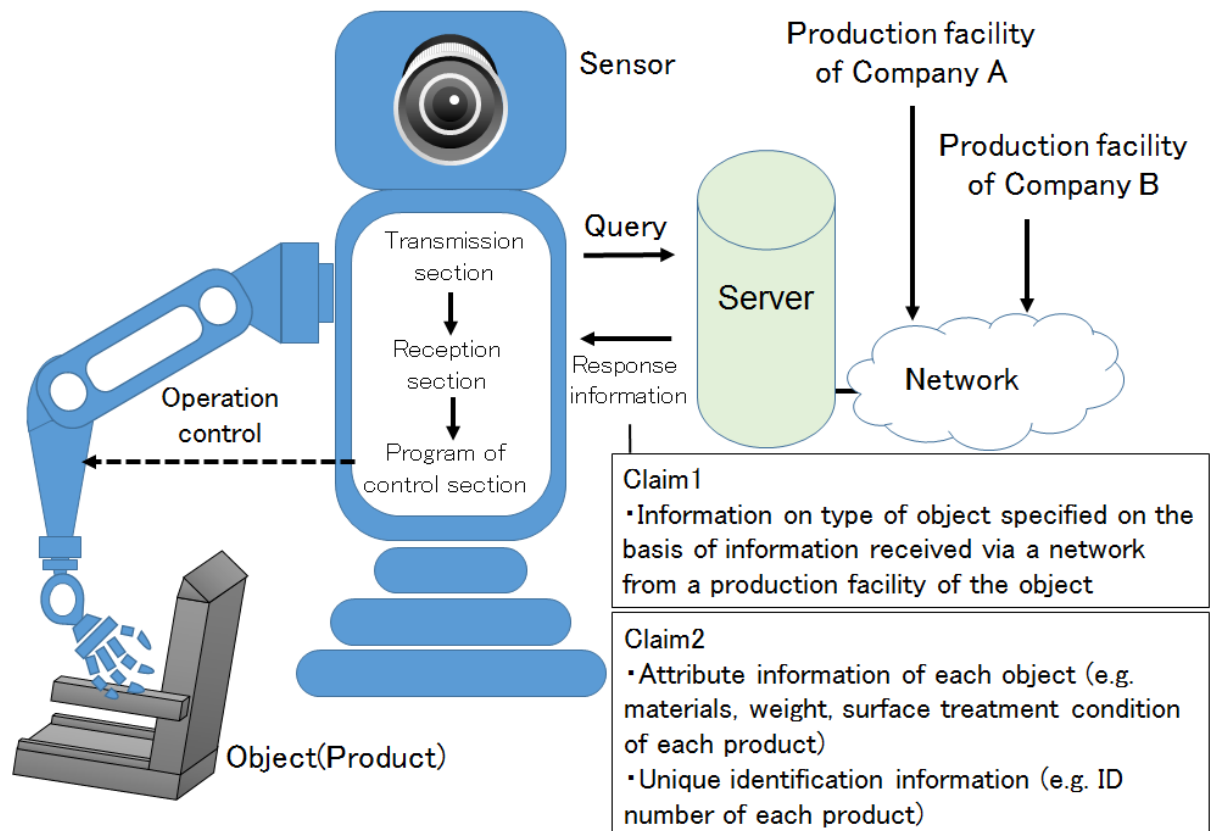
Description	Prior art
<p>Title of Invention</p> <p>Robot Apparatus</p>	<p>Title of Invention</p> <p>Robot Apparatus</p>
<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A robot apparatus which acts on an object comprising:</p> <p>at least one kind of sensor for detecting the object;</p> <p>a transmission section for transmitting a query to a server in order to acquire information on the object based on an output of the sensor;</p> <p>a reception section for receiving response information answering the query from the server; and</p> <p>a control section storing a program which controls the operation of the robot apparatus on the basis of the received response information;</p> <p>wherein the response information is the information on a type of the said object specified by the said server <u>on the basis of information received via a network from a production facility of the said object.</u></p>	<p>What is claimed is:</p> <p>[Claim 1]</p> <p>A robot apparatus which acts on an object comprising:</p> <p>at least one kind of sensor for detecting the object;</p> <p>a transmission section for transmitting a query to a server in order to acquire information on the object based on an output of the sensor;</p> <p>a reception section for receiving response information answering the query from the server; and</p> <p>a control section storing a program which controls the operation of the robot apparatus on the basis of the received response information;</p> <p>wherein the response information is the information on a type of the said object specified by the said server.</p>
<p>[Claim 2]</p> <p>A robot apparatus which acts on an object comprising:</p> <p>at least one kind of sensor for detecting the object;</p> <p>a transmission section for transmitting a query to a server in order to acquire information on the object based on an output of the sensor;</p> <p>a reception section for receiving response information answering the query from the</p>	

