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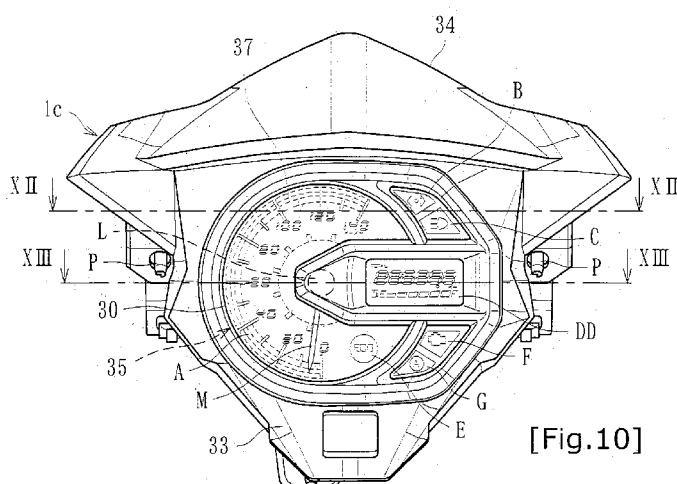
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(54) Title: METER COVER STRUCTURE FOR MOTORCYCLE



[Fig.10]

(57) Abstract: A meter cover structure for a motorcycle is provided that can simplify the manufacturing process and allows recognition as an exclusive design used in a specific vehicle type even when a meter unit as a common component is used. A meter cover structure 1 of a motorcycle includes a front handle cover 1a and a rear handle cover 1b that cover a front and a rear, respectively, of a steering handle and a meter unit 35 that is mounted in between the front handle cover 1a and the rear handle cover 1b and includes a meter display 30 visible to a rider. The meter cover structure 1 of a motorcycle includes an upper handle cover (meter cover) 1c attached above the front handle cover 1a, the rear handle cover 1b, and the meter unit 35. The upper handle cover 1c is an integrally formed component including a design covering portion 33 that makes display units of the meter display 30 visible and covers other predetermined parts and a meter visor 34 that extends from the design covering cover 33 toward a front of a vehicle.

DESCRIPTION

METER COVER STRUCTURE FOR MOTORCYCLE

Technical field

5 The present invention relates to a meter cover structure for a motorcycle that includes a meter unit that is mounted in between a front handle cover and a rear handle cover, and includes a design covering portion to make the appearance at a meter display and a meter visor portion to be visor means..

Background

10 Patent Literature 1 discloses a meter cover structure for a motorcycle that includes a handle bar cover 21 including a front cover 62 and a rear cover 63 that cover a front and a rear, respectively, of a handle bar 63, for example. A meter unit arranged in the handle cover structure for a motorcycle is mounted in between the front cover 62 and the rear cover 63 and
15 includes a meter display visible to a rider. The meter device 25 is needle display type and formed with indicator needles (67, 68) that can oscillate about pivots in accordance with a vehicle speed and fuel level in which a cover 70 is internally formed for covering the pivots of the indicator needles.

Citation List

20 Patent Literature

 Patent Literature 1: United States Patent No. 7614471

Summary**Technical Problem**

25 However, the conventional meter cover structure for a motorcycle includes the cover 70 that is internally formed for covering the pivots of the indicator needles, which is regarded as a cause of complicating an assembling process for the meter device 25. Another problem is that the meter device 25 is limited its design that cannot use as a common component because
30 the same design will appear in many motorcycle models. Even though, each motorcycle model needs its own design. This prior art cannot answer in several of design demand.

 The present invention has been made in view of the above circumstances, and an object thereof is to provide a meter cover structure for a motorcycle that can simplify the

manufacturing process and allows recognition as an exclusive design used in a specific vehicle in several of motorcycle models or types even the meter unit as the common component is used.

5 **Solution to Problem**

The invention of claim 1 is a meter cover structure for a motorcycle including a meter unit that is mounted at a handle cover and includes a meter display visible to a rider and, a meter cover that is covering a portion of said meter display. The meter cover is formed a design covering portion for making a design appearance on said meter display in the top view, and a meter visor portion for extending from said design covering portion forward of said motorcycle.

The invention of claim 2 is the meter cover structure for a motorcycle according to claim 1. The meter display of said meter unit includes at least a needle display unit including an indicator needle for indicating a speed of said motorcycle and a digital display unit for displaying at least a fuel amount of said motorcycle, in which the design covering portion includes a window for covering a periphery of said digital display unit and an extension part extending from said window for covering a pivot of said indicator needle in said needle display unit.

The invention of claim 3 is the meter cover structure for a motorcycle according to claim 2, in which said design covering portion includes a partition part extending from said window for partitioning an indicator symbol of said motorcycle from the needle display unit.

The invention of claim 4 is the meter cover structure for a motorcycle according to claim 1, in which said meter cover is mounted between said handle cover that includes a front handle cover and a rear handle covers by some mounting units and, at least one of said mounting unit is located behind said meter visor portion for engaging to said front handle cover.

The invention of claim 5 is the meter cover structure for a motorcycle according to claim 4. The meter visor portion extends forward and downward, in which said meter visor portion and said front handle cover form a groove along with an edge of said meter visor portion.

The invention of claim 6 is the meter cover structure for a motorcycle according to claim 4, in which said one mounting unit includes a fastening means and the other of said mounting units are positioned behind said design covering portion and include a snap fit

elements for engaging to said rear handle cover .

The invention of claim 7 is the meter cover structure for a motorcycle according to claim 2, in which said indicator needle is moved by a stepping motor controlled by digital.

5 **Advantageous Effects of Invention**

According to the invention of claim 1, the meter cover structure for a motorcycle includes a meter unit that is mounted at a handle cover and includes a meter display visible to a rider and, a meter cover that is covering a portion of said meter display in which the meter cover is formed a design covering portion for making a design appearance on said meter display in the top view , and a meter visor portion for extending from said design covering portion forward of said motorcycle, thus enabling simplification of the manufacturing process by forming the design covering portion at outside of meter unit and allowing recognition as an exclusive design used in a specific vehicle type even when the meter unit as the common component is used.

15 In other words, the meter cover is the integrally formed component including the design covering portion and the meter visor portion, thus enabling simplification of the manufacturing process compared with the separated structure that forms the additional meter visor because the size becomes bigger which is convenient for manufacturing process.

According to the invention of claim 2, the meter display of said meter unit includes at least a needle display unit including an indicator needle for indicating a speed of said motorcycle and a digital display unit for displaying at least a fuel amount of said motorcycle, in which the design covering portion includes a window for covering a periphery of said digital display unit and an extension part extending from said window for covering a pivot of said indicator needle in said needle display unit, thus enabling a favorable combination of needle display and digital display in the meter display, enabling creation of unity in design, and enabling provision of a more attractive image. In particular, the extension part that extends from the peripheral part of digital display and covers the pivot of the indicator needle in the needle display unit is enabling the integral design between both display units, also to eliminate the conventional separate cover like as prior art and enabling further simplification of the manufacturing process can be reduced.

According to the invention of claim 3, said design covering portion includes a partition part extending from said window for partitioning an indicator symbol of said motorcycle from said needle display unit, thus enabling obvious separation of the needle display unit and

indicator symbols and also enabling simplification of the manufacturing process because it is not necessary to set the build-in partition part. As well as a reduction in manufacturing costs due to the partition part is integrated to the design covering portion.

According to the invention of claim 4, said meter cover is mounted between said
5 handle cover that includes a front handle cover and a rear handle covers by some mounting units and, at least one of said mounting unit is located behind said meter visor portion for engaging to said front handle cover, thus enabling the meter visor portion become firm and smooth because the mounting portion is located at place where is behind the meter visor portion.

10 According to the invention of claim 5, said meter visor portion extends forward and downward, in which said meter visor portion and front handle cover form a groove along with an edge of said meter visor portion, thus enabling the sufficient strength of the meter cover by providing fastening means at the meter visor portion that always face with the wind flow, and to provide the snap fit elements at the design covering portion that requires less strength than
15 the meter visor portion. Accordingly, the manufacturing time can be reduced as well because snap fit elements are mounted by just pressing.

According to the invention of claim 6, said one mounting unit includes a fastening means and the other of said mounting units are positioned behind said design covering portion and include a snap fit elements for engaging to said rear handle cover, thus enabling a wind
20 flow to be weakened not being hindering the rider from riding because wind flow is led to outward direction. In addition, the groove weakens the wind flow, thereby enabling sufficient mounting strength to be obtained by fastening the meter visor portion by at least one fastening means, which can further reduce costs.

According to the invention of claim 7, said indicator needle is moved by a stepping
25 motor controlled by digital, thus enabling the accuracy in the speed detection because stepping motor is controlled by electronic control unit.

Brief Description of Drawings

[Fig. 1] Fig. 1 is a side view illustrating a motorcycle in which a meter cover structure for a motorcycle according to an embodiment of the present invention is used.

[Fig. 2] Fig. 2 is a front view illustrating the motorcycle.

