Date	September 16, 2009	Court	Intellectual Property High Court, First Division
Case number	2008 (Gyo-Ke) 10433		
A case in which, with respect to the trial decision of the Japan Patent Office (JPO) which dismissed the plaintiffs' request for a trial against the examiner's decision on the grounds that the claimed invention was unpatentable under Article 29, paragraph (2) of the Patent Act, the court rescinded the trial decision ruling that it was issued in violation of Article 50 of said Act as applied mutatis mutandis pursuant to Article 159, paragraph (2) of said Act			

References:
Article 29, paragraph (2), Article 50, and Article 159, paragraph (2) of the Patent Act

Summary of the Judgment

The plaintiffs, with regard to their patent application concerning the invention entitled "exhaust gas purifying method and purifying device for internal combustion engines," made a request to the Japan Patent Office (JPO) for a trial against the examiner's decision that refused said application, but was given a decision to dismiss the request, on the grounds that the claimed invention could have easily been conceived of from the cited invention and the well-known art. Dissatisfied with this, the plaintiffs filed a suit with this court to seek rescission of the JPO trial decision.

This case involves a wide range of issues in dispute, including the errors in the findings as to the common features and the different features between the cited invention and the claimed invention, the error in the identification of the different features between the two, the failure to notice and false recognition of the special effect achieved by the claimed invention, and the violation of Article 50 of the Patent Act as applied mutatis mutandis pursuant to Article 159, paragraph (2) of said Act. In this judgment, the court rescinded the JPO trial decision, ruling that the JPO trial decision was issued in violation of Article 50 of said Act as applied mutatis mutandis pursuant to Article 159, paragraph (2) of said Act. The court's holdings are as follows.

"B. According to the procedural history as described above, it is not very clear how the JPO examiner construed the phrase in the statement of Claim 1 of the invention claimed in the plaintiffs' application, '[The NOx purifying catalyst] adsorbs the NOx [in the exhaust gas] onto the surface thereof,' because the examiner did not specifically mention his/her view on this point. However, with regard to the feature of 'adsorbing the NOx onto the surface,' the examiner made his/her decision after reviewing the content of the written opinion dated April 5, 2004 (Plaintiffs' Exhibit No. 15), which

stressed that the claimed invention could provide adsorption onto the surface of the catalyst instead of absorption into the catalyst, and in his/her decision, the examiner stated that 'adsorption onto the surface' was 'well-known art,' and considering these facts, it is natural to understand that the examiner considered the feature of 'adsorbing NOx onto the surface,' while accepting the plaintiffs' (applicants') view as to the meanings of 'adsorption' and 'absorption' as well as the relationship between the two, and as a result, concluded that the different feature in the claimed invention, 'adsorption onto the surface,' could have easily been conceived of from the well-known art, including the invention disclosed in Cited Document 2 mentioned in (1)D(a) above.

On the other hand, the JPO trial board, as mentioned in Different Feature 1 in II-3(3)A above, recognized the feature of the claimed invention, 'adsorbs NOx onto the surface of the NOx purifying catalyst,' as being its difference from the cited invention, and as mentioned in II-3(4)A above, while specifically indicating Well-Known Examples 1 and 2, stated that 'a NOx purifying catalyst which adsorbs NOx onto the surface thereof is well-known.' However, as mentioned in (1)C, Well-Known Examples 1 and 2, at least, do not use the term 'adsorb,' and as for the term 'surface,' these examples only stated that 'O_2^- and O^{2-} react with NO on the surface of Pt,' and they rather stated that 'spread within the absorbing agent in the form of nitrate ion, NO_3^-.' Thus, the trial board seems to have recognized the sequence of phenomena, wherein O_2^- and O^{2-} react with NO on the surface of the catalyst and spread within the absorbing agent in the form of nitrate ion, NO_3^-, as being the phenomenon 'adsorption onto the surface.' We can infer that this recognition is based on the presupposition that the phenomenon 'adsorption onto the surface of the catalyst' is included in the sequence of phenomena 'adsorption onto the surface of the catalyst and following spread (absorption) within the catalyst,' in short, 'adsorption' and 'absorption' could occur simultaneously, as alleged by the defendant in this case.

As shown above, the examiner's decision and the trial decision cannot be deemed to use an identical construction of the feature of 'adsorbing NOx onto the surface,' but rather, in view of the wording, etc. of the respective decisions, it is found that the former construed this feature as 'adsorption onto the surface,' whereas the latter construed it as involving not only adsorption onto the surface but also 'absorption' into the catalyst. Consequently, we should inevitably conclude that the trial board made its decision based on different reasons from the examiner.

Given the construction and presupposition argued by the plaintiffs, as shown in III above, the feature of 'adsorbing NOx onto the surface' is precisely the important

element of the claimed invention. According to the plaintiffs' arguments in their written opinion and written request for a trial against the examiner's decision, it is found that the plaintiffs used a different construction from the trial board of the feature of 'adsorbing NOx onto the surface,' and used a different presupposition from the trial board in recognizing the claimed invention and the cited invention. Since the trial board made its decision based on different reasons from the examiner as to the feature of 'adsorbing NOx onto the surface,' the board should have given the plaintiffs the opportunity to state their opinion.

Even where the trial board did not give the plaintiffs such opportunity to state their opinion, if there are special circumstances such as where the board effectively conducted proceedings as to both cases and the plaintiffs stated their opinions as necessary, it could be possible to find that the measure taken by the trial board is not illegal in effect (see 2006 (Gyo-Ke) No. 10538, judgment of the Intellectual Property High Court, February 21, 2008, V-1(4)). However, there are no such special circumstances in this case.

C. Furthermore, the trial decision could read as if it referred to the publicly known art (Well-Known Examples 1 and 2), which had not been mentioned at all in the notice of reasons for refusal, and construed that even though said art had not been included in the reasons for refusal, it could be a kind of cited invention as set forth in Article 29, paragraphs (1) and (2) of the Patent Act just because the art was well-known.

More specifically, with regard to Different Feature 1, the trial board stated that, 'Since the NOx purifying catalyst, which adsorbs NOx onto the surface of the catalyst when the exhaust gas is lean, is well-known art (see Well-Known Examples 1 and 2; hereinafter referred to as "Well-Known Art 1"), the matter necessary for identifying the claimed invention in terms of Different Feature 1 is well-known.' With regard to Different Feature 2, the trial board stated that, 'the claimed invention wherein NOx in the exhaust gas is adsorbed by the NOx purifying catalyst when the internal combustion engine is in lean operation, and after adsorption, the exhaust gas is made in a stoichiometric or rich condition for several seconds, and then the NOx adsorbed by the NOx purifying catalyst is reduced to N_2 by contact-reacting the NOx with a reducer to purify the exhaust gas,' is well-known... The feature of determining the time and depth, as provided by the claimed invention in terms of Different Feature 2, is nothing more than a design matter that could be achieved appropriately by taking into account Well-Known Art 2 disclosed in Well-Known Examples 1 and 3.' The trial board then concluded that, 'a person ordinarily skilled in the art could have easily made the claimed invention by referring to the cited invention, Well-Known Art 1, and

Well-Known Art 2.' This conclusion is erroneous.

