

# US Patent & Trademark Office

## Patent Public Search | Text View

United States Patent Application Publication

20250256554

Kind Code

A1

Publication Date

August 14, 2025

Inventor(s)

FUKUMOTO; Akihiro

### OFF-ROAD VEHICLE

#### Abstract

A utility vehicle **100** includes a front door **1** and a rear door **2** located in rear of the front door **1**. A rear end portion **11** of the front door **1** overlaps with a front end portion **21** of the rear door **2** as viewed in a vehicle width direction, and is located outside in the vehicle width direction with respect to the front end portion **21** of the rear door **2**.

**Inventors:** FUKUMOTO; Akihiro (Akashi-shi, JP)

**Applicant:** KAWASAKI MOTORS, LTD. (Hyogo, JP)

**Family ID:** 1000007799734

**Assignee:** KAWASAKI MOTORS, LTD. (Hyogo, JP)

**Appl. No.:** 18/437383

**Filed:** February 09, 2024

#### Publication Classification

**Int. Cl.:** B60J5/04 (20060101); B60J10/86 (20160101); E05D3/02 (20060101)

**U.S. Cl.:**

**CPC** B60J5/047 (20130101); B60J5/0486 (20130101); B60J10/86 (20160201); E05D3/02 (20130101); E05Y2900/531 (20130101)

#### Background/Summary

FIELD

[0001] The technique disclosed here relates to an off-road vehicle.

BACKGROUND

[0002] U.S. Patent Application Publication No. 2022/0315115 discloses an off-road vehicle including a front door and a rear door located in rear of the front door. Part of a main body panel is located in a clearance between the rear end of the front door and the front end of the rear door.

## SUMMARY

[0003] In a case where there is the clearance between the rear end of the front door and the front end of the rear door, there is a probability of the inside of a vehicle compartment being viewed from the outside through the clearance. For this reason, in some cases, an additional component for blocking the view, such as part of the above-described main body panel, is located in this clearance. In this case, the additional component is required, and therefore, a manufacturing cost may increase.

[0004] The technique disclosed here has been made in view of the above-described points, and an object thereof is to eliminate, without the need for an additional component, a probability of the inside of a vehicle compartment being viewed through a clearance between a front door and a rear door.

[0005] The off-road vehicle disclosed here includes a front door and a rear door located in rear of the front door. A rear end portion of the front door overlaps with a front end portion of the rear door as viewed in a vehicle width direction, and is located outside in the vehicle width direction with respect to the front end portion.

[0006] The off-road vehicle can eliminate, without the need for the additional component, a probability of the inside of the vehicle compartment being viewed through the clearance between the front door and the rear door.

---

## Description

### BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1 is a side view of a utility vehicle.

[0008] FIG. 2 is a perspective view of a coupled portion between a rear door and a B pillar from the inside of a vehicle compartment.

[0009] FIG. 3 is an enlarged view of a portion B of FIG. 2.

[0010] FIG. 4 is a sectional view of a front door, the rear door, and the B pillar taken along the horizontal plane when the section is viewed from above.

[0011] FIG. 5 is an enlarged view of a portion A of FIG. 1.

[0012] FIG. 6 is a sectional view taken along a VI-VI line of FIG. 5.

[0013] FIG. 7 is a sectional view of the rear door, a shaft, and the B pillar taken along the horizontal plane when the section is viewed from above, and shows the behavior of the rear door upon opening and closing.

[0014] FIG. 8 is a sectional view for describing a sealant of an off-road vehicle according to a modification.

### DESCRIPTION OF EMBODIMENTS

[0015] Hereinafter, an exemplary embodiment will be described based on the drawings. FIG. 1 is a side view of a utility vehicle **100**.

[0016] The utility vehicle **100** is a four-wheeled vehicle which can travel off road. The utility vehicle **100** is one example of an off-road vehicle. Hereinafter, the utility vehicle **100** will also be merely referred to as a “vehicle **100**.”