5 [Fig. 3] Fig. 3 is a top view illustrating the motorcycle.

[Fig. 4] Fig. 4 is a rear view illustrating the motorcycle (partially cut away)

[Fig. 5] Fig. 5 is a front view of the meter cover structure in the motorcycle and an enlarged view illustrating a front handle cover, a meter cover, and the like.

10 [Fig. 6] Fig. 6 is a side view of the meter cover structure in the motorcycle and an enlarged view illustrating the front handle cover, a rear handle cover, the meter cover, and the like.

[Fig. 7] Fig. 7 is a top view illustrating a meter cover in the meter cover structure for the motorcycle.

15 [Fig. 8] Fig. 8 is an external view illustrating the meter cover: (a) is a side view, and (b) is a front view.

[Fig. 9] Fig. 9 is an underside view illustrating the meter cover.

[Fig. 10] Fig. 10 is a top view illustrating a state in which the meter cover is mounted above a meter unit.

[Fig. 11] Fig. 11 is a sectional view along line XI-XI in Fig. 5.

20 [Fig. 12] Fig. 12 is a sectional view along line XII-XII in Fig. 10.

[Fig. 13] Fig. 13 is a sectional view along line XIII-XIII in Fig. 10.

[Fig. 14] Fig. 14 is a sectional view of only a handle cover cut away along line XIV-XIV in Fig. 5.

25 Description of Embodiments

The following specifically describes an embodiment of the present invention with reference to the drawings.

A meter cover structure for a motorcycle according to the present embodiment is used in a scooter type motorcycle as shown in Figs. 1 through 6 including but not limited to the other type of motorcycle. The motorcycle includes a front handle cover 1a, a rear handle cover 1b, and an upper handle cover 1c that constitute a meter cover structure 1, a front cover 2, a front hood 3, a pair of right and left winker lights 4(L,R) and a headlight 5 mounted in the front cover 2, a pair of right and left back mirrors 6(L,R), a pair of right and left handles

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7(L,R) where the right handle 7R coupling the throttle to accelerate an engine power, a front brake lever 8a and a rear brake lever 8b, a front tire 9, a rotor and a caliper 10 for a front brake, outer front forks 11, a leg shield 12, floor panels 13, a side stand 14, a main stand 15, a belt converter cover 16, an air cleaner 17, a rear tire 18, a rear cushion 19, a front fender 20a, a rear fender 20b, a rear combination light 21, a rear grip 22, a seat 23, a center cover 24, side covers 25, a muffler and a protector 26, passenger steps 27, a key component 28, an upper inner cover 29a and a lower inner cover 29b, and a meter unit 35 including a meter display 30.

As shown in Figs. 3 and 4, the rear handle cover 1b is provided with a lighting switch S1 for switching the headlight 5 between high beam and low beam, an automatic engine start/stop mode switch S2 for switching to a mode for performing automatic engine stop as called idling stop system, a horn switch S3 for sounding a horn, a winker switch S4 for blinking either of the right and left winker lights 4, and a start switch S5 for starting the engine to drive the motorcycle.

The meter cover structure 1 according to the present embodiment in particular includes a front handle cover 1a and a rear handle cover 1b that cover a front and a rear, respectively, of a steering handle 31 (refer to Fig. 5) mounted on an upper part of a head pipe 32 (refer to Figs. 5 and 6), the meter unit 35 that is mounted in between the front handle cover 1a and the rear handle cover 1b and includes the meter display 30 visible to a rider, and the upper handle cover 1c attached above the front handle cover 1a, the rear handle cover 1b, and the meter unit 35.

As shown in Fig. 10, the assembling method of the meter unit 35 is respectively arranged by rearward coupling to the rear handle cover 1b by a pair of screws P, then forward coupling to the front handle cover 1a and upward coupling to the meter cover 1. The meter unit 35 further includes the meter display 30 including a digital display unit DD that is an information screen showing fuel level and traveled distance, a needle display unit A that is painted on a dial design 37 to indicate a speed (vehicle speed) of a motorcycle together with an economic running symbol E that displays when the motorcycle is traveling economically as predetermined in low speed running or low Round Per Minute(RPM) which engine takes less power and requires less fuel consumption, and an indicator symbols (B-C, and F-G) showing a winker indicator symbol B that blinks when the winker switch S4 is operated, a high beam indicator symbol C that lights up when the headlight 5 is switched to the high beam, , a fuel injection indicator symbol F that lights up and is displayed when the fuel injection has some troubles, and an automatic engine start/stop display unit G that is displayed when automatic

engine stop is operated are visible.

The needle display unit A in the meter unit 35 includes an indicator needle M coupling with a pivot L (refer to Figs. 10 to 13) that oscillate by a stepping motor SM system comprising a gear ratio GR that is rotatably fixing to a motor and being controlled by an electronic control unit (not shown) in accordance with the vehicle speed, a gear box is forming to cover a gear ratio thereof. The other indicator symbols (B-C, and F-G) in the meter unit 35 are constituted so as to indicate predetermined characters, numerals, and patterns on the meter display 30. These display units (A to G) are covered with a lens 36 (refer to Figs. 11 to 13) of the meter unit 35 and is visible from the rider through the lens 36.

The upper handle cover 1c is mounted above the front handle cover 1a and the rear handle cover 1b as shown in Figs. 4 and 5 and is an integrally formed component (a component obtained by integrally forming a resin material in the present embodiment) including a design covering portion 33 that attaches to the meter visible to make the meter display 30 seems exclusive design even the meter unit 35 is common structure and a meter visor portion 34 that extends from the design covering portion 33 toward a front of the vehicle as shown in Figs. 7 to 9. As shown in the drawings, the design covering portion 33 covers a periphery of the meter display 30, wherein a window 33f is extended from the design covering portion 33 to cover around a periphery of the information screen. Consequently, the window 33f enables the information screen looked more exclusive design as the separated display unit from the meter unit 35. An extension part 33a that extends from the window 33f and covers the pivot L of the indicator needle M in the speed display unit A, and a partition part 33b that extends from the window 33f at upward and downward to cover a periphery (a periphery of the indicator symbols (B-C, and F-G) excluding the economic travel display unit E in the present embodiment) and separates the needle display unit A from the other parts (B-C, and F-G). The partition part 33b enables simplification of the manufacturing process because it is not necessary to set the build-in partition part. As well as to reduce manufacturing costs due to the partition part 33b is integrated to the design covering portion 33.

In other words, as shown in Figs. 7 and 10, the design covering portion 33, thereby forming a first opening 33c that is opened to show the needle display unit A and makes the economic running display unit E visible, a second opening 33d that is opened to show the other indicator symbols (B-C, and F-G) become visible. As shown in Figs. 12 and 13, the meter unit 35 is the assembly of a printed circuit board PCB for controlling the digital display unit DD and a lighting source LG as a light guide for lighting the dial design 37 and the

indicator symbols (B-C, and F-G), wherein a case CA for housing thereof is coupling with an electrical socket ES for supplying the electricity to the print circuit board PCB, the lighting source LG and the stepping motor SM. Finally, the lens 36 is covering the case. In fact, the design covering portion 33 is mounted with a clearance g off the surface of the lens 36 of the meter unit 35. As a result, the vibration while riding the motorcycle may damage the lens 36 and the design covering portion 33. Thus, to provide clearance between both components, it eliminates the damage thereof that is occurred by vibrating and touching.

With this configuration, when the rider sees the meter display 30 of the meter unit 35, a display area of the needle display unit A, the winker lights indicator symbol B, the high beam indicator symbol C, the digital display unit DD, the economic running display unit E, a display area of the fuel injection indicator symbol F and the automatic engine start/stop display unit G, are seen so as to be sectioned into respective predetermined shapes, thus enabling vehicle type-dependent designs and increasing flexibility in a layout of the display units.

The meter visor portion 34 is formed of a part integrally formed with the design covering portion 33 and has a shape that can receive a wind flow W from the front and lead it outward during the motorcycle traveling. As shown in Figs. 2, 5, 11 and 14, the meter visor portion 34 according to the present embodiment extends frontward and downward toward the front handle cover 1a, and the front handle cover 1a is formed with a recessed surface 1ar along an edge 34e of the meter visor portion 34 that is extended exceed the recessed surface. In fact, the edge 34 and the recessed surface 1ar are making a groove R from each other. With this configuration, the wind flow W received from the front during vehicle traveling flows along the arrow in Fig. 14, and the flow can be flown outward while being weakened. This enables the wind flow W is less directed to the rider which causes the riding is more convenient.

As shown in Figs. 4, 8, and 9, the upper handle cover 1c including the design covering portion 33 and the meter visor portion 34 as described above includes a plurality of mounting portions M1-4 that are at least one mounting unit M3 fixing by a fastening means T and other mounting units M1, M2, M4 fixing by a snap-fit elements S for enabling the upper handle cover 1c to be mounted and dismounted on and from the front handle cover 1a and the rear handle cover 1b. The fastening means T as a screw is positioned at behind the meter visor portion 34, and as shown in Fig. 11, can fasten the meter visor portion 34 to the front handle cover 1a. Consequently, the mounting unit M3 by the fastening means M3 enabling the meter visor portion become firm and smooth because the mounting portion is located at place where is

behind the meter visor portion.

