US 20250263029A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2025/0263029 A1**

SHINOHE (43) **Pub. Date: Aug. 21, 2025**

(54) **VEHICLE FENDER COVER STRUCTURE**

(71) Applicant: **SUBARU CORPORATION**, Tokyo (JP)

(72) Inventor: **Koji SHINOHE**, Tokyo (JP)

(73) Assignee: **SUBARU CORPORATION**, Tokyo (JP)

(21) Appl. No.: **19/025,077**

(22) Filed: **Jan. 16, 2025**

(30) **Foreign Application Priority Data**

Feb. 15, 2024 (JP) 2024-021302

Publication Classification

(51) **Int. Cl.**

B60R 13/08 (2006.01)

B60R 13/06 (2006.01)

(52) **U.S. Cl.**

CPC ***B60R 13/0838*** (2013.01); ***B60R 13/06*** (2013.01)

(57) **ABSTRACT**

A vehicle fender cover structure covering a gap above a vehicle body frame member of a vehicle includes a fender cover body, a sound insulation material, and a seal. The fender cover body includes a vertical plate covering the gap from an inner side in the vehicle widthwise direction, and a top plate projecting from an upper end of the vertical plate outward in the vehicle widthwise direction. The sound insulation material is provided along the vertical plate, and prevents noise from being released from the engine room to an outside of the vehicle. The seal is provided on the top plate, is brought into elastic contact with an inner side in the vehicle widthwise direction of an upper end part of an exterior member of the vehicle, and blocks a current of air gushing to the outside of the vehicle.

