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अधोहस्ताक्षरी जो पेटेंट अधिनियम, 1970 की धारा 73(3) के तहत महानियंत्रक एकस्व, एवं व्यापार चिह्न की ओर से प्रमाणपत्र हस्ताक्षर व जारी करने के लिए प्राधिकृत अधिकारी हूँ, यह प्रमाणित करता(ती) हूँ कि निम्नलिखित पेटेंट आवेदन के संबंध में फाइल दस्तावेज़(जों) को निम्नलिखित लिपि इसके साथ संलग्न है:

I, the undersigned, being an officer duly authorized to sign and issue the certificate on behalf of the Controller General of Patents, Designs and Trademarks in accordance with the provisions of Section 73(3) of the Patents Act, 1970, hereby certify that annexed hereto is the document(s) as filed in connection with the following Patent Application:

आवेदन संख्या/a) Application Number: 202141029635

फाइल करने की तारीख/b) Date of Filing: 01/07/2021

नुरोधित दस्तावेज़(जों) का नाम:

Name of the document(s) requested: Complete Specification

प्रमाणित पेटेंट अधिनियम, 1970 की धारा 147(1) के अधीन मुझमें निहित शक्तियों के तहत जारी किया गया है। This certificate is issued under the powers vested in me U/S 147(1) of The Patents Act, 1970.

this 13th day of May 2022

नियंत्रक पेटेंट व डिजाइन/Controller of Patents and Designs
(प्राधिकृत हस्ताक्षरी/Authorised Signatory)

FORM 1
THE PATENTS ACT 1970 (39 of 1970) and
THE PATENTS RULES, 2003
APPLICATION FOR GRANT OF PATENT
(Section 7, 54 and 135 and sub-rule (1) of
Rule 20)

(FOR OFFICE USE ONLY)

				Application No.	
				Filing date:	
				Amount of Fee paid:	
				CBR No:	
				Signature:	
1. APPLICANT'S REFERENCE / IDENTIFICATION NO. (AS ALLOTTED BY OFFICE)					
2. TYPE OF APPLICATION [Please tick (✓) at the appropriate category]					
Ordinary (✓)		Convention ()		PCT-NP ()	
Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()
3A. APPLICANT(S)					
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3B. CATEGORY OF APPLICANT [Please tick (✓) at the appropriate category]					
Natural Person ()		Other than Natural Person (✓)			
		Small Entity ()		Startup ()	Others (✓)
4. INVENTOR(S) [Please tick (✓) at the appropriate category]					
Are all the inventor(s) same as the applicant(s) named above?		Yes ()		No (✓)	
If "No", furnish the details of the inventor(s)					
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5. TITLE OF THE INVENTION

A Fuel Inlet Assembly for a Saddle-type Vehicle

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8. IN CASE OF APPLICATION CLAIMING PRIORITY OF APPLICATION FILED IN CONVENTION COUNTRY, PARTICULARS OF CONVENTION APPLICATION

Country	Application Number	Filing date	Name of the applicant	Title of the Invention	IPC (as classified in the convention country)

9. IN CASE OF PCT NATIONAL PHASE APPLICATION, PARTICULARS OF INTERNATIONAL APPLICATION FILED UNDER PATENT CO-OPERATION TREATY (PCT)	
International application number	International filing date
10. IN CASE OF DIVISIONAL APPLICATION FILED UNDER SECTION 16, PARTICULARS OF ORIGINAL (FIRST) APPLICATION	
Original (first) application No.	Date of filing of original (first) application
11. IN CASE OF PATENT OF ADDITION FILED UNDER SECTION 54, PARTICULARS OF MAIN APPLICATION OR PATENT	
Main application/patent No.	Date of filing of main application
12. DECLARATIONS	
(i) Declaration by the inventor(s) (In case the applicant is an assignee: the inventor(s) may sign herein below or the applicant may upload the assignment or enclose the assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period). I/We, the above named inventor(s) is/are the true & first inventor(s) for this Invention and declare that the applicant(s) herein is/are my/our assignee or legal representative. (a) Date (b) Signature(s) (c) Name(s) RAJENDRAN PADALINGAM (a) Date (b) Signature(s) (c) Name(s) THANGAVEL DEEPAN (a) Date (b) Signature(s) (c) Name(s) VAIDHEESWARAN RAMESH (a) Date (b) Signature(s) (c) Name(s) KARNAM VENKATA MANGA RAJU	

(ii) Declaration by the applicant(s) in the convention country

(In case the applicant in India is different than the applicant in the convention country: the applicant in the convention country may sign herein below or applicant in India may upload the assignment from the applicant in the convention country or enclose the said assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period)

I/We, the applicant(s) in the convention country declare that the applicant(s) herein is/are my/our assignee or legal representative.

(a) Date

(b) Signature(s)

(c) Name(s) of the signatory

(iii) Declaration by the applicant(s)

☒ We the applicant(s) hereby declare(s) that: -

☒ We are in possession of the above-mentioned invention.

☒ The ~~provisional~~/complete specification relating to the invention is filed with this application.

☒ The invention as disclosed in the specification uses the biological material from India and the necessary permission from the competent authority shall be submitted by me/us before the grant of patent to me/us.

☒ There is no lawful ground of objection(s) to the grant of the Patent to me/us.

☒ We are the true & first inventor(s).

☒ We are the assignee or legal representative of true & first inventor(s).

☒ The application or each of the applications, particulars of which are given in Paragraph-8, was the first application in convention country/countries in respect of my/our invention(s).

☒ We claim the priority from the above mentioned application(s) filed in convention country/countries and state that no application for protection in respect of the invention had been made in a convention country before that date by me/us or by any person from which we derive the title.

☒ Our application in India is based on international application under Patent Cooperation Treaty (PCT) as mentioned in Paragraph-9.

☒ The application is divided out of my /our application particulars of which is given in Paragraph-10 and pray that this application may be treated as deemed to have been filed on DD/MM/YYYY under section 16 of the Act.

☒ The said invention is an improvement in or modification of the invention particulars of which are given in Paragraph-11.

13. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION

(a) Form 2

Item	Details	Fee	Remarks
Complete/ provisional specification)#	No. of pages 15		
No. of Claim(s)	No. of claims 15 and No. of pages 5		
Abstract	No. of pages 1		
No. of Drawing(s)	No. of drawings 9 and No. of pages 9		

In case of a complete specification, if the applicant desires to adopt the drawings filed with his provisional specification as the drawings or part of the drawings for the complete specification under rule 13(4), the number of such pages filed with the provisional specification are required to be mentioned here.

(b) Complete specification ~~(in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies).~~

(c) Sequence listing in electronic form

(d) Drawings ~~(in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies).~~

(e) Priority document(s) or a request to retrieve the priority document(s) from DAS (Digital Access Service) if the applicant had already requested the office of first filing to make the priority document(s) available to DAS.

(f) Translation of priority document/Specification/International Search Report/International Preliminary Report on Patentability.

(g) Statement and Undertaking on Form 3

(h) Declaration of Inventorship on Form 5

(i) Power of Authority

Total fee is being paid via online payment mode.

We hereby declare that to the best of my/our knowledge, information and belief the fact and matters slated herein are correct and I/We request that a patent may be granted to me/us for the said invention.

Dated this 1st day of July 2021

TVS MOTOR COMPANY LIMITED

By their Agent & Attorney


(Nikhil Ranjan)
of Khaitan & Co
Reg No IN/PA-1471

To
The Controller of Patents
The Patent Office, at Chennai

Note: -

- * Repeat boxes in case of more than one entry.
- * To be signed by the applicant(s) or by authorized registered patent agent otherwise where mentioned.
- * Tick (✓)/cross (x) whichever is applicable/not applicable in declaration in paragraph-12.
- * Name of the inventor and applicant should be given in full, family name in the beginning.
- * Strike out the portion which is/are not applicable.
- * For fee: See First Schedule.

FORM 2
THE PATENTS ACT, 1970
(39 OF 1970)
&
THE PATENTS RULES, 2003
COMPLETE SPECIFICATION
[See section 10, Rule 13]

TITLE OF INVENTION

A Fuel Inlet Assembly for a Saddle-type Vehicle

APPLICANT

**TVS MOTOR COMPANY LIMITED, an Indian company, having its
address at "Chaitanya", No.12 Khader Nawaz Khan Road,
Nungambakkam, Chennai 600 006, Tamil Nadu, India.**

PREAMBLE TO THE DESCRIPTION

The following specification particularly describes the invention and the manner in which it is to be performed.

FIELD OF THE INVENTION

[001] The present invention relates to a fuel inlet assembly.