Continuously in Fig. 11, the other mounting units M1,M2,M4 fixing by a snap-fit elements S are positioned at behind and near to corners of the design covering portion 33, whereas the snap-fit elements S are the male element that are formed at a position facing down to the upper side of the front and rear handle covers 1a,1b and couple with a clip CS for being inserted into an engaging holes h as the female element formed in the front and rear handle cover 1a,1b, become elastically deformed, and can be locked. With this configuration, the design covering portion 33 can be engaged with the front handle cover 1a and the rear handle cover 1b with one touch. Thus, the other mounting unit M1,M2,M4 fixing by the snap fit elements enabling the sufficient strength of the meter cover at the design covering portion that requires less strength than the meter visor portion. Accordingly, the manufacturing time can be reduced as well because snap fit elements are mounted by just pressing

The meter cover structure 1 for a motorcycle according to the embodiment includes a meter unit 35 that is mounted at a handle cover and includes a meter display 30 visible to a rider and, a meter cover 1c that is covering a portion of said meter display 30 in which the meter cover 1c is formed a design covering portion 33 for making a design appearance on said meter display 30 in the top view, and a meter visor portion 34 for extending from said design covering portion 33 forward of said motorcycle, thus enabling simplification of the manufacturing process by forming the design covering portion 33 at outside of meter unit 35 and allowing recognition as an exclusive design used in a specific vehicle type even when the meter unit 35 as the common component is used.

In other words, the meter cover 1c is the integrally formed component including the design covering portion 33 and the meter visor portion 34, thus enabling simplification of the manufacturing process compared with the separated structure that forms the additional meter visor because the size becomes bigger which is convenient for manufacturing process.

The meter display 30 of the meter unit 35 according to the present embodiment includes at least a needle display unit A including an indicator needle M for indicating a speed of said motorcycle and a digital display unit DD for displaying at least a fuel amount of said motorcycle, in which the design covering portion 33 includes a window 33f for covering a periphery of said digital display unit DD and an extension part 33a extending from said window 33f for covering a pivot L of said indicator needle M in said needle display unit A, thus enabling a favorable combination of needle display and digital display in the meter display 30, enabling creation of unity in design, and enabling provision of a more attractive

image. In particular, the extension part 33a that extends from the peripheral part of digital display and covers the pivot L of the indicator needle M in the needle display unit A is enabling the integral design between both display units, also to eliminate the conventional separate cover like as prior art and enabling further simplification of the manufacturing process can be reduced.

The design covering portion 33 according to the present embodiment includes a partition part 33b extending from the window 33f for partitioning an indicator symbol of the motorcycle from the needle display unit A, thus enabling obvious separation of the needle display unit A and indicator symbols and enabling simplification of the manufacturing process because it is not necessary to set the build-in partition part 33b. As well as a reduction in manufacturing costs due to the partition part 33b is integrated to the design covering portion 33.

The meter cover 1c according to the present embodiment is mounted between the handle cover that includes a front handle cover 1a and a rear handle covers by some mounting units (M1-4) and, at least one of the mounting unit is located behind the meter visor portion 34 for engaging to the front handle cover 1a, thus enabling the meter visor portion 34 become firm and smooth because the mounting portion is located at place where is behind the meter visor portion 34.

The meter visor portion 34 according to the present embodiments extends forward and downward, in which the meter visor portion 34 and the front handle cover 1a form a groove R along with an edge 34e of the meter visor portion, thus enabling the sufficient strength of the meter cover 1c by providing fastening means at the meter visor portion 34 that always face with the wind flow, and to provide the snap fit elements at the design covering portion 33 that requires less strength than the meter visor portion 34. Accordingly, the manufacturing time can be reduced as well because snap fit elements are mounted by just pressing.

The one mounting unit M3 according to the present embodiment includes a fastening means T and the other mounting units (M1, M2, M4) are positioned behind the design covering portion 33 and include a snap fit elements S for engaging to the rear handle cover 1b, thus enabling a wind flow to be weakened not being hindering the rider from riding because wind flow is led to outward direction. In addition, the groove R weakens the wind flow, thereby enabling sufficient mounting strength to be obtained by fastening the meter visor portion 34 by at least one fastening means, which can further reduce costs.

The indicator needle M according to the present embodiment is moved by a stepping

motor controlled by digital, thus enabling an accuracy in the speed detection because stepping motor is controlled by electronic control unit.

Although the present embodiment has been described, the present invention is not limited thereto; the meter display 30 of the meter unit 35 may include a display unit different from the display units (A to G), and one, two, or four or more snap-fit units may be included while including a plurality of fastening units M3, for example. The motorcycle in which the handle cover structure according to the present embodiment is used may be various vehicle types, not limited to the scooter as in the present embodiment.

Industrial Applicability

The meter cover structure for a motorcycle can be used in a meter cover structure for a motorcycle having different appearance, a meter cover structure for a motorcycle to which other functions are added, or the like as long as the meter cover structure for a motorcycle includes a meter unit that is mounted at a handle cover and includes a meter display visible to a rider and, a meter cover that is covering a portion of said meter display in which the meter cover is formed a design covering portion for making a design appearance on said meter display in the top view, and a meter visor portion for extending from said design covering portion forward of said motorcycle.

Reference Signs List

- 1 Meter cover structure
- 1a Front handle cover
- 1b Rear handle cover
- 1c meter cover
- 2 Front cover
- 3 Front hood
- 4 Winker light
- 5 Headlight
- 6 Back mirror
- 7 Handle
- 8 Brake lever
- 9 Front tire
- 10 Rotor and caliper

- 11 Outer front fork
- 12 Leg shield
- 13 Floor panel
- 14 Side stand
- 5 15 Main stand
- 16 Belt converter cover
- 17 Air cleaner
- 18 Rear tire
- 19 Rear cushion
- 10 20 Rear fender
- 21 Rear combination light
- 22 Rear grip
- 23 Seat
- 24 Center cover
- 15 25 Side cover
- 26 Muffler and protector
- 27 Passenger step
- 28 Key component
- 29 Inner cover
- 20 30 Meter display
- 31 Steering handle
- 32 Head pipe
- 33 Design covering portion
- 34 Meter visor portion
- 25 35 Meter unit

CLAIMS

1. A meter cover structure (1) for a motorcycle comprising:
a meter unit (35) that is mounted at a handle cover (1a,1b) and includes a meter display (30) visible to a rider and,
5 a meter cover (1c) is covering a portion of the meter display (30)
characterized in that, said meter cover (1c) is formed a design covering portion (33) for making a design appearance (33a~g) on the meter display (30) in the top view, and a meter visor portion (34) for extending from said design covering portion (33) forward of said motorcycle.

10 2. The meter cover structure (1) for a motorcycle according to claim 1, said meter display (30) of said meter unit (35) includes at least
a needle display unit (A) including an indicator needle (M) for indicating a speed of said motorcycle and
15 a digital display unit (DD) for displaying at least a fuel amount of said motorcycle,
wherein said design covering portion (33) includes a window(33f) for covering a periphery of said digital display unit (DD) and
an extension part (33a) extending from said window (33f) for covering a pivot (L) of said indicator needle (M) in said needle display unit (A).

20 3. The meter cover structure (1) for a motorcycle according to claim 2, wherein said design covering portion (33) includes a partition part (33b) extending from said window (33f) for partitioning an indicator symbol (B-C, and F-G) of said motorcycle from said needle display unit (A).

25 4. The meter cover structure (1) for a motorcycle according to claim 1, wherein said meter cover (1c) is mounted between said handle cover(1a,1b) that includes a front handle cover (1a) and a rear handle covers (1b) by some mounting units (M1-4) and,
at least one of said mounting unit (M3) is located behind said meter visor portion (34) for
30 engaging to said front handle cover (1a).

5. The meter cover structure (1) for a motorcycle according to claim 4, said meter visor portion (34) extends forward and downward, wherein said meter visor portion (34) and said

front handle cover (1a) form a groove (R) along with an edge (34e) of said meter visor portion (34).

6. The meter cover structure (1) for a motorcycle according to claim 4, wherein
5 said one mounting unit (M3) includes a fastening means (T) and
the other of said mounting units (M1,M2,M4) are positioned behind said design covering
portion (33) and include a snap fit elements (S) for engaging to said rear handle cover (1b) .
7. The meter cover structure (1) for a motorcycle according to claim 2, wherein
10 said indicator needle (M) is moved by a stepping motor controlled by digital.