server; and

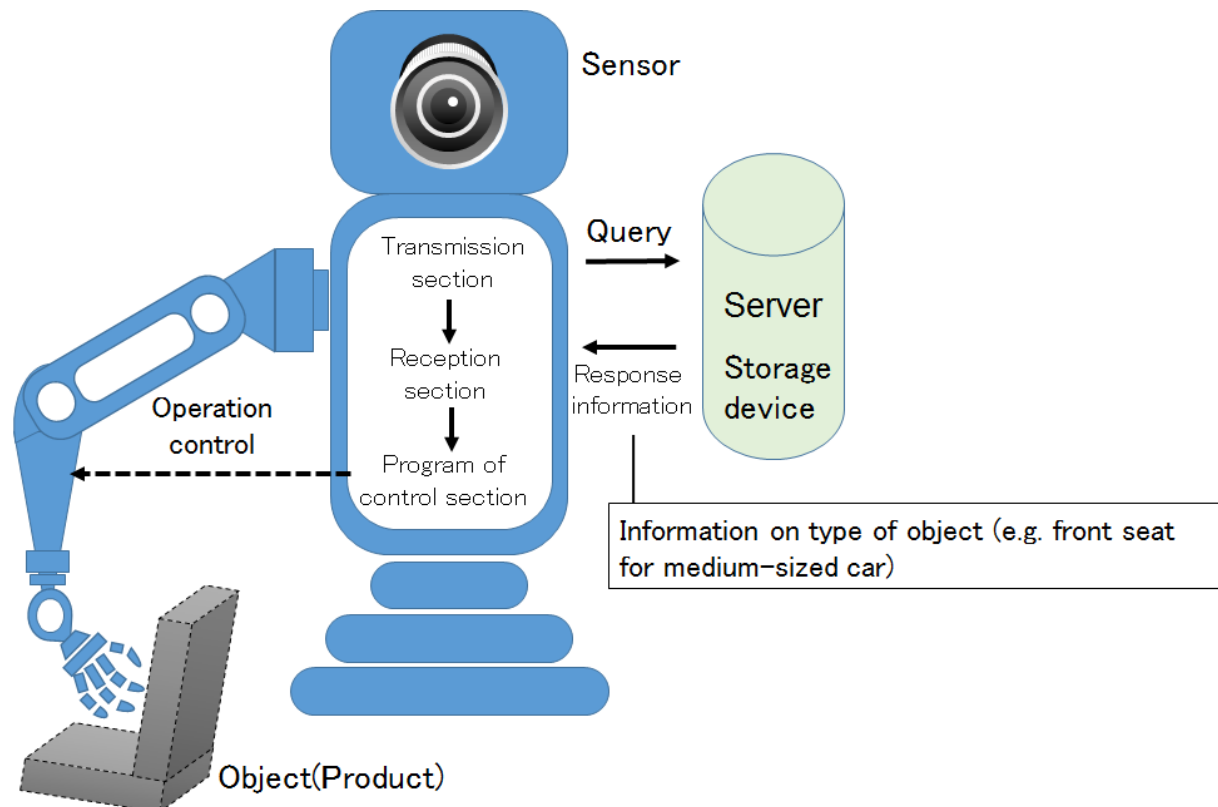
a control section storing a program which controls the operation of the robot apparatus on the basis of the received response information;

wherein the response information contains the attribute information and the unique identification information of each of the said object specified by the said server.

Drawing in the present application



Drawing in the prior art



Overview of the description

Solution for the Problem to be Solved

The invention as claimed in claim 1 is directed to a robot apparatus capable of accurately determining a type of a product as an object to be handled, on the basis of the latest information acquired from a production facility of the product, thereby achieving appropriate handling of the product.

The invention as claimed in claim 2 is directed to a robot apparatus capable of achieving appropriate handling of individual products and reporting of information acquired as to the products, even when each of the products as an object to be handled has a different specification.

Embodiment 1

In an embodiment of the invention according to claim 1, the robot apparatus performs work such as transferring, at an assembly plant like an automobile manufacturing factory, various types of products delivered as assembly parts from a number of parts manufacturing companies. The robot apparatus has a gripping unit for grasping a product and an image sensor capable of obtaining images of the product.

In the robot apparatus, the image sensor detects, as image information, such information as the shape of a product being handled by the robot apparatus, a company name indicated on the product, a serial number assigned to each product according to a system prescribed for each type of products. The transmission section sends a query for acquiring information on a type of product to a server based on an output of the image sensor. The query contains image information.

Overview of the description

... In the robot apparatus, an image sensor detects, as image information, such information as the shape of a product being handled by the robot apparatus, a company name indicated on the product, a serial number assigned to each product according to a system prescribed for each type of products. A transmission section sends a query for acquiring information on a type of product to a server based on an output of the image sensor. The query contains image information.

When the server receives the query from the robot apparatus, it compares the image information of the query with information stored in a storage device of the server to determine a type of object. Then, the server sends the information on the type of object, e.g., a front seat for a medium-sized car, to the robot apparatus as a response. The robot apparatus controls the operation of a gripping unit, etc. on the basis of the response information.

The server is connected via a network to a computer system of a production facility of each product manufacturing company and stores the latest information on products. When the server receives the query from the robot apparatus, it analyzes the image information to specify a type of product and sends the information back to the robot apparatus as response information.

In the robot apparatus, a reception section receives the response information, and a program of a control section controls the operation of the robot apparatus on the basis of the response information.

In the present embodiment, the robot apparatus performs operation control on the basis of the information that the server received from the production facility of the product via a network. Therefore, the robot apparatus can accurately determine a type of product on the basis of the latest information. This contributes to appropriate handling of the product.

Embodiment 2

In an embodiment of the invention according to claim 2, a robot apparatus has a gripping unit, an image sensor, and a transmission section, similar to the Embodiment 1.