[0017] In the present disclosure, each component of the vehicle **100** will be described using a direction with respect to the vehicle **100**. Specifically, a “front” means the front of the vehicle **100** in a vehicle front-rear direction, and a “rear” means the rear of the vehicle **100** in the vehicle front-rear direction. A “left” means the left when facing the front of the vehicle **100**, and a “right” means the right when facing the front of the vehicle **100**. Note that a right-left direction will also be

referred to as a “vehicle width direction.” In the present disclosure, a member extending or expanding in a certain direction includes not only a member precisely extending or expanding parallel with a certain direction, but also a member substantially extending or expanding in a certain direction.

[0018] The vehicle **100** includes a front door **1** and a rear door **2** located in rear of the front door **1**. The vehicle **100** may further include a B pillar **61**, a protective frame **62**, and a roll-over protection structure (ROPS). The B pillar **61** is a columnar member located in front of a rear seat. The B pillar **61** is located outside in the vehicle width direction with respect to a front seat. The B pillar **61** extends in an up-down direction. The B pillar **61** includes a pair of B pillars **61** located right and left. The protective frame **62** is located outside in the vehicle width direction with respect to the front seat. The protective frame **62** protects an occupant on the front seat from, e.g., external impact from the side. The protective frame **62** is inclined with respect to the up-down direction so as to be positioned higher as extending rearward. The upper end of the protective frame **62** is coupled to the B pillar **61**. The lower end of the protective frame **62** is coupled, for example, to a lower frame extending in the front-rear direction in a lower portion of the vehicle **100**. The ROPS is a frame structure which protects the occupant, e.g., when the vehicle **100** rolls over. The ROPS is attached to a vehicle body so as to surround a space above a vehicle compartment. Specifically, the ROPS is detachably attached to an upper end portion of the B pillar **61**. Note that ROPS is not shown in FIG. **1** and FIG. **2** described later.

[0019] FIG. **2** is a perspective view of a coupled portion between the rear door **2** and the B pillar **61** from the inside of the vehicle compartment. The vehicle **100** further includes a hinge **50** supporting the rear door **2** such that the rear door **2** rotates about a predetermined rotation axis C. In this example, the hinge **50** includes a first hinge **51** and a second hinge **52** located below the first hinge **51**.

[0020] FIG. **3** is an enlarged view of a portion B of FIG. **2**. The first hinge **51** has a first arm **55** attached to the protective frame **62** and a second arm **56** attached to the rear door **2**. The first arm **55** and the second arm **56** are coupled to each other through a first shaft **54**. The axis of the first shaft **54** is coincident with the rotation axis C. That is, the first arm **55** and the second arm **56** are rotatable about the rotation axis C. Specifically, the first arm **55** is attached to the B pillar **61** through a first bracket **91** and the protective frame **62**. More specifically, the first arm **55** is bolted to the first bracket **91**, for example. The first bracket **91** is attached to the protective frame **62**, for example, by welding. As shown in FIG. **4**, the second arm **56** is attached to a rear door frame **28** serving as the framework of the rear door **2**. FIG. **4** is a sectional view of the front door **1**, the rear door **2**, and the B pillar **61** taken along the horizontal plane when such a section is viewed from above. The rear door frame **28** extends substantially in the up-down direction.

[0021] A basic configuration of the second hinge **52** is the same as the configuration of the first hinge **51**. That is, as shown in FIG. **2**, the second hinge **52** has a first arm **58** attached to the B pillar **61** and a second arm **59** attached to the rear door **2**. The first arm **58** and the second arm **59** are coupled to each other through a second shaft **57**. The axis of the second shaft **57** is coincident with the rotation axis C. That is, the first arm **58** and the second arm **59** are rotatable about the rotation axis C. Specifically, the first arm **58** is attached to the B pillar **61** through a second bracket **92**. More specifically, the first arm **58** is attached to the second bracket **92**, and the second bracket **92** is attached to the B pillar **61**. The second arm **59** is attached to the rear door frame **28**. With the above-described configuration, the rear door **2** is openably attached to the B pillar **61** through the first hinge **51** and the second hinge **52**.

