Date	June 29, 2016	Court	Intellectual Property High Court, Fourth Division
Case number	2016 (Ne) 10007		
– A case in which the court examined a request for an injunction, etc. against an act of infringement made based on the patent right for an invention titled "chair with a swing function," and found that the products in question cannot be considered to fall within the technical scope of the invention as its equivalent.			

References: Article 70 of the Patent Act

Numbers of related rights, etc.: Patent No. 3958413, Correction No. 2015-390046

Summary of the Judgment

1. This is a case where the appellant alleged that the appellee's act of importing, selling, or otherwise handling the defendant's products constitutes infringement of the appellant's patent right and sought an injunction against the appellee's import, sale, etc. of the defendant's products and demanded disposal thereof under Article 100, paragraphs (1) and (2) of the Patent Act and requested payment of damages for the act of tort.

2. In the judgment in prior instance (Judgment of the Tokyo District Court, 2014 (Wa) 25196, December 8, 2015), the court of prior instance dismissed all of the appellant's claims by holding that the defendant's products do not fall within the technical scope of the Invention.

3. In this judgment, the Intellectual Property High Court found that the defendant's products cannot be considered to fall within the technical scope of the Invention on the grounds that the defendant's products do not satisfy the first and fifth requirements of the doctrine of equivalents.

(1) First requirement

The degree of contribution of the Invention can be considered to be relatively small in that the Invention adopts the 2-point rod holding system rather than the 1-point rod holding system as a seat holding mechanism. The essential part of the Invention is almost the same as the invention described in Claim 1 as far as the seat holding mechanism is concerned.

Therefore, the essential part of the Invention can be considered to lie in the fact that the Invention adopts the 2-point rod holding system as a seat holding mechanism for a baby chair, etc. whose seat can be swung continuously and which has a solenoid as a means of swing control.

On the other hand, the defendant's products do not adopt the 2-point rod holding system as a seat holding mechanism.

Therefore, the defendant's products cannot be considered to embody the essential part of the Invention and cannot be considered to satisfy the first requirement of the doctrine of equivalents.

(2) Fifth requirement

In response to a notice of reasons for refusal, the appellant made the amendment to the claimed invention relating to a baby chair, etc. whose seat can be swung continuously and which has a solenoid as a means of swing control, by deleting the former Claim 1, which does not specify the seat holding mechanism, in order to limit the Invention to the one described in the former Claim 2 (the "Invention"), which adopts the 2-point rod holding system as a seat holding mechanism. As of the time of the filing of the application for the Invention, it was already widely known that some baby chairs, etc. whose seat can be swung continuously adopt rollers and curved rails as a seat holding mechanism. A seat holding mechanism that adopts rollers and curved rails can be objectively considered to be included within the scope of the seat holding mechanism described in the former Claim 1, which was deleted as mentioned above.

Therefore, it can be said that the appellant admitted, or acted in a manner that appeared to admit, that the seat holding mechanism that adopts rollers and curved rails does not fall within the technical scope of the Invention.

Thus, the fifth requirement of the doctrine of equivalents cannot be considered to be satisfied.

Judgment rendered on June 29, 2016, original received on the same day by court clerk
2016 (Ne) 10007 Appeal case of seeking injunction of patent right infringement, etc.
Court of Prior Instance: Tokyo District Court 2014 (Wa) 25196
Date of conclusion of the oral argument: May 30, 2016

Judgment

Appellant: Combi Corporation

Appellee: Aprica Children's Products G.K.

Main text

1. This appeal shall be dismissed.
2. Appellant shall bear the cost of the appeal.

Facts and reasons

No. 1 Gist of the appeal

1. The judgment in prior instance shall be reversed.
2. Appellee should not import, sell, or offer to sell each of the products described in the attached list of the Defendant's products in the judgment in prior instance.
3. Appellee must dispose of each of the products described in the list.
4. Appellee shall pay the money of 140 million yen and a rate of 5% per annum to Appellant from September 26, 2014 until completion of the payment.
5. Appellee shall bear the costs of both the first court and the second court.
6. Declaration of provisional execution

No. 2 Outline of the case (the abbreviations shall follow those in the judgment in prior instance unless specified otherwise.)

1. This case is a case in which Appellant having the patent right (present patent right) according to the invention titled "chair with rocking function" alleges that, since each of the products described in the attached list of the Defendant's products in judgment in prior instance (each of the Defendant's products) belongs to the technical scope of the invention according to Claim 1 of the scope of claims (present invention), the act of import, sales, and the like of each of the Defendant's products by Appellee is infringement of the present patent right, and claimed injunction of import, sales, and the like of each of the Defendant's products and disposal of the products under Article

100, paragraphs (1) and (2) of the Patent Act and claimed payment of damages of 140 million yen as damages on the ground of tort and delay damages at a rate of 5% per annum prescribed in the Civil Code from the September 26, 2014, which is the day following the tort, until completion of the payment.

The court of prior instance dismissed all the claims by Appellant by stating that each of the Defendant's products does not belong to the technical scope of the present invention and thus, Appellant instituted this appeal against the judgment in prior instance.

2. Basic facts (facts undisputed by the parties or facts easily found by the evidences described at the end of each clause and the entire import of oral argument)

(1) Present patent right

Appellant has the present patent right as follows. Appellant made amendment for the Description attached to the written application (present amendment). (Exhibits Ko 1, 2, 8-1 to 8-5)

A. Patent number: Patent No. 3958413

B. Title of the Invention: Chair with rocking function

C. Filing date: September 17, 1997

D. Date of registration: May 18, 2007

(2) Correction request

Appellant made a request for a correction trial by the claim for trial as of May 18, 2015 to correct the Description according to the present patent as in the corrected description (present Description) attached to the judgment in prior instance. The Japan Patent Office rendered the JPO decision that the correction is approved on July 30 of the same year and finalized the JPO decision (hereinafter referred to as the "present correction"). (Exhibits Ko 27-1, 27-2 and 28-1, 28-2)

(3) Present invention

Claim 1 in the scope of claims after the present correction is as in claim 1 in the scope of claims in the present Description. The invention according to Claim 1 is described separately by constituent features as follows (hereinafter, each constituent feature will be referred to as "constituent feature A" and the like).