In the present embodiment, the transmission section sends a server a query for identifying an individual product and acquiring relevant information based on an output of the image sensor.

The server is connected to a computer system of a production facility of each product manufacturing company via a network, and stores information on product lines in a systematically organized and

continuously updated manner. When the server receives a query from the robot apparatus, it analyzes image information to identify each individual product, and sends attribute information, such as materials used, weight, and surface treatment condition of each one of the products, and unique identification information (e.g., ID number uniquely and systematically assigned to each one of all the products to be handled) to the robot apparatus as response information.

In the robot apparatus, a reception section receives the response information, and a program of a control unit controls the operation of the robot apparatus on the basis of the response information.

In this embodiment, the robot apparatus receives response information containing the attribute information, such as materials, weight, surface treatment condition, and the unique identification information of each individual product and, on the basis of the information, controls its own operation. This enables appropriate handling, etc. of each product. More specifically, this enables a control of the gripping unit in such a manner that the gripped portion of the product and the gripping force can be optimized to each individual product. Information (e.g., rigidity of the gripped portion) acquired by the control section of the robot apparatus when the gripping unit grips the product can be sent from the transmission section to the server with the unique identification information. This enables the robot apparatus to perform the feedback of such information to the server and the addition and updating of the attribute information of the product. Thus, the added or updated attribute information may be used for the next

gripping of the same product, or shared with the other robot apparatus connected to the server. For the sake of the subsequent handling of the product in the assembly factory, the robot apparatus can affix to the product a seal showing a printed identification symbol or number, or attach an ID tag to the product, on the basis of the unique identification information. Furthermore, in a case where the robot apparatus detects abnormality such as damage of the product, the robot apparatus can also report it to the server with the unique identification information.

[Conclusion]

The invention of claim 1 lacks novelty.

The invention of claim 2 has novelty.

[Explanation]

- Claims 1

The robot apparatus is a subcombination, which is a part of a combination of the robot apparatus and the server.

Claim 1 on the robot apparatus recites a feature related to the server (the other subcombination), namely, “the response information is the information on a type of the said object specified by the said server on the basis of information received via a network from a production facility of the said object”. The portion of “on the basis of information received via a network from a production facility of the said object” only describes the source from which the server, separate from the robot apparatus, obtains information for specifying response information. This does not make any difference in the program itself of the robot apparatus, and does not serve to specify a structure, a function, etc. of the robot apparatus.

Consequently, there is no difference between the invention according to claim 1 and the invention disclosed in the cited document. As a result, the invention according to claim 1 lacks novelty.

- Claim 2

Similarly, claim 2 on a robot apparatus recites a feature related to the server (the other subcombination), namely, “the response information contains the attribute information and the unique identification information of each of the said object specified by the said server”. With

respect to the response information, claim 2 also specifies that the robot apparatus has “a control section storing a program which controls the operation of the robot apparatus on the basis of the received response information”. Therefore, the robot apparatus according to claim 2 has a control section storing a program which controls the operation of the robot apparatus on the basis of the attribute information and the unique identification information of each of the object, and performs the operation, through the control section, in response to the attribute information and the unique identification information of each of the object.

In contrast, according to disclosure in the cited document, “the response information is the information on a type of the said object specified by the said server.” Therefore, the robot apparatus only has a control section with a program which controls the operation of the robot apparatus on the basis of the information on a type of the said object, vis-à-vis the response information, and does not perform operation in response to the attribute information and the unique identification information of each of the object.

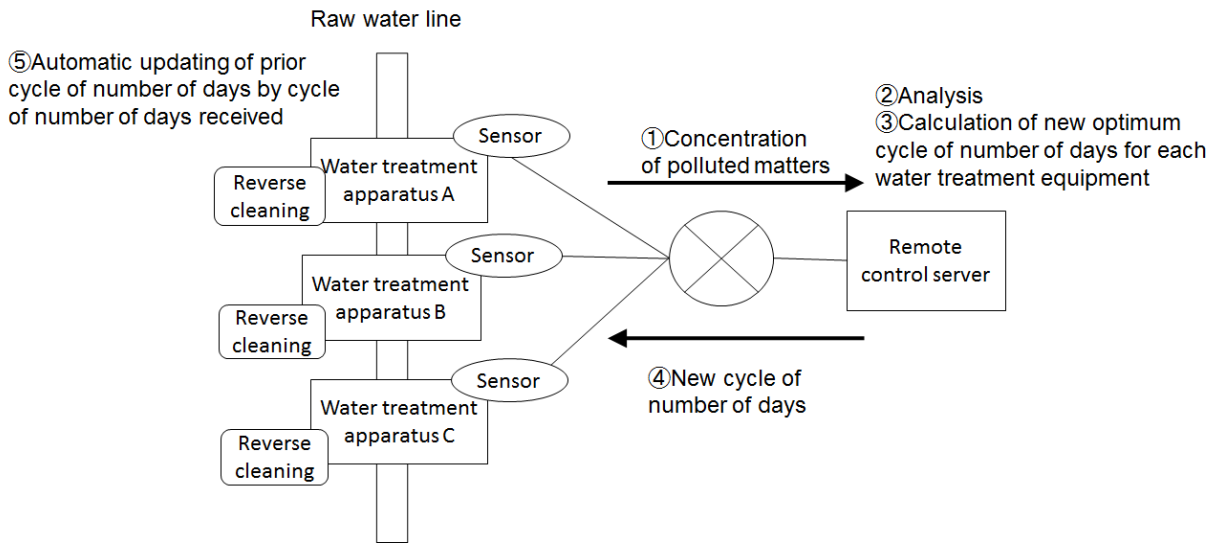
In this way, the robot apparatus according to claim 2 has a different program and thus operates differently from that in the prior art.