AMENDED CLAIMS

received by the International Bureau on 15 May 2017 (15.05.2017)

1. (Amended) A meter cover structure (1) for a motorcycle comprising:
a meter unit (35) that is mounted at a handle cover (1a,1b) and includes a meter display (30) visible to a rider and,

5 a meter cover (1c) is covering a portion of the meter display (30)
characterized in that, said meter cover (1c) is formed a design covering portion (33) for making a design appearance (33a~g) on the meter display (30) in the top view ,
and a meter visor portion (34) for extending from said design covering portion (33)
forward of said motorcycle and

10 said meter display (30) of said meter unit (35) includes at least a needle display unit (A) including an indicator needle (M) for indicating a speed of said motorcycle and
a digital display unit (DD) for displaying at least a fuel amount of said motorcycle,
wherein said design covering portion (33) includes a window(33f) for covering a
periphery of said digital display unit (DD) and

15 an extension part (33a) extending from said window (33f) for covering a pivot (L) of said indicator needle (M) in said needle display unit (A).

2. (Cancelled)

3. (Unchanged) The meter cover structure (1) for a motorcycle according to claim 1,
wherein said design covering portion (33) includes a partition part (33b) extending from
20 said window (33f) for partitioning an indicator symbol (B-C, and F-G) of said motorcycle
from said needle display unit (A).

4. (Amended) A meter cover structure (1) for a motorcycle comprising:
a meter unit (35) that is mounted at a handle cover (1a,1b) and includes a meter

display (30) visible to a rider and,

a meter cover (1c) is covering a portion of the meter display (30)

characterized in that, said meter cover (1c) is formed a design covering portion (33) for making a design appearance (33a~g) on the meter display (30) in the top view,

5 and a meter visor portion (34) for extending from said design covering portion (33) forward of said motorcycle

wherein said meter cover (1c) is mounted between said handle cover(1a,1b) that includes a front handle cover (1a) and a rear handle covers (1b) by some mounting units (M1-4) and, at least one of said mounting unit (M3) is located behind said meter visor
10 portion (34) for engaging to said front handle cover (1a).

5. (Unchanged) The meter cover structure (1) for a motorcycle according to claim 3, said meter visor portion (34) extends forward and downward , wherein said meter visor portion (34) and said front handle cover (1a) form a groove (R) along with an edge (34e) of said meter visor portion (34).

15 6. (Unchanged) The meter cover structure (1) for a motorcycle according to claim 3, wherein said one mounting unit (M3) includes a fastening means (T) and the other of said mounting units (M1,M2,M4) are positioned behind said design covering portion (33) and include a snap fit elements (S) for engaging to said rear handle cover (1b) .

20 7. (Unchanged) The meter cover structure (1) for a motorcycle according to claim 1, wherein said indicator needle (M) is moved by a stepping motor controlled by digital.

STATEMENT UNDER ARTICLE 19 (1)

Claim 1 amended; claim 2 cancelled; claim 3 unchanged; claim 4 amended; claims 5 and 6 unchanged

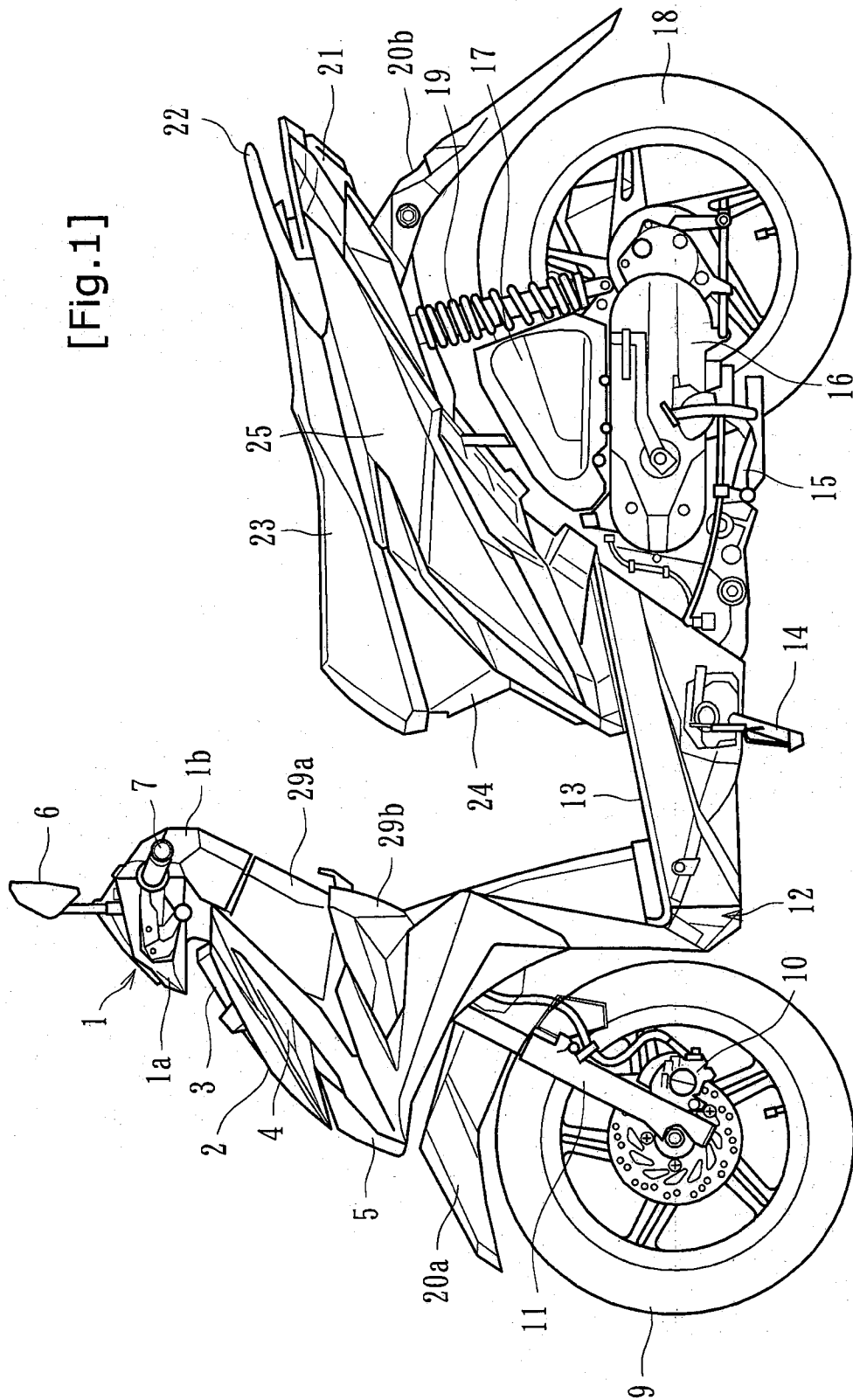
(1) The amendment under Article 19 (1) limits the features; “design covering portion (33) includes a window (33f) for covering periphery of said digital display unit (DD) and an extension part (33a) extending from said window (33f) for covering a pivot (L) of said indicator needle (M) in said needle display unit (A)” (Claim 1) and “meter cover (1c) is mounted between said handle cover (1a, 1b) that includes a front handle cover (1a) and a rear handle cover (1b) by some mounting units (M1-4) and, at least one of said mounting unit (M3) is located behind said meter visor portion (34) for engaging said front handle cover (1a)” (Claim 3).