[0022] FIG. **5** is an enlarged view of a portion A of FIG. **1**. A rear end portion **11** of the front door **1** overlaps with a front end portion **21** of the rear door **2** as viewed in the vehicle width direction, and is located outside in the vehicle width direction with respect to the front end portion **21**. In this example, the rear end portion **11** of the front door **1** overlaps with the front end portion **21** of the rear door **2** as viewed in the vehicle width direction across the substantially entireties of the front

door **1** and the rear door **2** in the up-down direction.

[0023] FIG. **6** is a sectional view taken along a VI-VI line of FIG. **5**. Note that in FIG. **6**, members other than the front door **1**, the rear door **2**, and the first shaft **54** are not shown for the sake of convenience in description. Specifically, the front door **1** has a front door body **12** and a first protruding piece **13** protruding rearward from the front door body **12** and including the rear end portion **11** of the front door **1**. More specifically, the first protruding piece **13** protrudes rearward from the outer corner of the rear end of the front door body **12** in the vehicle width direction.

[0024] The front door body **12** is a body portion of the front door **1**. The front door body **12** has a rear wall **19** facing rearward. The rear wall **19** expands substantially in the up-down direction and the vehicle width direction.

[0025] The first protruding piece **13** is entirely in a plate shape (specifically, flat plate shape). The first protruding piece **13** expands in the up-down direction and the front-rear direction.

[0026] Specifically, the front door **1** includes a first inner panel **31** and a first outer panel **41**. The first inner panel **31** is located inside in the vehicle width direction with respect to the first outer panel **41**. The first inner panel **31** includes a first wall **31a**, a second wall **31b**, and a third wall **31c**. Each of the first wall **31a** and the third wall **31c** expands in the front-rear direction and the up-down direction. The second wall **31b** expands substantially in the vehicle width direction and the up-down direction. The second wall **31b** serves as the above-described rear wall **19**. The rear end of the first wall **31a** is coupled to the inner end of the second wall **31b** in the vehicle width direction. The outer end of the second wall **31b** in the vehicle width direction is coupled to the front end of the third wall **31c**. The first outer panel **41** expands substantially in the front-rear direction and the up-down direction. In this example, a rear end portion of the first outer panel **41** is bent inward in the vehicle width direction. The first wall **31a** and second wall **31b** of the first inner panel **31** and a portion of the first outer panel **41** positioned in front with respect to the rear wall **19** define the above-described front door body **12**. The third wall **31c** of the first inner panel **31** and a portion of the first outer panel **41** positioned in rear with respect to the rear wall **19** define the above-described first protruding piece **13**.

[0027] The rear door **2** has a rear door body **22** and a second protruding piece **23** protruding forward from the rear door body **22** and including the front end portion **21** of the rear door **2**. Specifically, the second protruding piece **23** protrudes forward from the outer corner of the front end of the rear door body **22** in the vehicle width direction.

[0028] The rear door body **22** is a body portion of the rear door **2**. The rear door body **22** has a front wall **29** facing forward. The front wall **29** expands substantially in the up-down direction and the vehicle width direction.

[0029] The second protruding piece **23** is entirely in a plate shape. Specifically, the second protruding piece **23** includes a first portion **23a**, a second portion **23b**, and a third portion **23c**. The third portion **23c** expands in the front-rear direction and the up-down direction. The rear end of the third portion **23c** is coupled to the outer corner of the front end of the rear door body **22** in the vehicle width direction. The second portion **23b** is inclined with respect to the vehicle width direction so as to be positioned inside in the vehicle width direction as extending forward. The rear end of the second portion **23b** is coupled to the front end of the third portion **23c**. The first portion **23a** expands in the front-rear direction and the up-down direction. The rear end of the first portion **23a** is coupled to the front end of the second portion **23b**. The first portion **23a** includes the front end portion **21** of the rear door **2** described above. That is, the first portion **23a** overlaps with the rear end portion **11** of the front door **1** as viewed in the vehicle width direction. The first portion **23a** is one example of a “front end portion of a second protruding piece.”