Even granting, as alleged by the defendant, that Well-Known Art 1 and Well-Known Art 2 are famous and well-known inventions, one cannot say that even though these sorts of art had not been mentioned in the reasons for refusal, they could be used as cited inventions as set forth in Article 29, paragraphs (1) and (2) of the Patent Act just because they were well-known. This is evident from the construction of Article 29, paragraphs (1) and (2) and Article 50 of said Act. It is true that the well-known art that was not included in the reasons for refusal might be exceptionally admitted as a factor to be taken into consideration when finding whether or not the claimed invention could have easily been conceived of as provided in Article 29, paragraph (2) of said Act. However, it may be used only as an auxiliary factor in the process of making a fine adjustment in the finding of the cited invention included in the reasons for refusal or determining easiness in conceiving of the claimed invention, or as knowledge that is highly well known in the related technical fields and could be a natural or silent assumption for understanding the relevant art. One cannot say that any art could be cited as a matter of course even when it is not mentioned in the reasons for refusal, only if it is well-known, It can be imagined that the well-known art alleged by the defendant is famous and known to a wide range of persons concerned. However, as it plays an important role in the procedure for finding whether or not the claimed invention could have easily been conceived of, said well-known art cannot be regarded merely as an auxiliary factor to be used in the process of making a fine adjustment in the finding of the cited invention or determining easiness in conceiving of the claimed invention nor as knowledge that could be a natural or silent assumption. Therefore, said well-known art cannot be regarded as a decisive factor for affirming easiness in conceiving of the claimed invention in this case.

On this point, the defendant's arguments are inappropriate, and the plaintiffs' arguments are appropriate.

D. For the reasons shown above, for all of the points at issue mentioned above, the trial decision is in violation of Article 50 of the Patent Act as applied mutatis mutandis pursuant to Article 159, paragraph (2) of said Act."

Judgment rendered on September 16, 2009; the original was received on the same day; court clerk

2008 (Gyo-Ke) 10433 Case of Seeking Rescission of a JPO Decision (Patent)

Date of conclusion of oral argument: July 22, 2009

Judgment

Plaintiff: Honda Motor Co., Ltd.

Plaintiff: Hitachi, Ltd.

Defendant: Commissioner of the JPO

Main Text

1. A JPO decision rendered regarding Trial against Examiner's Decision of Refusal No. 2005-16201 on October 7, 2008 shall be rescinded.

2. The defendant shall bear the court costs.

Facts and reasons

No. 1 Claims

The same as the main text.

No. 2 Outline of the case

The plaintiffs filed a patent application, but received an examiner's decision of refusal. Dissatisfied with this, the plaintiffs filed a request for a trial against the examiner's decision of refusal, but received a JPO decision that dismissed the request. Therefore, the plaintiffs instituted this action to seek rescission of the JPO decision.

1. Developments in procedures at the JPO

On December 9, 1997, the plaintiffs filed a patent application (the "Patent Application"; Patent Application No. 1997-339028; Publication of Unexamined Patent Application No. 1999-173181) for an invention titled "method of purifying exhaust gas of internal combustion engine and apparatus thereof," but received a notice of reasons for refusal dated January 30, 2004 (Exhibit Ko 12). Therefore, the plaintiffs submitted a written opinion (Exhibit Ko 15) and a written amendment (Exhibit Ko 6), both of which are dated April 5 of the same year. However, an examiner's decision of refusal dated July 19, 2005 (Exhibit Ko 13) was rendered. Consequently, the plaintiffs filed a request for a trial against the examiner's decision of refusal on August 25 of the same year and submitted a written amendment dated November 17 of the same year (Exhibit Ko 16).

As a result of the proceedings, the JPO rendered a decision on October 7, 2008 to the effect that the request for a trial in question is to be dismissed, and served a certified copy of the decision to the plaintiffs on the 21st of the same month.

2. Scope of claims

According to the statements in the description after the amendment by the written amendment dated April 5, 2004 (Exhibit Ko 6) and the drawings originally attached to the application, the invention pertaining to Claim 1 is as follows (hereinafter referred to as the "Claimed Invention"; although there are Claims 1 to 6, the parts relating to Claims 2 to 6 are omitted below).

"[Claim 1] A method of purifying an exhaust gas of an internal combustion engine comprising an NO_X purifying catalyst arranged in an exhaust gas passage, wherein said NO_X purifying catalyst is a compound of at least one kind of element selected from the group consisting of alkaline metals and alkaline earth metals, at least one kind of element selected from the group consisting of rare earth metals, at least one kind of element selected from the group consisting of platinoid metals (so-called noble metals), and titanium (Ti); and wherein said NO_X purifying catalyst adsorbs NO_X in the exhaust gas onto a surface thereof when the exhaust gas is lean and reduces the adsorbed NO_X to N_2 when the exhaust gas is stoichiometric or rich; and wherein the exhaust gas is purified by adsorbing NO_X in the exhaust gas onto said NO_X purifying catalyst when the internal combustion engine is being operated under a lean condition, by setting, after the adsorption, the exhaust gas to a stoichiometric or rich state for 0.5 seconds to 4.5 seconds, by setting a depth of the rich state, under said stoichiometric or rich state, to be between 13.0 and 14.7 by air-to-fuel ratio A/F, and by reducing the NO_X adsorbed onto said NO_X purifying catalyst to N_2 through contact reaction with a reducing agent."

3. Reasons given in the JPO decision

The JPO determined that a patent cannot be granted for the Claimed Invention pursuant to the provisions of Article 29, paragraph (2) of the Patent Act because a person ordinarily skilled in the art could have easily made the Claimed Invention based on International Publication No. 1994/25143 (Exhibit Ko 1; hereinafter referred to as the "Cited Document," and the invention described therein is referred to as the "Cited Invention"), Publication of Unexamined Patent Application No. 1995-139340 (Exhibit Ko 2; hereinafter referred to as "Well-Known Example 1"), Publication of Unexamined Patent Application No. 1995-332071 (Exhibit Ko 3; hereinafter referred to as "Well-Known Example 2"), and Publication of Unexamined Patent Application No. 1994-66129 (Exhibit Ko 4; hereinafter referred to as "Well-Known Example 3"). (Incidentally, the way that the publicly known documents are described in the cited JPO decision is corrected in some parts in conformity to that in this judgment.)