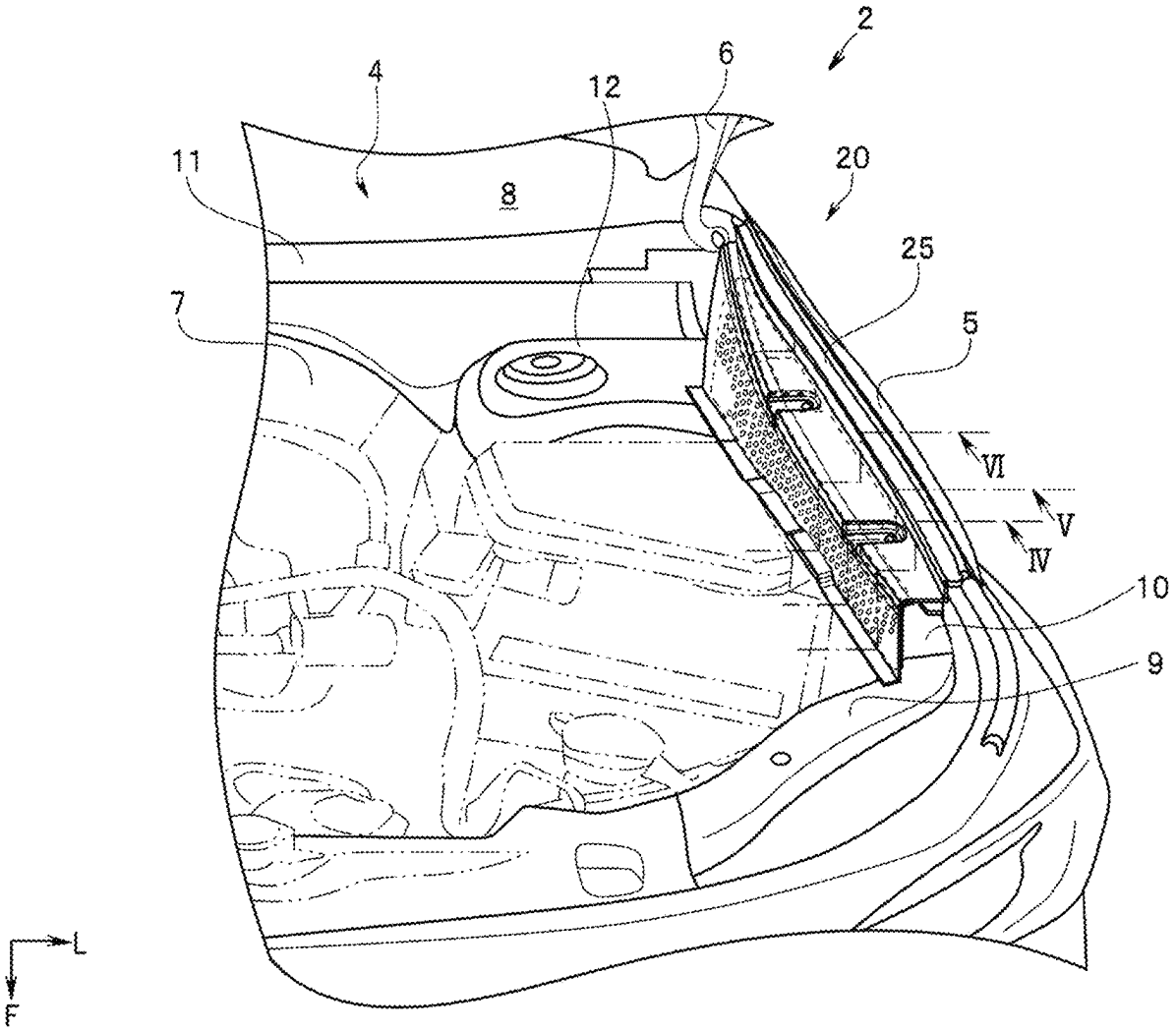


FIG. 1

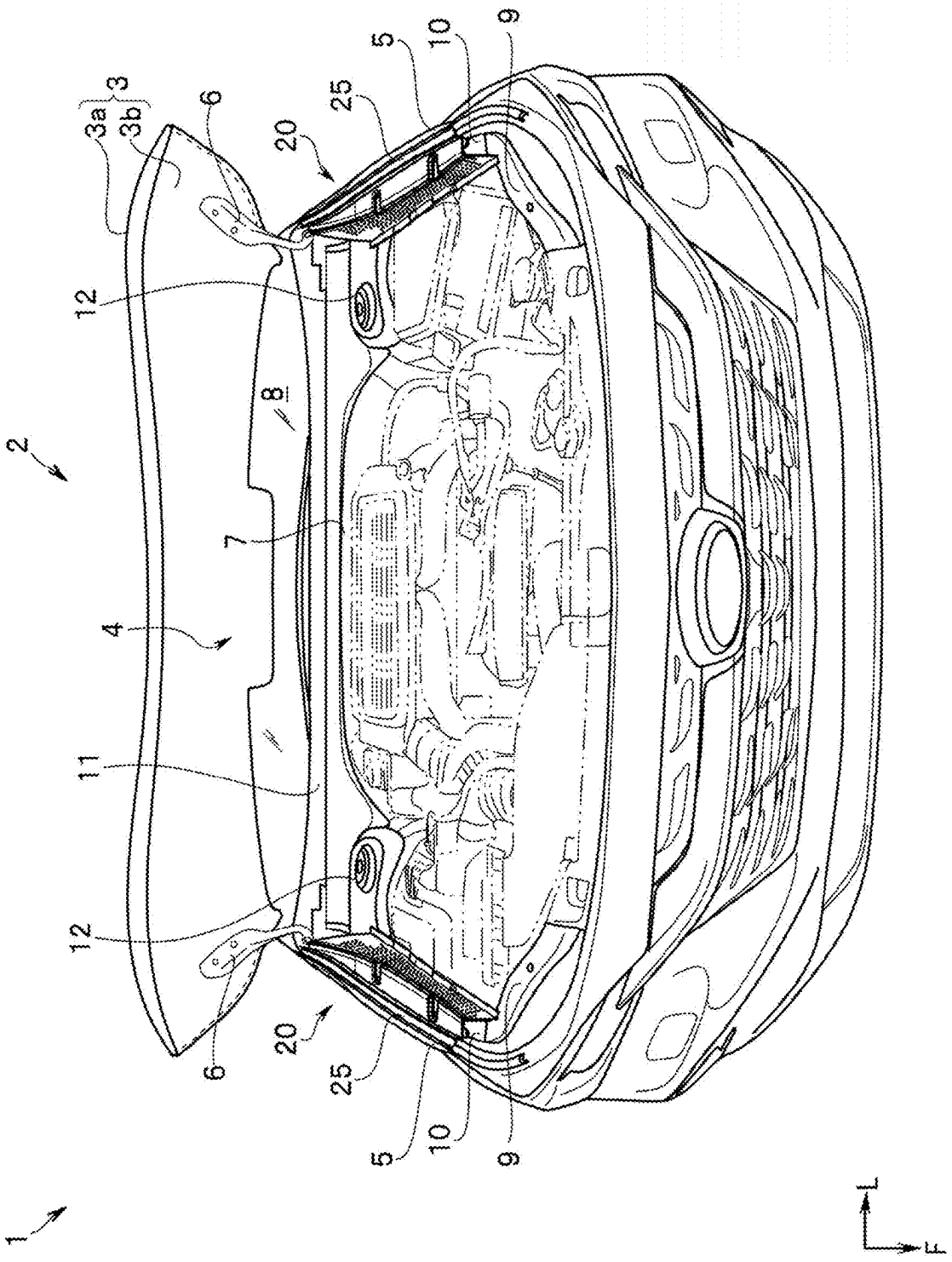


FIG. 2

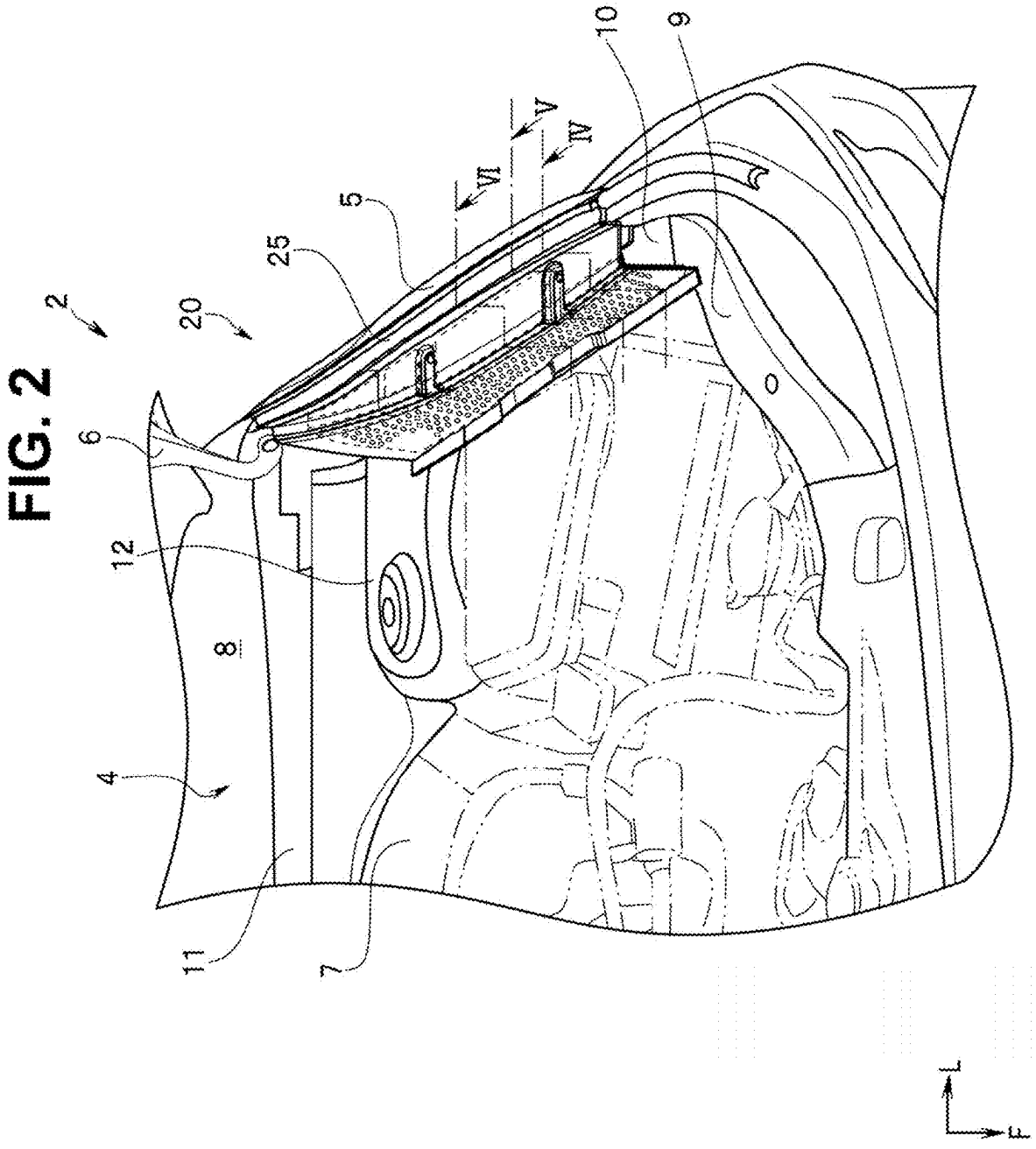


FIG. 3