Accordingly, there is a difference between the invention according to claim 2 and the invention disclosed in the cited document. As a result, the invention according to claim 2 has novelty.

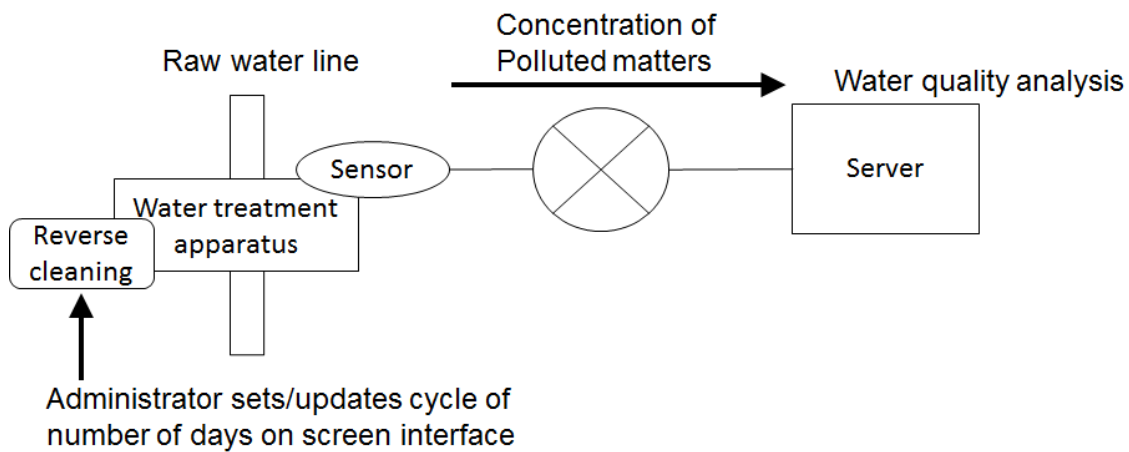
[Case 36] Subcombination (IoT-related technologies) (Invention has novelty)

Description	Prior art
<p>Title of Invention</p> <p>Water Treatment Apparatus</p>	<p>Title of Invention</p> <p>Water Treatment Apparatus</p>
<p>What is claimed is:</p>	<p>What is claimed is:</p>
<p>[Claim 1]</p>	<p>[Claim 1]</p>
<p>Water treatment apparatus for producing treated water by removing polluted matters contained in raw water, the apparatus comprising:</p>	<p>Water treatment apparatus for producing treated water by removing polluted matters contained in raw water, the apparatus comprising:</p>
<p>means for executing reverse cleaning process at a cycle of the variable number of days;</p>	<p>means for executing reverse cleaning process at a cycle of the variable number of days;</p>
<p>a concentration detector for detecting concentration of polluted matters of raw water to be introduced into the water treatment apparatus; and</p>	<p>a concentration detector for detecting concentration of polluted matters of raw water to be introduced into the water treatment apparatus; and</p>
<p>means for sending the detected concentration of polluted matters to a remote control server that is communicatively connected;</p>	<p>means for sending the detected concentration of polluted matters to a server that is communicatively connected.</p>
<p><u>wherein the remote control server calculates a new cycle of the number of days for updating on the basis of a plurality of concentrations of polluted matters received from a plurality of water treatment apparatuses on the same raw water line, and sends a result thereof to the water treatment apparatus.</u></p>	

Drawing in the present application



Drawing in the prior art



Overview of the description

The water treatment apparatus catches polluted matters contained in raw water such as ground water by a filtering bed to produce treated water. In the water treatment apparatus, as treated water is produced, ability of the filtering bed for catching polluted matters degrades. Therefore, it is necessary to execute reverse cleaning process at particular timing. It is desirable that the cycle of the number of days for executing the reverse cleaning process can be updated when water quality of raw water changes.

Overview of the description

The water treatment apparatus catches polluted matters contained in raw water such as ground water by a filtering bed to produce treated water.

As to the cycle of the number of days by which the water treatment apparatus executes the reverse cleaning process, an administrator of the water treatment apparatus can set/update, as required. The water treatment apparatus has a screen interface, and the administrator can set/update the cycle of the number of days on the screen interface.

In the present invention, the water treatment apparatus executes the reverse cleaning process at a cycle of the variable number of days. The cycle of the number of days is updated in a case where a new cycle of the number of days is received from the remote control server.

The water treatment apparatus sends concentration of polluted matters of raw water obtained by the concentration detector to the remote control server. In the remote control server, concentrations of polluted matters received from a plurality of water treatment apparatuses existing on the same raw water line are collected and analyzed. When it is determined that water quality of the raw water line changes based on the analysis, a new optimum cycle of the number of days is calculated for each water treatment apparatus by means of a specific equation containing concentrations of polluted matters and specification information of each water treatment apparatus. Then, the remote control server sends thus calculated new cycle of the number of days of each water treatment apparatus to the respective water treatment apparatuses for the sake of automatic updating.

