Appeal decision

Appeal No. 2018-10982

Aichi, Japan
Appellant TOKAI RIKA CO., LTD

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The case of appeal against the examiner's decision of refusal of Japanese Patent Application No. 2014-238224, entitled "shift device", [the application published on May 30, 2016, Japanese Unexamined Patent Application Publication No. 2016-97900] has resulted in the following appeal decision:

Conclusion

The appeal of the case was groundless.

Reason

No. 1 History of the procedures

The present application is an application filed on Nov. 25, 2014, and the outline of history of the procedures thereof is as follows.

November 8, 2017: Written notice of reasons for refusal
December 26, 2017: Submission of written opinion and written amendment
May 22, 2018: Decision of refusal
August 9, 2018: Submission of written request for appeal

No. 2 The Invention

The inventions according to Claims 1-4 of the present application are specified by the matters described in Claims 1-4 of the scope of claims amended by the amendment of Dec. 26, 2017, and the invention according to Claim 1 thereof (hereinafter, referred to as "the Invention") is as follows.

"[Claim 1]

A shift device, comprising:

a shift body that is moved to change a shift position;

a sliding body that is provided at the shift body, and is made to be capable of sliding in a predetermined direction; and

a pressing body, which is provided at the shift body, has a different body from the sliding body, and is made to be capable of contacting with the sliding body only in a predetermined direction, the pressing body being configured to press and slide the sliding body in a predetermined direction by a vehicle occupant's operation on the shift body."

No. 3 Reasons for refusal stated in the examiner's decision

The reasons for refusal stated in the examiner's decision are: [Reason 1] Since the inventions according to Claims 1-3 of the present application are inventions that are described in Cited Documents 1-3 distributed before the filing date of the present application, these fall under Article 29(1)(iii) of the Patent Act, and thus the applicant should not be granted a patent for them; and [Reason 2] The inventions according to Claims 1-4 of the present application are ones that could have been invented with ease by a person having ordinary skill in the technical field of the invention before the application was filed, based on the inventions described in Cited Documents 1-3 distributed before the filing date of the present application, and, therefore, the applicant should not be granted a patent in accordance with the provisions of Article 29(2) of the Patent Act.

Cited Document 1: Japanese Examined Utility Model Application Publication No. S62-5692

Cited Document 2: U.S. Patent Application Publication No. 2002/0148261 Specification

Cited Document 3: U.S. Patent Application Publication No. 2014/0116176 Specification

No. 4 Described matters in the Cited Documents and Cited Invention

1 Description of Cited Document 3

In Cited Document 3 that is a publication distributed before the filing date of the present application, there are described the following matters relating to "SHIFT LEVER FOR A VEHICLE TRANSMISSION" together with drawings. (The underlines were added by the body, and the same applies hereafter.)

(1) Paragraph [0003]

"[0003] The present disclosure relates, in general, to a shift lever for a vehicle transmission which, when operated by a driver to change gear steps, facilitates a smooth changing operation".

(2) Paragraphs [0005]-[0006]

"[0005] Generally, drivers manually operate a shift lever provided in a vehicle to select a desired operation mode of the shift lever in order to change gear steps of a vehicle transmission. Particularly in an automatic transmission, drivers manually operate the shift lever to set the operation mode such as forward mode, neutral mode, backward mode, engine brake mode, and parking mode. Here, particularly when it is intended to select the backward mode, the gear change can generally be done only when a button, i.e., a kind of safety device, is pressed down.

[0006] As shown in FIG. 1, when the driver presses the button 500 down, an end side of the button rolls along an inclined surface 330 of a head 310 to move a rod 300 up and down. Here, this action causes operation noise and unsmooth operation to occur due to friction between the button 500 and the head 310 and between the head 310 and wall parts of an internal mounting space 210 of a support section 200, causing a feeling of inconvenience to the driver".

