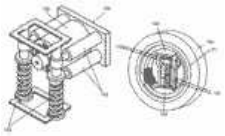
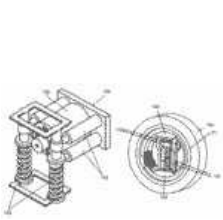
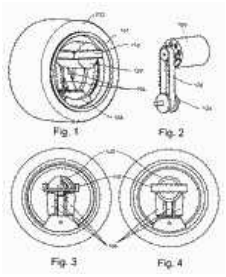
691 results for ((vehicle or car)/TI/AB/IW/CLMS/DESC/ODES/OBJ/ADB/ICLM/KEYW/TX AND (fold+)/TI/AB/IW/TX/CLMS/DESC/ODES/OBJ/ADB/ICLM/KEYW AND (pulley)/TI/AB/IW/CLMS/DESC/ODES/OBJ/ADB/ICLM/KEYW/TX AND (motor)/TI/AB/IW/CLMS/DESC/ODES/OBJ/ADB/ICLM/KEYW/TX AND (battery)/TI/AB/IW/CLMS/DESC/ODES/OBJ/ADB/ICLM/KEYW/TX) AND (B60K)/IPC - Collection: FAMPAT

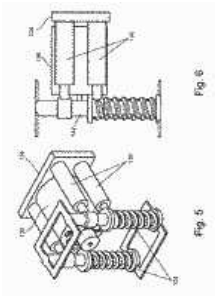
#	Title	Publication number	1st app. date	Applicant/Assignee	1st publ. date	Publ. date
101.	Autonomous modular **vehicle** wheel assembly	US20060012144	2005-06-15	MIT - MASSACHUSETTS INSTITUTE OF TECHNOLOGY*	2006-01-19	2006-01-19

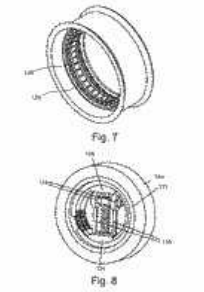
An autonomous modular wheel assembly includes at least one connector for connecting the wheel control assembly to a **vehicle** axle, one or more suspension arms that support the assembly with respect to the axle, an electric drive **motor** connected to a the **vehicle** wheel, a steering bearing, and a steering actuator. The electric drive **motor** and steering bearing control the operation of the **vehicle** wheel in response to commands received via the actuator. The connector has one or more electrical connection points for providing power and information to the wheel assembly. The robot wheel increases the **vehicle** steering range to up to 150 degrees and enables new **vehicle** drive modes. The traditional +/−30 degrees of front wheel steering are enabled, as well as at least three new drive modes: four wheel parallel and converse steering, spin on spot steering, and 90 degree sideways motion.