When the water treatment apparatus receives the new cycle of the number of days from the remote control server, the prior set cycle of the number of days is automatically updated to the new cycle of the number of days, and the reverse cleaning process is executed according to the updated cycle of the number of days after the update.

Further, the water treatment apparatus can also send concentration of polluted matters of raw water obtained by the concentration detector to the server. The server analyzes the concentration of polluted matters, and causes a result thereof to be utilized for an examination of water quality.

[Conclusion]

The invention of claim 1 has novelty.

[Explanation]

The invention of claim 1 is directed to “water treatment apparatus”. Claim 1 also includes a description as to matters of the “remote control server” which is the other subcombination. That is, claim 1 includes a description of “the remote control server calculates a new cycle of the number of days for updating on the basis of a plurality of concentrations of polluted matters received from a plurality of water treatment apparatus on the same raw water line, and sends a result thereof to the water treatment apparatus”.

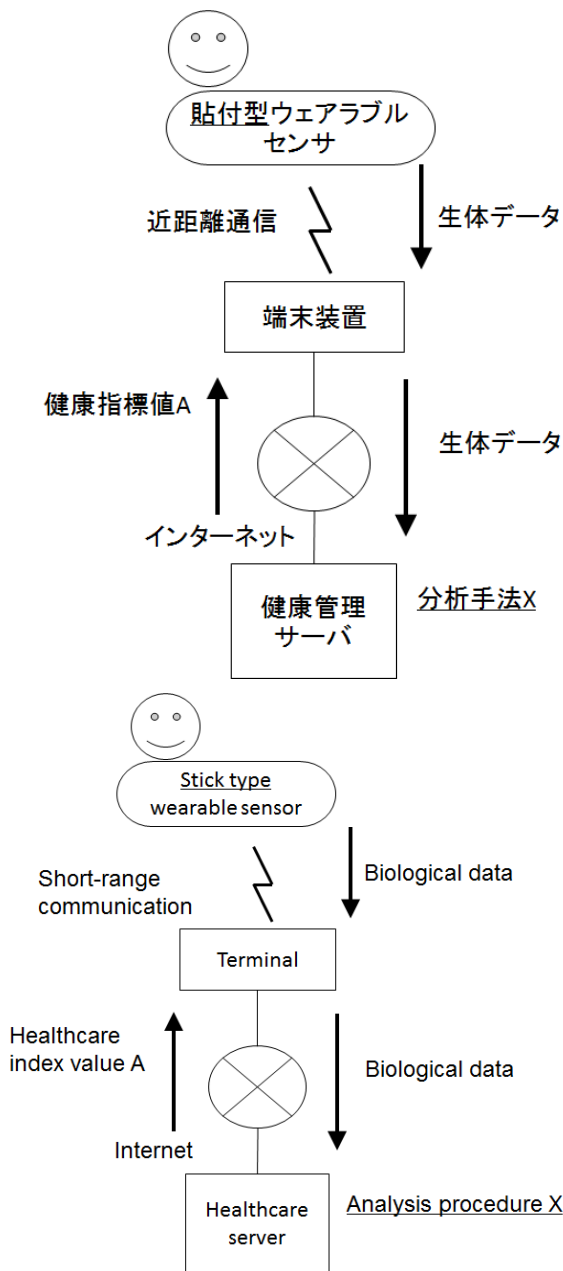
When considering the common general technical knowledge at the time of filing the present application and a description of “When the water treatment apparatus receives the new cycle of the number of days from the remote control server, the prior set cycle of the number of days is automatically updated to the new cycle of the number of days, and the reverse cleaning process is executed according to the updated cycle of the number of days after the update” in the detailed description of the invention, the statement as to the other subcombination specifies the water treatment apparatus in the meaning that the water treatment apparatus has reception means for receiving the cycle of the number of days from the remote control server. Therefore, the invention of claim 1 is specified as the water treatment apparatus having reception means.

Accordingly, the invention of claim 1 differs from the invention of the water treatment apparatus of the cited document which only sends concentration of polluted matters to the server and does not have reception means. Therefore, the invention of claim 1 has novelty.