(3) Paragraph [0009]

"[0009] Accordingly, the present disclosure has been made keeping in mind the above problems occurring in the related art, and the present disclosure is intended to propose a shift lever which minimizes operation noise and friction when operating a button to reduce the feeling of inconvenience to a driver and to facilitate smooth operation of the button".

(4) Paragraph [0031]

"[0031] FIG. 2 is a view of a shift lever according to an embodiment of the present disclosure. The shift lever includes a support section 200, a rod 300, an engaging protrusion 230, an elastic part 400, and a button 500. The support section 200 is provided under a knob 100 and has an internal vertical mounting space 210. The rod 300 is provided in the mounting space 210 of the support section 200 to move linearly in a first direction, and has an upper part having an upper inclined surface 330 inclined at a certain angle and a side having a plurality of successive engaging grooves 350

aligned in the first direction. The engaging protrusion 230 is provided on an inner wall surrounding the mounting space 210 of the support section 200 at a position corresponding to one of the engaging grooves 350, such that, when the rod moves linearly in the first direction, the engaging protrusion is successively and selectively engaged with one of the engaging grooves so as to afford a brisk, clear operation action when changing gears. The elastic part 400 is mounted at a lower side of the rod 300 to support the rod 300 in the first direction. The button 500 is provided on one side of the knob 100 such that one end thereof extends inside the knob 100 to the inclined surface 330 of the upper part of the rod 300, and another end thereof is exposed to the outside of the knob 100 to enable that end to be pressed down so as to push down the rod 300. The button is provided on one side with a roller 600 which, when the button 500 is pressed down, pushes down the rod 300 while rolling along the inclined surface 330 of the rod 300".

(5) Paragraph [0038]

"[0038] FIG. 5 is a detailed view of a portion of the structure of FIG. 2 which is improved relative to the structure of FIG. 1. In FIG. 5, it can be seen that the roller 600 is provided on one end of the button 500, and the engaging protrusion 230 is formed on the inner wall of the mounting space of the support section 200 and the engaging grooves 350 are formed on the upper side of the rod 300 in the mounting space 210. The upper side of the rod 300 is provided as a separate head 310 that can be assembled to the upper portion of the rod 300. The head 310 has the inclined surface 330 on its upper portion and the engaging grooves 350 which are successively formed on its one side in the first direction, which corresponds to the linear direction in which the rod moves. When a driver operates the button 500, the rod 300 is moved linearly in the first direction to enable the engaging grooves 350 to be successively engaged with the engaging protrusion 230. This affords the driver a feeling that the engagement is clearly performed whenever one of the engaging grooves is engaged with the engaging protrusion".

(6) Paragraph [0042]

"[0042] FIG. 8 is a more detailed view of the engaging protrusion 230 which is formed on the inner wall of the mounting space 210 of the support section 200 at a position corresponding to the engaging grooves 350. The engaging protrusion 230 is provided at an upper portion of an elongate part which extends longitudinally from a base side of a rectangular opening of the inner wall of the mounting space 210. Thus, the engaging

protrusion 230 is surrounded by side and upper gaps 250 in the rectangular opening such that the engaging protrusion 230 can elastically move back and forth. When the rod 300 is moved linearly, the engaging protrusion 230 closely contacts and engages with respective engaging grooves 350. Hence, when operated, the button 500 is smoothly operated such that a driver can be aware of clear and complete operation of the button 500".

(7) In view of the described matters of the above (4)-(6) and the illustration contents of FIG. 2 and FIG. 5, it is recognized that, regarding the head 310 of Cited Document 3, its movement in a diameter direction of the rod 300 is regulated by the internal wall surrounding the mounting space 210 of the support section 200, and linear movement thereof is possible only in a first direction that is a direction of linear movement of the rod 300.

In addition, the rod 300 and the head 310 are of different bodies, and it can be said that the two have been assembled in contact with each other in the first direction (vertical direction in FIG. 5). Therefore, it is recognized that, when the button 500 is pressed down, the roller 600 of the button 500 presses the inclined surface 330 of the head 310 to press down the head 310 in the first direction, and, by this, the head 310 presses the rod 300 to press down it (make it move linearly) in the first direction.

