

Date	October 26, 2000	Court	Tokyo High Court
Case number	2000 (Ne) 2147		18th Civil Division
– A case in which the court maintained the judgment in prior instance which found that the structure of the defendant's product is equivalent to the patented invention covered by the patent right held by the plaintiff.			

References: Article 70 of the Patent Act

Number of related rights, etc.: Patent No. 2662538

### Summary of the Judgment

1. The appellee holds a patent right ("Patent Right") for an invention titled "device for separating and removing foreign matter on raw laver" ("Patented Invention"). The appellee alleged that the machine for removing foreign matter from laver manufactured and sold by the appellant (the defendant) (the "appellant's product") literally satisfies the constituent features stated in the scope of claims of the Patented Invention or is equivalent thereto and claimed an injunction against the manufacture and sale of the appellant's product as well as the disposal thereof.

In the judgment in prior instance, the court denied literal infringement by finding that the structure of the appellant's product differs from part of Constituent Feature B stated in the scope of claims of the Patented Invention, which reads "the first rotating plate is fit into the inner peripheral edge of this circular frame plate part in a substantially flush state with a slight clearance," i.e., the structure wherein "the first rotating plate is fit into the inner peripheral edge of this circular frame plate [...] with a [...] clearance." With respect to the infringement under the doctrine of equivalents, the court first made the following findings with respect to the first requirement for finding infringement under the doctrine of equivalents (the different part is not an essential part of the patented invention), and determined that the appellant's product can be found to be equivalent to the Patented Invention by finding that the characteristic part of the Patented Invention can be found in the structure of fitting the rotating plate into the circular frame plate part with a slight clearance but not in the structure of fitting the rotating plate into the inner peripheral edge of the circular frame plate and that the abovementioned different part is not an essential part of the Patented Invention: [i] "The essential part of a patented invention is the characteristic part that serves as the basis for the means to solve the specific problem of the patented invention among the structure of the patented invention stated in the scope of claims, or in other words, such part is one which, if replaced with another structure, would cause the product

thereof as a whole to be evaluated as being different from the technical idea of the patented invention."; and [ii] "The determination on whether or not the difference between the patented invention and the subject product is related to the essential part of the patented invention should not be made by simply and formally extracting part of the structure stated in the scope of claims but instead should be made from the standpoint of whether the means to solve the problem used in the subject product belong to the principles that are substantially identical with the principles of the means to solve the problem used in the patented invention or to different principles, after identifying the characteristic principles of the means to solve the problem used in the patented invention by comparing it with prior art." As a result, in the judgment in prior instance, the court upheld the appellee's claims.

2. In this judgment, in addition to affirming the findings and determinations made in the judgment in prior instance, the court made the following findings and determinations with respect to the allegations concerning the fulfillment of the constituent features and application of the doctrine of equivalents among the grounds for the appeal and dismissed the appeal in question.

The appellant's allegations are based on the following alleged facts: In the appellant's product, a strong water flow that directly moves toward the bottom plate and bottom corner part of the tank from the gap exit by the rotation of the rotating plate and this water flow functions to adversely discharge the water existing in the bottom corner part of the tank toward the upper part and central part of the tank, while a reciprocal water flow is generated toward the central direction on the surface of water due to the existence of difference in level in the vertical direction in the outer peripheral edge part of the rotating plate that generates strong water flow and has it collide with the outer wall of the tank. As a result of such structure, water, laver and foreign matter particles are stirred in a completely turbid state in the whole tank and thus it is impossible for foreign matter particles with a heavy specific gravity to be accumulated at the bottom corner part by making use of the centrifugal force of the vortex formed by the rotating plate unlike in the case of the Patented Invention. In order to prove this fact, the appellant submitted experiment reports, etc. that allegedly confirm such allegation. However, the abovementioned experiment reports, etc. are insufficient to find that the water flow obtained by the structure of the appellant's product, which is different from Constituent Feature B of the Patented Invention, is so different from the water flow obtained by the structure of the Patented Invention as to resist the centrifugal force obtained by the rotation, in relation to the foreign matter particles.

Therefore, the appellant's alleged fact that it is impossible to achieve the objective of the Patented Invention (i.e., to have foreign matter particles with a heavy specific gravity accumulated in the bottom corner part by the centrifugal force of the vortex) in the appellant's product cannot be admitted.