L. A chair with rocking function including:

A. a base and a seat provided capable of rocking with respect to the base, comprising:

B. a member of a magnetic material supported by the seat;

C. a solenoid fixed to the base proximately to the member of the magnetic material at a position different from a position of the member of the magnetic material when the seat stands still and attracting the member of the magnetic material to a rocking direction by an electromagnetic force; and

D. rocking control means for controlling a rocking operation of the seat by exciting the solenoid at a predetermined timing,

E. the member of the magnetic material and the solenoid being rocked in a separated state, in which

F'. in the base, at least two rods are provided capable of rocking at positions separated from each other in the rocking direction of the seat, the seat being supported by the two rods at two different positions separated with respect to the rocking direction;

G. the member of the magnetic material is constituted by the two members of the magnetic material faced/disposed at a predetermined interval;

H. the solenoid is fixed to the base in the vicinity of a middle point position between the two members of the magnetic material when rocking of the seat is stopped;

I. the solenoid has a through hole along a winding axis, the winding axis being fixed to the base in parallel with the rocking direction of the seat;

J. the two members of the magnetic material are fixed to a linear shaped shaft fixed to the seat; and

K. the shaft is inserted into the through hole.

(4) Act of Appellee

Appellee has imported the Defendant's products 1 and 2 from June in 2013, the Defendant's product 3 from October in the same year, and the Defendant's products 4 and 5 from November in 2014 from China, respectively, and sells them to major retailers and major mail-order site operators dealing with goods for babies. Moreover, Appellee offered to sell each of the Defendant's products on their official website (Exhibits Ko 3 to 6, 19-1, 19-2, and 20-1, 20-2).

3. Issues

(1) Establishment of infringement under the doctrine of equivalent

Appellant alleges that the specific configuration of each of the Defendant's products is as the feature of the configuration of each of the Defendant's products in Attachment 1 (Appellant's allegation). Moreover, fulfillment of the constituent features A, I, K, and L of the present invention by each of the

Defendant's products is undisputable. On the other hand, with regard to whether each of the Defendant's products fulfills the constituent features B to E, G, H, and J of the present invention is disputable as in B below. Moreover, it is undisputable by the parties that the specific configuration (configuration corresponding to the constituent feature F') of the seat supporting mechanism of each of the Defendant's products is as the constituent feature (Appellant's allegation) f of each of the Defendant's products in Attachment 1, and each of the Defendant's products does not fulfill the constituent feature F' of the present invention in terms of wording (present different point).

Therefore, the issue related to the establishment of infringement under the doctrine of equivalent is as follows:

A. Present Different Point (Issue 1)

B. Whether each of the Defendant's products fulfills [i] the "magnetic material" of the constituent features B, C, E, G, and J; [ii] the "solenoid attracting the member of the magnetic material to the rocking direction" in the constituent feature C; [iii] the "rocking control means for controlling the rocking operation of the seat by exciting the solenoid at the predetermined timing" in the constituent feature D; [iv] the "two members of the magnetic material" in the constituent features G, H, and J; and [v] the "position different from the position of the member of the magnetic material" in the constituent feature C and the "vicinity of the middle point position in the constituent feature H", respectively (Issues 2-1 to 2-5)

(2) Presence/absence of the invalidation reason of the patent according to the present invention (Issue 3)

(3) Value of damages of Appellant (Issue 4)

(omitted)

No. 4 Judgment of this court

Each of the Defendant's products does not fulfill at least the constituent feature F' of the present invention in terms of wording, but since each of the Defendant's products is not applicable to infringement under the doctrine of equivalent of the present invention or does not belong to the technical scope thereof, this court also decided that the Appellant's claim should be dismissed.

The reasons for that are as follows:

1. Establishment of infringement under the doctrine of equivalent

(1) Requirements of infringement under the doctrine of equivalent

Even if there is a portion different from the product to be manufactured or the like or the method to be used by the counterpart (hereinafter referred to as a "target product or the like") in the configuration described in the scope of claims, if [i] the portion is not an essential part of the patent invention; [ii] the object of the patent invention can be achieved even if the portion is replaced by that in the target product or the like, and the identical function and effect can be exerted; [iii] a person having ordinary knowledge in the technical field to which the invention belongs (person ordinarily skilled in the art) could have easily conceived of the replacement as above at the time of the manufacture or the like of the target product or the like; [iv] the target product or the like is not identical to the publicly known art at the filing of the patent invention or not a product that would have been easily conceived of by the person ordinarily skilled in the art therefrom; and [v] there is no special circumstances that the target product or the like is applicable to those intentionally excluded from the scope of claims in the filing procedure of the patent invention, it is reasonable to interpret that the target product or the like is equivalent to the configuration described in the scope of claims and belongs to the technical scope of the patent invention (see Supreme Court 1994 (O) 1083, February 24, 1998, Third Petty Bench Judgment / Civil Court Precedents Vol. 52, No. 1, page 113).

(2) First requirement of equivalence (non-essential part)

A. Finding of essential part

The substantial value of the invention to be protected by the Patent Act resides in a point that solution based on the unique technical idea unprecedented in the prior art for realizing solution of a technical problem which could not have been achieved by the prior art is disclosed to society with a specific configuration. Therefore, the essential part in the patent invention should be interpreted to be a feature part configuring the unique technical idea not found in the prior art in the description in the scope of claims of the patent invention.

Moreover, the aforementioned essential part should be found by finalizing the feature part configuring the unique technical idea not found in the prior art in the description in the scope of claims of the patent invention after the problem and the solution of the patent invention (see Article 36, paragraph (4) of the Patent Act, Article 24-2 of the Regulations under the Patent Act) and the effect thereof (object, configuration, and the effect thereof) are grasped on the basis of the description in the scope of claims and the Description. That is, in view of the fact that the substantial value of the patent invention is determined in accordance with a degree of contribution as compared with the prior art in the technical field thereof, the essential

part of the patent invention should be found from the description in the scope of claims and the Description or particularly from the comparison with the prior art described in the Description, and it is interpreted that, [i] if the degree of contribution of the patent invention is evaluated to be larger than in the prior art, a part of the description in the scope of claims is found to be made into a superordinate concept thereof; and [ii] if the degree of contribution is evaluated not to be so larger than in the prior art, it is found to have substantially the same meaning as the description in the scope of claims.

However, the problem that could not be solved by the prior art is described in the Description, but if it is objectively insufficient in view of the prior art at the filing, the feature part configuring the unique technical idea of the patent invention not found in the prior art should be found by also considering prior arts not described in the Description. In such a case, the essential part of the patent invention becomes more proximate to the description in the scope of claims than in the case in which it is found only from the description in the scope of claims and the Description, and it is interpreted that a range where the equivalence is found becomes narrower.