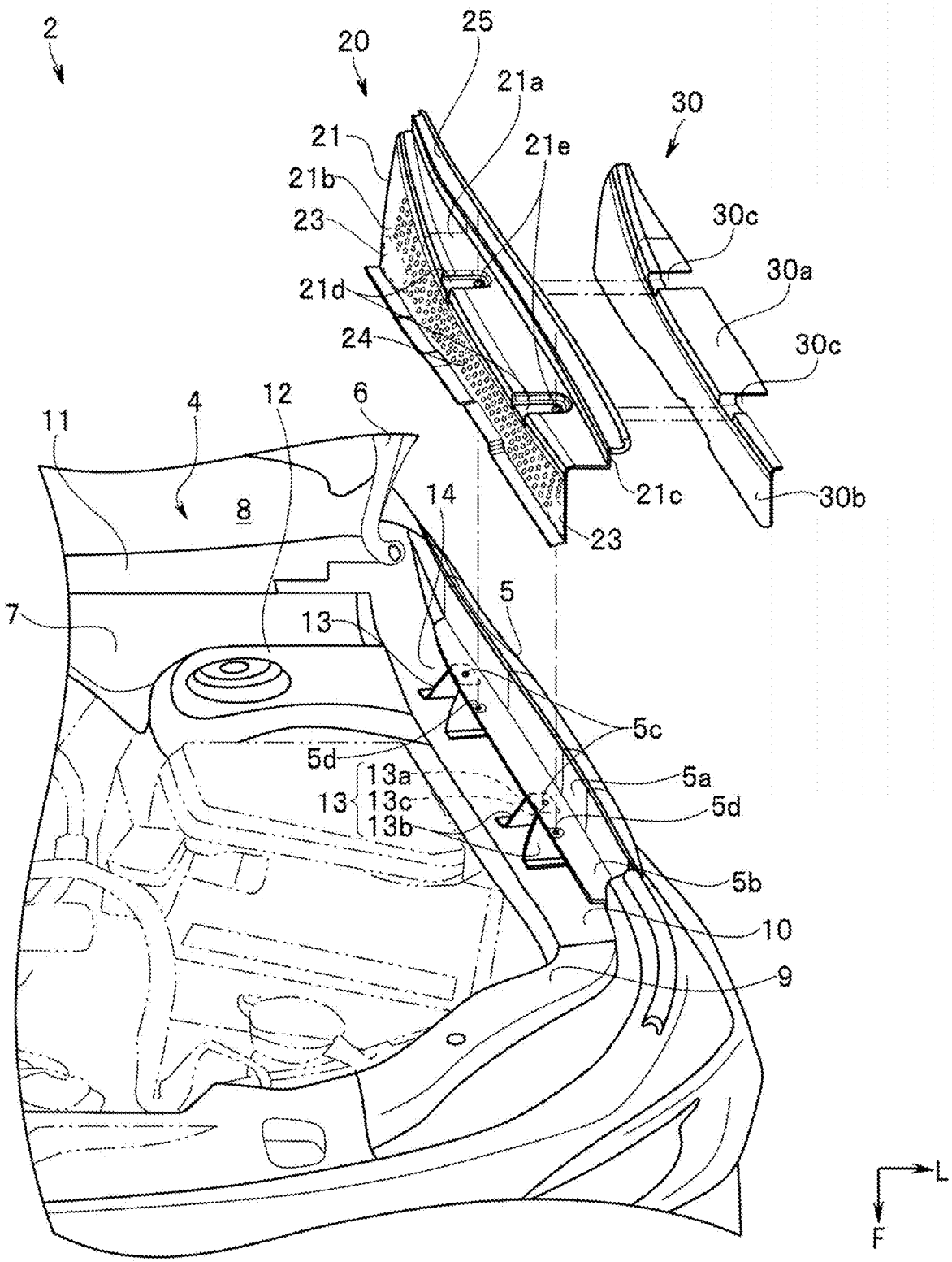

2
20
25
21a
30
21
21e
21b
23
30c
30a
21d
24
30c
11
4
12
6
8
14
21c
30b
23
7
13
5
5c
5d
13a
13
13c
13b
5a
5d
5b
10
9
L
F