BACKGROUND OF THE INVENTION

5 [002] In conventional motor vehicles in which the fuel tank is packaged under the floorboard, also commonly known as bottom mounted fuel tanks, the provision for refuelling is provided at a certain vertical height above the fuel tank. The refuelling provision is connected to the fuel tank by means of a connecting inlet. The connecting inlet for connecting the opening of the
10 refuelling provision to the fuel tank must meet strict leak proof requirements, and is hence conventionally a single fabricated tube. These leak proof requirements must be met without affecting the feasibility of assembly & serviceability when required of the refuelling provision, connecting inlet or the fuel tank. This increases the complexity in vehicle layout, especially in saddle-
15 type vehicles with greater packaging constraints.

[003] Further, for bottom mounted fuel tanks, the fuel storage capacity of fuel tank is limited due to a large number of layout parameters such as ground clearance, vehicle width & length dimensions, wiring harness and cable routing, and mounting components like fuel gauge inside fuel tank; ergonomic
20 parameters such as customer foot resting height; and air circulation for cooling and breathing circuits for the engine. Any attempt at increasing the

fuel tank volume may have a detrimental effect on any of the aforementioned parameters.

[004] In addition, in saddle-type vehicles with bottom mounted fuel tanks, additional vehicle components such as carbon canister and the supporting ancillary parts along with the fuel system related pipes such as drain pipe for draining the overflowing fuel or water during refuelling or water service or raining, and vent pipe for ventilation of fuel tank are to be arranged without interfering with the surrounding vehicle parts while meeting the requirements of the aforementioned parameters. It is also an important layout consideration that the canister must be kept as close as possible to the vapour tapping zone of the fuel tank, so as to maintain the charging and draining properties.

[005] Thus, there is a need in the art for a fuel inlet assembly for a saddle-type vehicle which addresses at least the aforementioned problems.

15 SUMMARY OF THE INVENTION

[006] In one aspect, the present invention is directed towards a fuel inlet assembly for a saddle-type vehicle. The fuel inlet assembly has a fuel inlet flange with a fuel inlet for receiving fuel from an external source and a first inlet pipe attached to the fuel inlet flange at a first end. The first inlet pipe extends at least downwardly from the fuel inlet flange. Further, a second inlet pipe extends at least downwardly from the first inlet pipe. The second inlet pipe has an intake end and an outlet end. Herein, the intake end of the

second inlet pipe is detachably attached to a second end of the first inlet pipe, and the outlet end of the second inlet pipe is connected to a fuel tank, thereby supplying fuel received at the fuel inlet flange to the fuel tank.

[007] In an embodiment of the invention, the fuel inlet flange is provided
5 integrally with the first inlet pipe.

[008] In a further embodiment of the invention, the fuel tank is disposed under a floorboard of the saddle-type vehicle.

[009] In another embodiment of the invention, the fuel inlet flange is provided on a rear panel of the saddle-type vehicle.

10 [010] In another embodiment of the invention, the fuel inlet flange has a vent spout connected to the fuel tank via a vent pipe for relieving accumulated air inside the fuel tank during refuelling. In an embodiment, the vent spout is provided below the fuel inlet, such that the vent spout protrudes normal to a central axis of the fuel inlet.

15 [011] In a further embodiment of the invention, the fuel inlet flange has a receiver portion surrounding the fuel inlet to receive excess fuel spillage from the fuel inlet. In an embodiment, the fuel inlet flange has a drain spout connected to a drain pipe and the drain pipe is open at one end for draining any excess fuel spillage from the fuel inlet collected at the receiver portion.

20 [012] In a further embodiment of the invention, the fuel inlet assembly has a fuel cap for covering the fuel inlet. The fuel cap is supported on the fuel inlet flange.

[013] In a further embodiment of the invention, the first inlet pipe has a mounting flange for mounting a canister for the saddle-type vehicle.

[014] In a further embodiment of the invention, the first inlet pipe has a guiding portion for routing the vent pipe and the drain pipe in a substantially vertical orientation.

[015] In another embodiment of the invention, sum of volume of the first inlet pipe and volume of the second inlet pipe is at least 5% of volume of the fuel tank.

[016] In another aspect, the present invention relates to a saddle-type vehicle having a head pipe, a main tube with a first portion extending rearwardly and downwardly from the head pipe, a floorboard extending rearwardly from a rear end of the first portion of the main tube, a fuel tank disposed under the floorboard and a fuel inlet assembly. The fuel inlet assembly has a fuel inlet flange with a fuel inlet for receiving fuel from an external source and a first inlet pipe attached to the fuel inlet flange at a first end. The first inlet pipe extends at least downwardly from the fuel inlet flange. Further, a second inlet pipe extends at least downwardly from the first inlet pipe. The second inlet pipe has an intake end and an outlet end. Herein, the intake end of the second inlet pipe is detachably attached to a second end of the first inlet pipe, and the outlet end of the second inlet pipe is connected to a fuel tank, thereby supplying fuel received at the fuel inlet flange to the fuel tank.

[017] In an embodiment of the invention, the saddle-type vehicle has a front panel disposed forwardly of the head pipe in a vehicle front-rear direction and a rear panel disposed rearwardly of the head pipe in the vehicle front-rear direction. The rear panel is configured to define a space therebetween with the front panel such that the fuel inlet assembly is disposed in the space defined by the front panel and the rear panel therebetween.

[018] In a further embodiment of the invention, the fuel inlet flange of the fuel inlet assembly is provided on the rear panel.

10 BRIEF DESCRIPTION OF THE DRAWINGS

[019] Reference will be made to embodiments of the invention, examples of which may be illustrated in accompanying figures. These figures are intended to be illustrative, not limiting. Although the invention is generally described in context of these embodiments, it should be understood that it is not intended to limit the scope of the invention to these particular embodiments.

Figure 1 illustrates a right-side view of an exemplary saddle-type vehicle, in accordance with an embodiment of the invention.

Figure 2 illustrates a top perspective view of a frame assembly of the saddle-type vehicle, in accordance with an alternative embodiment of the invention.

Figure 3 illustrates a perspective view of a fuel inlet assembly, in accordance with an embodiment of the invention.

Figure 4 illustrates a rear perspective view of the saddle-type vehicle with the fuel inlet assembly, in accordance with an embodiment of the invention.

Figure 5 illustrates a perspective view of a fuel inlet flange, in accordance with an embodiment of the invention.

Figure 6 illustrates a perspective view of the fuel inlet flange and a first inlet pipe, in accordance with an embodiment of the invention.

Figure 7 illustrates the perspective view of the fuel inlet assembly, in accordance with an embodiment of the invention.

Figure 8 illustrates a sectional view of the fuel inlet assembly, in accordance with an embodiment of the invention.

Figure 9 illustrates a perspective view of the saddle-type vehicle with the fuel inlet assembly, in accordance with an embodiment of the invention.

15 DETAILED DESCRIPTION OF THE INVENTION

[020] The present invention relates to a fuel inlet assembly. More particularly, the present invention relates to a fuel inlet assembly for a saddle-type vehicle.

[021] Figure 1 illustrates a right-side view of an exemplary saddle-type vehicle 10, in accordance with an embodiment of the present subject matter. The vehicle 10 comprises a frame assembly 105. The frame assembly 105 includes a head pipe 105A and a main tube 105B. The main tube 105B has a

first portion 105B' extending rearwardly and downwardly from the head pipe 105A. One or more front suspensions 110 connect a front wheel 115 to a handlebar assembly 190, which forms a steering assembly of the vehicle 10. The steering assembly is rotatably disposed about the head pipe 105A. The first portion 105B' of the main tube 105B extends rearwardly downward from the head pipe 105A and the main tube 105B includes a bent portion thereafter extending substantially in a longitudinal direction. In an alternative embodiment as illustrated in Figure 2, the saddle-type vehicle 10 has the frame assembly 105 with a non-monocoque frame structure having a first cross tube 105C extending from the first portion 105B' of the main tube 105B in a vehicle width direction, a pair of reinforcement members 105D extending rearwardly from the first cross tube 105C, and a second cross tube 105E extending in the vehicle width direction from a rear portion of the pair of reinforcement members 105D, thereby connecting the pair of reinforcement members 105D.

[022] Reference is made to Figure 1, wherein the vehicle 10 includes a power unit comprising at least an internal combustion (IC) engine 125. The power unit is coupled to a rear wheel 145. In one embodiment, the engine 125 is swingably connected to the frame assembly 105. In one embodiment, the engine 125 is mounted to the swing arm (not shown) and the swing arm is swingably connected to the frame assembly 105. Further, the vehicle 10 includes a transmission means (not shown) coupling the rear wheel 145 to

the power unit. The transmission means includes a continuously variable transmission, an automatic transmission, or a fixed ratio transmission. A seat assembly 151 is disposed above the power unit and is supported by the rear tubes 105C of the frame assembly 105. The seat assembly 151 is hingedly
5 openable. The frame assembly 105 defines a step-through portion ahead of the seat assembly 151. A floorboard 155 is disposed at the step-through portion, wherein a rider can operate the vehicle 10 in a seated position by resting feet on the floorboard 155. The floorboard extends rearwardly from a rear end of the first portion 105B' of the main tube 105B. Further, the
10 floorboard 155 is capable of carrying loads.