Judgment rendered on October 26, 2000

2000 (Ne) 2147, Appeal Case of Seeking an Injunction against Infringement of a Patent Right (Date of conclusion of oral argument: September 5, 2000; Court of prior instance: Tokyo District Court, 1998 (Wa) 11453)

#### Judgment

Appellant (Defendant): Fulta Electric Machinery Co., Ltd.

Appellee (Plaintiff): Shinwa Seisakusho Co., Ltd.

#### Main text

The appeal in question shall be dismissed.

The cost of appeal shall be borne by the appellant.

#### Facts and reasons

##### No. 1 Judicial decision sought by the appellant

"The judgment in prior instance shall be revoked. The claims made by the appellee shall be dismissed."

##### No. 2 Outline of the case

1. The appellee (the plaintiff), who holds a patent right (the "Patent Right") related to a device for separating and removing foreign matter on raw laver (title of the invention: device for separating and removing foreign matter on raw laver; the "Patented Invention"; Patent No. 2662538), alleged that the machine for removing foreign matter from laver (the "appellant's product") manufactured and sold by the appellant (the defendant) literally satisfies the constituent features stated in the scope of claims of the Patented Invention or is equivalent thereto and claimed an injunction against the manufacture and sale of the appellant's product as well as the disposal thereof. In the judgment in prior instance, the court held as follows: the structure of the appellant's product differs from part of constituent feature B stated in the scope of claims of the patent invention, which reads "the first rotating plate is fit into the inner peripheral edge of this circular frame plate part in a substantially flush state with a slight clearance," i.e., the structure wherein "the first rotating plate is fit into the inner peripheral edge of this circular frame plate [...] with a [...] clearance," but the appellant's product may be found to be equivalent to the Patented Invention. Based on this finding, the court upheld the appellee's claims.

2. The outline of the case is as stated in "1. Undisputed facts" and "2. Issues and the parties' allegations in relation thereto" of section "No. 2 Outline of the case" among the facts and reasons of the judgment in prior instance.

##### No. 3 Court decision

In this judgment, the court found that the appellant's product is equivalent to

Patented Invention 1 and Patented Invention 2 and thus the appellant's act of manufacturing and selling the appellant's product constitutes infringement of the Patent Right. The reasons are as stated in section "No. 3 Determination on the issues" that is among the facts and reasons of the judgment in prior instance, other than the following determinations made by this court in line with the grounds for appeal.

(Omitted)

## 2. Determinations on the grounds for appeal

(1) Allegations 1 and 2 among the grounds for appeal are based on the following alleged facts: In the appellant's product, a strong water flow that directly moves toward the bottom plate and bottom corner part of the tank from the gap exit by the rotation of the rotating plate and this water flow functions to adversely discharge the water existing in the bottom corner part of the tank toward the upper part and central part of the tank, while a reciprocal water flow is generated toward the central direction on the surface of water due to the existence of difference in level in the vertical direction in the outer peripheral edge part of the rotating plate that generates strong water flow and has it collide with the outer wall of the tank. As a result of such structure, water, laver and foreign matter particles are stirred in a completely turbid state in the whole tank and thus it is impossible for foreign matter particles with a heavy specific gravity to be accumulated at the bottom corner part by making use of the centrifugal force of the vortex formed by the rotating plate unlike in the case of the Patented Invention. In order to prove this fact, the appellant submitted Exhibits Otsu No. 23-1 through No. 23-4 and Exhibits Otsu No. 24 through No. 27.

(2) Exhibits Otsu mentioned above are all reports of an experiment titled "test to confirm the dispersion state of foreign matter particles in raw laver." Specifically, they are reports of experiments which confirmed the dispersion state of foreign matter particles in the tank when seawater (specific gravity: 1.03), raw laver (laver, specific gravity: 1.02) and foreign matter particles are mixed in the appellant's products (Dasutōru FD-380C with one rotating plate; Dasutōru FD-380S with two rotating plates) and are rotated and stirred under various conditions by collecting raw laver or foreign matter particles by pumping or a woven metal wire at nine positions defined by classifying the stirred mixed liquid flow into the inner side, intermediate, and external side in the radial direction, and the upper part, intermediate part and bottom part in the vertical direction. Among the abovementioned exhibits, Exhibits Otsu No. 23-1 through No. 23-4 are reports on experiments wherein *Platorchestia platensis* (commonly known

as prawn), stems of seaweed or wood chips, etc. that have substantially the same specific gravity as raw laver are mixed as foreign matter, while Exhibits Otsu No. 24 through No. 27 are reports on experiments wherein molded chips of polyacetal resin (specific gravity: 1.33) and seashells (specific gravity: 2.61) that have a heavier specific gravity than raw laver are mixed as foreign matter.