FIG. 4

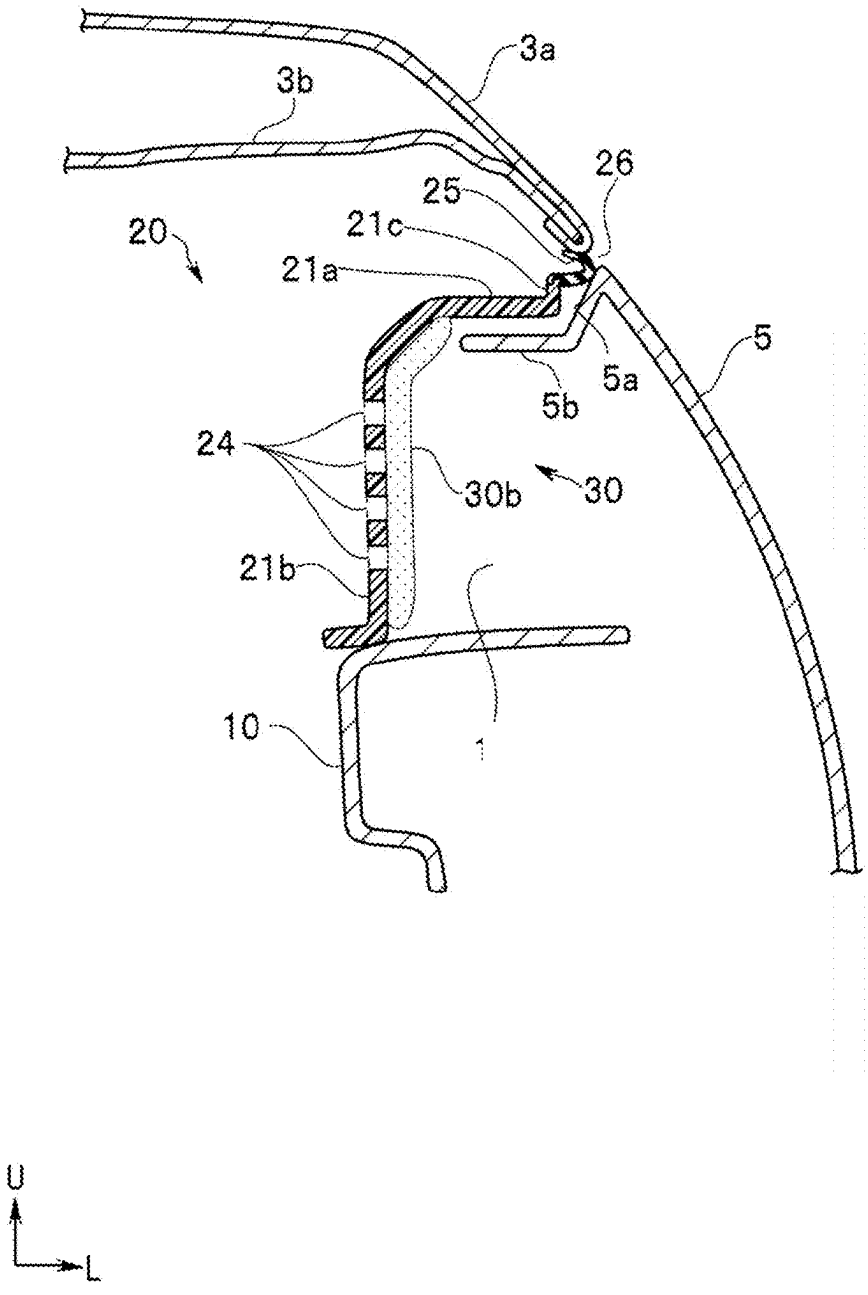


FIG. 5

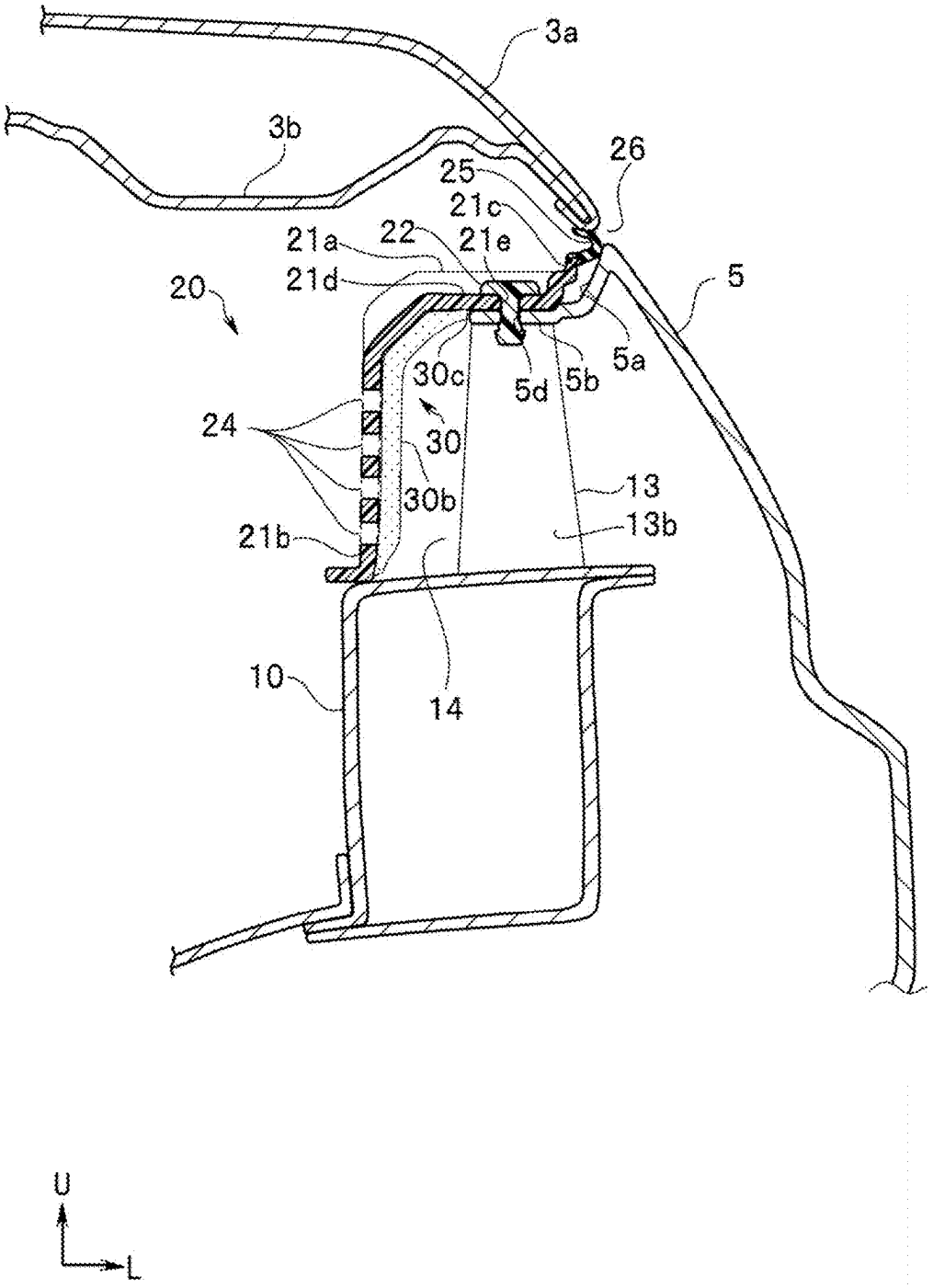

3a
3b
26
25
21c
21a
22
21e
21d
20
5
5a
30c
5d
5b
24
30
13
30b
13b
21b
10
14
U
L

FIG. 6

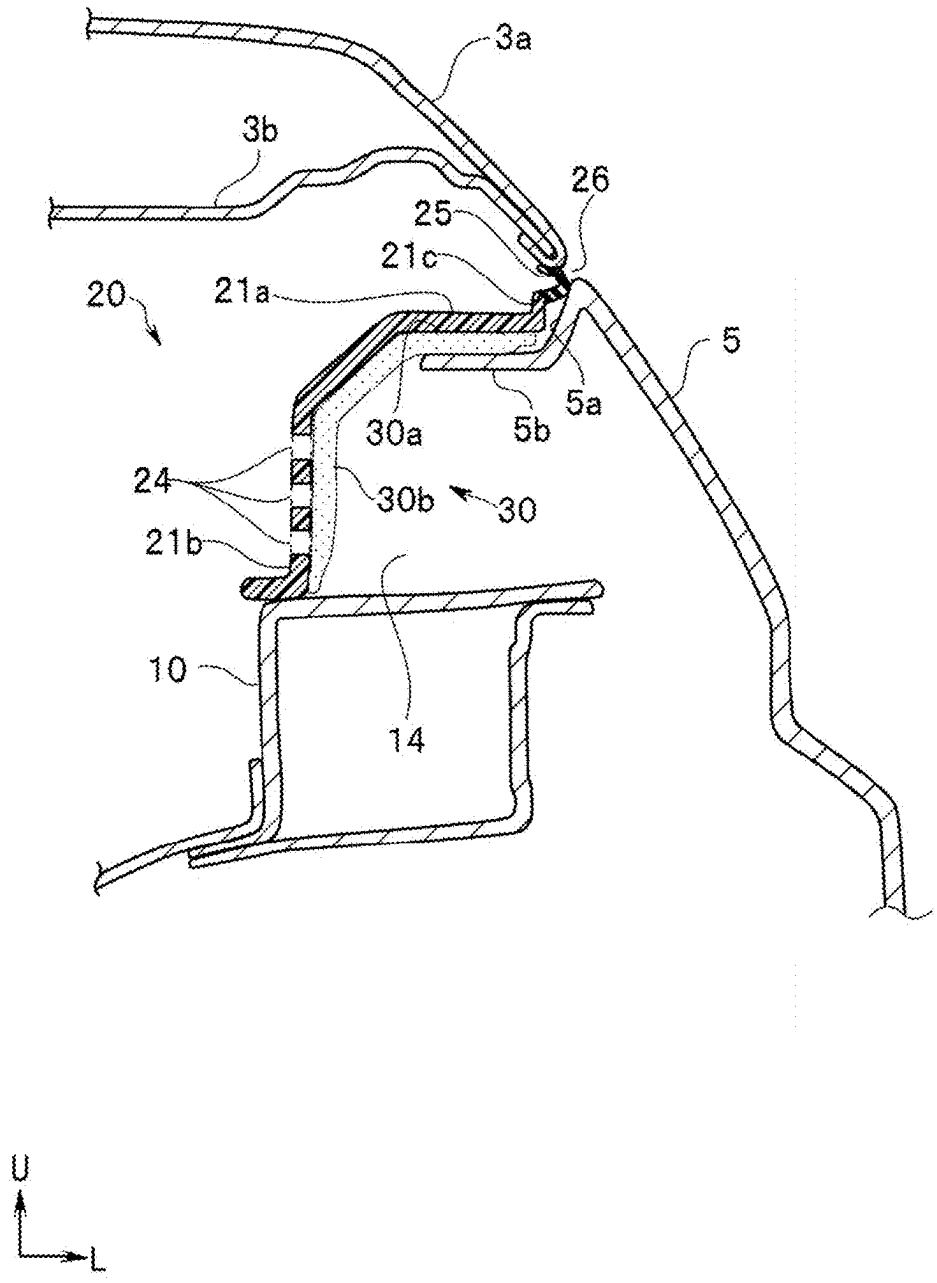
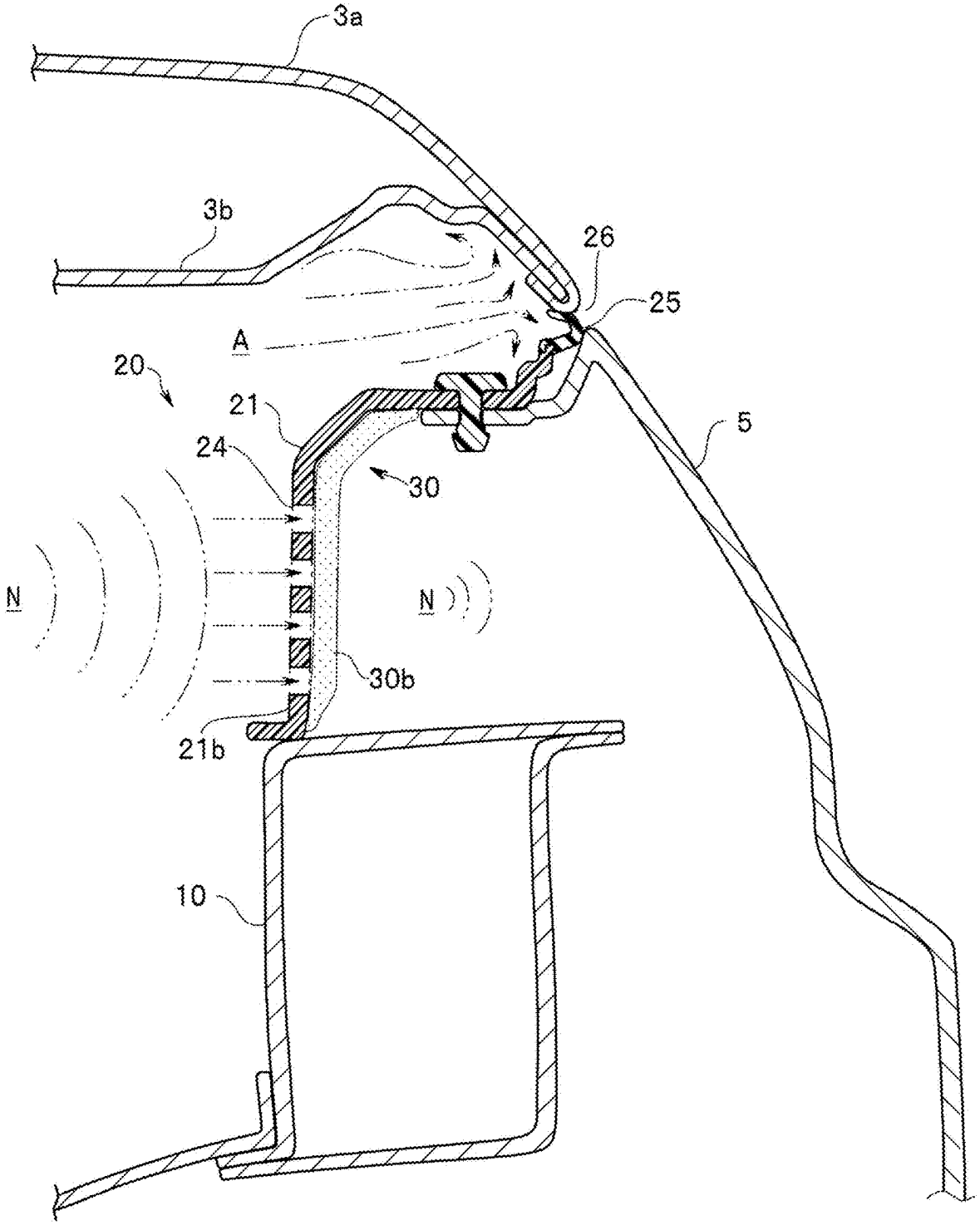