B. Description in the present Description

The Detailed Description of the Invention in the present Description has roughly the following description:

(A) Technical Field

The present invention relates to a chair used as a chair and as a bed for infants, for example, and particularly to a chair with a rocking function which can continuously rock a seat. ([0001])

(B) Prior Art

Conventionally, in a chair and the like for infants, a seat body is continuously rocked mainly by means performed manually or the like, but an art which realized electronic control of this rocking means is disclosed in Unexamined Patent Application Publication No. 1980-99219, for example.

The rocking device described in the aforementioned gazette is constituted by, as schematically illustrated in Fig. 15 (judgment note: Drawing in Attachment 2), a seat body 122 rotatably suspended on a support 121, an arc-shaped iron core 123 interlocking with rocking of the seat body 122, a solenoid 124 fixed to the support 121 side and having the iron core 123 capable of going into/out of a coil, and a rocking control device 125 for controlling power supply to the solenoid 124 in accordance with a rocking state of the seat body 122. ([0002])

A rocking driving method by this rocking device will be described. First, by

electrically conducting the solenoid 124 by the rocking control device 125 at an inclined position of the seat body 122 illustrated in Fig. 15, an electromagnetic force is generated from the solenoid 124, and the iron core 123 is attracted toward an arrow A direction; that is, to the solenoid 124 side. As a result, the seat body 122 is inclined to an arrow B direction. After that, the electric conduction to the solenoid 124 is shut off, the seat body 122 starts to be inclined to an opposite direction by its own weight, and is returned to the original inclined position together in combination with the inertia of the seat body 122. By repeating the operation described above, the rocking motion is performed. ([0003])

(C) Problem to be Solved by the Invention

Such conventional rocking devices have the following problems.

a. Since the rocking motion draws an arc around a base point 126 as a center, a through hole of the solenoid 124 and the iron core 123 are desirably formed having an arc shape around the base point, respectively. However, since it is actually difficult to mold an inside of the solenoid 124 with the arc shape, the through hole of the solenoid is set larger than an iron core diameter, and in some cases only the iron core side is molded having an arc shape. ([0004])

However, even with such configuration, since the iron core with the arc shape is inserted into the through hole of the linear-shaped solenoid, not only might the iron core be brought into contact with a wall surface of the through hole, but also a distance by which the electromagnetic force from the solenoid substantially acts on the iron core (effective power load distance) is shortened, and the sufficient rocking driving becomes difficult in a state where a heavy article is mounted on the seat body. ([0005])

In general, the smaller the gap between the through hole wall surface of the solenoid and the iron core, the larger the electromagnetic force working on the iron core, and attraction efficiency can be improved, but if this gap is narrowed, when the iron core is brought into contact with the through hole wall surface, a rubbing noise between the iron core and the through hole wall surface is generated, and a frictional loss caused by the contact is generated. As a result, a larger torque becomes necessary for the rocking driving, and the solenoid needs to be excited excessively as compared with the usual case. Moreover, if a dimensional tolerance of fitting between the through hole of the solenoid and the iron core is too small, an ejection sound for pushing out air inside the through hole is generated when the iron core passes through the through hole.

b. In the case of the configuration in which the solenoid and the iron core are in contact with each other and there is a sliding part, a rocking motion for a long time can deteriorate a material quality by friction and thus, in general, a lubricant such as a grease is applied on a sliding portion. However, if it is to be used for a long time or to be operated with a relatively large torque, nonconformity such as alteration of the lubricant on the sliding portion caused by a frictional heat occurs in some cases, and the lubricant itself rather gives a bad influence. Thorough maintenance work can be performed in order to avoid such a state, but the maintenance work itself is cumbersome and not desirable, since work such as replacement of an expendable component or the like is needed depending on the case.

c. There can be such a case in which a user moves to an end portion side of the seat body 122 from the vicinity of the base point 126 which is a rotation center axis of the seat body 122 illustrated in Fig. 15, and a gravity center position 127 of the seat body 122 is biased. In such a case, in a single-arm rocking method found in the conventional rocking device, as the seat body 122 is inclined, a rotating moment is increased with an increase of a distance L from the base point 126, and such a need arises that a driving torque should be larger than usual. As a result, a rocking amplitude cannot be made constant, and the rocking motion becomes unstable. ([0006])

Thus, in view of the aforementioned problem of the prior art, the present invention has an object to supply a chair with a rocking function with high power conversion efficiency by which a stable rocking motion can be performed even if the gravity center position of the user is biased, while silence at rocking is maintained. ([0007])

(D) Means for Solving the Problem

Thus, the invention of a chair with a rocking function described in Claim 1 is a chair with a rocking function including a base, and a seat provided capable of rocking with respect to the base, including a member of a magnetic material supported by the seat, a solenoid fixed to the base proximately to the member of the magnetic material at a position different from a position of the member of the magnetic material when the seat stands still and attracting the member of the magnetic material to a rocking direction by an electromagnetic force, and rocking control means for controlling a rocking operation of the seat by exciting the solenoid at a predetermined timing, the member of the magnetic material and the solenoid being rocked in a separated state, in which in the base, at least two rods are provided capable of rocking at positions

separated from each other in the rocking direction of the seat, the seat being supported by the two rods at two different positions separated with respect to the rocking direction, the member of the magnetic material is constituted by two members of the magnetic material faced/disposed at a predetermined interval, the solenoid is fixed to the base in the vicinity of a middle point position between the two members of the magnetic material when rocking of the seat is stopped, the solenoid has a through hole along a winding axis, the winding axis being fixed to the base in parallel with the rocking direction of the seat, the two members of the magnetic material are fixed to a linear shaped shaft fixed to the seat, and the shaft is inserted into the through hole. ([0008])

(E) Description of Embodiment

The seat 2 and the base 5 constitute a parallel link mechanism in which the seat 2 is supported on the base 5 side by two rocking rods 7a and 7b, and by a pendulum motion by the rocking rods 7a and 7b around rod support portions 5a and 5b, the seat 2 can be reciprocally moved; that is, made to swing including some vertical motion as illustrated in Figs. 4 and 5. ([0018])