(1) Content of the Cited Invention

"A method of removing nitrogen oxides contained in an exhaust gas of an internal combustion engine comprising a catalyst arranged in an exhaust gas passage,

wherein said catalyst (hereinafter referred to as "Catalyst A") is a material comprising at least

one kind of alkali or alkaline earth metal or a compound thereof, mixture or complex oxide of ceria, lantana, and titania, and at least one kind of noble metal selected from the group consisting of platinum, palladium, rhodium, and ruthenium, and

removes accumulated NO_X by decreasing the amount of air being aspirated in the suction system of the internal combustion engine or supplying the fuel in an excess amount, thereby enabling the exhaust gas to form a reducing atmosphere, and

wherein NO_X in the exhaust gas is adsorbed onto Catalyst A by bringing it into contact with Catalyst A in an oxidizing atmosphere of the internal combustion engine, and after adsorption, the exhaust gas instantaneously forms a reducing atmosphere by instantaneously decreasing the amount of air being aspirated in the suction system of the internal combustion engine or by supplying the fuel in an excess amount, thereby removing accumulated NO_X."

(2) Common features of the Cited Invention and the Claimed Invention

"A method of purifying an exhaust gas of an internal combustion engine comprising an NO_X purifying catalyst arranged in an exhaust gas passage,

wherein said NO_X purifying catalyst is a compound of at least one kind of element selected from the group consisting of alkaline metals and alkaline earth metals, at least one kind of element selected from the group consisting of rare earth metals, at least one kind of element selected from the group consisting of platinoids (so-called noble metals), and titanium (Ti), and wherein said NO_X purifying catalyst adsorbs NO_X in the exhaust gas onto itself when the exhaust gas is lean and reduces the adsorbed NO_X to N_2 when the exhaust gas is stoichiometric or rich, and

wherein the exhaust gas is purified by adsorbing NO_X in the exhaust gas onto said NO_X purifying catalyst when the internal combustion engine is being operated under a lean condition, by setting, after the adsorption, the exhaust gas to a stoichiometric or rich state, and by reducing the NO_X adsorbed onto said NO_X purifying catalyst to N_2 through catalytic reaction with a reducing agent."

(3) Differences between the Cited Invention and the Claimed Invention

A. Difference 1

"In the Claimed Invention, NO_X in the exhaust gas is adsorbed onto the surface of the NO_X purifying catalyst when the exhaust gas is lean. On the other hand, in the Cited Invention, the place onto which NO_X is adsorbed is unclear."

B. Difference 2

"The Claimed Invention includes the statement 'by setting, after the adsorption, the exhaust gas to a stoichiometric or rich state for 0.5 seconds to 4.5 seconds, by setting a depth of the rich state, under said stoichiometric or rich state, to be between 13.0 and 14.7 by air-to-fuel ratio A/F.' On the other hand, in the Cited Invention, a stoichiometric or rich state is instantaneously formed after adsorption, and the time and depth of said state is not clear."

(4) Determinations concerning whether the differences could have been easily conceived of by a person ordinarily skilled in the art

A. Regarding Difference 1

"Since NO_X purifying catalysts, which adsorb NO_X onto a surface thereof when the exhaust gas is lean, are well-known (for example, see Well-Known Examples 1 and 2; hereinafter referred to as "Well-Known Art 1"), the matter necessary for identifying the Claimed Invention in terms of Difference 1 is well-known."

B. Regarding Difference 2

"It is well-known that exhaust gas can be purified by adsorbing its NO_X onto said NO_X purifying catalyst when the internal combustion engine is being operated under a lean condition, and then, after the adsorption, setting the exhaust gas to a stoichiometric or rich state for a few seconds to reduce the NO_X adsorbed onto said NO_X purifying catalyst to N_2 through catalytic reaction with a reducing agent (for example, see Well-Known Examples 1 and 3; hereinafter referred to as "Well-Known Art 2"). The feature of determining the time and depth, as provided by the Claimed Invention in terms of Difference 2, is nothing more than a design matter that can be conceived of appropriately by taking into account the well-known art disclosed in Well-Known Examples 1 and 3."

(5) Conclusion

"Therefore, a patent cannot be granted for the Claimed Invention pursuant to the provisions of Article 29, paragraph (2) of the Patent Act as the Claimed Invention is one which a person ordinarily skilled in the art could have easily made based on the Cited Invention, Well-Known Art 1, and Well-Known Art 2."

(omitted)

No. 5 Court decision

1. In consideration of the case, the court makes a determination concerning Ground for Rescission 8 (Violation 2 of Article 50 of the Patent Act, as applied mutatis mutandis pursuant to Article 159, paragraph (2) of said Act).

(1) According to evidence (noted at relevant places) and the entire import of argument, the following facts are found.

A. Regarding the Claimed Invention

According to Exhibits Ko 5 and 6, the problem to be solved and the means for solving the problem, etc. of the Claimed Invention are as follows.

(A) Prior art

a. "One of the proposed technologies is that NO_X is separated from a lean-burn exhaust gas

using an NO_X absorbent (at least, separated from O_2 in the exhaust gas), and then the NO_X separated by the NO_X absorbent is reduced to N_2 to be rendered harmless, and the NO_X absorbing ability of the NO_X absorbent is recovered by catalytic reaction of the NO_X with a reducing agent, such as a hydrocarbon, carbon monoxide, hydrogen, or the like." (paragraph [0006])

b. "For example, in technologies disclosed in Publication of Unexamined Patent Application No. 1987-97630, Publication of Unexamined Patent Application No. 1987-106826, and Publication of Unexamined Patent Application No. 1987-117620, the NO_X in an exhaust gas (after NO is converted into NO_2, which is easily absorbed) is removed through absorption by being brought in contact with a catalyst that has an NO_X absorbing ability. When the absorbing efficiency is decreased, the exhaust gas is stopped from passing through the catalyst and the accumulated NO_X is removed by being reduced with a reducing agent, such as H_2, HC produced from methane, gasoline, or the like to recover the NO_X absorbing ability of the catalyst." (paragraph [0007])

c. "Moreover, the technology described in Patent Gazette No. 2600492 discloses a means whereby an NO_X absorbent, which absorbs NO_X when the exhaust gas is discharged during lean operation and discharges the absorbed NO_X when the oxygen concentration in the exhaust gas is decreased, is arranged in an exhaust gas passage of an engine and NO_X is absorbed when the exhaust gas is discharged during lean operation, and the absorbed NO_X is discharged by decreasing the O_2 concentration in the exhaust gas flowing into the NO_X absorbent and then reduced to N_2." (paragraph [0008])