FIG. 7



VEHICLE FENDER COVER STRUCTURE

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The present application claims priority from Japanese Patent Application No. 2024-021302 filed on Feb. 15, 2024, the entire contents of which are hereby incorporated by reference.

BACKGROUND OF THE INVENTION

Field of the Invention

[0002] The present invention relates to a vehicle fender cover structure that covers a gap occurring between a vehicle body frame member, which forms an engine room, and a front fender panel.

Description of Background Art

[0003] Japanese Unexamined Patent Application Publication (JP-A) No. 2009-161141 describes a fender cover (fender protector). The entire contents of this publication are incorporated herein by reference.

SUMMARY OF THE INVENTION

[0004] According to one aspect of the present invention, a vehicle fender cover structure includes a fender cover body including a vertical plate, a sound insulation material that is positioned along a surface of the vertical plate and prevents noise from being released from an engine room of a vehicle to an outside of the vehicle, and a seal positioned on a top plate that tis projecting from an upper end of the vertical plate outward in a vehicle widthwise direction and is brought into elastic contact with an inner side in the vehicle widthwise direction of an upper end part of an exterior member of the vehicle and block a current of air gushing to the outside of the vehicle from the engine room. The vertical plate of the fender cover body covers the top plate and a gap above a vehicle body frame member of the vehicle on an outer side of the engine room in the vehicle widthwise direction from an inner side in the vehicle widthwise direction, and a hardness of a material of the fender cover body is greater than a hardness of a material of the sound insulation material.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] A more complete appreciation of the invention and many of the attendant advantages thereof will be readily obtained as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings, wherein:

[0006] FIG. **1** is a front perspective view illustrating a state in which fender covers are disposed on vehicle-widthwise outer sides of an engine room;

[0007] FIG. **2** is an enlarged front perspective view illustrating a state in which the fender cover is disposed on the vehicle-widthwise outer side of the engine room;

[0008] FIG. **3** is an enlarged front perspective view illustrating a structure of the fender cover in an exploded state;

[0009] FIG. **4** is a cross-sectional view along line IV-IV of FIG. **2**;

[0010] FIG. **5** is a cross-sectional view along line V-V of FIG. **2**;

[0011] FIG. **6** is a cross-sectional view along line VI-VI of FIG. **2**; and

[0012] FIG. **7** is a cross-sectional view along line V-V of FIG. **2**, illustrating a state in which noise is prevented from being released to the outside of a vehicle from the engine room and in which a current of air gushing from the engine room in the direction of a vehicle-widthwise outer side.

DETAILED DESCRIPTION OF THE EMBODIMENTS

[0013] Embodiments will now be described with reference to the accompanying drawings, wherein like reference numerals designate corresponding or identical elements throughout the various drawings.

[0014] The term "join" used in the following description includes a joining method represented by fusion joining, structural joining, etc.

[0015] As illustrated in FIG. **1**, the front part of a vehicle body **2** of a vehicle **1** includes an engine hood **3**, an engine room **4**, and a lateral pair of front fender panels **5**.

[0016] The engine hood **3** includes, for example, an outer panel **3***a* and an inner panel **3***b*, each of which is composed of a steel plate. The outer panel **3***a* has its outer edges finished with a hemming process to reach the inner panel **3***b*. Both ends of the rear end part of the engine hood **3** are swingably supported by the vehicle body **2** via a lateral pair of hinges **6**.

