

Patent Right	Date	February 19, 2020	Court	Intellectual Property High Court, Fourth Division
	Case number	2019 (Gyo-Ke) 10025		
<p>- A case in which, with regard to the JPO decision that, on the patent of the invention titled "GAS DISSOLVING DEVICE AND GAS DISSOLVING METHOD", since a working example illustrating that the problem of the invention can be solved is not described in the description, and the structure which can solve the problem cannot be specified even by adding the common general technical knowledge to the working example and the comparative example described in the description, the patent was invalidated on the grounds of violation of the support requirement, the JPO decision was rescinded since it is found that a person ordinarily skilled in the art can understand the feature of the device according to the invention from the description in the Detailed Description of the Invention in the description and the common general technical knowledge and can recognize that he/she can solve the problem of the invention on the basis of that.</p>				

Case type: Rescission of Trial Decision of Invalidation

Result: Granted

References: Article 36, paragraph (6), item (i) of the Patent Act

Related rights, etc.: Patent No. 6116658

Decision of JPO: Invalidation Trial No. 2017-800116

Summary of the Judgment

1. This case is a rescission lawsuit against the JPO decision of invalidation on Present Inventions 1 to 4 according to the present patent (Patent No. 6116658) of the invention titled "GAS DISSOLVING DEVICE AND GAS DISSOLVING METHOD." The JPO decision rendered that Present Inventions 1 to 4 violate the support requirement, since the working example illustrating that the problem of the invention can be solved is not described in the description, and even by adding the common general technical knowledge to the working example and the comparative example described in the description, the structure which can solve the problem cannot be specified. Plaintiff alleged an error in judgment of compatibility to the support requirement of Present Inventions 1 to 4 as the reasons for rescission.
2. The judgment held as follows and rescinded the JPO decision.
 - (1) Problems of Present Inventions 1 to 4

According to the description in the present description, it is found that the Detailed Description of the Invention in the present description discloses that the problem of Present Invention 1 is to provide a "gas dissolving device" for "dissolving

a gas in a liquid in an oversaturated state and for stably maintaining such oversaturated state" and employs, as means for solving the problem, the structure in which "pressure-reduction transfer means is provided and moreover, a pressure applied to the liquid is adjusted."

Moreover, the same applies to the problem of Present Inventions 2 to 4 including Present Invention 1 in the patent specifying matters by directly or indirectly referring to Present Invention 1.

(2) Compatibility to support requirement

A. According to the description in the present description, it is found that the Detailed Description of the Invention in the present description has a disclosure that the gas dissolving device of the "present invention" employs the structure in which hydrogen water is generated by dissolving hydrogen in a liquid in an "oversaturated state" by "pressurization-type gas dissolving means," and this hydrogen water flows by maintaining a laminar flow state in a tubular path which is the "pressure reduction transfer means" so that the pressure is lowered and transferred to a hydrogen water discharge port while "oversaturated state" is maintained, whereby the problem of the "present invention" that the "gas is dissolved in the liquid in the oversaturated state and such oversaturated state is stably maintained" can be solved.

Here, the term "oversaturated" means that "solubility of a gas into a liquid is different depending on a temperature, but it indicates a state where a dissolution amount of the gas in the liquid at a temperature A(°C) is present in an amount higher than the solubility at the temperature A(°C)," and the term "laminar flow" means a regular flow with directions of speeds are aligned in general and is realized when a flow velocity is sufficiently slow. Moreover, with regard to variables of an inner diameter X and a length L of a thin tube and a pressure Y of the pressurization-type gas dissolving means, it is found to be the common general technical knowledge that if values of the two variables; that is, L and Y, are the same, the larger the value of the inner diameter X of the thin tube, the slower the flow velocity of the liquid flowing through the thin tube can become, and if the value of the pressure Y of the pressurization-type gas dissolving means is large, more gas can be dissolved in the liquid, but the flow velocity of the liquid flowing through the thin tube can be faster, and if the value of the length L of the thin tube is large, the flow velocity of the liquid flowing through the thin tube can be slowed by resistance of an inner wall of the thin tube.

B. In view of the examination on the basis of the working example and the

comparative example described in the present description, it can be understood from the result of comparison of the working examples and the common general technical knowledge in the aforementioned A that in order to increase the value of hydrogen concentration when the values of the inner diameter X of the thin tube and a flowrate of the hydrogen water are the same, it is only necessary to select each value so that an increase rate of the value of the pressure Y of the pressurization-type gas dissolving means is larger than an increase rate of the value of the length L of the thin tube.

C. By summarizing the aforementioned A and B, it is found that a person ordinarily skilled in the art understands from the description in the Detailed Description of the Invention in the present description and the common general technical knowledge that the gas dissolving device of Present Invention 1 is not necessarily characterized by execution of strict numerical control and can recognize that he/she can solve the problem of Present Invention 1 to "dissolve the gas in the liquid in the oversaturated state and to stably maintain such oversaturated state" by considering the aforementioned B and by selecting the values of X, Y, and L so that a laminar flow is formed in the hydrogen water in the tubular path made of the thin tube.

(3) Summary

According to the above, it is found that a person ordinarily skilled in the art can recognize that he/she can solve the problem of Present Invention 1 for all the invention specifying matters in Present Invention 1 on the basis of the description in the Detailed Description of the Invention in the present description and the common general technical knowledge and thus, it is found that Present Invention 1 is described in the Detailed Description of the Invention. The same applies to Present Inventions 2 to 4.

Therefore, it is found that Present Inventions 1 to 4 conform to the support requirement and thus, the judgment in the JPO decision which denied this has an error.