(B) Problem to be solved of the invention

a. "The technologies described above have the following problems to be solved. That is, the first problem is determining what reducing agent is used for reducing and rendering harmless the NO_X absorbed and captured in the catalyst. Although a vehicle mounting a lean-burn combustion engine shows merit in energy saving (based on improvement of the fuel consumption rate described above), using of the reducing agent decreases the improvement of the fuel consumption rate. Therefore, the amount of the reducing agent should be minimized as much as possible, and the apparatus and the control for using the reducing agent should be simple and reliable. In addition to these, employing the system should not deteriorate performance and operability of the vehicle." (paragraph [0009])

b. "Secondly, in the technologies disclosed in Publication of Unexamined Patent Application No. 1987-97630, Publication of Unexamined Patent Application No. 1987-106826, and Publication of Unexamined Patent Application No. 1987-117620 described above, the amount of the reducing agent burnt by O_2 in the exhaust gas is suppressed to reduce the amount of the reducing agent in use because the exhaust gas is stopped from passing through the catalyst, and

the reducing agent, e.g., HC, is brought in contact with the NO_X absorbent in order to recover the NO_X absorbent. However, two NO_X absorbent units need to be provided and an exhaust-gas switching mechanism for alternately conducting the exhaust gas through the units is also required. Therefore, this causes a problem in that the structure of the exhaust gas purifying apparatus becomes complex." (paragraph [0010])

c. "Thirdly, in the technology disclosed in Patent Gazette No. 2600492, the exhaust gas is always conducted through the NO_X absorbent. NO_X is absorbed when the exhaust gas is lean and the absorbed NO_X is discharged to recover the absorbent by decreasing the O_2 concentration in the exhaust gas (combustion under a rich burn condition). Therefore, switching of the gas flow is not necessary, and accordingly, the abovementioned second problem can be solved." (paragraph ([0011])

d. "However, it is based on the premise that the material, which can absorb NO_X when the exhaust gas is discharged during lean operation and can discharge the absorbed NO_X when the O_2 concentration in the exhaust gas is decreased, is employed as the catalyst. The abovementioned technology also discloses a means for making combustion of the exhaust gas in a rich condition when the discharged NO_X is reduced. However, in order to actually mount the abovementioned means on the vehicle as a system, it is necessary to optimize the condition in the rich combustion, taking into consideration the fuel economy (fuel consumption rate), the operability, the drivability, the reliability and so on. Therefore, from the standpoint of optimizing the fuel economy, the problem is how the amount of fuel consumed in the richer combustion is decreased. In addition to this, the optimization of some of the conditions closely relates to the characteristic of the NO_X absorbent, and accordingly, selection of the NO_X absorbent is also one of the important elements." (paragraph [0012])

e. "The invention is intended to solve the abovementioned problems. The purpose of the invention is to provide a method and an apparatus of purifying an exhaust gas of a lean-burn-combustion internal combustion engine that can effectively remove harmful components, such as NO_X or the like, from the exhaust gas to render them harmless, with the fuel economy suppressed to decrease. In particular, the purpose of the invention is to provide a method and an apparatus of purifying an exhaust gas wherein the structure of the purifying method and the purifying apparatus is simple and the amount of the consumed reducing agent is small, and wherein NO_X is reduced to N_2 to be rendered harmless by separating NO_X from the lean exhaust gas using an NO_X adsorbent and then bringing the separated NO_X into contact with a stoichiometric or rich exhaust gas. These gases are capable of realizing a lean–burn-combustion internal combustion engine excellent in both of the exhaust gas purifying performance and the fuel consumption rate." (paragraph [0013])

(C) Means for solving the problem

a. "In order to achieve the abovementioned purpose, a method of purifying an exhaust gas of an internal combustion engine pertaining to this invention is characterized in that an NO_X purifying catalyst is arranged in an exhaust gas passage, and said NO_X purifying catalyst is a compound of at least one kind of element selected from the group consisting of alkaline metals and alkaline earth metals, at least one kind of element selected from the group consisting of rear earth metals, at least one kind of element selected from the group consisting of platinoids (so-called noble metals), and titanium (Ti); and said NO_X purifying catalyst adsorbs NO_X in the exhaust gas onto the surface when the exhaust gas is lean and reduces the adsorbed NO_X to N_2 when the exhaust gas is stoichiometric or rich; and wherein the exhaust gas is purified by adsorbing NO_X in the exhaust gas onto said NO_X purifying catalyst when the internal combustion engine is being operated under a lean condition, and then the exhaust gas is set to a stoichiometric state or a rich state for 1 second to 4.5 seconds thereby reducing the NO_X adsorbed onto said NO_X purifying catalyst to N_2 through catalytic reaction with the reducing agent." (paragraph [0014])

b. "The method of purifying an exhaust gas of an internal combustion engine pertaining to this invention, which is structured as described above, can render the exhaust gas harmless and effectively purify NO_X and so on in the exhaust gas under lean-burn combustion without affecting the fuel consumption rate very much. This can be accomplished by adsorbing and capturing NO_X in the exhaust gas when the exhaust gas is lean (a stoichiometric amount of oxidizing agent in the exhaust gas is larger than that of reducing agent present in the exhaust gas), and by reducing the adsorbed and captured NO_X to N_2 when the exhaust gas is stoichiometric (an amount of reducing agent is equal to an amount of oxidizing agent) or rich (an amount of reducing agent is equal to or larger than an amount of oxidizing agent), that is, by adsorbing NO_X in the exhaust gas onto said NO_X purifying catalyst when the internal combustion engine is being operated under a lean condition, and by bringing, after the adsorption, the exhaust gas to a stoichiometric state or a rich state for 1 second to 4.5 seconds to reduce the NO_X adsorbed onto said NO_X purifying catalyst to N_2 through catalytic reaction with the reducing agent." (paragraph [0015])

(D) Embodiment of the invention

a. "The NO_X purifying catalyst in the embodiment … in the lean exhaust gas … The capture of NO_X is performed mainly by adsorption onto the surface of the catalyst. When the adsorbed and captured NO_X is brought in contact with the stoichiometric or rich exhaust gas, the adsorbed and captured NO_X is reduced to N_2 on the catalyst with the reducing agent, e.g., HC (hydrocarbon), CO (carbon monoxide) and so on, to recover the NO_X adsorbing ability of the surface of the catalyst.…This is because the mass transfer step accompanied by the reduction reaction of adsorbed NO_X includes only a vapor phase diffusion step of the reducing agent and produced N_2 and a surface diffusion step of the adsorbed NO_X and so on, and does not include any mass

transfer step inside the catalyst bulk, which is large in mass transfer resistance." (paragraph [0040])

b. "If the NO_X is absorbed inside the catalyst bulk, the NO_X needs to move up to the surface of the catalyst by diffusion or the reducing agent needs to move into the catalyst bulk by diffusion. In order to increase the transfer velocity inside the bulk, a concentration difference is required as a motive force, and accordingly, the concentration of the reducing agent needs to be increased. That is, the rich shift needs to be deepened." (paragraph [0041])

c. "The NO_X purifying catalyst in the embodiment … does not require deepening the rich shift, because it does not include a transfer step inside the bulk. Instead, it requires time for supplying the necessary reducing agent. … [I]n the NO_X purifying catalyst in the embodiment … the decrease in fuel consumption rate due to the rich shift is small because shallow rich shift suffices." (paragraph [0042])

(E) Effect of the Invention

"… [T]his invention can effectively purify NO_X and so on in the exhaust gas of lean-burn combustion without affecting the fuel consumption rate very much … by adsorbing and capturing NO_X in an oxidation atmosphere of the exhaust gas in the lean operating range of the internal combustion engine, and by generating a reducing atmosphere to recover the NO_X purifying catalyst." (paragraph [0046])

B. Regarding the Cited Invention

According to Exhibit Ko 1, the technical content of the Cited Invention is as follows.