[0017] The engine room **4** has an upward-facing opening **7** that is connected to the inner part of the engine room **4**.

[0018] The opening **7** can be opened and closed by the engine hood **3**. This opening **7** is formed along frames of the vehicle body **2** surrounding the engine room **4**.

[0019] The frames include, for example, a radiator core upper (not illustrated) extending in the vehicle-widthwise directions in front of the opening **7**, a lateral pair of radiator core upper sides **9**, and a lateral pair of apron upper members **10**, as vehicle body frame members. These vehicle body frame members are formed by applying press work on a sheet metal member including a high-strength steel plate, etc.

[0020] The lateral pair of radiator core upper sides **9** extend with a curve from both ends of the radiator core upper toward the rear part of the vehicle body.

[0021] As illustrated in FIG. **1** through FIG. **3**, the lateral pair of apron upper members **10** project from both ends of a cowl top **11**, which extends in the vehicle-widthwise directions, toward the front of the vehicle body along the engine room **4** at the vehicle-widthwise-outer-side lower end parts of a front glass **8**. The front end part of each of the apron upper members **10** projecting toward the front of the vehicle body is connected with the rear end part of its corresponding radiator core upper side **9**. To the vehicle-widthwise inner side of each of the apron upper members **10**, for example a suspension tower **12** supporting the upper part of a suspension device (not illustrated) is joined.

[0022] The upper surface of each of the apron upper members **10** has a longitudinal pair of brackets **13** as illustrated in FIG. **3**. The brackets **13** are for attaching the front fender panels **5**.

[0023] The longitudinal pair of brackets **13** have a prescribed interval between them for example in the longitudinal direction of the vehicle body. Each of the brackets **13** is formed by applying press work on a sheet metal member.

Receiving this work, each of the brackets **13** has a substantially-hat-shaped cross section in a vehicle-widthwise side view.

[0024] Specifically, each of the brackets **13** includes a top plate **13***a* and a pair of walls **13***b*.

[0025] The top plates **13***a* are provided at positions opposite to the upper surfaces of the apron upper members **10** at prescribed intervals. The top plate **13***a* has, at its substantial center, a bolt-hole **13***c* for attaching the front fender panel **5**.

[0026] The pair of walls **13***b* project downward from the ends of the top plate **13***a* that exist in the longitudinal direction of the vehicle body. The lower end part of each of the walls **13***b* projecting downward is joined to the upper surface of the apron upper member **10** while being bent in the longitudinal direction of the vehicle body.

[0027] Thus provided brackets **13** can absorb collision energy through collapse of their walls **13***b* for example when a collision load more than or equal to a prescribed value is applied from above the front fender panel **5**.

[0028] As illustrated in FIG. **3**, the lateral pair of front fender panels **5** are provided on vehicle-widthwise outer sides as exterior members of the vehicle body **2**. Each of the front fender panels **5** is formed for example by applying press work on a sheet metal member including a steel plate, etc.

[0029] Each of the front fender panels **5** includes an inner wall **5***a* and a flange **5***b*.

[0030] As illustrated in FIG. **4**, the inner wall **5***a* projects downward for example from the edge of the upper end of the front fender panel **5**. The inner wall **5***a* has a vehicle-widthwise inner surface that is substantially planar. This enables a seal **25**, which will be described later, to be brought into elastic contact with the vehicle-widthwise inner surface of the inner wall **5***a* from the vehicle-widthwise inner side.

[0031] The flange **5***b* projects from the lower end parts of the inner wall **5***a* toward the vehicle-widthwise inner side. As illustrated in FIG. **3**, this flange **5***b* has a bolt-hole **5***c* at a position corresponding to each of the bolt-holes **13***c*. The flange **5***b* also has a longitudinal pair of clipping holes **5***d* for attaching a fender cover **20**, which will be described later.

[0032] The flange **5***b* abuts on each of the top plates **13***a* with the bolt-holes **5***c* aligned with their corresponding bolt-holds **13***c* from above.

[0033] The front fender panel **5** is thereby fastened to each of the brackets **13** with bolts (not illustrated) from above with the flange **5***b* abutting on the brackets **13**. In other words, the front fender panel **5** has its upper portion attached to the apron upper member **10** via the brackets **13**.

[0034] This structure with the brackets **13** between the front fender panel **5** and the apron upper member **10** results in a gap **14**, equivalent to the height of each of the brackets **13**, formed between the upper surface of the apron upper member **10** and the flange **5***b* as illustrated in FIG. **3**.

[0035] To cover the gap **14** like this from the vehicle-widthwise inner side, the engine room **4** has a lateral pair of the fender covers **20** at each of its side portions.

[0036] The lateral pair of fender covers **20** and their peripheral portions are symmetrical in basic structure. Accordingly, explanations are hereinafter given to the left part of the vehicle body as an example.

[0037] As illustrated in FIG. **3**, the fender cover **20** according to the present embodiment includes a fender cover body **21**, the seal **25**, and a sound absorption material **30**.

[0038] Specifically, the fender cover body **21** includes a top plate **21***a* and a vertical plate **21***b*. The top plate **21***a* and the vertical plate **21***b* are formed as a single member out of for example a synthetic resin material such as a polypropylene (PP) material etc.

[0039] The top plate **21***a* is provided at a position opposite to the upper surface of the flange **5***b*. The top plate **21***a* further has, as illustrated in FIG. **3** and FIG. **5**, an upward flange **21***c* and a longitudinal pair of step parts **21***d*.

[0040] The upward flange **21***c* projects upward from the vehicle-widthwise outer edge of the top plate **21***a*.

[0041] The longitudinal pair of step parts **21***d* have a prescribed interval between them for example in the longitudinal direction of the top plate **21***a*. Each of the step parts **21***d* has a shape projecting downward from the bottom of the top plate **21***a* in a vehicle-widthwise side view. This enables the bottom of each of the step parts **21***d* to abut on the upper surface of the flange **5***b*.

[0042] Each of these step parts **21***d* serves as a fixer for attaching the fender cover body **21** to the flange **5***b*. Thus, each of the step parts **21***d* has a clipping hole **21***e*.

[0043] The projection of each of the step parts **21***d* is formed to have a dimension equivalent to the thickness of the sound absorption material **30**, which will be described later. This enables the sound absorption material **30** to be held at the gap between the top plate **21***a* and the flange **5***b* when the fender cover body **21** is attached to the flange **5***b*.

[0044] As illustrated in FIG. **3**, each of the clipping holes **21***e* is provided at a position opposite to its corresponding one of the clipping holes **5***d* provided to the flange **5***b*. As illustrated in FIG. **5**, each of the clipping holes **21***e* such as this can have a clip **22** inserted through it from above, while being aligned with its corresponding one of the clipping holes **5***d*.

[0045] With this insertion of the clip **22** through each of the clipping holes **21***e*, the fender cover body **21** is attached to the flange **5***b*.

[0046] As illustrated in FIG. **4** through FIG. **6**, the vertical plate **21***b* is disposed from the vehicle-widthwise inner side at a position opposite to the gap **14**. This vertical plate **21***b* projects downward from the vehicle-widthwise inner edges of the top plate **21***a* and each of the step parts **21***d*. In other words, the vertical plate **21***b* is positioned to cover the gap **14** from the vehicle-widthwise inner side. The lower end part of thus provided vertical plate **21***b* can abut, while being bent vehicle-widthwise inwardly, on the upper surface of the apron upper member **10**.