As described above, since flange portions 2a and 2b below a seat surface supporting the seat 2 are provided at two different positions separated with respect to the rocking direction of the seat, even if the gravity center position changing depending on a seated position of the user or the like is biased, nonconformity such as inclination of the seat 2 or hindrance in the rocking function such as rocking amplitude or the like which will be described later can be prevented. ([0019])

In the through hole 10 of the solenoid 9, a shaft 13 made of a non-magnetic material such as aluminum and two members 14a and 14b (hereinafter referred to as plungers) of the magnetic material fixed to the shaft 13 at a predetermined interval are inserted proximately to an inner wall of the through hole 10 and in a non-contact state. (see the drawings in Attachment 5) ([0021])

By means of such configuration, the solenoid 9 and the plungers 14a and 14b are not mechanically connected but the plungers 14a and 14b can be independently movable in a horizontal direction with respect to the solenoid 9. Since the plungers 14a and 14b are movable somewhat in the vertical direction with the rocking motion of the rocking rods 7a and 7b, a vertical interval between the inner wall of the through hole 10 in the solenoid and the plungers 14a and 14b is set such that the plungers 14a and 14b are not brought into contact with the inner wall of the through hole 10 and get as close to each other as possible. ([0023])

(F) Advantageous Effect of the Invention

According to the invention described in Claim 1, the distance between the member of the magnetic material and the solenoid can be shortened with a simple configuration by aligning the member of the magnetic material and the solenoid linearly with respect to the rocking direction, and the power load efficiency can be further improved, while, since the seat is rocked/driven in the state where the member of the magnetic material and the solenoid are separated, generation of noise and vibration can be reduced as much as possible, silence and sitting comfort can be further improved, and the maintenance work can be reduced as much as possible.

According to the invention described in Claim 1, since the seat is rocked by the parallel link mechanism, rocking resistance is largely reduced, and even if the gravity center position of the user is biased on the seat, a stable rocking motion can be realized without hindrance in the rocking function of the seat, and a more comfortable use feeling can be obtained. ([0052])

C. Prior art described in the present Description

In the present Description, an art disclosed in Unexamined Patent Application Publication No. 1980-99219 (Exhibit Ko 2, hereinafter referred to as the "Exhibit Otsu 2 gazette") is described as prior art.

Exhibit Otsu 2 gazette is a document disclosing the rocking control means and the seat supporting mechanism and the like for an infant cradle capable of continuously rocking the seat, and the solenoid and the like are employed for the rocking control means, and such a system that a rod is provided capable of rocking at one point, the seat being supported by this rod (hereinafter, this system is referred to as the "rod one-point support system") was employed for the seat supporting mechanism.

D. Contents of the present invention

(A) According to the aforementioned B and C, the present invention is found to be as follows:

a. The present invention relates to a chair used as a chair and the like for infants capable of continuously rocking the seat.

b. Conventionally, the rocking control means in the chairs and the like for infants capable of continuously rocking the seat is operated mainly manually or the like.

The art disclosed in Exhibit Otsu 2 gazette employs the solenoid as the rocking control means and the rod one-point support system as the seat supporting mechanism in the chair and the like for infants capable of continuously rocking the seat.

However, in the chair and the like for infants disclosed in Exhibit Otsu 2

gazette, the iron core and the solenoid which gives the electromagnetic force to the iron core are desirably molded having an arc shape, respectively, but since it is actually difficult to mold the solenoid having the arc shape, the through hole of the linear solenoid is set somewhat larger, and in some cases only the iron core is molded having the arc shape. However, when the iron core having the arc shape is inserted into the through hole of the linear solenoid, a distance is generated between the solenoid and the iron core and thus, it has a problem that the electromagnetic force working from the solenoid to the iron core is weakened. The present Description describes that the art disclosed in Exhibit Otsu 2 gazette has the problem that the through hole of the solenoid is brought into contact with the iron core, but this is caused by narrowing of the interval between the through hole of the solenoid and the iron core in order to prevent weakening of the electromagnetic force working from the solenoid to the iron core. Thus, the problem of the contact between the through hole of the solenoid and the iron core is included in the problem that the distance is generated between the solenoid and the iron core, and the electromagnetic force working from the solenoid to the iron core is weakened.

Moreover, in the chair and the like for infants disclosed in Exhibit Otsu 2 gazette, when the user moves to the end portion side of the seat, and the gravity center position is biased, the rotating moment around the base point which is the rotation center axis of the seat is increased, and there is also a problem that the electromagnetic force working from the solenoid to the iron core needs to be strengthened in order to rock the seat.

c. The present invention has an object to solve the problem of the chair and the like for infants capable of continuously rocking the seat in which the solenoid is employed as the rocking control means, and the rod one-point supporting system is employed as the seat supporting mechanism; that is, (1) the problem that the distance is generated between the solenoid and the iron core by inserting the iron core having the arc shape into the through hole of the linear solenoid; and (2) the problem that, when the gravity center position of the seat is biased, the rotating moment around the base point which is the rotating center axis of the seat is increased.

d. In order to solve problem [i] described above, the present invention employs a system in which the two rods are provided on the base, capable of rocking, at positions separated from each other in the rocking direction of the seat in the seat supporting mechanism, the seat being supported capable of

rocking at the two different positions separated with respect to the rocking direction (hereinafter, this system is referred to as the "rod two-point support system") and the configuration in which the member of the magnetic material and the shaft fixing it (hereinafter, it may be referred to as the "shafts and the like" in some cases) have a linear shape. That is, by employing the rod two-point support system, a vertical motion at the rocking of the seat is suppressed, and by making the shaft and the like have the linear shape, the shaft and the like can be inserted into the through hole of the winding axis of the solenoid having a smaller diameter. Since the shaft and the like and the solenoid can be made proximate, weakening of the electromagnetic force working from the solenoid to the shaft and the like is prevented. Therefore, the solution of the present invention to problem [i] described above is to employ not the rod one-point support system but the rod two-point support system as the seat supporting mechanism and the configuration in which the shaft and the like is made to have the linear shape. Whether the vertical motion at the rocking of the seat can be actually suppressed or not by employing the rod two-point support system does not determine the aforementioned finding on the solution of the present invention described in the present Description.