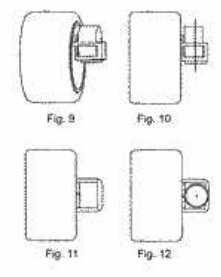


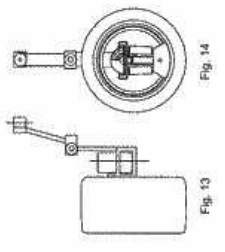


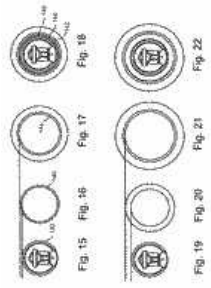


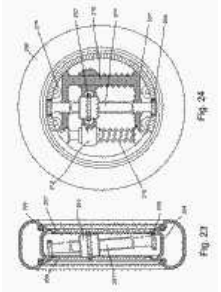


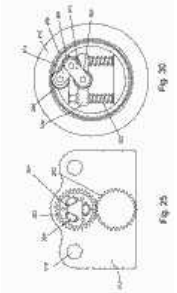


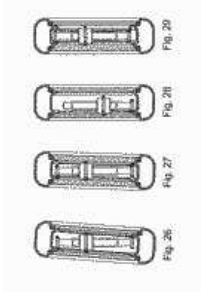






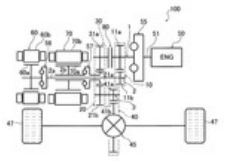


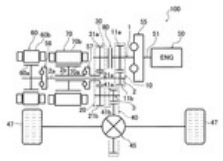




102.	Driving device for hybrid **vehicle**	WO2012108357	2012-02-03	HONDA **MOTOR***	2012-08-16	2012-08-16

The present invention avoids the occurrence of resonance in driving force transmission paths to prevent or effectively suppress **vehicle** body vibration due to the resonance. A driving device for a hybrid **vehicle** comprises an engine (50), a first **motor** (60) capable of generating electric power by the driving force of the engine (50), a second **motor** (70) capable of supplying driving force to driving wheels (47), a first driving force transmission path (T1) for transmitting the driving force of the engine (50) to the driving wheels (47), a second driving force transmission path (T2) for transmitting driving force between the first **motor** (60) and the engine (50), and a third driving force transmission path (T3) for transmitting the driving force of the second **motor** (70) to the driving wheels (47), and is provided with, in addition to a first damper (55) capable of accommodating torque fluctuations in the first driving force transmission path (T1), a second damper (56) capable of accommodating torque fluctuations in the second driving force transmission path (T2) and a third damper (57) capable of accommodating torque fluctuations in the third driving force transmission path (T3).





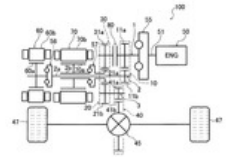


FIG.1

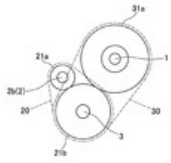


FIG.2

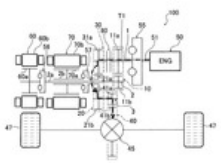


FIG.3

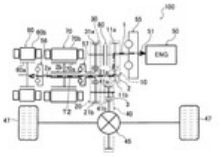


FIG.4

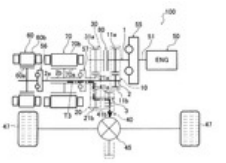


FIG.5

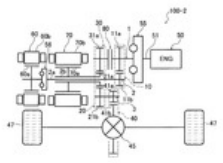


FIG.6

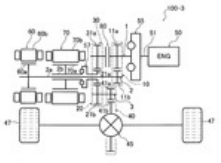


FIG.7

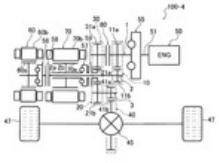


FIG.8

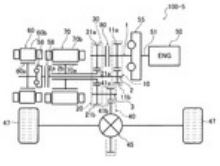
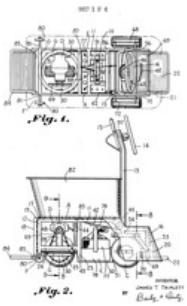
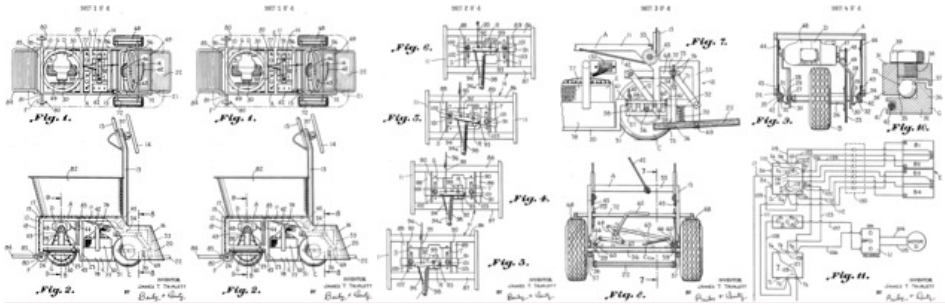