According to these Exhibits Otsu, while these experiments may be presumed to have been conducted with integrity (provided, however, that these exhibits contain errors in the average number of foreign matter particles and the method of calculating the average specific gravity; see the report dated September 6, 2000 prepared by Maeda Tamotsu that was submitted after the conclusion of oral argument), the following facts should be taken into consideration in evaluating the experiment results: [i] in reality, it may not be necessarily easy to classify the abovementioned nine positions in the mixed liquid flow that is stirred: and [ii] the stirred mixed liquid flow may be disturbed due to the insertion of pumps or woven metal wire to collect raw laver and foreign matter particles.

In addition, according to the abovementioned Exhibits Otsu, the conditions used in these experiments vary in the type of foreign matter particles (specific gravity), rotating speed (fast, standard, slow, very slow), liquid level (high, standard, low), and collection method (pumping, woven metal wire), and thus it is difficult to evaluate the experiment results in a uniform manner. However, it may be found as a general trend that most of the experiment results showed that the number of foreign matter particles collected in the inner side was zero or extremely small while the greatest number of foreign matter particles was in the external side. Moreover, while there were cases where the number of foreign matter particles collected in the vertical positions showed little difference among the upper part, intermediate part and bottom part or more foreign matter particles were collected in the upper part, in many cases, the bottom part accounted for the greatest proportion of the number of foreign matter particles collected. Yet, it may also be found that, among the nine positions mentioned above, foreign matter particles were not always collected with the greatest numbers in the external bottom part.

3. Among these experiment results, the following results may be found when some of the experiments that were conducted under conditions with standard liquid level (water level) and rotating speed (test No. 5) are examined in a specific manner.

In the experiment shown in Exhibit Otsu No. 23-1 (FD-380c, one rotating plate, foreign matter particles with a specific gravity approximately equal to that of raw laver, pumping), the proportion (%) of the number of the foreign matter particles collected was as follows: [i] inner side: intermediate: external side =0: 13.3: 86.7, [ii] upper part:

intermediate part: bottom part = 33.3: 26.7: 40.0, [iii] the position which accounted for the greatest proportion of the number of foreign matter particles collected was the external upper part (33.3%) while the number of foreign matter particles collected in the bottom part of the outside accounted for 26.7%.

In the experiment shown in Exhibit Otsu No. 23-4 (FD-380s, two rotating plates, foreign matter particles with a specific gravity approximately equal to that of raw lever, collection by woven metal wire), the proportion (%) of the number of foreign matter particles collected was as follows: [i] inner side: intermediate: external side = 20.0: 22.0: 58.0, [ii] upper part: intermediate part: bottom part = 20.0: 8.0: 72.0, [iii] the position which accounted for the greatest proportion of the number of foreign matter particles collected was the external bottom part (34.0%).

In the experiment shown in Exhibit Otsu No. 26 (FD-380c, one rotating plate, foreign matter particles with a heavy specific gravity, collection by woven metal wire), the proportion (%) of the number of foreign matter particles collected was as follows: [i] inner side: intermediate: external side = 0: 18.7: 81.3, [ii] upper part: intermediate part: bottom part = 33.6: 32.1: 34.3, [iii] the position which accounted for the greatest proportion of the number of foreign matter particles collected was the external upper part (33.6%) while the number of foreign matter particles collected in the external bottom part accounted for 15.7%.