[023] Further, the frame assembly 105 is covered by plurality of body panels including a front panel 160A, a leg shield 160B, an under-seat cover 160C, a left and a right-side panel 160D, and a rear panel 160E mounted on the frame assembly 105 and covering the frame assembly 105 and parts mounted
15 thereof. Herein, front panel 160A is disposed forwardly of the head pipe 105A in a vehicle front-rear direction and the rear panel 160E is disposed rearwardly of the head pipe 105B in the vehicle front-rear direction.

[024] In addition, a front fender 165 is covering at least a portion of the front wheel 115. A utility box is disposed below the seat assembly 151 and is
20 supported by the frame assembly 105. A rear fender 175 is covering at least a portion of the rear wheel 145 and is positioned upwardly of the rear wheel 145. One or more suspension(s) (not shown) are provided in the rear portion

of the vehicle 10 for connecting the swing arm 141 and the rear wheel 145 to the frame assembly 105 for damping the forces from the wheel 145 and the power unit from reaching the frame assembly 105.

[025] Furthermore, the vehicle 10 comprises of plurality of electrical and electronic components including a headlight 185A, a taillight 185B, a transistor-controlled ignition (TCI) unit (not shown), an alternator (not shown) and a starter motor (not shown).

[026] Figure 3 illustrates a perspective view of a fuel inlet assembly 200 for the saddle-type vehicle 10. As illustrated in Figure 3, the fuel inlet assembly 200 comprises a fuel inlet flange 210. The fuel inlet flange 210 has a fuel inlet 212 for receiving fuel from an external source. A first inlet pipe 230 is attached to the fuel inlet flange 210 at a first end 230A of the first inlet pipe 230. The first inlet pipe 230 extends at least downwardly from the fuel inlet flange 210. In an embodiment, the fuel inlet flange 210 is provided integrally with the first inlet pipe 230.

[027] Further, the fuel inlet assembly 200 comprises a second inlet pipe 240 that extends at least downwardly from the first inlet pipe 230. The second inlet pipe 240 has an intake end 240A and an outlet end 240B, wherein the intake end 240A of the second inlet pipe 240 is detachably attached to a second end 230B of the first inlet pipe 230. In an embodiment, the intake end 240A of the second inlet pipe 240 is detachably attached to the second end 230B of the first inlet pipe 230 by means of a circumferential clamp which can

be undone to detach the second inlet pipe 240 from the first inlet pipe 230. The outlet end 240B of the second inlet pipe 240 is attached to a fuel tank 250 (shown in Figure 7). Herein, the fuel tank 250 is disposed under the floorboard 155 of the vehicle 10. In operation, fuel received by the fuel inlet 212 of the fuel inlet flange 210 travels through the first inlet pipe 230 and the second inlet pipe 240 to the fuel tank 250 disposed under the floorboard 155. The detachable attachment of the second inlet pipe 240 to the first inlet pipe 230 allows a user to detach the second inlet pipe 240 from the first inlet pipe 230, which makes handling of the first inlet pipe 230 and the second inlet pipe 240 easier. In an embodiment, sum of volume of the first inlet pipe 230 and volume of the second inlet pipe 240 is at least 5% of volume of the fuel tank 250. That is, in addition to the fuel tank 250 itself, some amount of fuel can be stored in the first inlet pipe 230 and the second inlet pipe 240, thereby increasing fuel storage capacity.

[028] As illustrated in Figure 4, the fuel inlet flange 210 is provided on the rear panel 160E of the saddle-type vehicle 10. As the rear panel 160E is directly in front of the usual rider position, the user is able to access and monitor the fuel inlet 212 during a refuelling operation without having to dismount the vehicle 10.

[029] Figure 5 illustrates a perspective view of the fuel inlet flange 210. As illustrated in Figure 5, the fuel inlet flange 210 has a vent spout 214. The vent spout 214 is connected to the fuel tank via a vent pipe 216 (shown in Figure

7) with one end of the vent pipe 216 connected to the fuel tank 250 while other end of the vent pipe 216 is connected at the vent spout 214. The vent pipe 216 relieves the accumulated air inside the fuel tank 250 during refuelling, which is released into the atmosphere by an open end of the vent spout 214. The open end of the vent spout 214 is exposed to the atmosphere when the fuel inlet 212 is kept open during a refuelling operation, hence allowing the accumulated air inside the fuel tank 250 to escape through the vent pipe 216 and the vent spout 214, making space for the incoming fuel. Reference is made to Figure 8, where it is shown that the vent spout 214 is provided below the fuel inlet 212, such that the vent spout 214 protrudes normal to a central axis (X-X') of the fuel inlet 212.

[030] Figure 6 illustrates a perspective view of the fuel inlet flange 210 along with the first inlet pipe 230. As illustrated in Figure 5 and Figure 6, the fuel inlet flange 210 has a receiver portion 218 that surrounds the fuel inlet 212 to collect excess fuel spillage from the fuel inlet 212. The receiver portion 218 is formed by raising of side walls of the fuel inlet flange 210. The fuel inlet flange 210 further has a drain spout 220. Any excess fuel spilling out of the fuel inlet 212 is collected by raised side walls of the fuel inlet flange 210 forming the receiver portion 218 and directed towards the drain spout 220 assisted by gravity. The drain spout 220 is connected to a drain pipe 222 (shown in Figure 7) which is open at one end. Any spilled fuel received by the drain spout 220 is therefore drained via the open end of the drain pipe 222,

preventing any fuel accumulation in the fuel inlet flange 210. Similarly, the receiver portion 218 and the drain spout 220 also drain out any water collected in the receiver portion 218 during rains, preventing water accumulation around the fuel inlet 212.

5 [031] Figure 7 illustrates a perspective view of the fuel inlet assembly 200 along with the respective piping configurations. As shown in Figure 7, the fuel inlet assembly has a fuel cap 224 for covering the fuel inlet 212. The fuel cap 224 is supported on the fuel inlet flange 210. In an embodiment, the fuel cap 224 is hingedly attached to the fuel inlet flange 210 and is openable by
10 means of a wire operable by an ignition key. As illustrated in Figure 7 and also referenced in Figure 6, the first inlet pipe 230 has a mounting flange 232 for mounting a canister 260 for the vehicle 10. The canister 260 receives excess fuel vapours from the fuel tank 250 and purges the excess fuel vapours into the engine 125. The first inlet pipe 230 further has a guiding
15 portion 234 for routing the vent pipe 216 and the drain pipe 222 in a substantially vertical orientation, to allow for air to rise within the vent pipe 216 and any fuel or water spillage to fall through the drain pipe 222 assisted by gravity. The location of the mounting flange 232 and the guiding portion 234 is unrestricted to being varied as per vehicle layout requirements. The
20 mounting of canister 260 on the mounting flange 232 and routing of the vent pipe 216 and the drain pipe 222 through the guiding portion 234 ensures that

the canister 260, the vent pipe 216 and the drain pipe 222 do not interfere with any surrounding vehicle components.

[032] In another aspect, the present invention relates to the saddle-type vehicle 10 having the head pipe 105A, the main tube 105 having the first portion 105B' extending rearwardly and downwardly from the head pipe 105A, the floorboard 155 extending rearwardly from the rear end of the first portion 105B' of the main tube 105B, the fuel tank 250 disposed under the floorboard 155; and the fuel inlet assembly 200 as explained hereinbefore.

[033] In an embodiment, as illustrated in Figure 9 and referenced in Figure 4, the rear panel 160E is configured to define a space therebetween with the front panel 160A. The fuel inlet assembly 200 is disposed in the space defined by the front panel 160A and the rear panel 160E therebetween. Further, the fuel inlet flange 210 of the fuel inlet assembly 200 is provided on the rear panel 160E.

[034] Advantageously, the present invention provides a fuel inlet assembly for a saddle-type vehicle in which the fuel tank is disposed under the floorboard. The attachment of the first inlet pipe to the fuel inlet flange and the detachable attachment of the second inlet pipe with the first inlet pipe ensure that the path for the fuel from the fuel inlet to the fuel tank is leak proof. The detachable attachment of the second inlet pipe to the first inlet pipe also allows for the parts of the fuel inlet assembly to be separated and treated individually, thereby improving serviceability of the fuel inlet assembly.

[035] Further, the fuel inlet assembly of the present invention allows for a higher fuel storage capacity, as some amount of fuel can be stored in the first inlet pipe and the second inlet pipe along with the fuel tank. Furthermore, the fuel inlet assembly of the present invention provides for draining of excess
5 fuel spillage or water, thereby preventing any hazards related to accumulation. The fuel inlet assembly being covered by the front and the rear panel provide increased protection to the fuel inlet assembly from any physical damage, while providing better aesthetics.