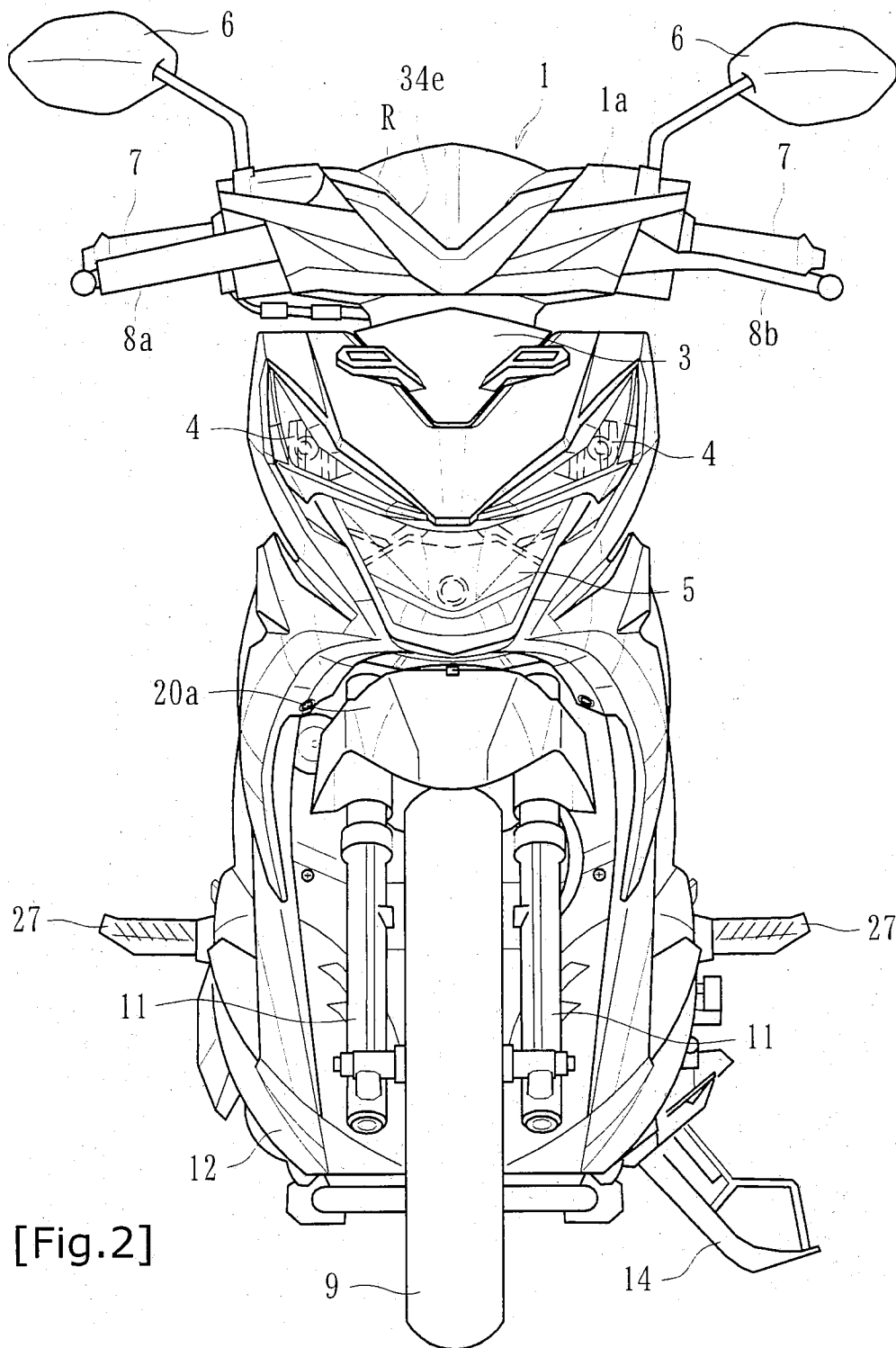
INFORMAL COMMENT

According to the present invention, in addition to the effect, “allows recognition as an exclusive design used in a specific vehicle in several of motorcycle models or types even the meter unit as the common component is used”, an effect by extension part (33a) or effect by mounting units (M1-4) is also provided.

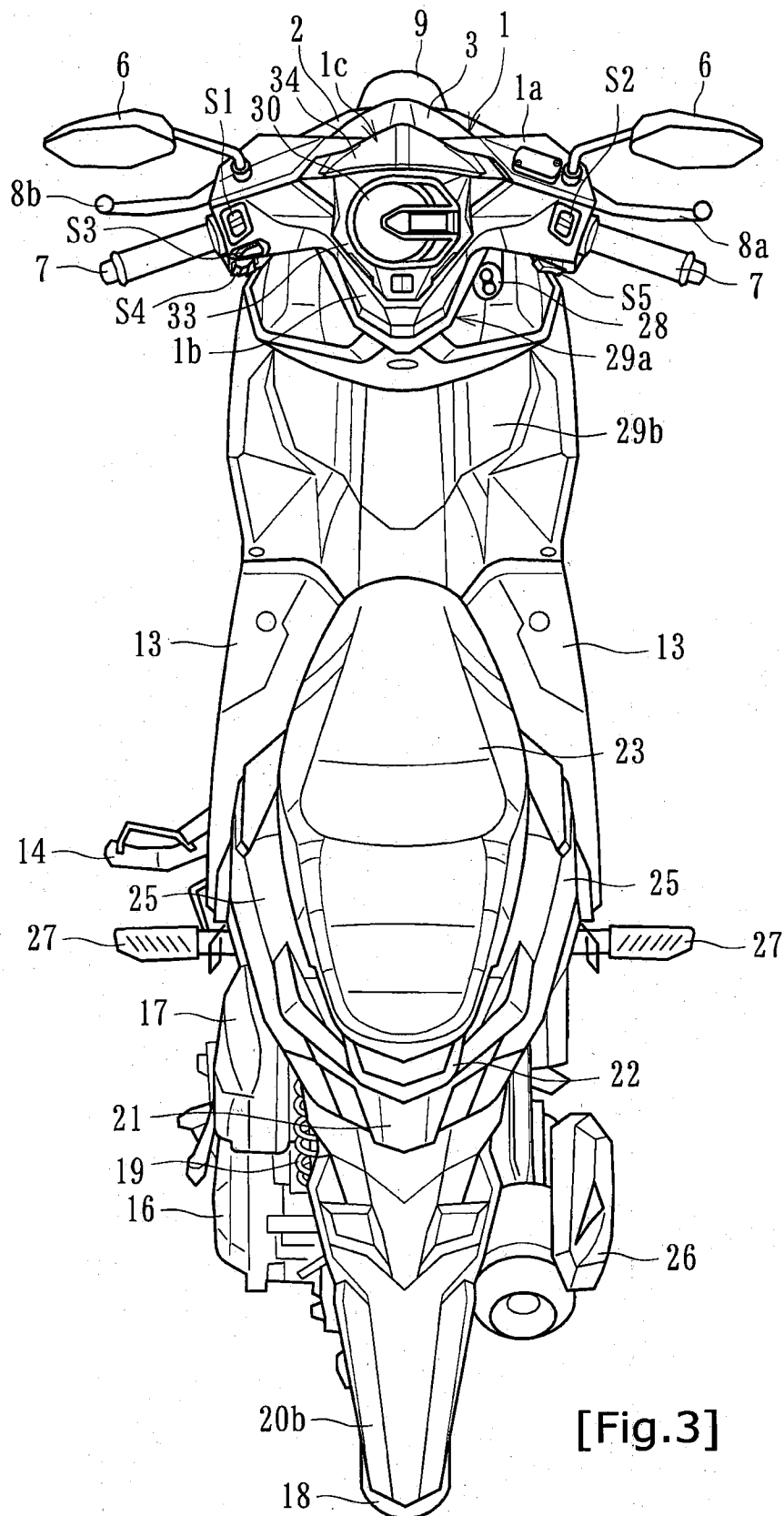
However, in the citations referred to in the ISR, technology with said features of the present invention is not disclosed. Therefore, the inventions disclosed in the citations referred to in the ISR will never provide such effects of the present invention.

[Fig.1]