[0047] As illustrated in FIG. **3**, the vertical plate **21***b* has a longitudinal pair of welding areas **23** and holes **24**. The longitudinal pair of welding areas **23** are for fixing the sound absorption material **30** through thermal welding.

[0048] The holes **24** are provided for example over the substantially entire surface of the vertical plate **21***b*, excluding the welding areas **23**. Also, the holes **24** are provided at substantially regular intervals. Each of the holes **24** is substantially circular. Each of such holes **24** serves as a hole for transmitting noise from the engine room **4** to the front fender panel **5**.

[0049] As illustrated in FIG. **3** through FIG. **6**, the seal **25** is provided to the upper end part of the upward flange **21***c* of the top plate **21***a*. This seal **25** serves to seal a gap **26** between the upper end part of the front fender panel **5** and the vehicle-widthwise outer end of the engine hood **3**.

[0050] The seal **25** is formed of an elastic member such as a rubber material, etc. The seal **25** such as this is for example permanently affixed to the upper end part of the upward flange **21***c* through 2-color molding.

[0051] Thus formed seal **25**, while being elastically deformed, is brought into pressure contact with the upper end part of the inner wall **5***a* of the front fender panel **5** from the vehicle-widthwise inner side. The seal **25**, while being elastically deformed, is also brought into pressure contact with the vehicle-widthwise outer end of the engine hood **3** from the vehicle-heightwise lower side, when the engine hood **3** is closed.

[0052] Through the elastic contact such as these, the seal **25** seals the gap **26**. This enables the seal **25** to block a current of air A gushing from the engine room **4** (see FIG. **7**). In order to adequately seal the gap **26** with the seal **25**, conditions such as the shape, thickness, etc. of the seal **25** are beforehand obtained through experiments, simulations, etc.

[0053] The sound absorption material **30** is formed of for example a non-woven fabric etc. that can absorb noise from the engine room **4**. As illustrated in FIG. **3** through FIG. **6**, the sound absorption material **30** is provided along the inside of the open cross-section of the fender cover body **21** before the fender cover body **21** is attached to the front fender panel **5**. In other words, the sound absorption material **30** has a basic shape substantially identical to the shape of the fender cover body **21** as illustrated in FIG. **3**.

[0054] The sound absorption material **30** has a top wall **30***a* that corresponds to the top plate **21***a* and a vertical wall **30***b* that corresponds to the vertical plate **21***b*. Further, the top wall **30***a* has a longitudinal pair of notches **30***c* to avoid interference with the step parts **21***d* of the fender cover body **21**.

[0055] These top wall **30***a* and vertical wall **30***b* of the sound absorption material **30** have their surfaces respectively in surface contact with the surfaces of the top plate **21***a* and the vertical plate **21***b* of the fender cover body **21**.

[0056] Further, the top wall **30***a* and the vertical wall **30***b* are fixed to the top plate **21***a* and the welding areas **23** through thermal welding while they are in surface contact.

[0057] Thereby, the surface of the vertical wall **30***b* is fixed along the surface of the area having the holes **24** in the vertical plate **21***b*. Also, attaching the fender cover body **21** to the front fender panel **5** causes the top wall **30***a* to be held between the top plate **21***a* and the flange **5***b* (see FIG. **6**).

[0058] Each of the notches **30***c* serves also as an alignment member for attaching the sound absorption material **30** to the fender cover body **21**. Accordingly, each of the notches **30***c* is formed to have a dimension slightly greater than that of each of the step part **21***d*. This enables each of the notches **30***c* to be adequately aligned with its corresponding one of the step parts **21***d* without interference.

[0059] Thus fixed sound absorption material **30** can absorb noise N that has come from the engine room **4** through the holes **24** (see FIG. **7**).

[0060] In order to adequately absorb the noise N from the engine room **4**, conditions such as for example the thickness of the sound absorption material **30**, the density of the sound absorption material **30**, the size of the holes **24**, and the pitch of the holes **24** are beforehand obtained through experiments, simulations, etc.

[0061] As described above, in the present embodiment, the sound absorption material **30** is equivalent to a specific example of a sound insulation material.

[0062] According to this embodiment, a vehicle fender cover structure is disposed to cover the gap **14** above the vehicle body frame member on a vehicle-widthwise outer side in an engine room The vehicle fender cover structure includes a fender cover body **21** including a vertical plate **21***b* formed to cover the gap **14** from a vehicle-widthwise inner side, and a top plate **21***a* projecting from an upper end of the vertical plate **21***b* toward a vehicle-widthwise outer side; a sound insulation material **30** that is provided along a surface of the vertical plate **21***b* and that is formed to prevent noise from being released from the engine room **4** to outside of a vehicle; and a seal **25** that is provided on the top plate **21***a*, that is brought into elastic contact with a vehicle-widthwise inner side of an upper end part of an exterior member, and that is formed to block a current of air gushing to outside of the vehicle from the engine room **4**. The fender cover body **21** is formed of a material that is harder than the sound insulation material **30**. This configuration can improve sound insulation performance for noise released to the outside of the vehicle from the engine room **4**, while securing the airtightness at the side portions that use seals **25** in the engine room **4**.

[0063] Specifically, the sound absorption material **30** is provided along the surface of the fender cover body **21** that covers the gap **14** above the apron upper member **10**.

[0064] This enables the fender cover **20** to suppress, with the sound absorption material **30**, noise released from the engine room **4** toward the front fender panel **5**. Therefore, the fender cover **20** can achieve high sound insulation performance for noise released to the outside of the vehicle from the engine room **4**.

[0065] Also, the top plate **21***a* has the seal **25** that is brought into elastic contact with the vehicle-widthwise inner side of the upper end part of the front fender panel **5**, thereby blocking a current of air gushing from the engine room **4** to the outside of the vehicle. The top plate **21***a* having the seal is formed of a material that is harder than the sound absorption material **30**.

[0066] These enable the fender cover **20** to adequately block, with the seal **25**, the current of air A gushing to the outside of the vehicle through the gap **26** during travel, as illustrated in FIG. **7**. In other words, the seal **25** is supported on the top plate **21***a* that is harder than the sound absorption material **30**. The top plate **21***a* belongs to the fender cover body **21**. A supporting structure like this can bring the seal **25** into pressure contact with the front fender panel **5** and the engine hood **3** more adequately than a structure where the seal **25** is supported on for example the top wall **30***a* of the sound absorption material **30**.

[0067] Thereby, the seal **25** adequately blocks the current of air A gushing to the outside of the vehicle through the gap **26** during travel. The fender cover **20** can thereby suppress turbulence in the wind caused by the traveling vehicle **1**, leading to improved aerodynamic performance.

[0068] For the above configuration, the fender cover body **21** may be formed of a synthetic resin material such as a polypropylene (PP) material etc. such that the fender cover body **21** is a member that is harder than the sound absorption material **30** but can collapse under a collision load more than or equal to a prescribed value. This enables the fender cover **20** to be deformed (collapsed) together with the front fender panel **5** when the head etc. of a pedestrian hits the front fender panel **5** in the event of collision etc. of the vehicle **1**.