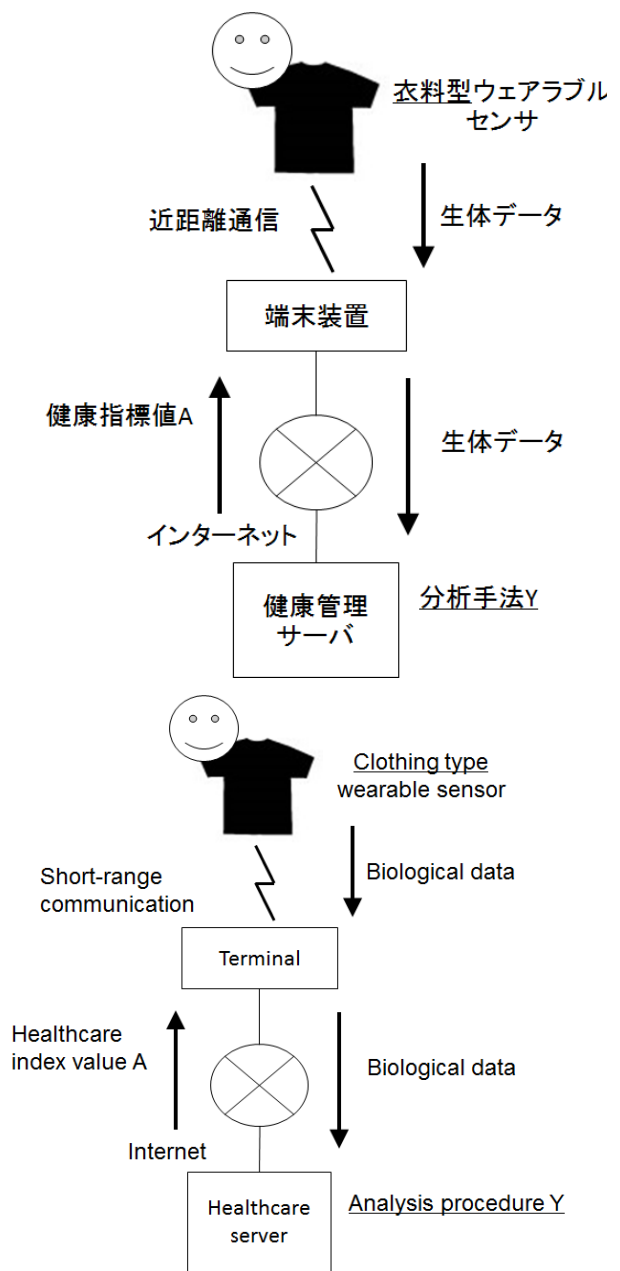
[Case 37] Subcombination (IoT-related technologies) (Invention lacks/has novelty)

Description	Prior art
<p>Title of Invention</p> <p>Healthcare System and Terminal</p>	<p>Title of Invention</p> <p>...</p>
<p>What is claimed is:</p>	
<p>[Claim 1]</p> <p>A healthcare system comprising a wearable sensor, a healthcare server, and a terminal device,</p> <p>wherein the wearable sensor is <u>a stick type sensor which is pasted on the skin of human body</u> and comprises</p> <p>means for measuring biological data containing a body temperature and heart rate of a wearer, and</p> <p>means for sending the biological data to the terminal device;</p> <p>wherein the terminal device comprises</p> <p>means for receiving the biological data from the wearable sensor,</p> <p>means for periodically summarizing the received biological data to send a result thereof to the healthcare server,</p> <p>means for receiving a health index value A received from the healthcare server, and</p> <p>means for displaying the health index value A on a screen; and</p> <p>wherein the healthcare server comprises</p> <p>means for calculating a health index value A of the wearer by analyzing the biological data received from the terminal device by means of analysis procedure X, and</p> <p>means for sending the calculated health index value A to the terminal device.</p>	<p>[Claim 1]</p> <p>A healthcare system comprising a wearable sensor, a healthcare server, and a terminal device,</p> <p>wherein the wearable sensor is a <u>clothing type sensor that a wearer wears</u> and comprises</p> <p>means for measuring biological data containing a body temperature and heart rate of the wearer, and</p> <p>means for sending the biological data to the terminal device;</p> <p>wherein the terminal device comprises</p> <p>means for receiving the biological data from the wearable sensor,</p> <p>means for periodically summarizing the received biological data to send a result thereof to the healthcare server,</p> <p>means for receiving a health index value A received from the healthcare server, and</p> <p>means for displaying the health index value A on a screen; and</p> <p>wherein the healthcare server comprises</p> <p>means for calculating a health index value A of the wearer by analyzing the biological data received from the terminal device by means of analysis procedure Y, and</p> <p>means for sending the calculated health index value A to the terminal device.</p>
<p>[Claim 2]</p> <p>A terminal device to be used for the healthcare system of Claim 1.</p>	

Drawing



Drawing



(Supplementary explanation)

There is no difference between the present invention and the invention disclosed in the Cited Document in that the communication system among a wearable sensor a terminal device and a healthcare server.

[Conclusion]

The invention of claim 1 has novelty.

The invention of claim 2 lacks novelty.

[Explanation]

- Claims 1

The invention of claim 1 differs from the invention disclosed in the cited document in a type of wearable sensor used in healthcare system and analysis procedure in the healthcare server.

That is, there is a difference between the invention of claim 1 and the invention disclosed in the cited document. Therefore, the invention of claim 1 has novelty.

- Claim 2

Claim 2 depends on claim 1 and is directed to an invention of “terminal device”. Claim 1 describes matters as to a “wearable sensor” and a “healthcare server” which are the other subcombination. That is, claim 1 recites a wearable sensor “which is a stick type sensor to be pasted on the skin of human body and comprises means for measuring biological data containing a body temperature and heart rate of the wearer and means for sending the biological data to the terminal device”, and a healthcare server “which comprises means for calculating a health index value A of the wearer by analyzing the biological data received from the terminal device by means of analysis procedure X and means for sending the calculated health index value A to the terminal device”.

However, the terminal device of claim 2 has only a function of periodically summarizing the biological data received from the wearable device to send a result thereof to the healthcare server and a function of displaying the health index value A received from the healthcare server. Therefore, a type of wearable device and an operation of the healthcare server do not specify a structure, a function, etc. of the terminal device.

When comparing the invention of claim 2 with the invention disclosed in the cited document, there is a difference in description and expression with respect to the matters as to the other subcombination; however, both inventions are identical in that having a function of periodically summarizing the biological data received from the wearable device to send a result thereof to the healthcare server and a function of displaying the health index value A received from the healthcare server, and thus there is no difference in the structure, the function, etc.