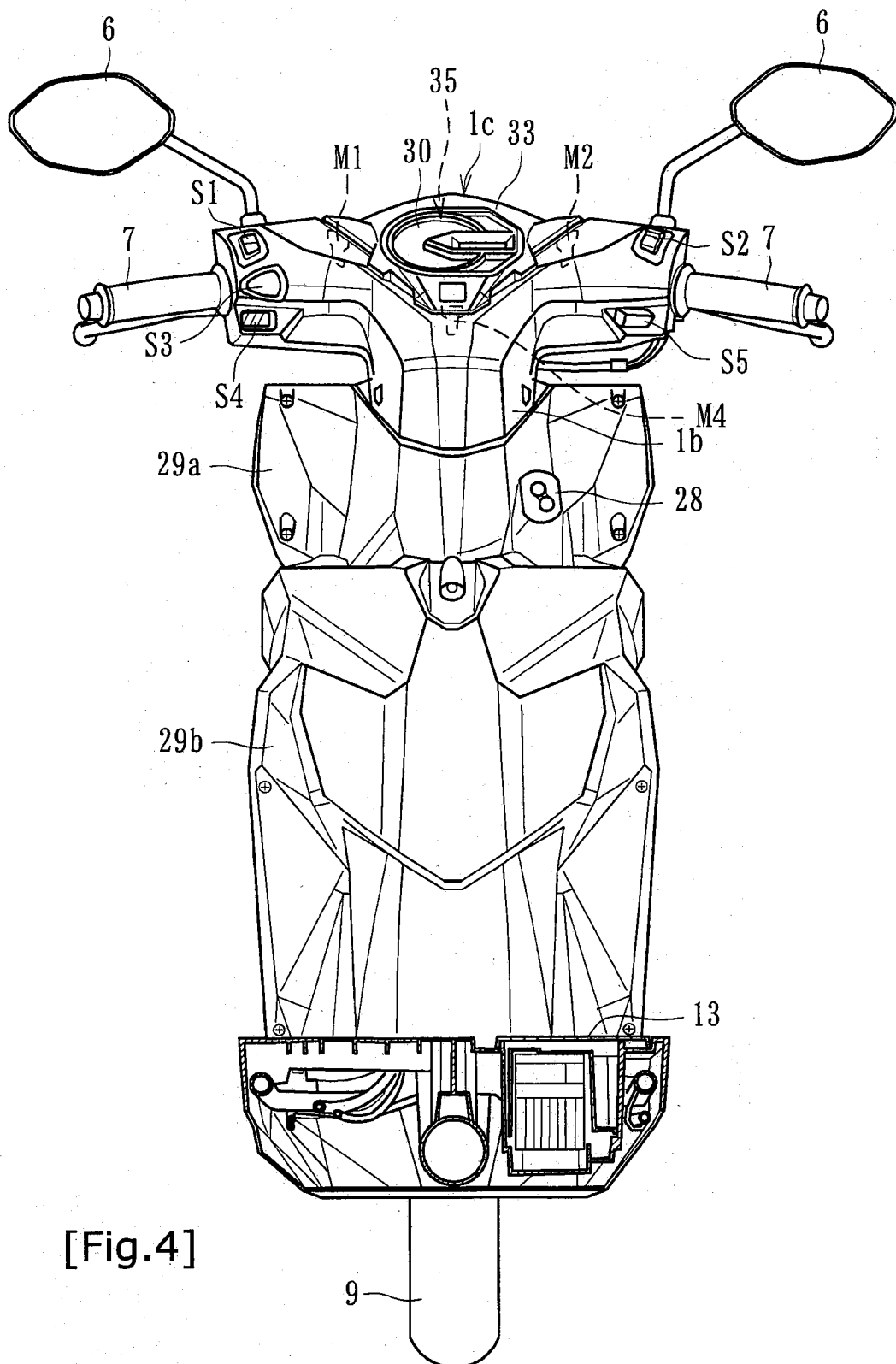


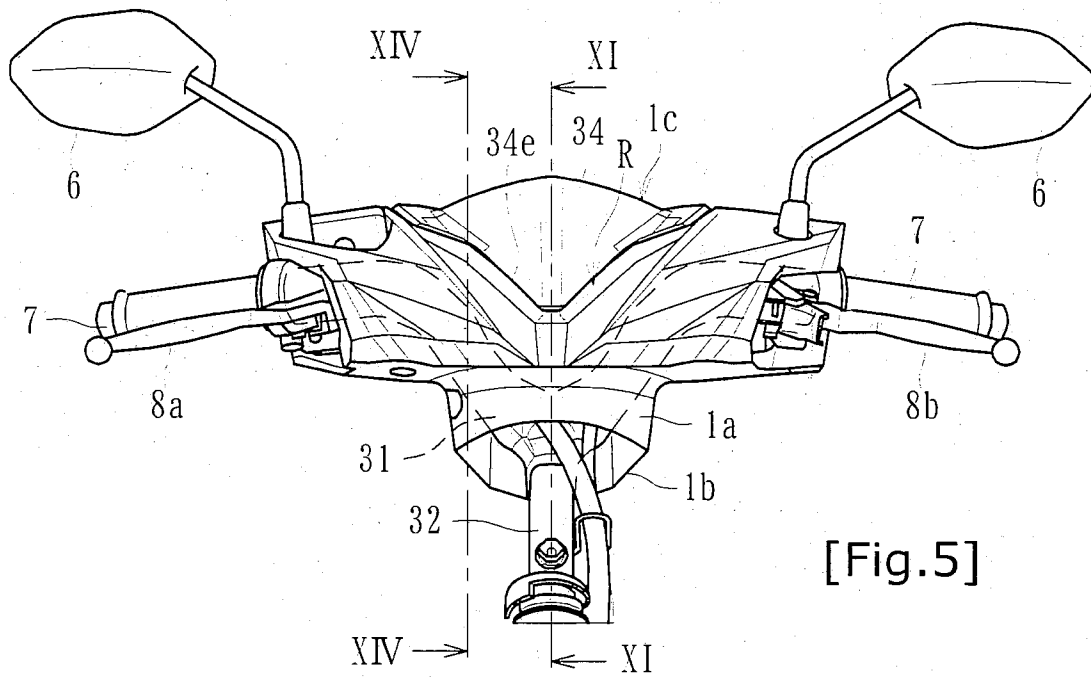


[Fig.2]

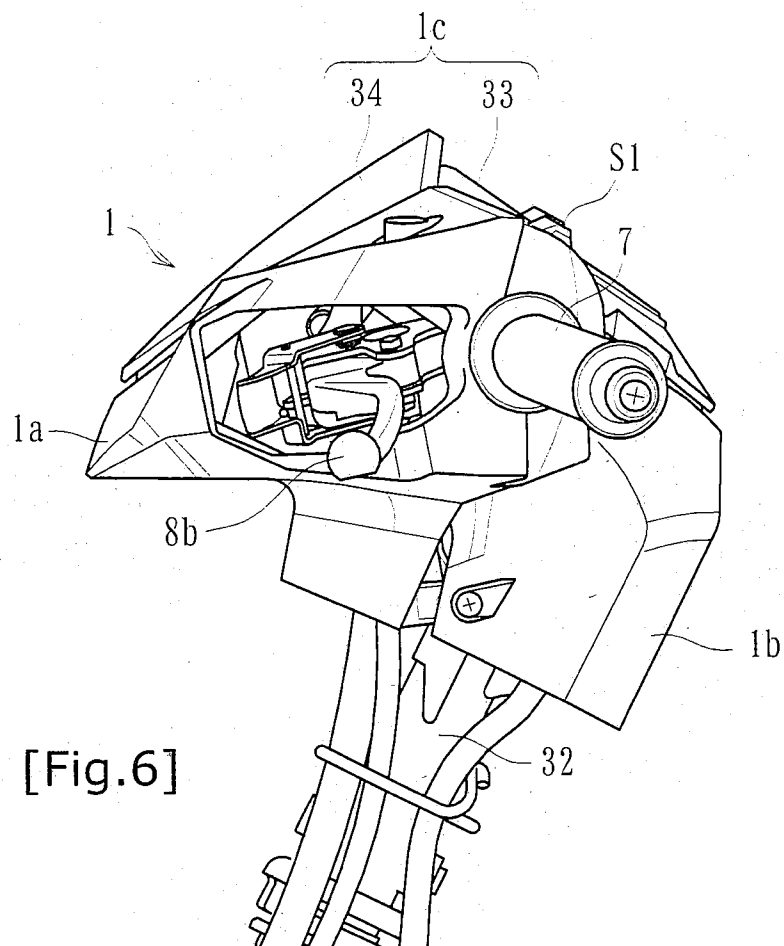


[Fig.3]

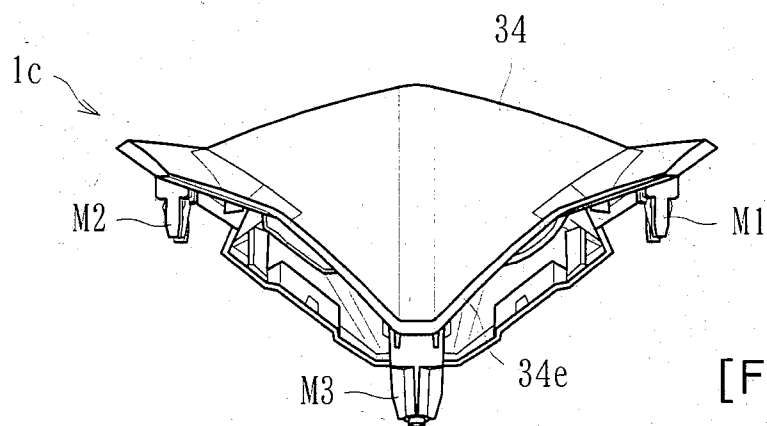
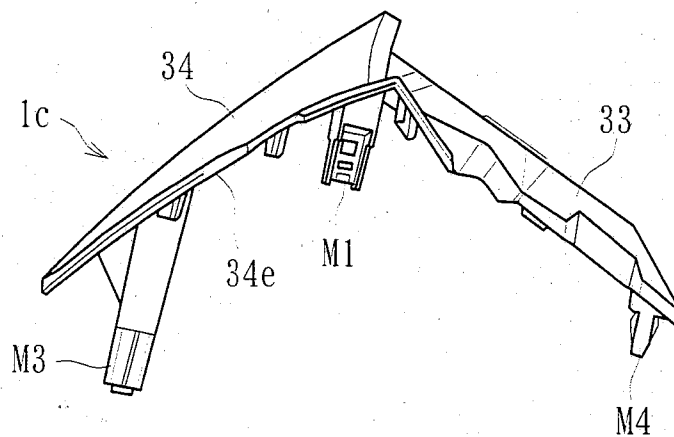
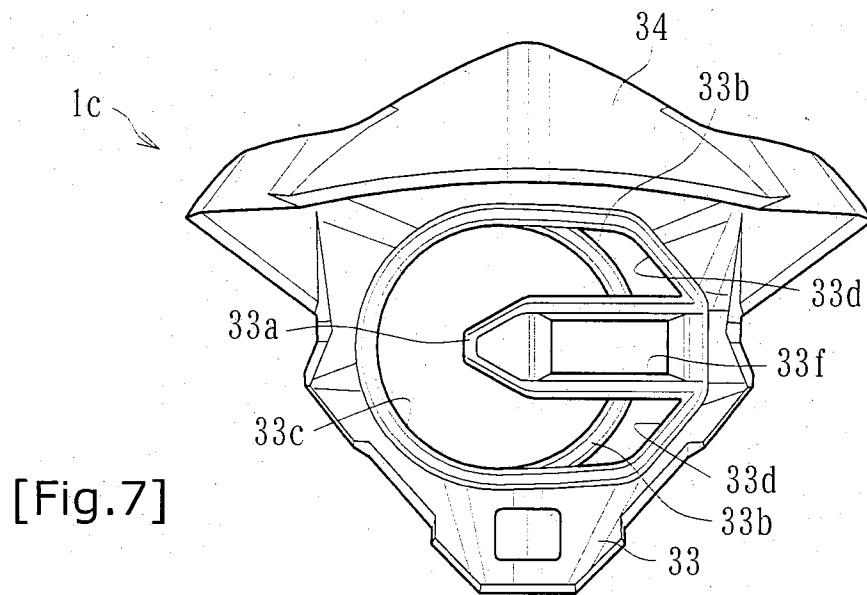