Moreover, the present invention employs the rod two-point support system for the seat supporting mechanism in order to solve problem [ii] described above. That is, if the rod one-point support system is employed for the seat supporting mechanism, the base point which is the rotation center axis of the seat is only one point where the rod supporting the seat is joined to the base and thus, when the user moves to the end portion side of the seat, the gravity center position is biased, and the rotating moment around the base point is increased. On the other hand, if the rod two-point system is employed, the two points where the rods supporting the seat are joined to the base become the base points which are rotation center axis of the seat, whereby even if the user moves to the end portion side of the seat, while the gravity center position is between the two base points (in the horizontal direction), the rotating moment working at each of the base points is offset, the rotating moment working on each of the base points is made smaller, and even if the gravity center position is outside the two base points (outer side in the horizontal direction), the rotating moment working on the base point is small since the distance to the base point closer to the gravity center position is short. As a result, it is no longer necessary to strengthen the electromagnetic force working from the

solenoid to the shaft and the like in order to rock the seat. Therefore, the solution of the present invention to problem [ii] described above is to employ not the rod one-point support system but the rod two-point support system for the seat supporting mechanism.

e. The present invention has an effect that weakening of the electromagnetic force working from the solenoid to the shaft and the like can be prevented by bringing the shaft and the like and the solenoid close to each other by employing not the rod one-point support system but the rod two-point support system as the seat supporting mechanism and the configuration in which the shaft and the like are made to have the linear shape to problem [i] described above.

Moreover, the present invention has an effect of reducing the rotating moment around the point where the rod supporting the seat is joined to the base and of eliminating the need to strengthen the electromagnetic force for rocking the seat by employing not the rod one-point support system but the solution of the rod two-point support system as the seat supporting mechanism to problem [ii] described above.

(B) Degree of contribution of the present invention

As is found above, the present invention has the object of solving the problems of the chair and the like for infants capable of continuously rocking the seat, employing the solenoid as the rocking control means, and employing the rod one-point support system as the seat supporting mechanism; that is, the problems that [i] since the iron core having the arc shape is inserted into the through hole of the linear solenoid, the distance is generated between the solenoid and the iron core; and [ii] when the gravity center position of the seat is biased, the rotating moment around the base point which is the rotation center axis of the seat is increased.

However, in the chair and the like for infants capable of continuously rocking the seat, presence of the rod two-point support system as the seat supporting mechanism was well-known to the person ordinarily skilled in the art on the priority date of the present patent (Exhibits Ko 11-1 to 11-3, Exhibits Otsu 6 to 8, 12). Moreover, if the rod two-point support system, not the rod one-point support system, can be employed for the seat supporting mechanism, the vertical motion at rocking of the seat can be suppressed, and if the gravity center position of the seat is biased, the rotating moment around the base point which is the rotation center axis of the seat can be decreased.

Moreover, presence of the configuration that the linear shaft is inserted into the through hole of the solenoid was well-known to the person ordinarily skilled in the art on the priority date of the present patent (Exhibits Otsu 13 to 17). Moreover, if the aforementioned configuration can be employed for the solenoid employed as the rocking control means in the chair and the like for infants capable of continuously rocking the seat, the shaft and the like can be brought closer to the solenoid.

Therefore, the well-known art that the rod two-point support system is employed as the seat supporting mechanism and the well-known art that the linear iron core is inserted into the solenoid can be considered to solve the problems of the chair and the like for infants capable of continuously rocking the seat, employing the solenoid as the rocking control means, and employing the rod one-point support system as the seat supporting mechanism.

However, the present Description does not have the description on the well-known art that the rod two-point support system is employed as the seat supporting mechanism and the well-known art that the linear shaft is inserted into the solenoid in the chair and the like for infants capable of continuously rocking the seat. Therefore, the description in the present Description as the problems that could not be solved by the prior art is objectively insufficient in view of the prior art and thus, the essential part of the present invention should be found from the comparison with each of the aforementioned well-known arts which were prior arts on the priority date in addition to the description in the present Description.

According to each of the description in the present Description and the aforementioned well-known arts, the present invention can be considered to have applied the configurations of the seat supporting mechanism which is the rod two-point support system and of the insertion of the linear shaft into the solenoid, which are the prior arts, to the chair and the like for infants capable of continuously rocking the seat, employing the solenoid as the rocking control means and the rod one-point support system as the seat supporting mechanism. Moreover, since the rod two-point support system which is the prior art is the seat supporting mechanism which had been present in the chair and the like for infants capable of continuously rocking the seat, it is not so difficult to combine the rod two-point support system with the seat supporting mechanism itself even for the one employing the solenoid as the rocking control means so long as it is the chair and the like for infants capable of continuously rocking

the seat.

Therefore, the degree of contribution of the present invention cannot be evaluated so highly in a point that the rod two-point system, not the rod one-point system, is employed as the seat supporting mechanism and thus, the essential part of the present invention is substantially the same as the description in Claim 1 in the scope of claims only to a degree related to the seat supporting mechanism.

E. Essential part of the present invention

(A) According to the above, in the chair and the like for infants capable of continuously rocking the seat and having the solenoid as the rocking control means, employment of the rod two-point support system as the seat supporting mechanism is found to be the essential part of the present invention (the feature part configuring the unique technical idea not found in the prior art in the scope of claims).

(B) On the other hand, Appellant alleges that the principle to solve the problem of the present invention resides in a point that the support member of the seat is provided at two different positions separated with respect to the rocking direction of the seat, the vertical motion of the seat at the rocking is suppressed to some degrees by causing trajectories of support points at the two positions to perform pendulum motions, respectively, and the distance between the solenoid and the magnetic material is shortened as much as possible while still in the non-contact state by employing the configuration in which the linear shaft is inserted into the through hole of the solenoid. However, to provide the support members of the seat at the two different positions separated with respect to the rocking direction of the seat and to configure such that the trajectories of the support points at the two positions perform the pendulum motions, respectively, mean to select the presence of the rods which are constituent elements of the rod two-point support system and thus, Appellant aforementioned allegation cannot be employed.

Moreover, Appellant alleges that the principle to solve the problem of the present invention also includes the point that the seat is supported at the two points separated with respect to the rocking direction by providing the member for supporting the seat at the two points separated with respect to the rocking direction. However, to provide the member for supporting the seat at the two points separated with respect to the rocking direction is also to select the presence of the rods which are the constituent elements of the rod two-point

support system and thus, Appellant's aforementioned allegation cannot be employed.