[036] The fuel inlet assembly of the present invention also provides for
10 routing of the vent pipe and the drain pipe and the mounting of the canister by using what would have been dead space around the first inlet pipe, in a manner that they do not interfere with any surrounding vehicle components, thereby providing better packaging characteristics.

[037] While the present invention has been described with respect to certain
15 embodiments, it will be apparent to those skilled in the art that various changes and modification may be made without departing from the scope of the invention as defined in the following claims.

WE CLAIM:

1. A fuel inlet assembly (200) for a saddle-type vehicle (10), comprising:
 - a fuel inlet flange (210) having a fuel inlet (212) for receiving fuel from an external source;
 - 5 a first inlet pipe (230) attached to the fuel inlet flange (210) at a first end (230A), extending at least downwardly from the fuel inlet flange (210); and
 - a second inlet pipe (240) extending at least downwardly from the first inlet pipe (230), the second inlet pipe (240) having an intake end (240A) and an outlet end (240B), the intake end (240A) of the second inlet pipe (240)
 - 10 being detachably attached to a second end (230B) of the first inlet pipe (230), and the outlet end (240B) of the second inlet pipe (240) being connected to a fuel tank (250), thereby supplying fuel received at the fuel inlet flange (210) to the fuel tank (250),
- 15 2. The fuel inlet assembly (200) as claimed in claim 1, wherein the fuel inlet flange (210) is provided integrally with the first inlet pipe (230).
3. The fuel inlet assembly (250) as claimed in claim 1, wherein the fuel tank (250) is disposed under a floorboard (155) of the saddle-type vehicle (10).

20

4. The fuel inlet assembly (200) as claimed in claim 1, wherein the fuel inlet flange (210) is provided on a rear panel (160E) of the saddle-type vehicle (10).
5. The fuel inlet assembly (200) as claimed in claim 1, wherein the fuel inlet flange (210) comprises a vent spout (214) connected to the fuel tank (250) via a vent pipe (216) for relieving accumulated air inside the fuel tank (250) during refuelling.
6. The fuel inlet assembly (200) as claimed in claim 4, wherein the vent spout (214) is provided below the fuel inlet (212), such that the vent spout (214) protrudes normal to a central axis (X-X') of the fuel inlet (212).
7. The fuel inlet assembly (200) as claimed in claim 1, wherein the fuel inlet flange (210) comprises a receiver portion (218) surrounding the fuel inlet (212) to receive excess fuel spillage from the fuel inlet (212).
8. The fuel inlet assembly (200) as claimed in claim 6, wherein the fuel inlet flange (210) comprises a drain spout (220) connected to a drain pipe (222), the drain pipe (222) being open at one end, for draining any excess fuel spillage from the fuel inlet (212) collected at the receiver portion (218).

9. The fuel inlet assembly (200) as claimed in claim 1, further comprising a fuel cap (224) for covering the fuel inlet (212), the fuel cap (224) being supported on the fuel inlet flange (210).
- 5 10. The fuel inlet assembly (200) as claimed in claim 1, wherein the first inlet pipe (230) comprises a mounting flange (232) for mounting a canister (260) for the saddle-type vehicle (10).
- 10 11. The fuel inlet assembly (200) as claimed in claim 4 or 7, wherein the first inlet pipe (230) comprises a guiding portion (234) for routing the vent pipe (216) and the drain pipe (222) in a substantially vertical orientation.
- 15 12. The fuel inlet assembly (200) as claimed in claim 1, wherein sum of volume of the first inlet pipe (230) and volume of the second inlet pipe (240) is at least 5% of volume of the fuel tank (250).
13. A saddle-type vehicle (10), comprising:
- a head pipe (105A);
 - a main tube (105B) having a first portion (105B') extending rearwardly and
 - 20 downwardly from the head pipe (105A);
 - a floorboard (155) extending rearwardly from a rear end of the first portion (105B') of the main tube (105B);

a fuel tank (250) disposed under the floorboard (155); and
a fuel inlet assembly (200) having a fuel inlet flange (210) with a fuel inlet
(212) for receiving fuel from an external source, a first inlet pipe (230)
attached to the fuel inlet flange (210) at a first end (230A), the first inlet
5 pipe (230) extending at least downwardly from the fuel inlet flange (210),
and a second inlet pipe (240) extending at least downwardly from the first
inlet pipe (230), the second inlet pipe (240) having an intake (240A) end
and an outlet end (240B), the intake end (240A) of the second inlet pipe
(240) being detachably attached to a second end (230B) of the first inlet
10 pipe (230), and the outlet end (240B) of the second inlet pipe (240) being
connected to the fuel tank (250), thereby supplying fuel received at the
fuel inlet flange (210) to the fuel tank (250).

14. The saddle-type vehicle (10) as claimed in claim 13, comprising a front
15 panel (160A) disposed forwardly of the head pipe (105A) in a vehicle
front-rear direction and a rear panel (160E) disposed rearwardly of the
head pipe (105B) in the vehicle front-rear direction, the rear panel (160E)
configured to define a space therebetween with the front panel (160A)
such that the fuel inlet assembly (200) is disposed in the space defined by
20 the front panel (160A) and the rear panel (160E) therebetween.

15. The saddle-type vehicle (10) as claimed in claim 13, wherein the fuel inlet flange (210) of the fuel inlet assembly (200) is provided on the rear panel (160E).

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Dated this 1st day of July 2021

TVS MOTOR COMPANY LIMITED
By their Agent & Attorney

10

(Nikhil Ranjan)
of Khaitan & Co
Reg No IN/PA-1471

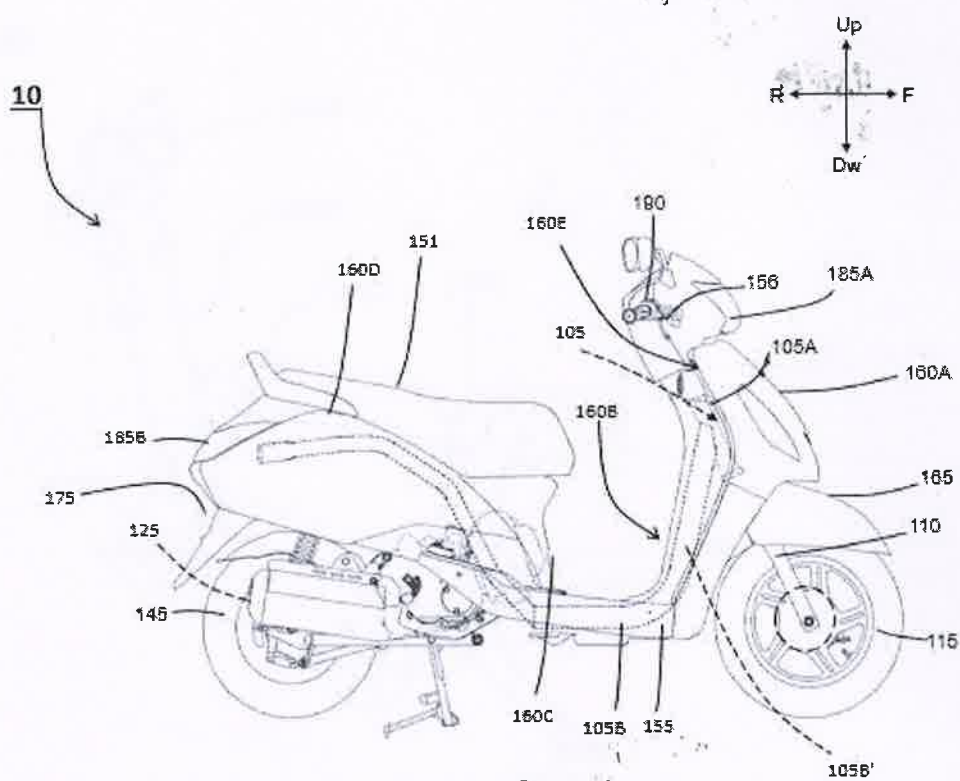
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ABSTRACT

A Fuel Inlet Assembly for a Saddle Type Vehicle

A fuel inlet assembly (200) for a saddle-type vehicle (10) having a fuel inlet flange (210) with a fuel inlet (212) for receiving fuel from an external source and a first inlet pipe (230) attached to the fuel inlet flange (210) at a first end (230A). The first inlet pipe (230) extends at least downwardly from the fuel inlet flange (210). A second inlet pipe (240) extends at least downwardly from the first inlet pipe (230). The second inlet pipe (240) has an intake end (240A) and an outlet end (240B). The intake end (240A) of the second inlet pipe (240) is detachably attached to a second end (230B) of the first inlet pipe (230), and the outlet end (240B) of the second inlet pipe (240) is connected to a fuel tank (250), thereby supplying fuel received at the fuel inlet flange (210) to the fuel tank (250).