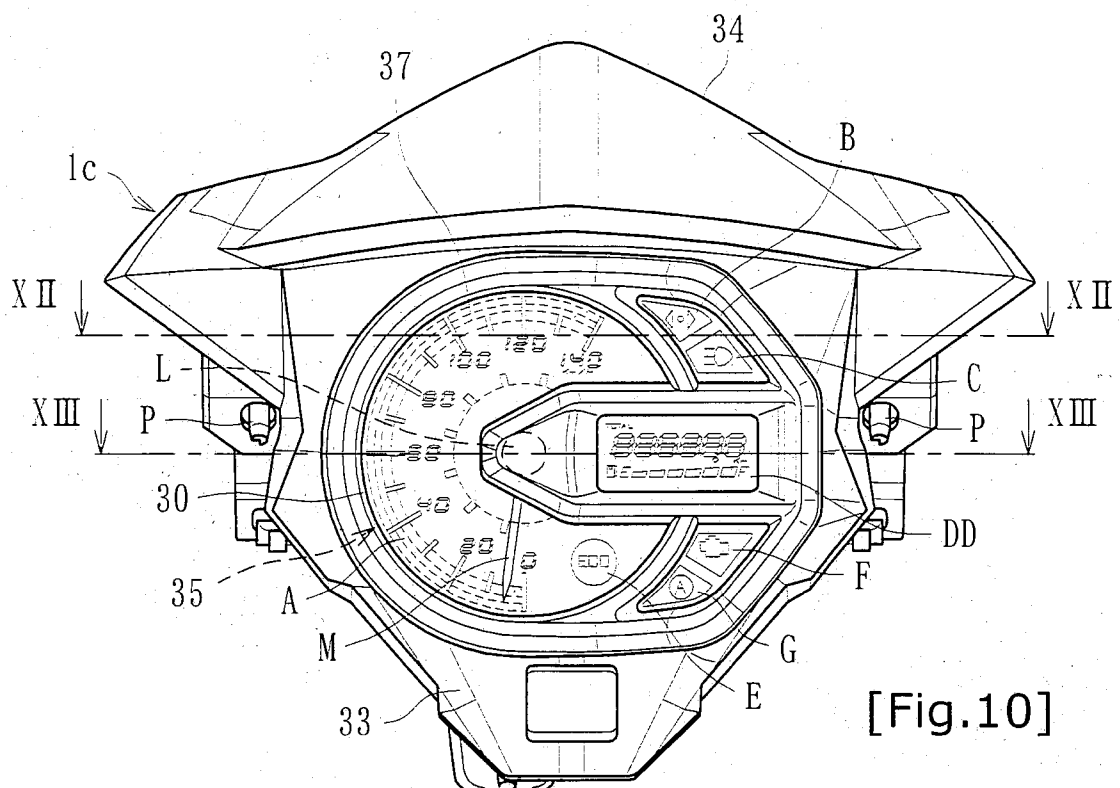
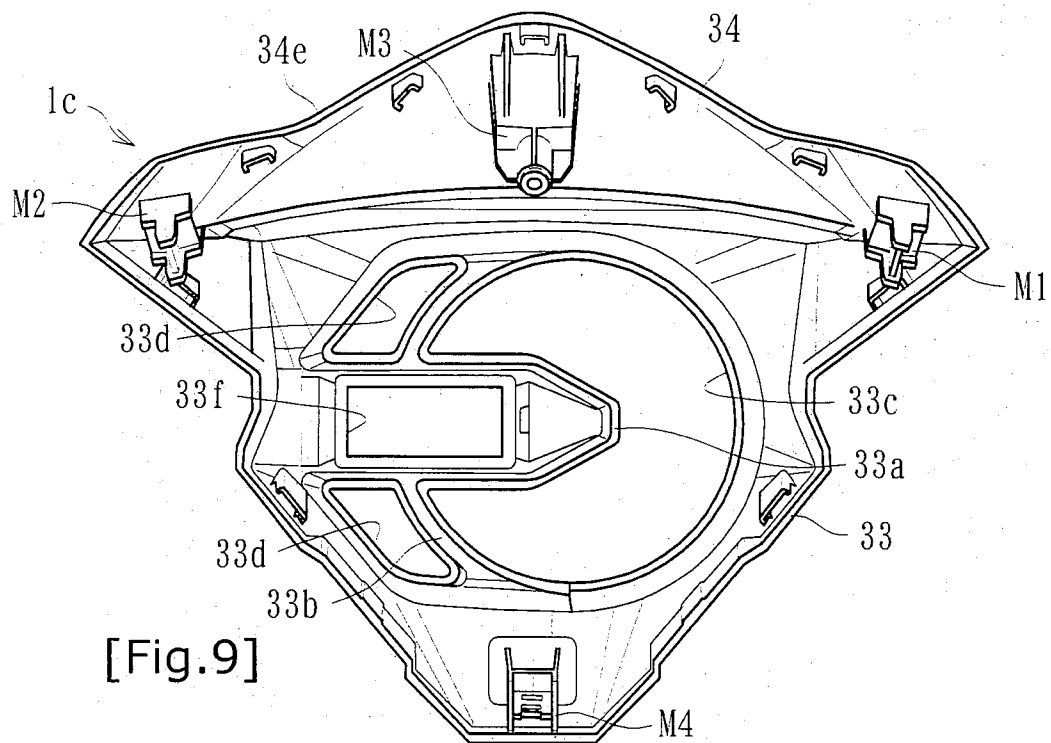


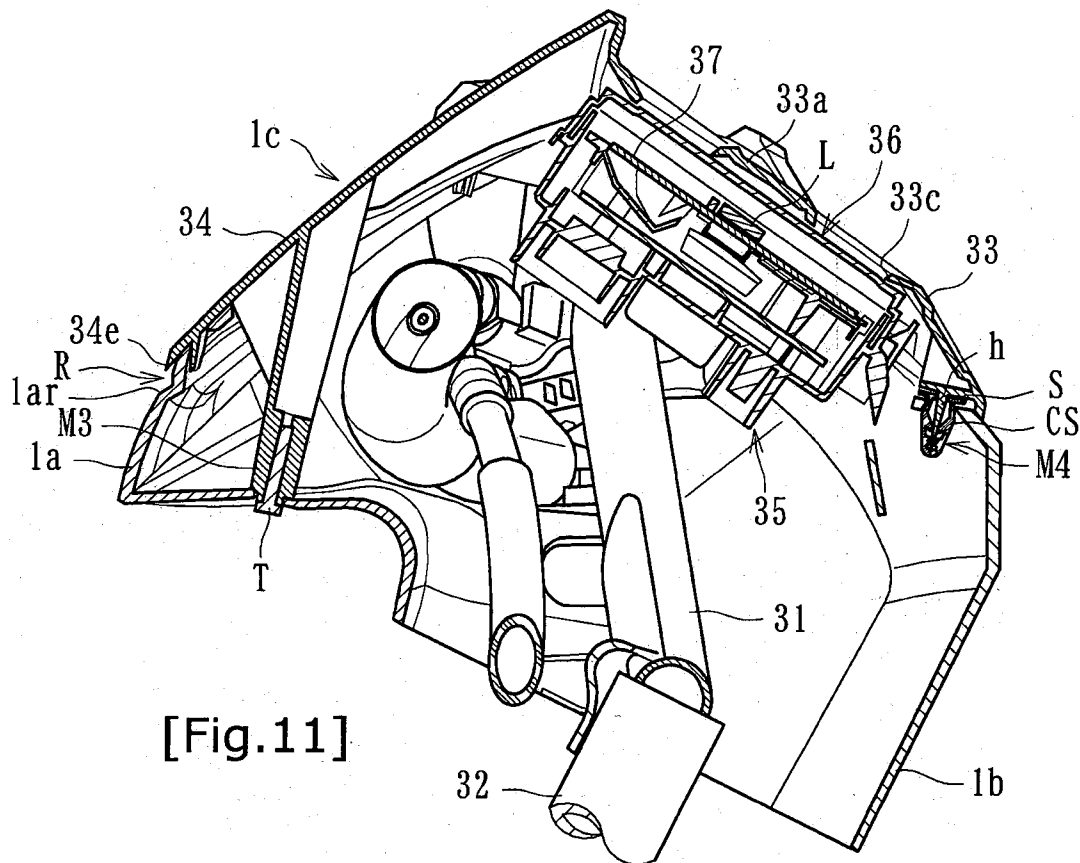
[Fig.5]