F. Non-fulfillment of the first requirement of each of the Defendant's products

Each of the Defendant's products is a chair and the like for infants using a solenoid as means for continuously rocking the seat and employs such a system that "two sets (four pieces in total) of rollers (wheels) at two different positions separated with respect to the rocking direction" are "rotatably provided" "on a lower part of the seat", respectively, and "two sets (four pieces in total) of the curved rails on an upper part of a base" "are provided at positions corresponding to each of the rollers", and "when each of the curved rails provided on the upper part of the base receives each of the rollers rotatably provided on the lower part of the seat, the seat" "is supported capable of rocking with respect to the base". As described above, each of the Defendant's products does not use the rod two-point support system as the seat supporting mechanism; that is, the system in which the two rods are provided capable of rocking at the positions separated from each other with respect to the rocking direction of the seat, the seat being supported by the two rods, capable of rocking at the two different positions separated with respect to the rocking direction. Therefore, each of the Defendant's products is not considered to include the essential part of the present invention.

Therefore, each of the Defendant's products is not found to fulfill the first requirement of the equivalence.

(3) Fifth requirement (special circumstances) of the equivalence

A. Determination reference of the fifth requirement

The fifth requirement of the equivalence is such that, even if the part different from the target product or the like is present in the configuration described in the scope of claims, there are no special circumstances such that the target product or the like is applicable to intentional exclusion from the scope of claims in the patent filing procedure. That is, the allegation on the patentee side later which contradicts the approval that the invention does not belong to the technical scope of the patent invention or an apparent behavior which would have been so understood such as intentional exclusion from the scope of claims by the applicant in the patent filing procedure is not allowed in view of the estoppel doctrine and thus, the equivalence is denied in the case of such special circumstances.

B. Application history of the present patent

According to the facts, evidences (evidences described in the end of each clause), and the entire import of the oral argument to be the grounds, the filing

procedure of the present patent is found to be as follows:

(A) Appellant filed an application for the present patent on September 17, 1997 describing as follows (Exhibit Ko 8-1)

a. Claim 1 in the scope of claims (hereinafter referred to as "Old Claim 1")

A chair with a rocking function including a base and a seat provided capable of rocking with respect to the base/ comprising: a member of a magnetic material supported by the seat / a solenoid fixed to the base proximately to the member of the magnetic material at a position different from a position of the member of the magnetic material when the seat stands still and attracting the member of the magnetic material to a rocking direction by an electromagnetic force / and rocking control means for controlling a rocking operation of the seat by exciting the solenoid at a predetermined timing, the member of the magnetic material and the solenoid being rocked in a separated state.

b. Claim 2 in the scope of claims (hereinafter referred to as "Old Claim 2")

The chair with a rocking function according to Claim 1, wherein, in the base, at least two rods are provided capable of rocking, the seat is supported by the two rods, the member of the magnetic material is constituted by two members of the magnetic material faced/disposed at a predetermined interval, and the solenoid is fixed to the base in the vicinity of a middle point position between the two members of the magnetic material when rocking of the seat is stopped.

c. Claim 3 in the scope of claims (hereinafter referred to as "Old Claim 3")

The chair with a rocking function according to Claim 1, wherein sliding means capable of a horizontal reciprocating motion of the seat with respect to the base is provided between the seat and the base.

(B) The examiner of the Japan Patent Office notified to Appellant that Old Claim 1 in the present patent application should be refused under Article 29, paragraph (2) of the Patent Act in the notice of reasons of refusal as of January 26, 2007 (present notice of reasons of refusal). (Exhibit Ko 8-2)

(C) Appellant made the present amendment upon receipt of the present notice of reasons of refusal. That is, Appellant submitted the amendment of procedures and the written opinion with the same gist on March 30, 2007, stating that Old Claim 1 is deleted, and the scope of claims are limited to Old Claims 2 and 3, Old Claim 2 is changed to Claim 1, and Old Claim 3 is changed to Claim 2, and alleged in the written opinion that "by carefully examining the reasons of refusal and Cited Document 1, we achieved the conclusion that the finding of the examiner was correct and made the amendment as follows that the scope of claims

is limited to Old Claims 2 and 3 described in the same notice as 'no reasons of refusal are found'.", "New Claim 1 employs the configuration of Old Claim 2 as it is without any reason of refusal and there is no concern of addition of a new matter to New Claim 1." "New Claim 2 employs the configuration of Old Claim 3 as it is without any reason of refusal and there is no concern of addition of a new matter to New Claim 1." and the like. Upon receipt of the present amendment, establishment of the present patent right was registered on May 18, 2007. (Exhibits Ko 8-3 to 8-5)

(D) The description of the scope of claims after the present amendment is as follows.

a. Claim 1

A chair with a rocking function including a base and a seat provided capable of rocking with respect to the base, comprising: a member of a magnetic material supported by the seat, a solenoid fixed to the base proximately to the member of the magnetic material at a position different from a position of the member of the magnetic material when the seat stands still and attracting the member of the magnetic material to a rocking direction by an electromagnetic force, and rocking control means for controlling a rocking operation of the seat by exciting the solenoid at a predetermined timing, the member of the magnetic material and the solenoid being rocked in a separated state, wherein, / in the base, at least two rods are provided capable of rocking, the seat being supported by the two rods, the member of the magnetic material is constituted by two members of the magnetic material faced/disposed at a predetermined interval, and the solenoid is fixed to the base in the vicinity of a middle point position between the two members of the magnetic material when rocking of the seat is stopped.

b. Claim 2

A chair with a rocking function including a base and a seat provided capable of rocking with respect to the base, comprising: a member of a magnetic material supported by the seat, a solenoid fixed to the base proximately to the member of the magnetic material at a position different from a position of the member of the magnetic material when the seat stands still and attracting the member of the magnetic material to a rocking direction by an electromagnetic force, and rocking control means for controlling a rocking operation of the seat by exciting the solenoid at a predetermined timing, the member of the magnetic material and the solenoid being rocked in a separated state, wherein / sliding means capable of a horizontal reciprocating motion of the seat with respect to the base is provided

between the seat and the base.

C. Presence/absence of special circumstances

As described in the aforementioned B, at the filing of the present patent, in the chair and the like for infants capable of continuously rocking the seat and having the solenoid as the rocking control means, Appellant did not particularly limit the seat supporting mechanism in Old Claim 1, limited the seat supporting mechanism to the rod two-point support system in Old Claim 2, and limited the seat supporting mechanism between the seat and the base to the one "wherein sliding means capable of a horizontal reciprocating motion (of the seat with respect to the base) is provided" between the seat and the base in Old Claim 3. Moreover, Appellant deleted Old Claim 1 from the scope of claims of the present patent and limited the range to Old Claim 2 and Old Claim 3.