2 Cited Invention

When the above-mentioned described matters, the recognized matters, and the illustration contents are put together and sorted out in conformity to the form of description of the Invention, it is recognized that there is described, in Cited Document 3, the following invention (hereinafter, referred to as "Cited Invention").

"A shift lever of a vehicle transmission, comprising:

a shift lever that is operated to change gear steps;

a rod 300 that is provided at the shift lever, and is capable of moving linearly in a first direction; and

a head 310, which is provided at the shift lever, has a different body from the rod 300, and is assembled in contact with the rod 300 in the first direction, the head 310 being configured to press and move the rod 300 linearly in the first direction by a driver's operation on the button 500."

No. 5 Comparison

1 The Invention and the Cited Invention are compared.

(1) "That is operated to change gear steps" of Cited Invention corresponds to "that is moved to change a shift position" of the Invention, and, in a similar fashion, "shift lever" to "shift body", "first direction" to "predetermined direction", " moving linearly" to " sliding", "a rod 300" to "a sliding body", " a driver's operation on the button 500" to "a vehicle occupant's operation on the shift body", "a head 310" to "a pressing body", and "a shift lever of a vehicle transmission" to "a shift device", respectively.

(2) The aspect that "the head 310" of Cited Invention "is assembled in contact with the rod 300 in the first direction" is, on the condition that it is an aspect that "pressing body" "is made to be capable of contacting with the sliding body in a predetermined direction", identical with the aspect of the Invention that "pressing body" "is made to be capable of contacting with the sliding body only in a predetermined direction".

2 Then, the Invention and Cited Invention have a corresponding feature and a prima facie different feature as follows.

<Corresponding feature>

"A shift device, comprising:

a shift body that is moved to change a shift position;

a sliding body that is provided at the shift body, and is made to be capable of sliding in a predetermined direction; and

a pressing body, which is provided at the shift body, has a different body from the sliding body, and is made to be capable of contacting with the sliding body in a predetermined direction, the pressing body being configured to press and slide the sliding body in a predetermined direction by a vehicle occupant's operation on the shift body."

<Different feature>

A point that, in the Invention, "a pressing body" and "a sliding body" are capable of in contact with each other "only in a predetermined direction", whereas, in Cited Invention, it is unclear whether it is of a structure in which the head 310 and the rod 300 are capable of being in contact with each other only in the first direction.

No. 6 Judgment by the body

1 Regarding the different feature

(1) The head 310 of Cited Invention is constituted in an aspect that enables linear movement only in the first direction (vertical direction in FIG. 5) by the internal wall

surrounding the mounting space 210 of the support section 200 (refer to No. 4, 1(7)), and in the light of the statement, regarding the rod 300, that it "is provided ... to move linearly in a first direction" (refer to the underlined portion of No. 4, 1(4)), it is recognized that it is not supposed to assemble these inclined relative to the first direction. Therefore, it can be said that both the head 310 and the rod 300 of Cited Invention are in an aspect that enables moving only in the first direction.

In addition, in the light of the statements of paragraph [0031] and FIG. 2 of Cited Document 3, it is recognized that the rod 300 of Cited Invention is energized upward (the upper side in FIG. 2 and FIG. 5) at all times by the elastic part 400. Therefore, it can be said that, in the state that the shift lever is assembled, the bottom face of the concave part of the head 310 and the upper surface of the rod 300 are in a state being in contact with each other always.

Accordingly, it is recognized that the head 310 and the rod 300 of Cited Invention are constituted in an aspect that, in a state that only the bottom face of the concave part of the head 310, which is a vertical surface relative to the first direction, and the upper surface of the rod 300 are in contact with each other at all times (the state of FIG. 5), they move in the first direction linearly.

In view of the above, it can be said that the head 310 and the rod 300 of Cited Invention are of a structure in which these are capable of being in contact with each other only in the first direction, and thus the aforementioned different feature is not recognized as a substantially different feature.