Reference Figure 3



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By their Agent & Attorney

(Nikhil Ranjan)
of Khaitan & Co
Reg No IN/PA-1471

105

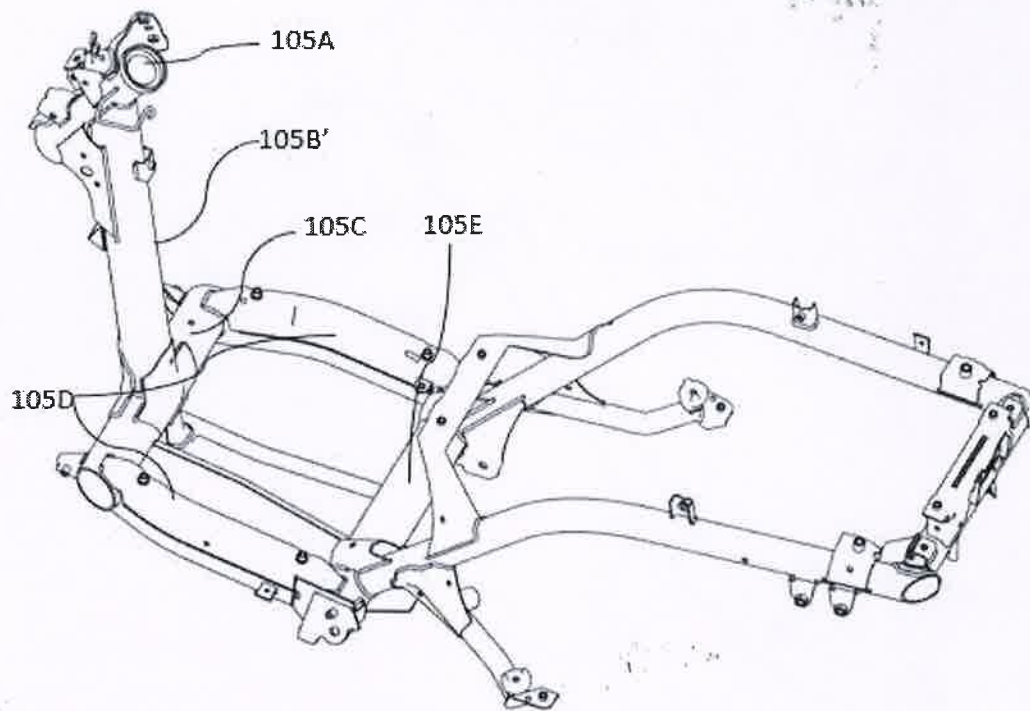
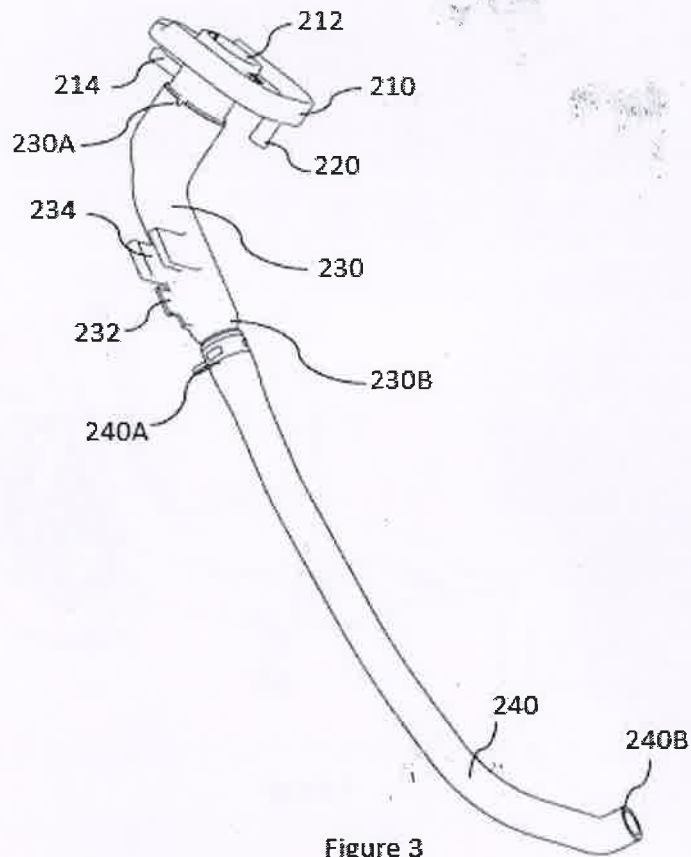


Figure 2

TVS MOTOR COMPANY LIMITED
By their Agent & Attorney

(Nikhil Ranjan)
of Khaitan & Co
Reg No IN/PA-1471

200



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By their Agent & Attorney


(Nikhil Ranjan)
of Khaitan & Co
Reg No IN/PA-1471

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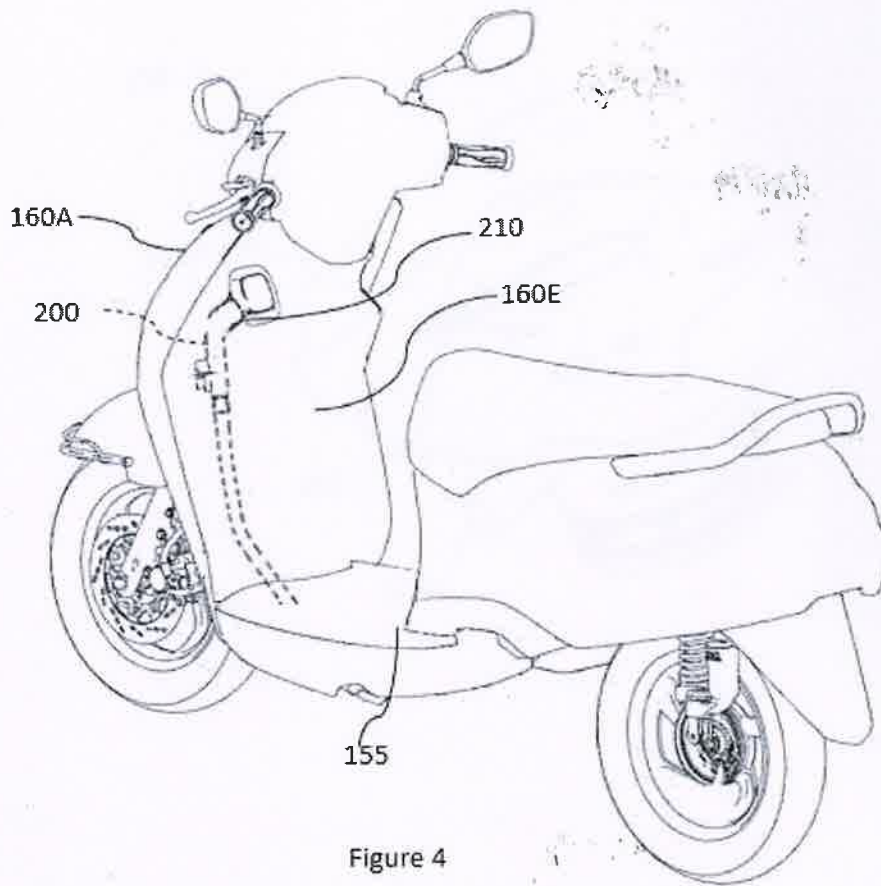


Figure 4

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of Khaitan & Co
Reg No IN/PA-1471

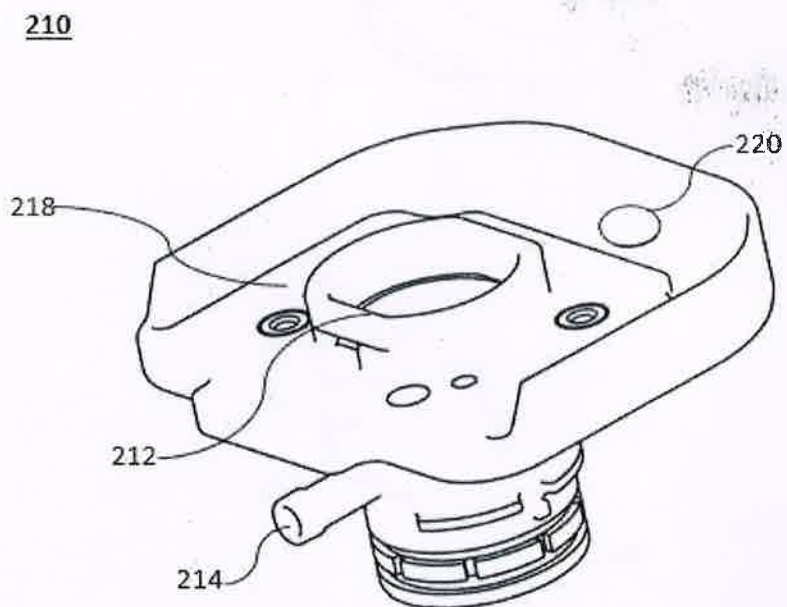


Figure 5

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of Khaitan & Co
Reg No IN/PA-1471