[0030] Specifically, the rear door **2** includes a second inner panel **32** and a second outer panel **42**. The second inner panel **32** is located inside in the vehicle width direction with respect to the second outer panel **42**. The second inner panel **32** includes a fourth wall **32a** and a fifth wall **32b**. The fourth wall **32a** expands in the front-rear direction and the up-down direction. The fifth wall **32b**

expands substantially in the vehicle width direction and the up-down direction. The fifth wall **32b** is the above-described front wall **29**. The front end of the fourth wall **32a** is coupled to the inner end of the fifth wall **32b** in the vehicle width direction. The second outer panel **42** entirely expands in the front-rear direction and the up-down direction. A portion of the second outer panel **42** positioned in rear with respect to the front wall **29** and the second inner panel **32** define the above-described rear door body **22**. A portion of the second outer panel **42** positioned in front with respect to the front wall **29** defines the above-described second protruding piece **23**.

[0031] With the above-described configuration, in terms of a position in the vehicle width direction, the first portion **23a** of the second protruding piece **23** is located inside in the vehicle width direction with respect to the outer surface of the rear door body **22**. The first portion **23a** of the second protruding piece **23** is positioned inside in the vehicle width direction with respect to the first protruding piece **13**. In this example, the first portion **23a** of the second protruding piece **23** and the first protruding piece **13** are separated from each other in the vehicle width direction. That is, in this example, the rear end portion **11** of the front door **1** and the front end portion **21** of the rear door **2** are separated from each other in the vehicle width direction.

[0032] Subsequently, a positional relationship between the front end portion **21** of the rear door **2**, the rotation axis C of the hinge **50**, and the B pillar **61** will be described. As shown in FIG. **4**, in terms of a position in the front-rear direction, the front end portion **21** of the rear door **2** is positioned in front with respect to the B pillar **61**. In terms of a position in the vehicle width direction, the front end portion **21** of the rear door **2** is positioned outside in the vehicle width direction with respect to the B pillar **61**. In this example, in terms of a position in the front-rear direction, the second protruding piece **23** of the rear door **2** extends to a position in front with respect to the B pillar **61**. In terms of a position in the vehicle width direction, the second protruding piece **23** of the rear door **2** is positioned outside in the vehicle width direction with respect to the B pillar **61**.

[0033] The rotation axis C of the hinge **50** is located between the first portion **23a** of the second protruding piece **23** and the front wall **29** in terms of a position in the front-rear direction. That is, the rotation axis C is located inside in the vehicle width direction with respect to the second protruding piece **23**. In terms of a position in the vehicle width direction, the rotation axis C is positioned outside in the vehicle width direction with respect to the B pillar **61**. In this example, in terms of a position in the front-rear direction, the rotation axis C is positioned in front with respect to the B pillar **61**.

[0034] In this vehicle **100**, the rear end portion **11** of the front door **1** overlaps with the front end portion **21** of the rear door **2** as viewed in the vehicle width direction. Thus, a probability of the inside of the vehicle compartment being viewed through a clearance between the front door **1** and the rear door **2** can be eliminated without the need for an additional component. Particularly in this example, the front door **1** includes the first protruding piece **13** protruding rearward from the front door body **12**, and therefore, the rear end portion **11** of the front door **1** can easily overlap with the front end portion **21** of the rear door **2** as viewed in the vehicle width direction. Further, the rear door **2** includes the second protruding piece **23** protruding forward from the rear door body **22**, and therefore, the front end portion **21** of the rear door **2** can easily overlap with the rear end portion **11** of the front door **1** as viewed in the vehicle width direction.