Thereby, the fender cover **20** can secure the safeness of a pedestrian in the event of collision of the vehicle **1**.

[0069] In addition, the vertical plate **21***b* further has the holes **24** at positions opposite to the sound absorption material **30**. With these holes **24**, the vertical plate **21***b* can transmit the noise N from the engine room **4** to the sound absorption material **30** without blocking the noise N, as illustrated in FIG. **7**.

[0070] Specifically, the sound absorption material **30** is provided at least in an area having the holes **24** along a surface on an outer side of the engine room **4**. This enables the sound absorption material **30** to achieve a higher sound absorption effect for the noise N transmitted from the engine room **4** than when the vertical plate **21***b* does not have holes **24**. Therefore, the fender cover **20** can achieve higher sound absorption performance for the noise N released from the engine room **4** to the outside of the vehicle.

[0071] In the above configuration, the holes **24** serve also as a fragile part of the vertical plate **21***b*. The holes **24** thus serve as the starting point of the collapse (deformation) for the vertical plate **21***b*, which concentratedly receives a collision load when a collision load more than or equal to a prescribed value is applied from above the fender cover **20**. This enables the fender cover **20** to increase the absorption of collision energy when a collision load more than or equal to a prescribed value is applied from the above.

[0072] The vertical plate **21***b*, which can be deformed starting from the holes **24**, can also reduce the reaction force accompanying the pressure contact between the engine hood **3** and the seal **25** occurring when the opening **7** is closed by the engine hood **3**. This enables the fender cover **20** to suppress the resistance due to the reaction force generated when the opening **7** is closed by the engine hood **3**. Thereby, the fender cover **20** having the seal **25** can secure sufficient closure of the engine hood **3**.

[0073] Also, the fender cover body **21**, formed of a synthetic resin material such as a polypropylene (PP) material etc., can fix the sound absorption material **30**, formed of a non-woven fabric etc., in surface contact with the fender cover body **21** through thermal welding. Thereby, the fender cover **20** does not require riveting etc. for fixing the sound absorption material **30**. This enables the fender cover **20** to fix the sound absorption material **30** to the fender cover body **21** without affecting the appearance.

[0074] Also, the top plate **21***a* has the longitudinal pair of step parts **21***d*. The projection of each of the step parts **21***d* is designed to have a dimension equivalent to the thickness of the sound absorption material **30**. This enables the top wall **30***a* of the sound absorption material **30** to be held between the top plate **21***a* and the flange **5***b*. The fender cover **20** can thereby more adequately fix the sound absorption material **30** existing between the top plate **21***a* and the flange **5***b*, when the fender cover body **21** is attached to the front fender panel **5**.

[0075] While explanations have been given using the sound absorption material **30** as an example of a sound insulation material in the present embodiment, it is also possible to provide a sound insulation material such as a noise blocking material etc. along the fender cover body **21**.

[0076] According to a vehicle fender cover structure of an embodiment of the present invention, it is possible to improve sound insulation performance for noise released to the outside of the vehicle from the engine room, while securing the airtightness at the side portions that use seals in the engine room.

[0077] The engine room of an automobile, etc. has a lateral pair of apron upper members as vehicle body frame members. The apron upper members exist on vehicle-widthwise outer sides in the engine room and extend in the longitudinal direction of the vehicle body. Each of the apron upper members has a front fender panel above it via a bracket in order to protect pedestrians.

[0078] This structure results in a gap existing between the upper surface of the apron upper member and the attachment part of the front fender panel attached to the bracket, and this gap is equivalent to the height of the bracket.

[0079] In general, the engine room has fender covers at side portions of the engine room in order to cover this gap from the vehicle-widthwise inner sides.

[0080] A fender cover (fender protector) has, for example, a generally L-shaped section as described by Japanese Unexamined Patent Application Publication (JP-A) No. 2009-161141.

[0081] Further, a fender cover has a seal on its upper surface as described by JP-A No. 2009-161141. This seal is brought into elastic contact with the side peripheral portions of the engine hood and can thereby suppress a current of air gushing from the engine room to the outside of the vehicle during travel. This suppression, by a seal, of a current of air to the outside of a vehicle improves its aerodynamic performance.

[0082] The fender cover, which covers the gap at the side portions of the engine room, suppresses the transmission of noise from the engine room to the front fender panel. The fender cover thereby contributes also to the suppression of noise released to the outside of the vehicle via the front fender panel. It would thus be an option to for example form a fender cover out of a sound insulation material etc. in order to improve the sound insulation performance.

[0083] Forming a fender cover out of a sound insulation material etc. results in a fender cover with reduced rigidity, sometimes making it difficult to provide the fender cover with a seal. In that case, there is a possibility that airtightness cannot be secured at the side portions of the engine room by the use of a seal, thereby allowing a current of air gushing to the outside of the vehicle to degrade the aerodynamic performance.

[0084] A vehicle fender cover structure according to an embodiment of the present invention improves sound insulation performance for noise released to the outside of the vehicle from the engine room, while securing the airtightness at the side portions that use seals in the engine room.

[0085] An aspect of the present invention provides a vehicle fender cover structure disposed to cover a gap above a vehicle body frame member of a vehicle on an outer side of an engine room in a vehicle widthwise direction of the vehicle. The vehicle fender cover structure includes a fender cover body including a vertical plate that covers the gap from an inner side in the vehicle widthwise direction, and a top plate projecting from an upper end of the vertical plate outward in the vehicle widthwise direction; a sound insulation material provided along a surface of the vertical plate, the sound insulation material being formed to prevent noise from being released from the engine room to an outside of the vehicle; and a seal provided on the top plate, the seal being brought into elastic contact with an inner side in the

vehicle widthwise direction of an upper end part of an exterior member of the vehicle, the seal being formed to block a current of air gushing to the outside of the vehicle from the engine room. A hardness of a material of the fender cover body is greater than a hardness of a material of the sound insulation material.

[0086] Obviously, numerous modifications and variations of the present invention are possible in light of the above teachings. It is therefore to be understood that within the scope of the appended claims, the invention may be practiced otherwise than as specifically described herein.

1. A vehicle fender cover structure, comprising:

a fender cover body comprising a vertical plate;

a sound insulation material positioned along a surface of the vertical plate and configured to prevent noise from being released from an engine room of a vehicle to an outside of the vehicle; and

a seal positioned on a top plate projecting from an upper end of the vertical plate outward in a vehicle widthwise direction and configured to be brought into elastic contact with an inner side in the vehicle widthwise direction of an upper end part of an exterior member of the vehicle and block a current of air gushing to the outside of the vehicle from the engine room,

wherein the vertical plate of the fender cover body is configured to cover the top plate and a gap above a vehicle body frame member of the vehicle on an outer side of the engine room in the vehicle widthwise direction from an inner side in the vehicle widthwise direction, and a hardness of a material of the fender cover body is greater than a hardness of a material of the sound insulation material.

2. The vehicle fender cover structure according to claim **1**, wherein the vertical plate has holes formed at positions opposite to the sound insulation material, and the sound insulation material is a sound absorption material that absorbs the noise from the engine room.

3. The vehicle fender cover structure according to claim **2**, wherein the sound absorption material is positioned at least in an area having the holes along a surface on an outer side of the engine room.

* * * * *