(A) In this invention (Claimed Invention), "the object described above is accomplished by a method for the removal of nitrogen oxides from an exhaust gas characterized by causing the exhaust gas in an oxidizing atmosphere to contact a catalyst comprising a refractory inorganic oxide and catalytically active components, the components comprising 0.1 to 30 g as metal per liter of the catalyst of at least one noble metal selected from the group consisting of platinum, palladium, rhodium, and ruthenium or a compound thereof, and 1 to 80 g as metal per liter of the catalyst of at least one metal selected from the group consisting of lithium, potassium, sodium, rubidium, cesium, beryllium, magnesium, calcium, strontium, and barium or a compound thereof, thereby inducing the catalyst to adsorb thereon the nitrogen oxides in the exhaust gas and, subsequently introducing a reducing substance intermittently into the exhaust gas, thereby purifying the exhaust gas by reducing the nitrogen oxides adsorbed on the catalyst." (lines 4 to 16 of page 4 of the description)

(B) "First, the principle of this invention will be described. In this invention, an exhaust gas containing NO_X is brought into contact with a component manifesting an oxidizing activity in an oxidizing atmosphere so that NO, N_2O, etc., which are generally present at high proportions in the NO_X components of the exhaust gas, are oxidized or activated into NO_2. The NO_2 thus

resulting from the oxidation or activation is then adsorbed on a component possessing an NO_2 adsorbing ability. By introducing a reducing substance instantaneously into the exhaust gas enveloping the NO_X accumulated on the adsorbent component, the adsorbed NO_X is reduced or decomposed to complete the removal of NO_X. It is the catalyst contemplated by this invention that discharges the function of reducing or decomposing the NO_X." (line 21 of page 7 of the description to line 9 of page 8 thereof)

(C) "The catalyst to be used in this invention comprises [A] catalytically active components composed of [a] 0.1 to 30 g as metal per liter of the catalyst of at least one noble metal selected from the group consisting of platinum, palladium, rhodium, and ruthenium or a compound thereof and [b] 1 to 80 g as metal per liter of the catalyst of at least one alkali or alkaline earth metal selected from the group consisting of lithium, potassium, sodium, rubidium, cesium, beryllium, magnesium, calcium, strontium, and barium or a compound thereof, and [B] a refractory inorganic oxide; and optionally further comprises as another catalytically active component composed of 0.1 to 50 g per liter of the catalyst of at least one heavy metal selected from the group consisting of manganese, copper, cobalt, molybdenum, tungsten, and vanadium or a compound thereof.

In the components mentioned above, such noble metals as platinum, palladium, rhodium, and ruthenium (particularly platinum and/or palladium) are effective in oxidizing NO_X in an oxidizing atmosphere. These noble metals function to reduce and decompose NO_X in the presence of a reducing substance or in a reducing atmosphere, in addition to functioning to oxide NO_X in an oxidizing atmosphere. By using these noble metals, therefore, the oxidation or activation of NO_X in an oxidizing atmosphere and the purification of the adsorbed NO_X (particularly NO_2) due to the intermittent introduction of a reducing substance or in a reducing atmosphere can be carried out with high efficiency. The amount of such noble metals to be used is in the range of 0.1 to 30 g (preferably 0.5 to 5 g) as metal per liter of the catalyst. If this amount is less than 0.1 g, the oxidation of NO_X will not easily proceed, the amount of NO_X to be adsorbed will be unduly small, and the reduction and removal of the adsorbed NO_X will not be amply effected. Conversely, if the amount exceeds 30 g, the excess noble metals will not produce any proportionate addition to their effects and will only increase the material costs, which is not preferable from an economic perspective.

As the component for adsorbing the oxidized and activated NO_X (particularly NO_2) alkali metals such as lithium, sodium, potassium, rubidium, and cesium or compounds thereof and/or alkaline earth metals such as magnesium, calcium, strontium, and barium or compounds thereof (particularly the compounds of alkali metals) are effectively used. The amount of this component to be used is in the range of 1 to 80 g (preferably 5 to 50 g) as metal per liter of the catalyst. If this amount is less than 1 g, the component acquires no sufficient NO_X adsorptive

capacity and, therefore, manifests an unduly low NO_X treatment capacity. Conversely, if the amount exceeds 80 g, the NO_X treatment capacity will be degraded because the basicity grows fairly strong to the extent of enhancing the fast adsorption of NO_X, and curbing the oxidation of NO_X and the reduction of NO_X by the noble metal. Among other alkali metals mentioned above, potassium and sodium prove particularly preferable. In this statement, the amount of the alkali metals mentioned above will be indicated as reduced to metal unless otherwise specified.

The purification of NO_X can be carried out with greater efficiency when at least one metal selected from the group consisting of manganese, copper, cobalt, molybdenum, tungsten, and vanadium or a compound thereof is used as another catalytically active component in addition to the components mentioned above. These components are thought to play the part of promoting the oxidation and adsorption of NO_X in an oxidizing atmosphere and/or promoting the reduction and decomposition of the adsorbed NO_X in the presence of a reducing agent or in an oxidizing atmosphere.

The amount of these components to be used is in the range of 0.1 to 50 g (preferably 1 to 20 g) per liter of the catalyst. That is, if this amount is less than 0.1 g, neither the adsorption of nitrogen oxides nor the reduction of adsorbed NO_X will be amply promoted. Conversely, if the amount exceeds 50 g, the excess component will not bring about any proportionate addition to the NO_X adsorptive capacity or the NO_X reduction capacity." (line 5 of page 14 of the description to line 5 of page 17 thereof)

C. Regarding Well-Known Examples 1 and 2

(A) According to Exhibit Ko 2, the technical content of Well-Known Example 1 is as follows.

a. Statements in Claim 1

"… NO_X absorbent, which absorbs NO_X in the exhaust gas when the air-to-fuel ratio of the exhaust gas is lean and discharges the absorbed NO_X when the oxygen concentration in the exhaust gas is decreased, …"

b. Statements in the description

"If inlet exhaust gas becomes considerably lean, the oxygen concentration in the inlet exhaust gas is substantially increased, and these O_2 molecules adhere to the surface of platinum (Pt) in the form of O_2^- or O^{2-} as shown in Figure 2(A). On the other hand, NO in the inlet exhaust gas reacts with this O_2^- or O^{2-} on the surface of platinum (Pt) and is oxidized to NO_2 ($2NO + O2 \rightarrow 2NO_2$). Then, part of the generated NO_2 is absorbed in an absorbent while being oxidized on platinum (Pt), and diffuses in the absorbent in the form of nitric acid ion (NO_3^-), as shown in Figure 2(A), while combining with barium oxide (BaO). In this manner, NO_X is absorbed in NO_X absorbent 18." (paragraph [0024])

c. Incidentally, as a result of careful examination of the scope of claims, description, and drawings, the word "adsorption" is not used in Well-Known Example 1.