There is no other difference between the invention of claim 2 and the invention disclosed in the cited document. Therefore, the invention of claim 2 lacks novelty.

[Case 38] Subcombination (IoT-related technologies) (Invention lacks/has novelty)

Description	Prior art
Title of Invention	Title of Invention
Drone Monitoring System and Drone	...
What is claimed is:	
[Claim 1]	
A drone monitoring system for monitoring a target to be monitored by means of a three-dimensionally movable drone, the system comprising:	
a plurality of drones;	
a terminal carried by the target to be monitored; and	
an administrative server connected to the drones and the terminal via a communication network;	
wherein the terminal comprises means for acquiring a current position as a terminal position information to send the acquired information to the administrative server;	
wherein the administrative server comprises	
means for selecting a drone closest to the target to be monitored on the basis of the terminal position information received from the terminal, and	
means for sending the terminal position information to the selected drone; and	
wherein the drone comprises	
means for acquiring a current position of the drone itself as drone position information,	
means for receiving the terminal position information from the administrative server, and	
means for performing flying control of the drone itself on the basis of the drone position information and the terminal position information.	

[Claim 2]

A three-dimensionally movable drone connected to an administrative server via a communication network, comprising:

means for acquiring a current position of the drone itself as drone position information;

means for receiving terminal position information from the administrative server; and

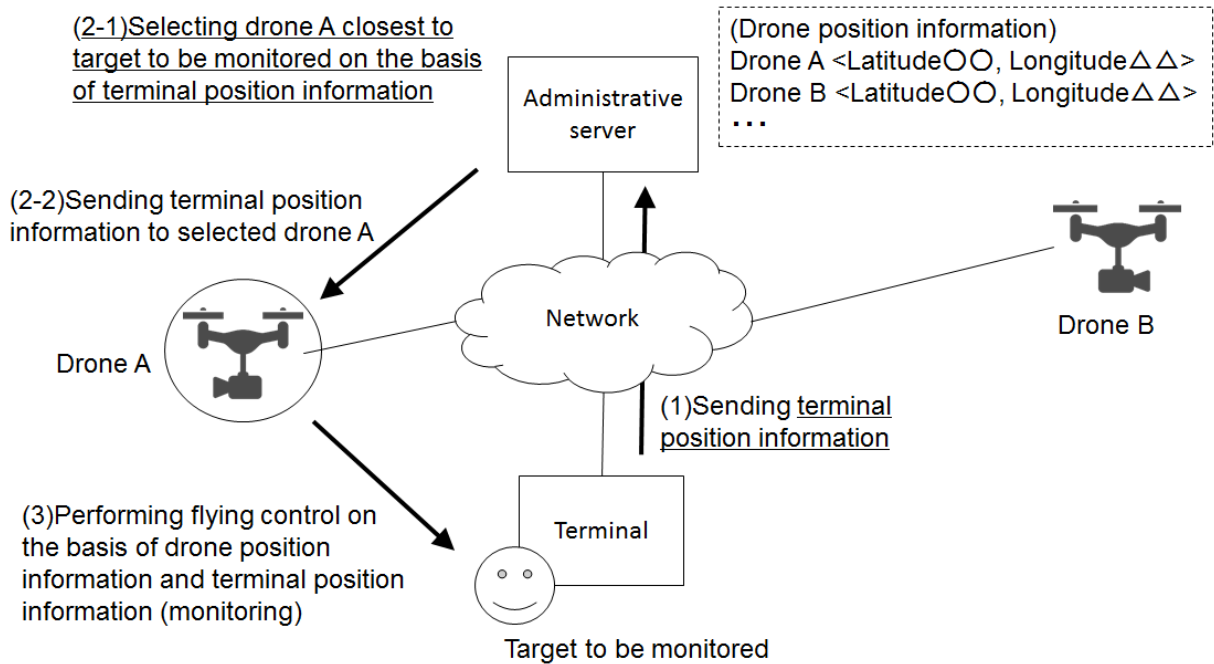
means for performing flying control of the drone itself on the basis of the drone position information and the terminal position information;