200

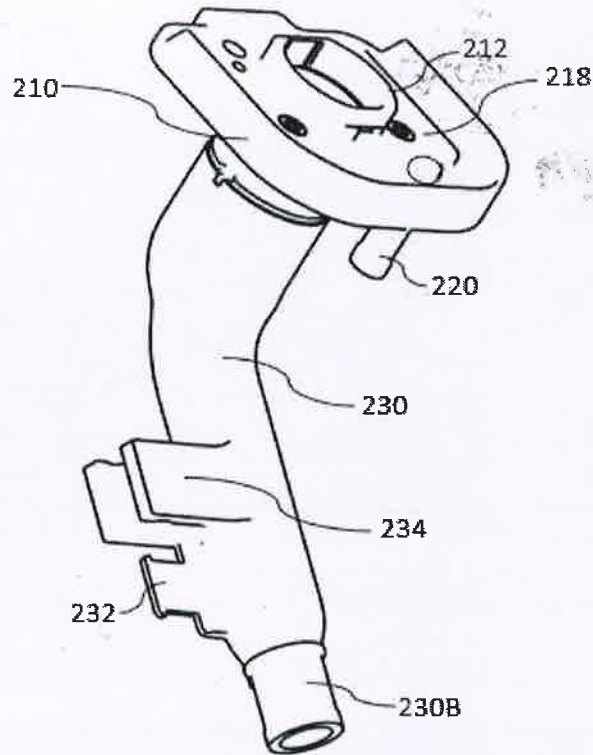


Figure 6

TVS MOTOR COMPANY LIMITED
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of Khaitan & Co
Reg No IN/PA-1471

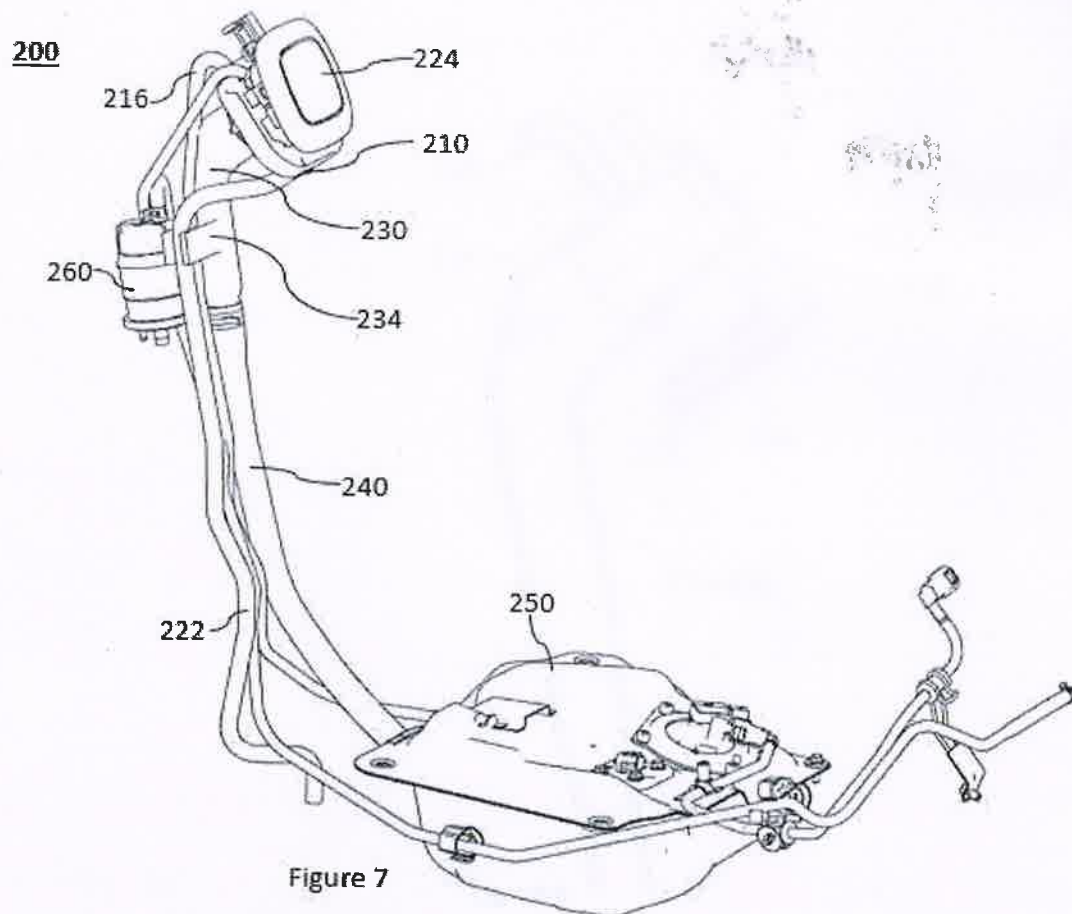


Figure 7

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Reg No IN/PA-1471

200

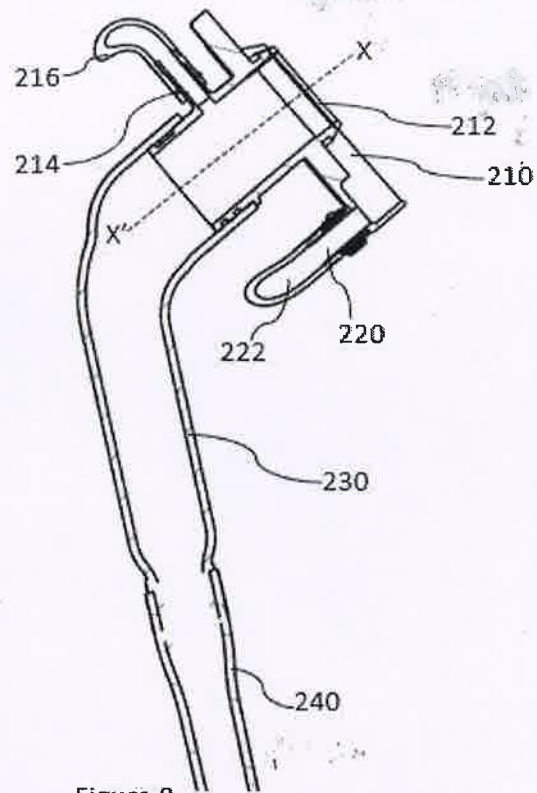


Figure 8

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(Nikhil Ranjan)
of Khaitan & Co
Reg No IN/PA-1471

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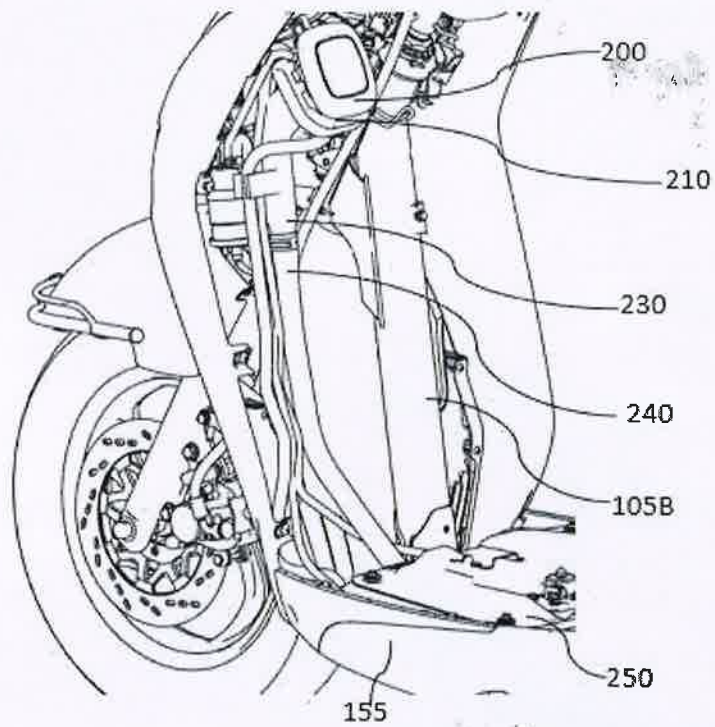


Figure 9

TVS MOTOR COMPANY LIMITED
By their Agent & Attorney

(Nikhil Ranjan)
of Khaitan & Co
Reg No IN/PA-1471

GOBIERNO DE INDIA
MINISTERIO DE COMERCIO E INDUSTRIA
LA OFICINA DE PATENTES

A QUIEN CORRESPONDA

Yo, el abajo firmante, siendo un funcionario debidamente autorizado para firmar y emitir el certificado en nombre del Contralor General de Patentes, Diseños y Marcas de conformidad con las disposiciones del artículo 73 (3) de la Ley de Patentes de 1970, por la presente certifica que el adjunto aquí presente es una copia fiel del documento o documentos presentados en relación con la siguiente Solicitud de Patente:

- a) Número de solicitud: 202141029635
- b) Fecha de presentación: 01/07/2021
- c) Nombre de los documentos solicitados: Descripción completa

Este certificado se emite bajo las facultades que me confieren U/S 147 (1) de la Ley de Patentes de 1970.