(B) According to Exhibit Ko 3, the technical content of Well-Known Example 2 is recognized as follows.

a. Statements in Claim 1

"NO_X absorbent, which absorbs NO_X when the air-to-fuel ratio of the inlet exhaust gas is lean and discharges the absorbed NO_X when the air-to-fuel ratio of the inlet exhaust gas becomes the theoretical air-to-fuel ratio or rich…"

b. "The average air-to-fuel ratio A/F in combustion chamber 5 is lean, and therefore, the oxygen concentration in the inlet exhaust gas increases when the inlet exhaust gas is lean. At this time, these oxygen molecules O2 adhere to the surface of platinum (Pt) in the form of O_2^- or O^{2-}, as shown in Figure 12(A). On the other hand, NO in the inlet exhaust gas reacts with O_2^- or O^{2-} on the surface of platinum (Pt) and is oxidized to NO2 (2NO + O2 → 2NO2). Then, part of the generated NO2 is absorbed in an absorbent while being oxidized on platinum (Pt), and diffuses in the absorbent in the form of nitric acid ion (NO_3^-) as shown in Figure 12(A) while combining with barium oxide (BaO). In this manner, NO_X is absorbed in NO_X absorbent 26." (paragraph [0057])

c. Incidentally, as a result of careful examination of the scope of claims, description, and drawings, the word "adsorption" is not used in Well-Known Example 2.

D. Developments in procedures from the filing of the Patent Application to the rendering of the JPO decision

According to Exhibits Ko 12, 13, 15, and 16, developments in procedures from the filing of the Patent Application to the rendering of the JPO decision are recognized as follows in addition to those stated in No. 2, 1. above.

(A) Content stated in the notice of reasons for refusal dated January 30, 2004

The following is stated in the remarks column in the notice of reasons for refusal dated January 30, 2004 (Exhibit Ko 12).

"The components and structure of the catalyst are shown in Cited Document 1 or 2.

The reduction time relates to the frequency, etc. of reduction (so-called rich spike), and it is a mere matter that a person ordinarily skilled in the art can decide as appropriate.

In addition, Cited Document 3 indicates that a depth of the rich state is set to be between 13.0 and 14.7 (14.6).

List of cited documents, etc.

1. Pamphlet of International Publication No. 1994/25143

(note in this judgment: Cited Document (Exhibit Ko 1))

2. Publication of Unexamined Patent Application No. 1987-97630

(note in this judgment: this document is not cited in the JPO decision)

3. Publication of Unexamined Patent Application No. 1997-4492

(note in this judgment: this document is not cited in the JPO decision)

(B) Content stated in the written opinion dated April 5, 2004

In response to the abovementioned notice of reasons for refusal (Exhibit Ko 12), the plaintiffs expressed the following opinions in the written opinion dated April 5, 2004 (Exhibit Ko 15) (so in original, including underlines).

"(b) … In (prior) art, exhaust gas is always conducted through an NO_X absorbent, and <u>NO_X is absorbed</u> when the exhaust gas is lean and the absorbed NO_X is discharged to recover the absorbent by decreasing the O_2 concentration in the exhaust gas (combustion under a rich burn condition). … (see paragraph [0011] in the description). (In this manner,) if the NO_X is absorbed inside the catalyst bulk, the NO_X needs to move up to the surface of the catalyst by diffusion or the reducing agent needs to move into the catalyst bulk by diffusion. In order to increase the transfer velocity inside the bulk, a concentration difference is required as a motive force, and accordingly, the concentration of the reducing agent needs to be increased. That is, the rich shift needs to be deepened. … (see paragraph [0041] in the description).

(c) … this invention can effectively purify NO_X and so on in the exhaust gas of lean-burn combustion without affecting the fuel consumption rate very much … by <u>adsorbing and capturing NO_X</u> in an oxidation atmosphere of the exhaust gas in the lean operating range of the internal combustion engine, and by generating a reducing atmosphere to recover the NO_X purifying catalyst (see paragraph [0046] in the description).

(d) The NO_X purifying catalyst in the embodiment … in the lean exhaust gas … The capture of NO_X <u>is performed</u> mainly <u>by adsorption onto the surface of the catalyst</u>. When the adsorbed and captured NO_X is brought in contact with the stoichiometric or rich exhaust gas, the adsorbed and captured NO_X is reduced to N_2 on the catalyst with the reducing agent, e.g., HC (hydrocarbon), CO (carbon monoxide) and so on, to recover the NO_X adsorbing ability of the surface of the catalyst.…This is because the mass transfer step accompanied by the reduction reaction of adsorbed NO_X includes only a vapor phase diffusion step of the reducing agent and produced N_2 and a surface diffusion step of the adsorbed NO_X and so on, and does not include any mass transfer step inside the catalyst bulk, which is large in mass transfer resistance (see paragraph [0040] in the description).

(e) <u>The NO_X purifying catalyst</u> in the embodiment … <u>does not require deepening the rich shift because it does not include a transfer step inside the bulk</u>. Instead, it requires time for supplying the necessary reducing agent.… <u>[I]n the NO_X purifying catalyst in the embodiment … the decrease in fuel consumption rate due to the rich shift is small because shallow rich shift suffices</u> (see paragraph [0042] in the description).

(3) It is stated in Cited Document 1 that ' … ' and ' … ,' thereby indicating that the NO_2 resulting from oxidization or activation is adsorbed onto a catalyst containing a component possessing an

NO_2 adsorbing ability and that the duration of introduction of the reducing agent for the removal of NO_X is in the range of 0.1 to 20 seconds (preferably 1 to 10 seconds). However, regarding the catalyst stated in Cited Document 1, it is not stated whether NO_2 adsorbed onto a component possessing an NO_2 adsorbing ability remains on the surface of the catalyst or is absorbed in the catalyst.

According to confirmation through experiments, etc. conducted by the applicant (see Exhibit Otsu 1, etc. in the case of opposition to Patent No. 3107294 (Opposition No. 2001-71379)), regarding the catalysts stated in Reference Examples 1 to 38 indicated in Cited Document 1, behavior of NO_X in the catalysts is understood not as retention of NO_2 by absorbing it onto the catalysts but as retention of NO_2 by absorbing it in the form of nitric acid ion (NO_3^-)."

"That is, Cited Document 1 indicates that NO_2 resulting from oxidization or activation is adsorbed onto a catalyst containing a component possessing an NO_2 adsorbing ability. However, according to specific examples of catalysts indicated as reference examples in Cited Document 1, behavior of NO_X in the catalysts stated in Cited Document 1 is not retention of NO_2 by adsorbing it onto the catalysts but is retention of NO_2 by absorbing it in the form of nitric acid ion (NO_3^-). The structure of the catalysts differs from Structure (i) of the Claimed Invention, i.e., the structure of the 'NO_X purifying catalyst,' which <u>adsorbs</u> NO_X in the exhaust gas <u>onto the surface thereof</u> when the exhaust gas is lean and reduces the adsorbed NO_X to N_2 when the exhaust gas is stoichiometric or rich."