[0035] FIG. **7** is a sectional view of the rear door **2**, a shaft **53**, and the B pillar **61** taken along the horizontal plane when such a section is viewed from above, and shows the behavior of the rear door **2** upon opening and closing. In FIG. **7**, a solid line indicates the state of the rear door **2** when the rear door **2** is fully closed, and a dash-dot-dot line indicates the state of the rear door **2** when the rear door **2** is fully opened and while the rear door **2** is being opened or closed. When the rear door **2** (specifically, left rear door **2**) is opened, the front end portion **21** (specifically, first portion **23a** of the second protruding piece **23**) of the rear door **2** rotates clockwise about the rotation axis C as viewed from above. That is, when the rear door **2** is opened, the front end portion **21** (specifically,

first portion **23a** of the second protruding piece **23**) of the rear door **2** moves inward in the vehicle width direction. In the vehicle **100**, the rear end portion **11** of the front door **1** is located outside in the vehicle width direction with respect to the front end portion **21** of the rear door **2**, and therefore, contact of the front end portion **21** with the rear end portion **11** upon opening of the rear door **2** can be avoided. In this example, the first portion **23a** of the second protruding piece **23** is positioned inside in the vehicle width direction with respect to the first protruding piece **13** of the front door **1**. Thus, contact of the second protruding piece **23** with the first protruding piece **13** upon opening of the rear door **2** can be avoided.

[0036] Further, in the vehicle **100**, the front end portion **21** of the rear door **2** is positioned in front with respect to the B pillar **61** in terms of a position in the front-rear direction, and the front end portion **21** is positioned outside in the vehicle width direction with respect to the B pillar **61** in terms of a position in the vehicle width direction. With this configuration, contact of the front end portion **21** with the B pillar **61** can be avoided when the rear door **2** is opened or closed even if the front end portion **21** moves inward in the vehicle width direction.

[0037] As described above, the first portion **23a** of the second protruding piece **23** moves inward in the vehicle width direction when the rear door **2** is opened. In the vehicle **100**, the rotation axis C of the hinge **50** is located between the first portion **23a** of the second protruding piece **23** and the front wall **29** in terms of a position in the front-rear direction. That is, the rotation axis C is not located in a space inside in the vehicle width direction with respect to the first portion **23a** of the second protruding piece **23**. Thus, interfering of the second protruding piece **23** with the rotation axis C upon opening of the rear door **2** can be avoided.

[0038] In addition, in the vehicle **100**, in terms of a position in the vehicle width direction, the first portion **23a** of the second protruding piece **23** is located inside in the vehicle width direction with respect to the outer surface of the rear door body **22**. With this configuration, even in a state in which the rear end portion **11** of the front door **1** overlaps with the front end portion **21** of the rear door **2** as viewed in the vehicle width direction, the outer surface of the rear door body **22** and the outer surface of the front door body **12** can be located in the same plane.

[0039] Next, a vehicle **200** according to a modification will be described. FIG. **8** is a sectional view for describing a sealant **7** of the vehicle **200** according to the modification. The vehicle **200** is different from the vehicle **100** in that the vehicle **200** has the sealant **7**. Other configurations are the same as those of the vehicle **100**. The same reference numerals as those of the vehicle **100** are used, and description thereof will be omitted.

[0040] The vehicle **200** further includes the sealant **7** located between the front end portion **21** of the rear door **2** and the rear end portion **11** of the front door **1** and attached to the front end portion **21**. The sealant **7** is made, for example, of rubber. Specifically, the sealant **7** extends substantially in the up-down direction along the front end portion **21**. That is, the shape of the sealant **7** is a columnar shape extending substantially in the up-down direction along the front end portion **21**. The sealant **7** has a groove **7c** in an end surface **71** facing rearward. The groove **7c** extends substantially in the up-down direction. The second protruding piece **23** (specifically, first portion **23a**) of the rear door **2** is fitted in the groove **7c**. Thus, the sealant **7** is attached to the front end portion **21** of the rear door **2**. That is, the sealant **7** rotates about the rotation axis C integrally with the front end portion **21** upon opening and closing of the rear door **2**. A portion of the sealant **7** outside in the vehicle width direction with respect to the groove **7c** is located between the front end portion **21** of the rear door **2** and the rear end portion **11** of the front door **1**. An end surface **72** of the sealant **7** facing outward in the vehicle width direction is curved such that a center portion thereof in the front-rear direction protrudes outward in the vehicle width direction. In this example, when at least the rear door **2** is closed, the end surface **72** of the sealant **7** contacts the rear end portion **11** of the front door **1**.