As described above, Appellant deleted Old Claim 1 not particularly limiting the seat supporting mechanism and limited the chair and the like for infants capable of continuously rocking the seat and having the solenoid as the rocking control means to Old Claim 2 (the present invention) employing the rod two-point support system for the seat supporting mechanism and Old Claim 3 employing the method "wherein sliding means capable of a horizontal reciprocating motion (of the seat with respect to the base) is provided" between the seat and the base in response to the notice of reasons of refusal in the present amendment. Presence of the system of the roller and the curved rail as the seat supporting mechanism of the chair and the like for infants capable of continuously rocking the seat had already been well known at the filing of the present invention (Exhibits Otsu 3 to 5), and the seat supporting mechanism related to the system using the roller and the curved rail is objectively included in a range of the seat supporting mechanism related to Old Claim 1 deleted as above.

Therefore, it can be so evaluated that Appellant admitted that the seat supporting mechanism related to the system using the roller and the curved rail does not belong to the technical scope of the present invention, or apparently behaved in such way.

Thus, the fulfillment of the fifth requirement of the equivalence cannot be approved.

D. Appellant's allegation

Appellant alleges that, since there was no chair and the like for infants combining each of the configurations using the solenoid as a power mechanism and using the roller and the curved rail as the seat supporting mechanism at the

time of filing of the present patent, and the problem caused by use of the solenoid as the power mechanism was not well known, it was not easy to include the system using the roller and the curved rail as the seat supporting mechanism in the scope of claims of the present patent and moreover, the seat supporting mechanism is not limited to the system using the rod in order to avoid the reasons of refusal.

However, the evaluation of the fact that Appellant comprehensively deleted the seat supporting mechanism related to the systems excluding the rod two-point support system and the like in the present amendment should be objectively determined.

Then, the Appellant's specific recognition at the present amendment and the object of the present amendment do not determine the conclusion related to the fulfillment of the fifth requirement of equivalence.

(4) Summary

Thus, without a need of examining establishment of the other requirements of equivalence, since each of the Defendant's products does not fulfill the first requirement and the fifth requirement of equivalence, each of the Defendant's products does not belong to the technical scope of the present invention as being equivalent thereto.

2. Conclusion

According to the above, without a need of determining the remaining points, since none of the Appellant's claims is grounded, the judgment in prior instance which dismissed them is reasonable.

Thus, the present appeal is dismissed and the judgment as in the main text shall be rendered.

Intellectual Property High Court, Fourth Division
Presiding judge: TAKABE Makiko
Judge: MASEKI Sumiko
Judge: KATASE Akira

Attachment 1

Features of configurations of each of the Defendant's products (Appellant's allegation)

l. A chair with a rocking function including

a. a base and a seat capable of rocking with respect to the base, comprising:

b. a member of a permanent magnet supported on the seat;

c. a solenoid fixed to the base proximately to the permanent magnet at a position different from a member position of the permanent magnet when the seat stands still and attracting the permanent magnet to a rocking direction by an electromagnetic force; and

d. rocking control means for controlling a rocking operation of the seat by exciting the solenoid at a predetermined timing,

e. the member of the permanent magnet and the solenoid being rocking in a separated state, in which

f. two sets (four pieces in total) of rollers (wheels) are rotatably provided on a lower part of the seat at two different positions separated with respect to the rocking direction, respectively, and two sets (four pieces in total) of the curved rails are provided on an upper part of the base at positions corresponding to each of the rollers, and when each of the curved rails provided on the upper part of the base receives each of the rollers rotatably provided on the lower part of the seat, the seat is supported capable of rocking with respect to the base,

g. the member of the permanent magnet is constituted by two members of the permanent magnet faced/disposed at a predetermined interval,

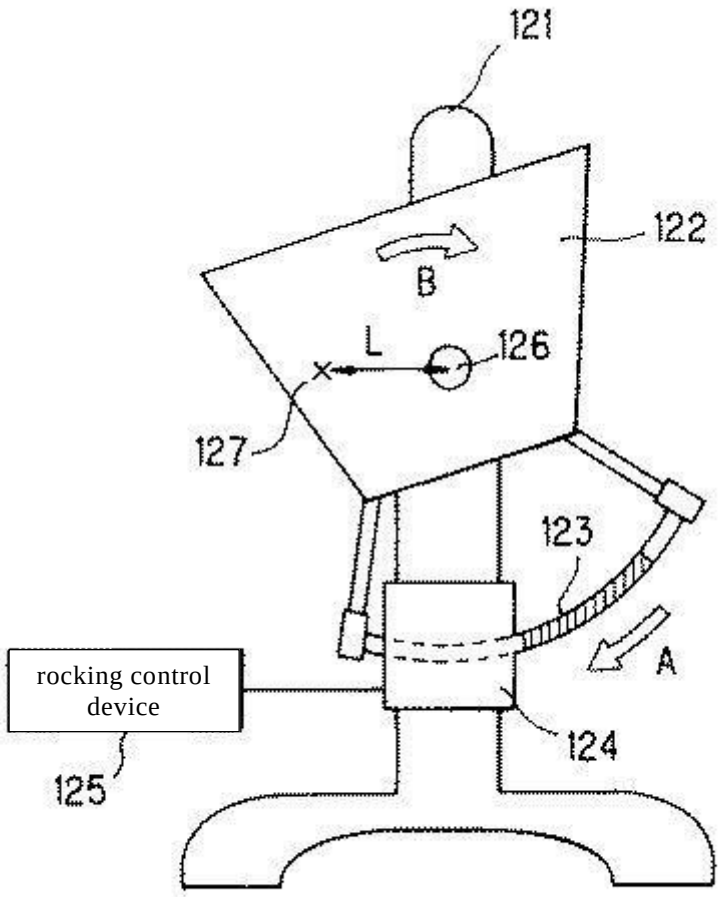
h. the solenoid is fixed to the base in the vicinity of a middle point position between the two members of the permanent magnet when rocking of the seat is stopped,

i. the solenoid has a through hole along a winding axis and is fixed to the base with the winding axis in parallel with the rocking direction of the seat,

j. the two members of the permanent magnet are fixed to a linear shaft fixed to the seat, and

k. the shaft is inserted into the through hole.