"In this manner, the abovementioned Structures (i) and (iii) of the Claimed Invention are not stated in Cited Documents 1 to 3. Therefore, the abovementioned functions and effects (D) and (E) of the Claimed Invention cannot be expected from the inventions stated in Cited Documents 1 to 3. Said functions and effects are specifically as follows: 'in the lean exhaust gas … The capture of NO_X is <u>performed</u> mainly <u>by adsorption onto the surface of the catalyst</u>. When the adsorbed and captured NO_X is brought in contact with the stoichiometric or rich exhaust gas, … This is because the mass transfer step accompanied by the reduction reaction of adsorbed NO_X includes only a vapor phase diffusion step of the reducing agent and produced N_2 and a surface diffusion step of the adsorbed NO_X and so on, and does not include any mass transfer step inside the catalyst bulk, which is large in mass transfer resistance; … <u>does not require deepening the rich shift</u> … <u>the decrease in fuel consumption rate due to the rich shift is small because shallow rich shift suffices</u>.'"

(C) Content stated in the examiner's decision of refusal dated July 19, 2005

In response to the opinions stated in the abovementioned written opinion (Exhibit Ko 15) and the amendment dated the same day (Exhibit Ko 6), an examiner's decision of refusal dated July 19, 2005 (Exhibit Ko 13) was rendered. The following is stated in the remarks column therein.

"NO_X purifying catalysts, which adsorb NO_X onto a surface thereof, have been well-known prior to the filing of the Patent Application without the need for examples. The frequency of the rich spike and the depth of the rich state thereof are those whose optimum value can be obtained by a person ordinarily skilled in the art through repeated experiments, etc. in consideration of fuel consumption rate, purifying performance, etc."

(D) Request for a trial dated August 25, 2005

In response to the abovementioned examiner's decision of refusal, the plaintiffs alleged as follows, in addition to their allegations in the aforementioned written opinion (Exhibit Ko 15), in the reasons of claims in the request for a trial against the examiner's decision of refusal dated August 25, 2005 and the request for a trial amended by the written amendment dated November 17, 2005 (Exhibit Ko 16).

"The examiner found in the remarks column in the examiner's decision of refusal that '(α) NO_X purifying catalysts, which adsorb NO_X onto a surface thereof, have been well-known prior to the filing of the Patent Application without the need for examples.' However, the examiner has not presented any evidence of such well-known art.

As mentioned above, the Claimed Invention has its characteristic structure in the abovementioned structure (i), i.e., '"NO_X purifying catalyst," which <u>adsorbs NO_X</u> in the exhaust gas <u>onto a surface thereof</u> when the exhaust gas is lean and <u>reduces the adsorbed NO_X to N_2 when the exhaust gas is stoichiometric or rich</u>.' Moreover, the applicant stated every minor detail about the essential significance and novelty, etc. of the abovementioned structure (i) of the Claimed Invention in the written opinion dated April 5, 2004. Therefore, if '(α) NO_X purifying catalysts, which adsorb NO_X onto a surface thereof, have been well-known prior to the filing of the Patent Application without the need for examples,' as found by the examiner, it is common for an examiner's decision of refusal to indicate and find evidence thereof. Even if the examiner merely unilaterally finds that the structure is well-known, the applicant cannot express an opinion on the finding if the examiner does not present any evidence thereof." (line 3 to line 14 of page 5)

(E) Content of the JPO decision

In response to this, the JPO found and determined as mentioned in No. 2, 3. above.

(2) Based on the abovementioned developments in procedures of the finding, the allegations of the plaintiffs in Ground for Rescission 8 are examined below.

A. As mentioned in (1)A. above, regarding the meaning of "adsorption onto the surface," "adsorption" and "absorption" are used in a clearly distinguished manner in the Claimed Invention. Specifically, in the "Prior art" and "Problems to be solved of the invention" sections, the expression "absorption" is used in the parts expressing prior art while the expression "adsorption" is used in the parts relating to the Claimed Invention. The following is stated in the

"Embodiment of the invention" section: "The capture of NO_X is performed mainly by adsorption onto the surface of the catalyst."; "This is because the mass transfer step accompanied by the reduction reaction of adsorbed NO_X includes only a vapor phase diffusion step of the reducing agent and produced N_2 and a surface diffusion step of the adsorbed NO_X and so on, and does not include any mass transfer step inside the catalyst bulk, which is large in mass transfer resistance."; "The NO_X purifying catalyst in the embodiment … does not require deepening the rich shift because it does not include a transfer step inside the bulk." Thereby, the meaning of "adsorption onto the surface" is clearly stated.

On the other hand, as mentioned in (1)B. above, there is no statement that distinguishes "adsorption" and "absorption" in the Cited Invention, though the expression "adsorption" is used therein.

As mentioned in (1)D.(A) above, in the notice of reasons for refusal dated January 30, 2004 (Exhibit Ko 12), it is pointed out that the components of the NO_X purifying catalyst are stated in Cited Document 1 or 2, but it is not specially pointed out that "NO_X is adsorbed onto the surface." Therefore, as mentioned in (1)D.(B) above, in response to the aforementioned reasons for refusal, the plaintiffs cited the following statements in the description of the Patent Application in the written opinion dated April 5, 2004 (Exhibit Ko 15) in relation to "adsorption of NO_X onto the surface": "this invention … by adsorbing and capturing NO_X in an oxidation atmosphere of the exhaust gas in the lean operating range of the internal combustion engine"; "The capture of NO_X is performed mainly by adsorption onto the surface of the catalyst." Thereby, the plaintiffs emphasized that the Claimed Invention differs from prior art in that in the Claimed Invention, "NO_X is mainly adsorbed onto the surface of the catalyst" while, in prior art, "exhaust gas is always conducted through an NO_X absorbent and NO_X is absorbed when the exhaust gas is lean."

In response to this, as mentioned in (1)D.(C) above, the examiner instructed in the examiner's decision of refusal dated July 19, 2005 (Exhibit Ko 13) that "NO_X purifying catalysts, which adsorb NO_X onto a surface thereof, have been well-known prior to the filing of the Patent Application without the need for examples."

B. Taking into account the abovementioned developments, it is not necessarily clear how the examiner interprets the statements in Claim 1 of the Claimed Invention, "adsorbs NO_X … onto a surface thereof" as there is no specific statement about it. However, it is natural to understand that the examiner accepted and then considered the plaintiffs' (applicants') interpretation of the meanings of and relationship between "adsorption" and "absorption" and consequently determined that the Claimed Invention could have been easily conceived of by a person ordinarily skilled in the art based on well-known art, including the Cited Invention or the invention stated in Cited Document 2 stated in (1)D.(A) above in relation to the difference, i.e.,

"adsorption onto a surface." This understanding is based on the facts that the examiner rendered the examiner's decision of refusal after considering the content of the written opinion dated April 5, 2004 (Exhibit Ko 15), which emphasizes that the expression "adsorbs NO_X … onto a surface thereof" means adsorbing onto a surface instead of absorbing inside," and that the examiner instructed in the examiner's decision of refusal that "adsorption onto a surface" is "well-known art."