[0041] The vehicle **200** has the sealant **7**, and therefore, entrance of dust into the vehicle compartment through a clearance between the front end portion **21** of the rear door **2** and the rear

end portion **11** of the front door **1** can be prevented. Particularly in this example, the end surface **72** of the sealant **7** contacts the rear end portion **11** of the front door **1** when at least the rear door **2** is closed, and therefore, entrance of dust into the vehicle compartment through the above-described clearance can be more reliably prevented. Further, the end surface **72** of the sealant **7** is curved such that the center portion thereof in the front-rear direction protrudes outward in the vehicle width direction. Thus, even in a case where the end surface **72** of the sealant **7** contacts the rear end portion **11** of the front door **1**, the sealant **7** does not interfere with an operation of opening and closing the rear door **2**.

#### OTHER EMBODIMENTS

[0042] The embodiment has been described above as an example of the technique disclosed in the present application. However, the technique in the present disclosure is not limited to above, and is also applicable to embodiments to which changes, replacements, additions, omissions, etc. are made as necessary. The components described above in the embodiment may be combined to form a new embodiment. The components shown in the attached drawings and described in detail may include not only components essential for solving the problems, but also components that are provided for describing an example of the above-described technique and are not essential for solving the problems. Thus, description of these non-essential components in detail and illustration of these components in the attached drawings shall not be interpreted that these non-essential components are essential.

[0043] For example, the off-road vehicle is not limited to the utility vehicle **100**. The off-road vehicle may be, for example, an all terrain vehicle (ATV) or a tractor. Moreover, the off-road vehicle is not limited to a four-wheeled vehicle, and for example, may be a three-wheeled vehicle.

[0044] In the vehicle **100**, the rear end portion **11** of the front door **1** overlaps with the front end portion **21** of the rear door **2** as viewed in the vehicle width direction across the substantially entireties of the front door **1** and the rear door **2** in the up-down direction. However, the rear end portion **11** of the front door **1** may not overlap with the front end portion **21** of the rear door **2** as viewed in the vehicle width direction at part of the front door **1** and the rear door **2** in the up-down direction.

[0045] As long as the rear end portion **11** of the front door **1** overlaps with the front end portion **21** of the rear door **2** as viewed in the vehicle width direction and is located outside in the vehicle width direction with respect to the front end portion **21**, the configurations of the front door **1** and the rear door **2** are not limited. For example, the front door **1** does not necessarily include the first protruding piece **13**. In this case, a rear end portion of the front door body **12** may overlap with the front end portion **21** of the rear door **2** as viewed in the vehicle width direction. The rear door **2** does not necessarily include the second protruding piece **23**. In this case, the rear end portion **11** of the front door **1** may overlap with a front end portion of the rear door body **22** as viewed in the vehicle width direction. The rear end portion **11** of the front door **1** may contact the front end portion **21** of the rear door **2**.

[0046] As long as the front end portion **21** of the rear door **2** does not contact the B pillar **61** upon opening and closing of the rear door **2**, the front end portion **21** is not necessarily positioned in front with respect to the B pillar **61** in terms of a position in the front-rear direction, and is not necessarily positioned outside in the vehicle width direction with respect to the B pillar **61** in terms of a position in the vehicle width direction.

[0047] The rotation axis C of the hinge **50** is not necessarily located between the first portion **23a** of the second protruding piece **23** and the front wall **29** in terms of a position in the front-rear direction.

[0048] In the vehicle **200** according to the modification, the sealant **7** is not necessarily attached to the front end portion **21** of the rear door **2** by fitting the second protruding piece **23** of the rear door **2** in the groove **7c**. For example, the sealant **7** may be present only between the front end portion **21** of the rear door **2** and the rear end portion **11** of the front door **1**, and the inner end surface of the

sealant **7** in the vehicle width direction may be attached to the second protruding piece **23** with, e.g., an adhesive.