Attachment 2
Fig. 15



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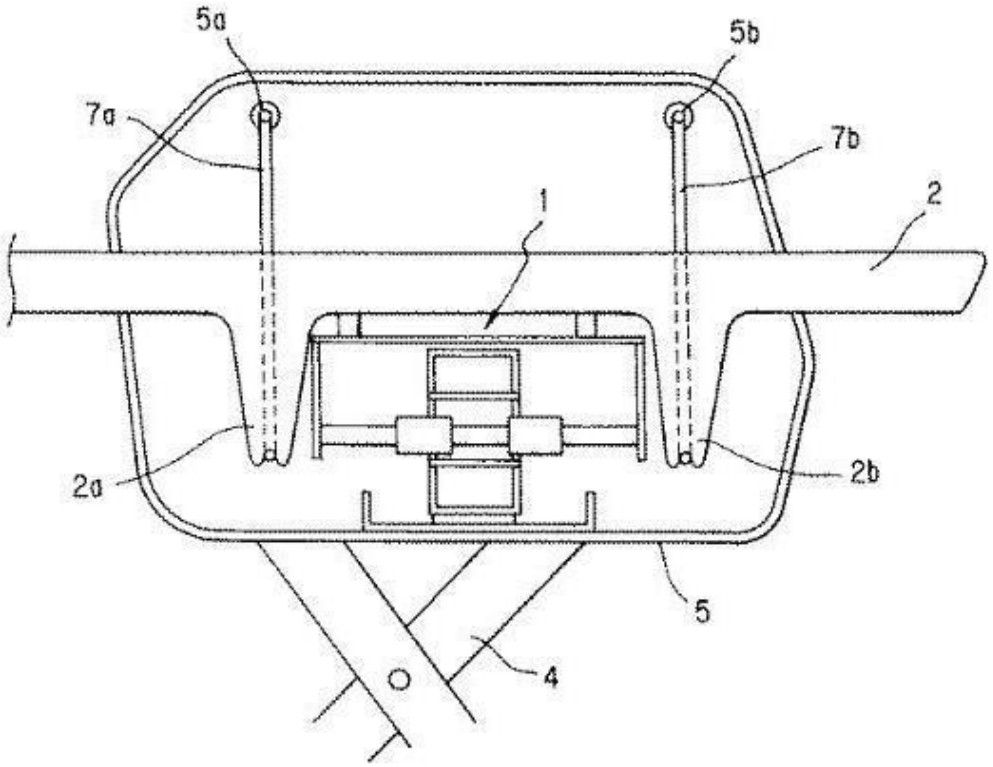
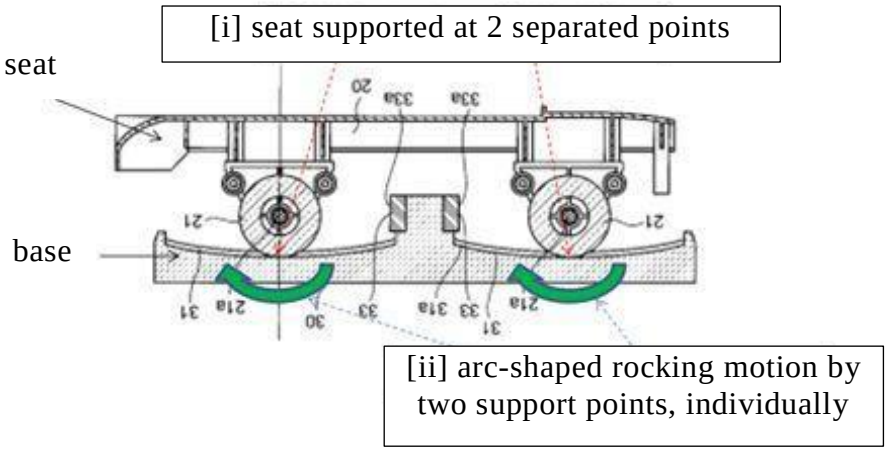
Attachment 3

Fig. 3

図3

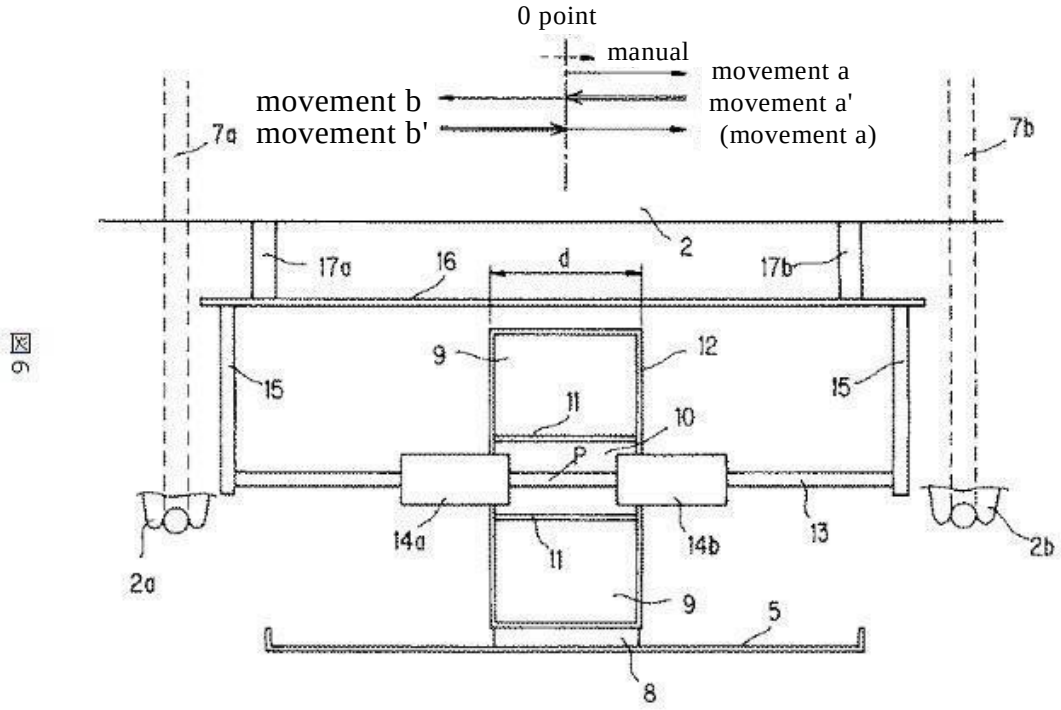


Attachment 4



Attachment 5

Fig. 6



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