In the experiment shown in Exhibit Otsu No. 27 (FD-380s, two rotating plates, foreign matter particles with a heavy specific gravity, collection by woven metal wire), the proportion (%) of the number of foreign matter particles collected was as follows: [i] inner side: intermediate: external side = 9.9: 37.7: 52.3, [ii] upper part: intermediate part: bottom part = 39.1: 19.9: 41.1, [iii] the position which accounted for the greatest proportion of the number of foreign matter particles collected was the external upper part (20.5%) while the number of foreign matter particles collected in the external bottom part accounted for 11.9%.

As it has been clearly shown in the abovementioned standard specific examples, generally, in the radial direction, foreign matter particles are collected in extremely small numbers in the inner side while it is collected in large numbers in the external side. In the vertical direction, foreign matter particles are collected in large numbers in the bottom part, but in fairly large numbers also in the upper part, and in terms of the position, foreign matter particles are collected in large numbers in the external upper part and external bottom part. Therefore, it is impossible to find as concluded in the abovementioned Exhibits Otsu that "foreign matter particles are evenly dispersed in every area" but rather it may be found that foreign matter particles are separated in a

fairly clear manner. Moreover, it may also be found that, in the appellant's product, foreign matter particles are accumulated in the external bottom part or upper part due to the centrifugal force of the rotating flow (vortex) that is generated by the rotation of the rotating plate.

4. As described above, it is obvious that, in most of the experiment results shown in the abovementioned experiment reports, foreign matter particles are distributed in the row of the external side and line of the bottom part around the external bottom part (the lower right cell of the table of figures showing the number of foreign matter particles collected) and it may be said that foreign matter particles are also separated by the centrifugal force of the rotating flow (vortex) in the appellant's product. It is true that it may not be found from these experiment results that foreign matter particles are obviously and prominently accumulated in the external bottom part alone in the appellant's product. However, in these experiments, as mentioned above, the mixed liquid flow may be disturbed in association with the collection of foreign matter particles during the stirring process. Moreover, if more than a certain amount of foreign matter particles is mixed and raw lever with high adherence property is used, it cannot be denied that, when foreign matter particles have been accumulated in the external bottom part to some extent, other foreign matter particles tend to accumulate in the upper side or inner side than such part. Furthermore, it cannot be promptly found from the abovementioned facts that foreign matter particles would not be separated by the centrifugal force of the rotating flow (vortex) that is generated by the rotating plate in the appellant's product, as alleged by the appellant.

In other words, the abovementioned Exhibits Otsu are insufficient to find that the water flow obtained by the structure of the appellant's product that is different from constituent feature B of the Patented Invention (with respect to appellant's product 1, the structure wherein the innermost part of the cyclic frame plate part and the outermost part of rotary disc 3 correspond when seen from above and gap 4 is established between the lower surface of rotary disc 3 and the external upper surface of sorting case 6, and with respect to appellant's product 2, a structure wherein the outermost part of rotary disc 3 exists beyond the innermost part of the cyclic frame plate part and gap 4 is established between the lower surface of rotary disc 3 and the external upper surface of selection case 6), or in other words, the structure wherein a gap is formed obliquely downward in the appellant's product, as specifically alleged by the appellant, is so different from the water flow obtained by the structure of the Patented Invention as to resist the self-evident centrifugal force that is obtained by the rotation, in relation to the foreign matter particles. Moreover, there is no other evidence to find to that effect



(Exhibits Otsu No. 28 and No. 30 are insufficient to find to this effect).

Therefore, the figures shown in the abovementioned experiment results are insufficient to find the facts alleged by the appellant that it is impossible to achieve the objective of the Patented Invention (i.e. to have foreign matter particles with a heavy specific gravity accumulated in the bottom corner part by the centrifugal force of the vortex) in the appellant's product, since water, laver and foreign matter particles would be in a completely turbid state. In addition, allegations 1 and 2 made by the appellant as grounds for appeal based on such alleged facts are groundless.

5. All of the evidence submitted in this case is insufficient to find that the Patent Right is obviously invalid and thus allegation made with respect to grounds for appeal 3 is also groundless.

#### No. 4 Conclusion

Based on the abovementioned findings, it is found that the judgment in prior instance, which upheld the appellee's claim, is appropriate.

Tokyo High Court 18<sup>th</sup> Civil Division

Presiding Judge: NAGAI Toshiaki

Judge: SHIOTSUKI Shuhei

Judge: HASHIMOTO Hidefumi