## ASPECTS

[0049] The above-described embodiment is a specific example of the following aspects.

[0050] (First Aspect) The utility vehicle **100** (off-road vehicle) includes the front door **1** and the rear door **2** located in rear of the front door **1**. The rear end portion **11** of the front door **1** overlaps with the front end portion **21** of the rear door **2** as viewed in the vehicle width direction, and is located outside in the vehicle width direction with respect to the front end portion **21** of the rear door **2**.

[0051] According to this configuration, a probability of the inside of the vehicle compartment being viewed through the clearance between the front door **1** and the rear door **2** can be eliminated without the need for the additional component.

[0052] (Second Aspect) The utility vehicle **100** of the first aspect further includes the sealant **7** located between the front end portion **21** of the rear door **2** and the rear end portion **11** of the front door **1** and attached to the front end portion **21** of the rear door **2**.

[0053] According to this configuration, entrance of dust into the vehicle compartment through the clearance between the front end portion **21** of the rear door **2** and the rear end portion **11** of the front door **1** can be prevented.

[0054] (Third Aspect) In the utility vehicle **100** of the first or second aspect, in terms of a position in the front-rear direction, the front end portion **21** of the rear door **2** is positioned in front with respect to the B pillar **61**, and in terms of a position in the vehicle width direction, the front end portion **21** of the rear door **2** is positioned outside in the vehicle width direction with respect to the B pillar **61**.

[0055] According to this configuration, contact of the front end portion **21** with the B pillar **61** upon opening and closing of the rear door **2** can be avoided.

[0056] (Fourth Aspect) In the utility vehicle **100** of any one of the first to third aspects, the front door **1** has the front door body **12** and the first protruding piece **13** protruding rearward from the front door body **12** and including the rear end portion **11** of the front door **1**.

[0057] According to this configuration, the rear end portion **11** of the front door **1** can easily overlap with the front end portion **21** of the rear door **2** as viewed in the vehicle width direction.

[0058] (Fifth Aspect) In the utility vehicle **100** of any one of the first to fourth aspects, the rear door **2** has the rear door body **22** and the second protruding piece **23** protruding forward from the rear door body **22** and including the front end portion **21** of the rear door **2**.

[0059] According to this configuration, the front end portion **21** of the rear door **2** can easily overlap with the rear end portion **11** of the front door **1** as viewed in the vehicle width direction.

[0060] (Sixth Aspect) In the utility vehicle **100** of any one of the first to fifth aspects, the front door **1** has the front door body **12** and the first protruding piece **13** protruding rearward from the front door body **12** and including the rear end portion **11** of the front door **1**, the rear door **2** has the rear door body **22** and the second protruding piece **23** protruding forward from the rear door body **22** and including the front end portion **21** of the rear door **2**, and the front end portion (first portion **23a**) of the second protruding piece **23** is positioned inside in the vehicle width direction with respect to the first protruding piece **13**.

[0061] According to this configuration, the front door **1** includes the first protruding piece **13** and the rear door **2** includes the second protruding piece **23**, and therefore, the rear end portion **11** of the front door **1** and the front end portion **21** of the rear door **2** can more easily overlap with each other as viewed in the vehicle width direction.

[0062] (Seventh Aspect) In the utility vehicle **100** of any one of the first to sixth aspects, in terms of a position in the vehicle width direction, the front end portion (first portion **23a**) of the second protruding piece **23** is located inside in the vehicle width direction with respect to the outer surface of the rear door body **22**.



[0063] According to this configuration, even in a state in which the rear end portion **11** of the front door **1** overlaps with the front end portion **21** of the rear door **2** as viewed in the vehicle width direction, the outer surface of the rear door body **22** and the outer surface of the front door body **12** can be located in the same plane.

[0064] (Eighth Aspect) The utility vehicle **100** of any one of the first to seventh aspects further includes the hinge **50** supporting the rear door **2** such that the rear door **2** rotates about the predetermined rotation axis C. The rear door body **22** has the front wall **29** facing forward, and the rotation axis C is located between the front end portion (first portion **23a**) of the second protruding piece **23** and the front wall **29** in terms of a position in the front-rear direction.