FIG.9

103.	Electric **vehicle**	DE1923341	1968-05-07	CHAVIS* TRIPLETT JAMES TRIPLETT JAMES THOMAS	1969-11-20	1969-11-20

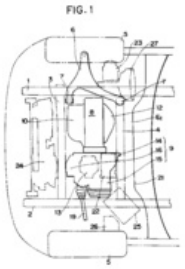
An electric **vehicle** capable of maneuvering in restricted areas through the use of a single steerable drive wheel mounted on a circular bearing assembly, which has a groove therein for receiving a cable so that by pulling the cable the steering wheel can be rotated. The electric **vehicle** has outwardly extending stabilizing members mounted on the frame adjacent the steering wheel so as to prevent the **vehicle** from turning over when such is cut too sharply. The **vehicle** is driven by an electric **motor** which is powered by a DC **battery** having a plurality of cells. A switching circuit is provided for sequentially converting a parallel connection of the cells to a series connection so as to vary the voltage supplied to the **motor** by simple manipulation of a single handle. The **battery** is carried within a pack so that such can be removed from the **vehicle**, and another **battery** pack substituted therefor, while such is being charged. Positioned adjacent the rear of the **vehicle** is a pivotal platform upon which the operator stands while driving the **vehicle**. A braking shoe is coupled to the pivotal platform so that when the operator shifts his weight forward on the platform such engages a wheel, stopping the **vehicle**. However, if the operator shifts his weight to the rear, the braking shoe will be raised off the wheel permitting the **vehicle** to move. The position of the rear axle of the **vehicle** can be readily adjusted by merely manipulating a locking mechanism and shifting the axle to the desired position.