(2) Even if the relevant different feature is a substantially different feature, both of the head 310 and the rod 300 of Cited Invention are members for which movement only in the first direction is assumed, and it is not supposed, as the above (1), that both are made to be of an aspect in which these are capable of moving in a direction other than the first direction (a direction having a predetermined angle relative to the first direction).

Then, it could have been conceived with ease by a person skilled in the art to make the head 310 and the rod 300, that are members that move only in the first direction together, be of a structure in which only surfaces perpendicular to the first direction can be in contact with each other; that is, to make these be of a structure in which these can be in contact with each other only in the first direction, taking into consideration efficient transfer of pressing force and friction of the contact surface, etc. (in this connection, in the light of the statement of paragraph [0006] of Cited Document 3, it is recognized that Cited Document 3 is aware of an issue of friction in various

portions at the time of operating the button 500; in addition, in Japanese Unexamined Patent Application Publication No. 2014-100946 that is a publication distributed before the filing date of the present application, for example, it is described that the rack 14 and the rod 4 that are members corresponding to "a pressing body" and "a sliding body" of the Invention are made to be of an aspect that enables these to be in contact with each other only in the movement direction (vertical direction) of the rod 4 (refer to paragraphs [0032] and [0033], and FIG. 4, etc.), and that, by this, sliding that comes with push operation of the button can be reduced, and so on (refer to paragraphs [0005], [0008], [0009], etc.))

Furthermore, also regarding the effect of the Invention that "it is possible to effectively suppress that the pressing body presses the sliding body toward the direction vertical to the predetermined direction that is the sliding direction, and sliding resistance of the sliding body can be effectively reduced" (refer to paragraph [0015] of the specification of the present application), it is nothing but an effect within the range predicted from the effect exerted by Cited Invention, and it cannot be regarded as a particularly distinguishing effect.

2 Appellant's allegation

In the written request for appeal, Appellant alleges that, "In Cited Document 3, a concave part is formed in the head 310, the concave part is opened on its underside, the upper end of the concave part is made to be of a circular truncated cone shape, and the upper end of the rod 300 is made to engage with the upper end of the concave part. For this reason, in particular, on the occasion that the head 310 is made to slide by the button 500, the side surface of the upper end of the concave part of the head 310 is made to contact with the upper end periphery of the rod 300 in a direction other than the predetermined direction (diameter direction)." (page 5, lines 7-11).

However, in Cited Document 3, there is no description or suggestion that the side surface of the upper end of the concave part of the head 310 contacts with the upper end periphery of the rod 300 in the diameter direction, and, also in view of the functions of the head 310 and the rod 300 in Cited Invention, there is no necessity to be of a structure in which the two come into contact with each other in the diameter direction, either.

In addition, it cannot be said that the aforementioned different feature is a substantially different feature, and, even if it is a substantially different feature, it could have been conceived with ease by a person skilled in the art as indicated in the previous

instruction, and, therefore, the above-mentioned allegation of Appellant cannot be employed.

Therefore, since the Invention is an invention described in Cited Document 3 (Cited Invention), it falls under Article 29(1)(iii) of the Patent Act, and thus Appellant should not be granted a patent for that. Alternatively, the Invention is an invention that could be invented by a person skilled in the art with ease based on the invention described in Cited Document 3, and, thus, Appellant should not be granted a patent for that in accordance with the provision of Article 29(2) of the Patent Act.

No. 7 Closing

As above, since Appellant cannot be granted a patent for the Invention in accordance with the provisions of Article 29(1)(iii) of the Patent Act or Article 29(2) of the Patent Act, the application should be rejected without examining the inventions according to the other claims.

Therefore, the appeal decision shall be made as described in the conclusion.

Jul. 16, 2019

Chief administrative judge: OMACHI, Masayoshi
Administrative judge: FUJITA, Kazuhide
Administrative judge: UCHIDA, Hiroyuki