[0065] According to this configuration, the rotation axis C of the hinge **50** is not located in the space inside in the vehicle width direction with respect to the front end portion (first portion **23a**) of the second protruding piece **23**. Thus, interfering of the second protruding piece **23** with the rotation axis C upon opening and closing of the rear door **2** can be avoided.

## Claims

1. An off-road vehicle comprising: a front door; a rear door located in rear of the front door; and a B pillar located outside in a vehicle width direction with respect to a front seat, wherein a rear end portion of the front door overlaps with a front end portion of the rear door as viewed in the vehicle width direction, and is located outside in the vehicle width direction with respect to the front end portion, and wherein the front end portion of the rear door is positioned forward of an entirety of the B pillar in a front-rear direction.
2. The off-road vehicle of claim 1, further comprising: a sealant located between the front end portion of the rear door and the rear end portion of the front door and attached to the front end portion of the rear door.
3. The off-road vehicle of claim 1, wherein the front end portion of the rear door is positioned outside in the vehicle width direction with respect to the B pillar.
4. The off-road vehicle of claim 1, wherein the front door has a front door body and a first protruding piece protruding rearward from the front door body and including the rear end portion of the front door.
5. The off-road vehicle of claim 1, wherein the rear door has a rear door body and a second protruding piece protruding forward from the rear door body and including the front end portion of the rear door.
6. The off-road vehicle of claim 1, wherein the front door has a front door body and a first protruding piece protruding rearward from the front door body and including the rear end portion of the front door, the rear door has a rear door body and a second protruding piece protruding forward from the rear door body and including the front end portion of the rear door, and a front end portion of the second protruding piece is positioned inside in the vehicle width direction with respect to the first protruding piece.
7. The off-road vehicle of claim 5, wherein the front end portion of the second protruding piece is located inside in the vehicle width direction with respect to an outer surface of the rear door body.
8. The off-road vehicle of claim 5, further comprising: a hinge supporting the rear door such that the rear door rotates about a predetermined rotation axis, wherein the rear door body has a front wall facing forward, and the rotation axis is located between the front end portion of the second protruding piece and the front wall in in the front-rear direction.
9. The off-road vehicle of claim 1, wherein the rear end portion of the front door is positioned forward of the B pillar in the front-rear direction.
10. The off-road vehicle of claim 1, wherein the B-pillar extends in an up-down direction, the vehicle comprising: a protective frame inclined with respect to the up-down direction so as to be positioned higher as it extends rearward, and coupled at its upper end to the B pillar; a first hinge

rotatably supporting the rear door and having a first arm attached to the protective frame and a second arm attached to the rear door; and a second hinge located below the first hinge, the second hinge rotatably supporting the rear door and having a third arm attached to the B pillar and a fourth arm attached to the rear door.

**11.** An off-road vehicle comprising: a front door; a rear door located in rear of the front door; a B pillar extending in an up-down direction located outside in a vehicle width direction with respect to a front seat; a protective frame inclined with respect to the up-down direction so as to be positioned higher as it extends rearward, and coupled at its upper end to the B pillar; a first hinge rotatably supporting the rear door and having a first arm attached to the protective frame and a second arm attached to the rear door; and a second hinge located below the first hinge, the second hinge rotatably supporting the rear door and having a third arm attached to the B pillar and a fourth arm attached to the rear door. wherein a rear end portion of the front door overlaps with a front end portion of the rear door as viewed in the vehicle width direction, and is located outside in the vehicle width direction with respect to the front end portion.

**12.** An off-road vehicle comprising: a front door; a rear door located in rear of the front door, and a hinge supporting the rear door such that the rear door rotates about a predetermined rotation axis, wherein a rear end portion of the front door overlaps with a front end portion of the rear door as viewed in a vehicle width direction, and is located outside in the vehicle width direction with respect to the front end portion, and wherein the rotation axis is positioned forward of an entirety of a B pillar in a front-rear direction.

---