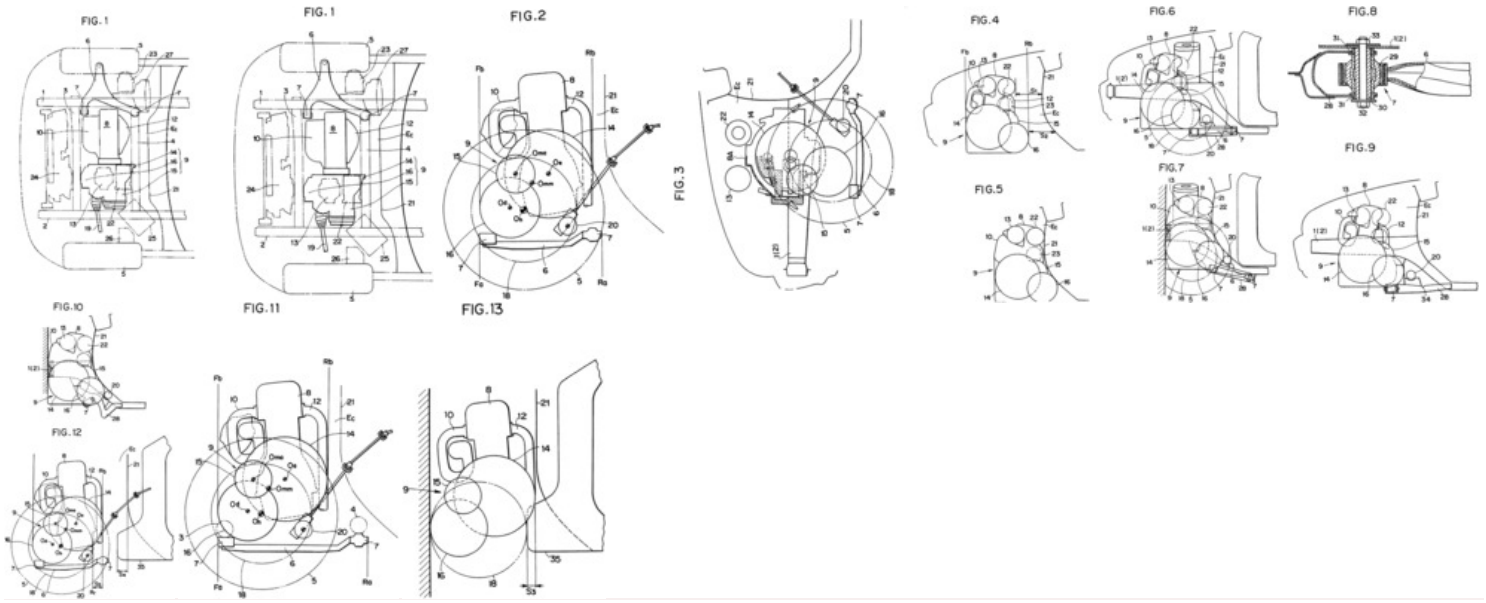




104.	Layout structure for a power train for a **vehicle**	WO9618516	1994-12-14	TOYOTA **MOTOR***	1996-06-20	1996-06-20

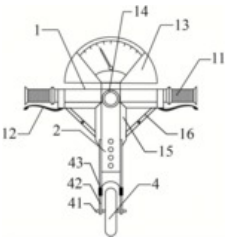
A layout structure for a power train for a **vehicle** in which an engine and a transaxle for transmitting a driving force outputted from the engine to front axles are disposed in an engine compartment on a front side of the **vehicle** with their axes being oriented transversely of the **vehicle**, and in which lower arms for supporting front wheels are each supported at two points in a longitudinal direction of the **vehicle**, said layout structure being characterized in that a longitudinal front-most point of a rigid body consisting of the engine and the transaxle substantially coincides with a longitudinal front-most points of the lower arms and that a longitudinal rear-most point of the rigid body consisting of the engine and the transaxle substantially coincides with longitudinal rear-most points of the lower arms, whereby it is possible to make the engine compartment shorter while keeping a sufficient crush stroke for a FF **vehicle**. <IMAGE>

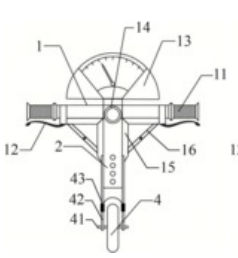


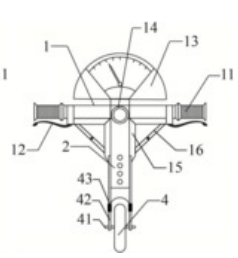


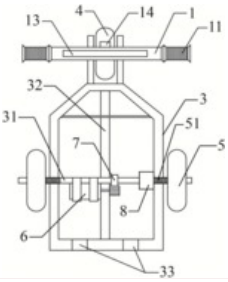
105. Light environment-friendly intelligent scooter CN106005127 2016-07-13 TIANJIN JUSHENG LONGZHUANGYUAN TECHNOLOGY* 2016-10-12 2016-10-12

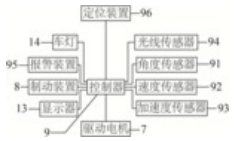
The invention provides a light environment-friendly intelligent scooter which comprises a base and a T-shaped handle moveably connected with the base through an expansion link, wherein a display is arranged at the center of the top of the T-shaped handle; accommodating slots are formed in the two sides of a vertical beam of the T-shaped handle; a supporting frame is arranged in the accommodating slots; the two ends of the supporting frame are fixedly connected with a horizontal beam and a vertical beam of the T-shaped handle; the vertical beam of the T-shaped handle is moveably connected with the horizontal beams on the two sides; a front wheel, a lithium **battery**, two rear wheels, a braking device and a driving **motor** are mounted on the base; two grooves are symmetrically formed at the rear end of the base along the central longitudinal shaft; a controller is arranged in the display; the controller is connected with an angle sensor, a speed sensor, an acceleration sensor and a light sensor; the display, the **vehicle** lamp, the driving **motor** and the braking device are all electrically connected with the controller; the light environment-friendly intelligent scooter is **foldable**, has the functions of reminding excessive speed and reducing speed, is slight in structure and is convenient and safe in use.