Con fecha este día 13 de mayo de 2022

Controlador de Patentes y Diseños
Signatario autorizado

FORMA 1 LA LEY DE PATENTES DE 1970 (39 DE 1970) y EL REGLAMENTO DE PATENTES, 2003 SOLICITUD DE CONCESIÓN DE PATENTE (Ver sección 7, 54 y 135 y la subregla (1) de las reglas 20)		(PARA USO DE OFICINA SOLAMENTE)		
		Solicitud No.		
		Fecha de Presentación:		
		Cantidad de Tasa Pagada:		
		CBR No.:		
		Firma:		
1. REFERENCIA / IDENTIFICACIÓN DEL SOLICITANTE NO. (SEGÚN LO ASIGNADO POR LA OFICINA)				
2. TIPO DE SOLICITUD [Marque (☒) en la categoría correspondiente]				
Ordinaria ☒		Convención ☐		
PCT-NP ☐				
Divisional ☐	Patente de adición ☐	Divisional ☐	Patente de adición ☐	
Divisional ☐	Patente de adición ☐	Divisional ☐	Patente de adición ☐	
3A. SOLICITANTE (S)				
Nombre Completo	Nacionalidad	País de Residencia	Dirección del solicitante	
TVS MOTOR COMPANY LIMITED	Una empresa india	India	No. de casa	"Chaitanya"
			Calle	No. 12 Khader, Nawaz Khan Road, Nungambakkam
			Ciudad	Chennai
			Estado	Tamil Nadu
			País	India
			Código Pin	600 006
3B. CATEGORÍA DE SOLICITANTE [Marque (☒) en la categoría correspondiente]				
Persona Natural		Otra que persona natural ☒		
		Pequeña entidad ☐	Iniciante ☐ Otro ☒	
4. INVENTOR(ES) [Marque (☒) en la categoría correspondiente]				
¿Son todos los inventores los mismos que los solicitantes mencionados anteriormente?		Sí ☐	No ☒	

Si la respuesta es "No", proporcione los detalles del inventor o inventores.				
Nombre completo	Nacionalidad	País de residencia	Dirección del inventor	
RAJENDRAN PADALINGAM	Nacional de India	India	No. casa	Chaitanya
			Calle	No. 12 Khader, Nawaz Khan Road, Nungambakkam
			Ciudad	Chennai
			Estado	Tamil Nadu
			País	India
			Código pin	600 006
THANGAVEL DEEPAN			No. casa	Chaitanya
			Calle	No. 12 Khader, Nawaz Khan Road, Nungambakkam
			Ciudad	Chennai
			Estado	Tamil Nadu
			País	India
			Código pin	600 006
VAIDHEESWARAN RAMESH	Nacional de India	India	No. casa	Chaitanya
			Calle	No. 12 Khader, Nawaz Khan Road, Nungambakkam
			Ciudad	Chennai
			Estado	Tamil Nadu
			País	India
			Código pin	600 006
KARNAM VENKATA MANGA RAJU			No. casa	Chaitanya
			Calle	No. 12 Khader, Nawaz Khan Road, Nungambakkam
			Ciudad	Chennai
			Estado	Tamil Nadu
			País	India
			Código pin	600 006

5. TÍTULO DE LA INVENCION					
Un ensamble de entrada de combustible para un vehículo tipo silla de montar					
6. AGENTE (S) AUTORIZADO (S) DE PATENTES REGISTRADOS		IN/PA NO.		1086	
		Nombre		Adheesh Nargolkar	
		No. de móvil		9820776760	
7. DIRECCIÓN DE SERVICIO DEL SOLICITANTE EN LA INDIA		Nombre		Khaitan & Co	
		Dirección Postal		Centro One Indiabulls, Piso 13, 841, Senapati Bapat Calle Elphinstone, Marg Bombay 400013, Maharashtra	
		No. de Teléfono		66365000	
		No. móvil		9820776760	
		No. Fax		66365050	
		e-mail		kcopatents@khaitanco.com adheesh.nargolkar@khaitanco.com	
8. EN CASO DE SOLICITUD QUE RECLAME LA PRIORIDAD DE LA SOLICITUD PRESENTADA EN EL PAÍS DE LA CONVENCION, DATOS DE LA SOLICITUD DE LA CONVENCION					
País	Numero de solicitud	Fecha de presentación	Nombre del solicitante	Título de la invención	IPC (como clasificado en el país de la convención)
9. EN CASO DE SOLICITUD PCT, DATOS DE LA SOLICITUD INTERNACIONAL PRESENTADA BAJO EL TRATADO DE COOPERACION DE PATENTES (PCT)					
Numero de solicitud internacional			Fecha de presentación internacional		
10. EN CASO DE UNA SOLICITUD DIVISIONAL PRESENTADA BAJO LA SECCION 16, DATOS DE LA SOLICITUD ORIGINAL (PRIMERA) SOLICITUD ORIGINAL (PRIMERA)					
No. de solicitud original (primera)			Fecha de presentación de solicitud original (primera)		
11. EN CASO DE PATENTE ADICIONAL PRESENTADA DE CONFORMIDAD CON LA SECCION 54, DATOS DE LA PRINCIPAL SOLICITUD O PATENTE					
No. de patente/solicitud principal			Fecha de presentación de solicitud principal		
Nulo			Nulo		
12. DECLARACIONES					

(i) Declaración del inventor (es)

(En caso de que el solicitante sea un cesionario: el inventor(es) puede firmar el presente a continuación o el solicitante puede cargar la cesión o adjuntar la cesión a esta solicitud de patente o enviar la cesión por correo postal/transmisión electrónica debidamente autenticada dentro del período prescrito).

Yo / nosotros, los inventores arriba mencionados, somos los verdaderos y primeros inventores de esta Invención y declaramos que los solicitantes en este documento son cesionarios o representantes legales.

(a) Fecha:

(b) Firma (s)

(c) Nombre (s) **RAJENDRAN PADALINGAM**

(a) Fecha:

(b) Firma (s)

(c) Nombre (s) **THANGAVEL DEEPAN**

(a) Fecha:

(b) Firma (s)

(c) Nombre (s) **VAIDHEESWARAN RAMESH**

(a) Fecha:

(b) Firma (s)

(c) Nombre (s) **KARNAM VENKATA MANGA RAJU**

(ii) Declaración del solicitante(s) en el país de convención

(En caso de que el solicitante en India es diferente al solicitante en el país de convención: el inventor en el país de convención puede firmar el presente a continuación o el solicitante en India puede cargar la cesión del solicitante en el país de convención o adjuntar dicha cesión con esta solicitud o enviar la cesión por correo postal/transmisión electrónica debidamente autenticada dentro del período prescrito).

Yo / nosotros, los solicitantes en el país de convención declaramos que el solicitante en este documento es/es mi/nuestro cesionario o representante legal

(a) Fecha:

(b) Firma (s)

(c) Nombre (s) del firmante

(iii) Declaración del solicitante (s)

☒ Yo / nosotros, el (los) solicitante (s) por la presente declaramos que:

☒ Estoy / Estamos en posesión de la invención mencionada anteriormente.

☒ La descripción ~~provisional~~ / completa relacionada con la invención se presenta con esta solicitud.

☒ La invención, tal como se describe en la descripción, utiliza material biológico de la India y yo o nosotros presentaremos el permiso necesario de la autoridad competente antes de otorgarnos la patente.

- ☒ No hay motivo legal de objeción (es) a la concesión de la Patente para mí / nosotros.
- ☒ Somos los verdaderos y primeros inventores.
- ☒ Soy el cesionario o representante legal de los verdaderos y primeros inventores.
- ☒ La solicitud o cada una de las solicitudes, cuyos detalles se dan en el párrafo 8, fue la primera solicitud en el país o países de la convención con respecto a mí / nuestra invención (es).
- ☒ Reclamamos la prioridad de las solicitudes mencionadas anteriormente presentadas en el país / países de la convención y declaramos que no se ha presentado ninguna solicitud de protección con respecto a la invención en un país de la convención antes de esa fecha por mí / nosotros o por cualquier persona de donde yo / nosotros derivamos el título.
- ☒ Nuestra solicitud en la India se basa en una solicitud internacional en virtud del Tratado de Cooperación en materia de Patentes (PCT), como se menciona en el párrafo 9.
- ☒ La solicitud está separada de mi / nuestra solicitud, cuyos detalles se dan en el Párrafo 10 y además, esta solicitud puede ser tratada como si se considerara presentada el DD / MM / YYYY bajo la sección 16 de la Ley.
- ☒ Dicha invención es una mejora o modificación de los detalles de la invención que se dan en el párrafo 11.