wherein the administrative server comprises

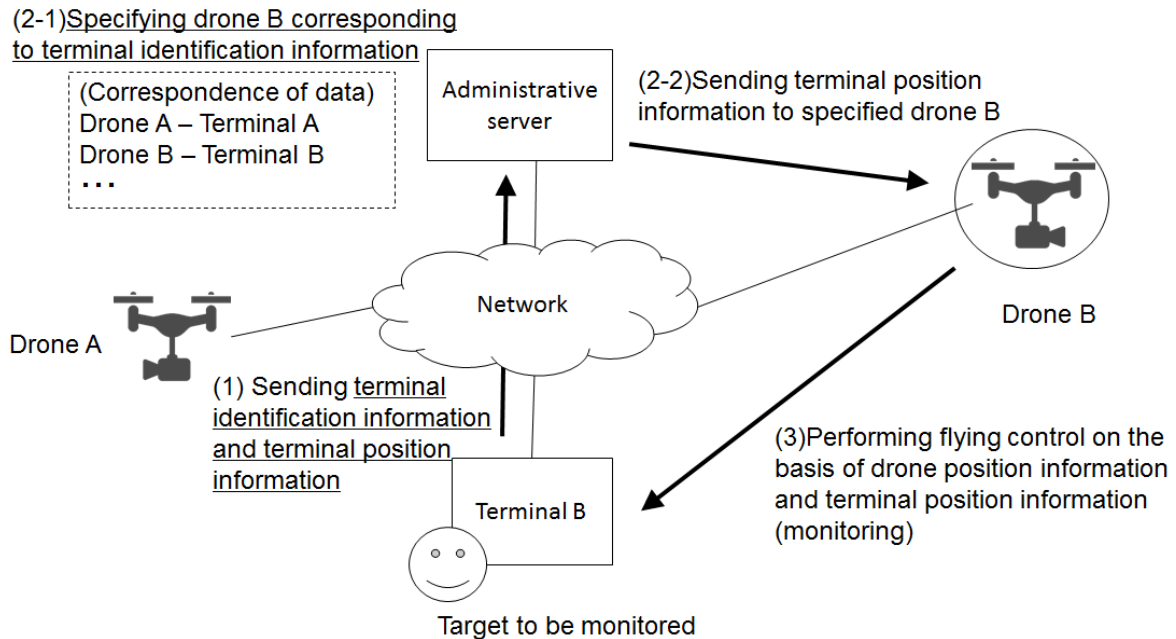
means for selecting a drone closest to the target to be monitored on the basis of the terminal position information received from the terminal of the target to be monitored, and

means for sending the terminal position information to the selected drone.

Drawing in the present application



Drawing in the prior art



Overview of the description

The present invention relates to a drone monitoring system for monitoring children and elderly people by utilizing autonomously flying unmanned object (drone).

The drone monitoring system of the present invention comprises a plurality of drones, a terminal to be carried by a child or an elderly who is a target to be monitored, and an administrative server. The drone is equipped with image capturing means and various types of sensors, thereby detecting abnormality of the target to be monitored. The drone also comprises means for announcing abnormality to people near the target to be monitored, as required. Further, a plurality of drones is arranged in advance at positions of different terrain and is shared among users of the present system. Then, the administrative server stores position information of each drone.

An operation of the present system will be described below.

(1) The terminal acquires a current position of the terminal itself as terminal position information and continuously sends the information to the administrative server.

(2-1) The administrative server selects a drone closest to the target to be monitored on the basis of the received terminal position information.

(2-2) The administrative server continuously sends the terminal position information received from the terminal to the selected drone.

(3) The drone performs flying control of the drone itself on the basis of drone position

Overview of the description

The present invention relates to a drone monitoring system for monitoring children and elderly people by utilizing autonomously flying unmanned object (drone).

The drone monitoring system of the present invention comprises a plurality of drones, a terminal to be carried by a child or an elderly who is a target to be monitored, and an administrative server. The drone is equipped with image capturing means and various types of sensors, thereby detecting abnormality of the target to be monitored. The drone also comprises means for announcing abnormality to people near the target to be monitored, as required. Further, the administrative server manages the drones in a manner that one drone is related to one corresponding terminal.

An operation of the present system will be described below.

(1) The terminal sends identification information of the terminal itself to the administrative server. Subsequently, the terminal acquires a current position of the terminal itself as terminal position information and continuously sends the information to the administrative server.

(2-1) The administrative server specifies a drone corresponding to the received terminal identification information.

(2-2) The administrative server continuously sends the terminal position information received from the terminal to the specified drone.

(3) The drone performs flying control of the drone itself on the basis of drone position

information that the drone acquires as a current position of itself and a position of the target to be monitored that the drone continuously receives from the administrative server. More specifically, in order to monitor the target to be monitored in an appropriate way, the drone performs flying control such that the drone flies away from the target to be monitored by a fixed distance, keeps a constant height, and continues autonomous flight.

information that the drone acquires as a current position of itself and a position of the target to be monitored that the drone continuously receives from the administrative server. More specifically, in order to monitor the target to be monitored in an appropriate way, the drone performs flying control such that the drone flies away from the target to be monitored by a fixed distance, keeps a constant height, and continues autonomous flight.

[Conclusion]

The invention of claim 1 has novelty.

The invention of claim 2 lacks novelty.

[Explanation]

- Claims 1

The invention of claim 1 differs from the invention disclosed in the cited document in a structure of “selecting a drone closest to the target to be monitored on the basis of the received terminal position information”.

That is, there is a difference between the invention of claim 1 and the invention disclosed in the cited document. Therefore, the invention of claim 1 has novelty.

- Claim 2

The invention of claim 2 is directed to a “drone”. Claim 2 describes matters as to “administrative server” which is the other subcombination. That is, claim 2 includes a description that “the administrative server comprises means for selecting a drone closest to the target to be monitored on the basis of the terminal position information received from the terminal of the target to be monitored and means for sending the terminal position information to the selected drone”.

However, how the administrative server selects a drone for monitoring a target to be monitored on the basis of what kind of standard will not affect a structure, a function, etc. of the drone of claim 2. This means that the above matters of other subcombination do not specify the structure, the function, etc. of the drone.

When comparing the invention of claim 2 with the invention disclosed in the cited document, there is a difference in description and expression in the matters of the other subcombination; however, there is no difference in a structure, a function, etc. There is no other difference between the invention of claim 2 and the invention disclosed in the cited document. Therefore, the invention of claim 2 lacks novelty.