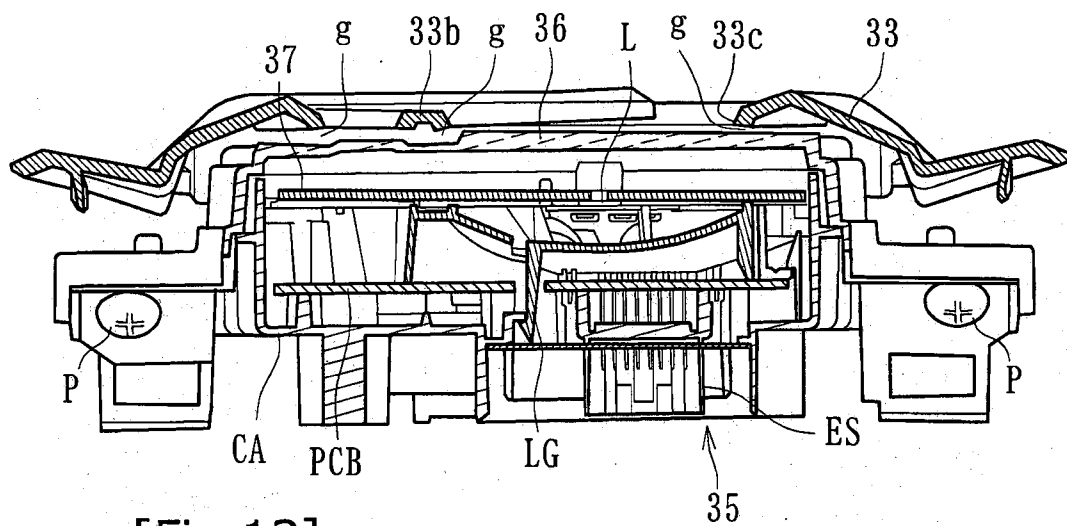
[Fig.6]



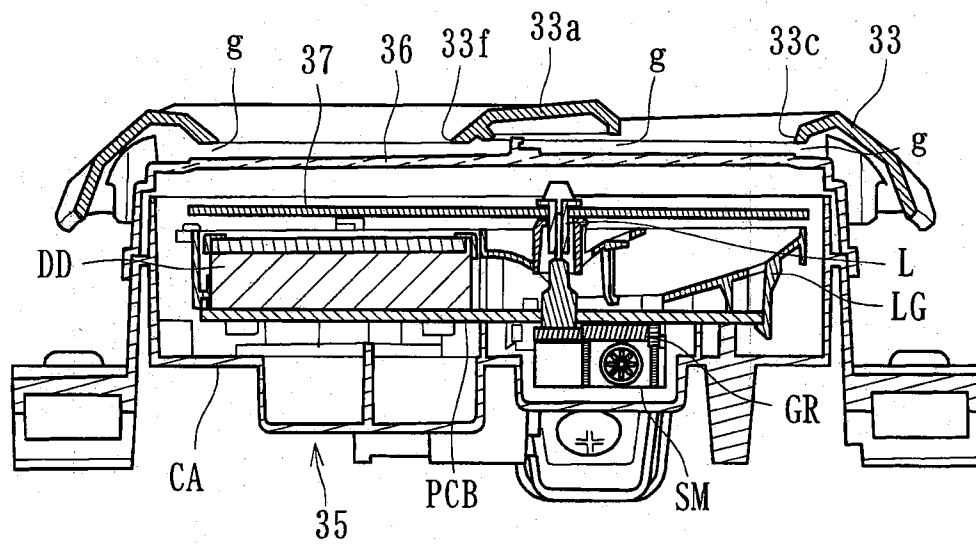




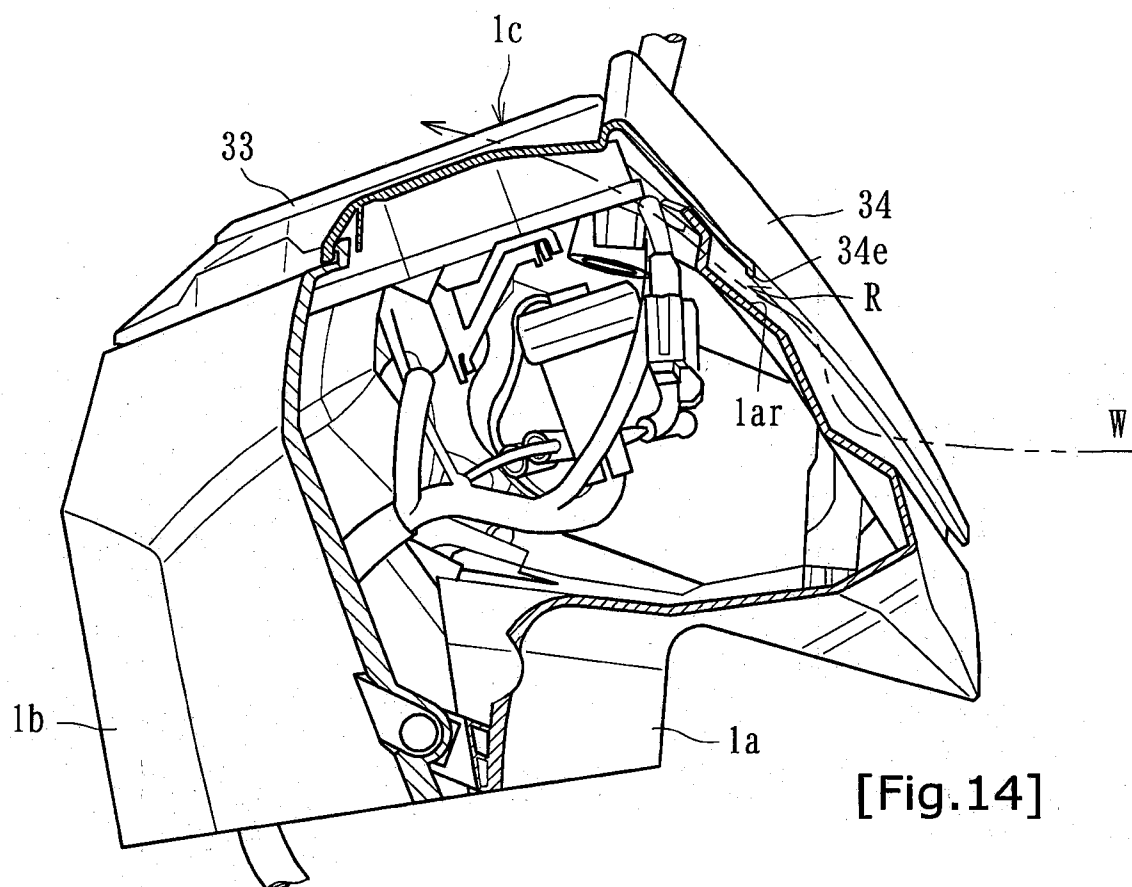
[Fig.11]



[Fig.12]



[Fig.13]



[Fig.14]

INTERNATIONAL SEARCH REPORT

International application No.

PCT/TH2016/000002

A. CLASSIFICATION OF SUBJECT MATTER Int.Cl. B62J23/00 (2006.01) i According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) Int.Cl. B62J23/00 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Published examined utility model applications of Japan 1922-1996 Published unexamined utility model applications of Japan 1971-2016 Registered utility model specifications of Japan 1996-2016 Published registered utility model applications of Japan 1994-2016 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.			
Y A	JP 2008-189293 A (HONDA MOTOR CO., LTD.) 2008.08.21, Paragraph 【0025】, Fig. 4 & KR 10-2008-0065538 A & CN 101244735 A & TW 200909281 A	1 2-7			
Y	WO 2011/155053 A1 (HONDA MOTOR CO., LTD.) 2011.12.15, Paragraphs 【0027】 - 【0030】, Fig. 2 & CN 102947172 A	1			
A	Microfilm of the specification and drawings annexed to the written application of Japanese Utility Model Application No.006022/1989 (Laid-open No.098087/1990) (SUZUKI MOTOR CORPORATION) 1990.08.03, Fig. 1 (Family:none)	2-7			
☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.					
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top; border: none;"> * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed </td> <td style="width: 50%; vertical-align: top; border: none;"> "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family </td> </tr> </table>				* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family				
Date of the actual completion of the international search 10.05.2016		Date of mailing of the international search report 18.05.2016 31.05.2016			
Name and mailing address of the ISA/JP Japan Patent Office 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan		Authorized officer SUYAMA, Naoki Telephone No. +81-3-3581-1101 Ext. 3341			
		3D	4 6 4 9		

INTERNATIONAL SEARCH REPORT

International application No.

PCT/TH2016/000002

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2009-67283 A (YAMAHA MOTOR CO., LTD.) 2009.04.02, Fig. 8 & EP 2036805 A1 (Fig. 8) & CN 101386317 A & AT 518734 T & TW 200911579 A & ES 2367204 T	2-7