13. LOS SIGUIENTES SON LOS ADJUNTOS CON LA SOLICITUD

(a) Forma 2

Item	Detalles	Tasa	Anotaciones
# Descripción Completa/ ~~provisional~~	No. de páginas - 15		
No. de Reivindicaciones	No. de reivindicaciones - 15 y No. de páginas - 5		
Resumen	No. de páginas - 1		
No. de figuras	No. de figuras - 9 y No. de páginas - 9		

En caso de una descripción completa, si el solicitante desea adoptar los dibujos llenos con su descripción provisional como dibujos o parte de los dibujos para la descripción completa bajo la regla 13 (4), se requiere el número de dichas páginas llenas con la descripción provisional. ser mencionado aquí.

~~(b) una descripción completa en confirmación con la solicitud internacional enmendada antes de que la Autoridad de examen preliminar internacional (IPEA) sea aplicable (2 copias).~~

~~(c) listado de secuencias en formato electrónico~~

~~(d) dibujos en confirmación con la solicitud internacional enmendada ante la autoridad de examen preliminar internacional (IPEA) según corresponda (2 copias)~~

~~(e) Los documentos de prioridad se solicitan para recuperar los documentos de prioridad del DAS (Servicio de acceso digital) si el solicitante ya había solicitado a la oficina de primera presentación que los documentos de prioridad estén disponibles para el DAS.~~

~~(f) Traducción de documento de prioridad / especificación / Informe de búsqueda internacional / Informe preliminar internacional sobre patentabilidad~~

(g) Declaración y cumplimiento en el formulario 3

(h) Declaración de inventor en el formulario 5

(i) Poder de autoridad

Tarifa total.....se está pagando a través del modo de pago en línea

Por la presente declaramos que, nuestro leal saber y entender, información y creencia, el hecho y los asuntos aquí descritos son correctos y solicitamos que se nos conceda una patente para dicha invención.

Con fecha este día 1 de julio de 2021

TVS MOTOR COMPANY LIMITED

Por su agente y abogado

FIRMA

(Nikhil Ranjan)

De Khaitan & Co

Reg No IN/PA-1471

A,

El controlador de patentes

La oficina de patentes de Chennai

Nota:

- Repetir casillas en caso de más de una entrada.
- Debe ser firmado por el solicitante o los solicitantes o por un agente de patentes registrado autorizado de lo contrario se mencionó.
- Marque (✓)/cruz (x) a lo que corresponda/no corresponda en la declaración del párrafo 12.
- El nombre del inventor y del solicitante debe indicarse en su totalidad, el apellido al principio.
- Táchese la parte que no corresponda.
- Tarifa: consulte el primer programa

REIVINDICACIONES

1. Un ensamble de entrada de combustible (200) para un vehículo tipo silla de montar (10), que comprende:

una brida de entrada de combustible (210) que tiene una entrada de combustible (212) para recibir combustible de una fuente externa;

un primer tubo de entrada (230) unido a la brida de entrada de combustible (210) en un primer extremo (230A), que se extiende al menos hacia abajo desde la brida de entrada de combustible (210); y

un segundo tubo de entrada (240) que se extiende al menos hacia abajo desde el primer tubo de entrada (230), teniendo el segundo tubo de entrada (240) un extremo de entrada (240A) y un extremo de salida (240B), el extremo de entrada (240A) de la segunda tubería de entrada (240) está unida de manera desmontable a un segundo extremo (230B) de la primera tubería de entrada (230), y el extremo de salida (240B) de la segunda tubería de entrada (240) está conectado a un tanque de combustible (250), suministrando así combustible recibido en la brida de entrada de combustible (210) al tanque de combustible (250).

2. El ensamble de entrada de combustible (200) según la reivindicación 1, en el que la brida de entrada de combustible (210) se proporciona integralmente con el primer tubo de entrada (230).

3. El ensamble de entrada de combustible (250) según la reivindicación 1, en el que el tanque de combustible (250) está dispuesto debajo de un suelo (155) del vehículo tipo silla de montar (10).
4. El ensamble de entrada de combustible (200) según la reivindicación 1, en el que la brida de entrada de combustible (210) se proporciona en un panel trasero (160E) del vehículo tipo silla de montar (10).
5. El ensamble de entrada de combustible (200) según la reivindicación 1, en el que la brida de entrada de combustible (210) comprende un pico de ventilación (214) conectado al tanque de combustible (250) a través de un tubo de ventilación (216) para aliviar el aire acumulado en el interior del tanque de combustible (250) durante el reabastecimiento de combustible.
6. El ensamble de entrada de combustible (200) según la reivindicación 4, en el que el pico de ventilación (214) se proporciona debajo de la entrada de combustible (212), de modo que el pico de ventilación (214) sobresale normal a un eje central (X-X ') de la entrada de combustible (212).
7. El ensamble de entrada de combustible (200) según la reivindicación 1, en el que la brida de entrada de combustible (210) comprende una parte receptora (218) que rodea la entrada de combustible (212) para recibir el exceso de combustible derramado desde la entrada de combustible (212).
8. El ensamble de entrada de combustible (200) según la reivindicación 6, en el que la brida de entrada de combustible (210) comprende un pico de drenaje (220) conectado a un tubo

de drenaje (222), el tubo de drenaje (222) está abierto en un extremo, para drenar cualquier derrame de exceso de combustible de la entrada de combustible (212) recogido en la parte receptora (218).

9. El ensamble de entrada de combustible (200) según la reivindicación 1, que comprende además una tapa de combustible (224) para cubrir la entrada de combustible (212), estando la tapa de combustible (224) apoyada en la brida de entrada de combustible (210).

10. El ensamble de entrada de combustible (200) según la reivindicación 1, en el que el primer tubo de entrada (230) comprende una brida de montaje (232) para montar un cartucho (260) para el vehículo tipo silla de montar (10).

11. El ensamble de entrada de combustible (200) según la reivindicación 4 ó 7, en el que el primer tubo de entrada (230) comprende una parte de guía (234) para enrutar el tubo de ventilación (216) y el tubo de drenaje (222) en una orientación sustancialmente vertical.

12. El ensamble de entrada de combustible (200) según la reivindicación 1, en el que la suma del volumen del primer tubo de entrada (230) y el volumen del segundo tubo de entrada (240) es al menos el 5% del volumen del tanque de combustible (250).

13. Un vehículo tipo silla de montar (10), que comprende:

un tubo colector (105A);

un tubo principal (105B) que tiene una primera parte (105B') que se extiende hacia atrás y hacia abajo desde el tubo de dirección (105A);

un piso del vehículo (155) que se extiende hacia atrás desde un extremo trasero de la primera porción (105B') del tubo principal (105B);

un tanque de combustible (250) dispuesto debajo del piso (155); y

un ensamble de entrada de combustible (200) que tiene una brida de entrada de combustible (210) con una entrada de combustible (212) para recibir combustible de una fuente externa, una primera tubería de entrada (230) unida a la brida de entrada de combustible (210) en un primer extremo (230A), el primer tubo de entrada (230) que se extiende al menos hacia abajo desde la brida de entrada de combustible (210), y un segundo tubo de entrada (240) que se extiende al menos hacia abajo desde el primer tubo de entrada (230), el segundo tubo de entrada (240) que tiene un extremo de entrada (240A) y un extremo de salida (240B), estando el extremo de entrada (240A) del segundo tubo de entrada (240) unido de forma desmontable a un segundo extremo (230B) del primer tubo de entrada (230), y el extremo de salida (240B) del segundo tubo de entrada (240) estando conectado al tanque de combustible (250), suministrando así el combustible recibido en la brida de entrada de combustible (210) al tanque de combustible (250).

14. El vehículo tipo silla de montar (10) según la reivindicación 13, que comprende un panel frontal (160A) dispuesto hacia delante del tubo de delantero (105A) en una dirección delantera-trasera del vehículo y un panel trasero (160E) dispuesto hacia atrás del tubo principal (105B) en la dirección delantera-trasera del vehículo, el panel trasero (160E) configurado para definir un espacio entre ellos con el panel frontal (160A) de tal manera que el ensamble de entrada de combustible (200) está dispuesto en el espacio definido por el panel frontal (160A) y el panel trasero (160E) entre ellos.

15. El vehículo tipo silla de montar (10) según la reivindicación 13, en el que la brida de entrada de combustible (210) del ensamble de entrada de combustible (200) se proporciona en el panel trasero (160E).