On the other hand, as Difference 1 mentioned in No. 2, 3.(3)A. above, the JPO found the point that "NO_X is adsorbed onto the surface of the NO_X purifying catalyst" to be a difference between the Claimed Invention and the Cited Invention. The JPO then instructed that "NO_X purifying catalysts, which adsorb NO_X onto a surface thereof, have been well-known" by specifically pointing out Well-Known Examples 1 and 2 as mentioned in No. 2, 3.(4)A. above. However, as mentioned in (1)C. above, the expression "adsorption" is not used at least in Well-Known Examples 1 and 2, and in relation to the expression "surface"; it is only stated that "O_2^- or O^{2-} and NO react on the surface of Pt." Rather, there is the statement "… diffuses in the absorbent in the form of nitric acid ion (NO_3^-)." Therefore, the JPO appears to find a series of phenomena in which O_2^- or O^{2-} and NO react on the surface of a catalyst and diffuse in the absorbent in the form of nitric acid ion (NO_3^-) to be a phenomenon of "adsorbing onto a surface." This is inferentially considered to be a determination that is based on a premise that "adsorption onto a surface" is included in the cases of "being adsorbed onto the surface of a catalyst and also diffusing (being absorbed) inside the catalyst," that is, "adsorption" and "absorption" are phenomena that simultaneously occur, as alleged by the defendant in this case.

In this manner, it is not recognized that the same interpretation was made in the examiner's decision of refusal and the JPO decision with regard to the point of "adsorption onto a surface." Rather, in light of the wording, etc. of instructions in the examiner's decision of refusal and the JPO decision, said point is recognized to be interpreted as "adsorption onto a surface" in the former while it is interpreted as a phenomenon including "absorption" in addition to "adsorption onto a surface" in the latter. Therefore, it must be said that the JPO made a determination based on a reason that is different from reasons for the examiner's decision of refusal.

Based on the plaintiffs' interpretation and premise as alleged in No. 3 above, this "adsorption onto a surface" is exactly an essential part of the Claimed Invention. According to the plaintiffs' allegations in the written opinion and the request for a trial, the plaintiffs are recognized as interpreting the "adsorption onto a surface" in a manner that is different from the panel and as understanding the Claimed Invention and the Cited Invention based on a different premise. Therefore, as long as the JPO makes a determination on the point of "adsorption onto a surface" based on a reason that is different from the reasons for the examiner's decision of refusal, it should have given the plaintiffs an opportunity to express their opinions.

Incidentally, even though the JPO did not give the plaintiffs the abovementioned opportunity to express their opinions, the measure taken by the JPO can be considered to be substantially not illegal under special circumstances, such as a case where both cases have been substantially examined and the plaintiffs have expressed necessary opinions (see No. 5, 1.(4) in the judgment of the Intellectual Property High Court of February 21, 2008; 2006 (Gyo-Ke) 10538). However, such special circumstance cannot be recognized in this case.

C. Furthermore, the JPO uses publicly known art (Well-Known Examples 1 and 2) that has not been revealed in the notice of reasons for refusal and seems to understand that, even if the publicly known art does not constitute a reason for refusal, it can be one of the cited inventions mentioned in Article 29, paragraphs (1) and (2) of the Patent Act only because it is well-known art.

That is, regarding Difference 1, the JPO instructed that "Since NO_X purifying catalysts, which adsorb NO_X onto a surface thereof when the exhaust gas is lean, are well-known (for example, see Well-Known Examples 1 and 2; hereinafter referred to as "Well-Known Art 1"), the matter necessary for identifying the Claimed Invention in terms of Difference 1 is well-known." In addition, regarding Difference 2, the JPO instructed as follows: "It is well-known to purify exhaust gas by adsorbing NO_X in the exhaust gas onto said NO_X purifying catalyst when the internal combustion engine is being operated under a lean condition, by setting, after the adsorption, the exhaust gas to a stoichiometric or rich state for a few seconds, and by reducing the NO_X adsorbed onto said NO_X purifying catalyst to N_2 through catalytic reaction with a reducing agent (…). The feature of determining the time and depth, as provided by the Claimed Invention in terms of Difference 2, is nothing more than a design matter that can be conceived of appropriately by taking into account the Well-Known Art 2 disclosed in Well-Known Examples 1 and 3"; "the Claimed Invention is one that a person ordinarily skilled in the art could have easily made based on the Cited Invention, Well-Known Art 1 and Well-Known Art 2." However, these instructions are erroneous.

Even if Well-Known Arts 1 and 2 were well-known as famous inventions, as alleged by the defendant, it is clear in terms of the interpretation of Article 29, paragraphs (1) and (2) and Article 50 of said Act that it cannot be said that Well-Known Arts 1 and 2 can be used as the cited inventions mentioned in Article 29, paragraphs (1) and (2) of said Act only on the grounds that they are well-known arts, even though they are not revealed in the reasons for refusal. Certainly, exceptions have been made to accept well-known art that have not been revealed in reasons for refusal in some cases in finding and determining whether an invention could have been easily conceived of by a person ordinarily skilled in the art under Article 29, paragraph (2) of said Act. However, such acceptance is limited to cases where the well-known art is accessorily used in the fine adjustment of findings of cited inventions that constitute a reason for

refusal or in the process of determining whether the invention could have been easily conceived of by a person ordinarily skilled in the art, or cases where the well-known art is highly well-known in the related technical field and is used as knowledge that serves as a natural or tacit premise in understanding the relevant technology. It is not that well-known art can be naturally cited even if it is not revealed in reasons for refusal. The well-known art alleged by the defendant is famous and is imagined to have been known to many persons concerned. However, taking into account that the well-known art plays an important role in this case in the procedure of finding and determining whether the invention could have been easily conceived of by a person ordinarily skilled in the art, it cannot be considered to fall under cases where the well-known art is accessorily used merely in the fine adjustment of findings of cited inventions or in the process of determining whether the invention could have been easily conceived of by a person ordinarily skilled in the art, or cases where the well-known art is used as knowledge that serves as a natural or tacit premise. Consequently, in this case, the well-known art cannot be considered to become a determinant to affirm that the invention could have been easily conceived of by a person ordinarily skilled in the art.

The defendant's allegation in this regard is unreasonable, and the plaintiffs' allegation is justifiable.

D. On these grounds, the JPO decision has illegality of violating Article 50 of the Patent Act, as applied mutatis mutandis pursuant to Article 159, paragraph (2) of said Act, in relation to all the above-mentioned points.

2. Conclusion

Therefore, there is a reason for Ground for Rescission 8 as alleged by the plaintiffs. Consequently, the JPO decision shall be rescinded.

Intellectual Property High Court, First Division

Presiding judge: TSUKAHARA Tomokatsu

Judge: SHOJI Tamotsu

Judge: YAGUCHI Toshiya