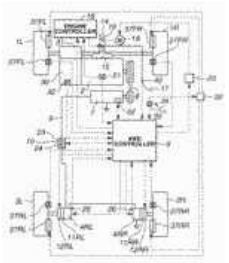


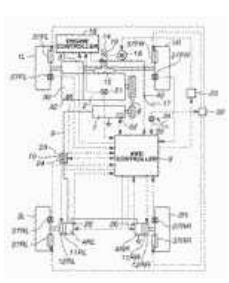


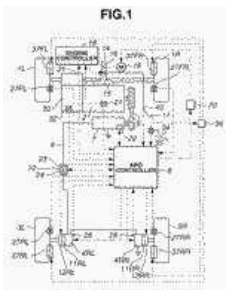


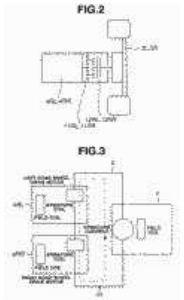
106. Drive controlling apparatus and method for automotive **vehicle** CN1535861 2003-04-10 NISSAN **MOTOR*** 2004-10-13 2004-10-13

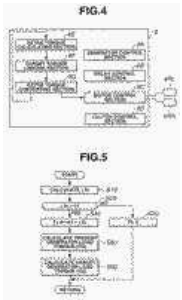
A drive controlling apparatus and method for an automotive **vehicle**, at least one couple of road wheels constitutes one pair of parallel road wheels (1L,1R) with respect to a vehicular width direction, a plurality of motors (4FL,4FR) driving independently and separately each road wheel of the pair of parallel road wheels are provided, and a power supply (7) supplies electric power to the plurality of motors, the plurality of motors driving respective road wheels of the pair of parallel road wheels being enabled to constitute a serial circuit with respect to the power supply.

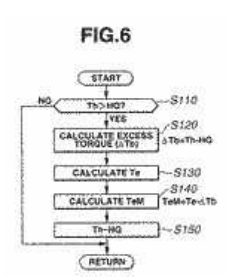


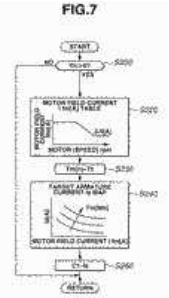


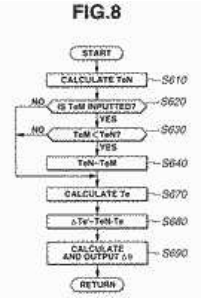


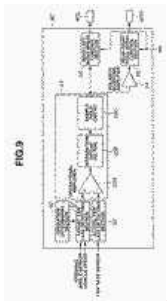


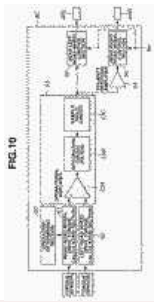


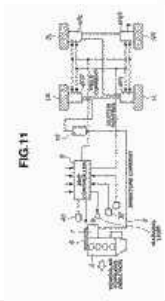




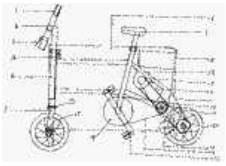




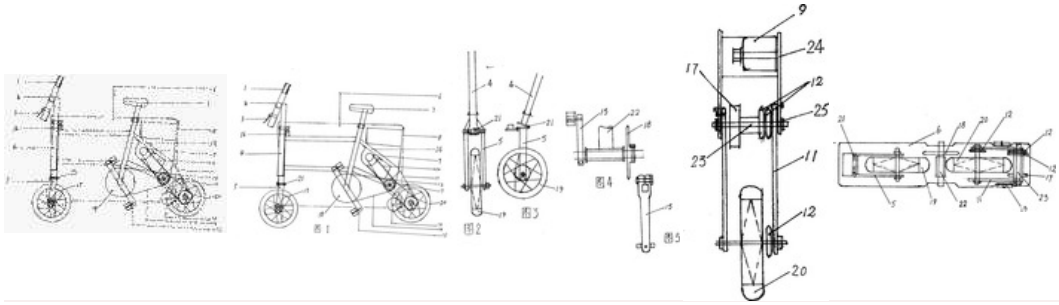




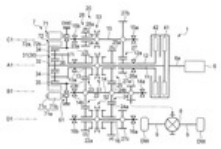
107. Box type **folding** electric and foot two purpose bicycle CN2512694 2001-12-13 CHEN ZHAOLI 2002-09-25 2002-09-25



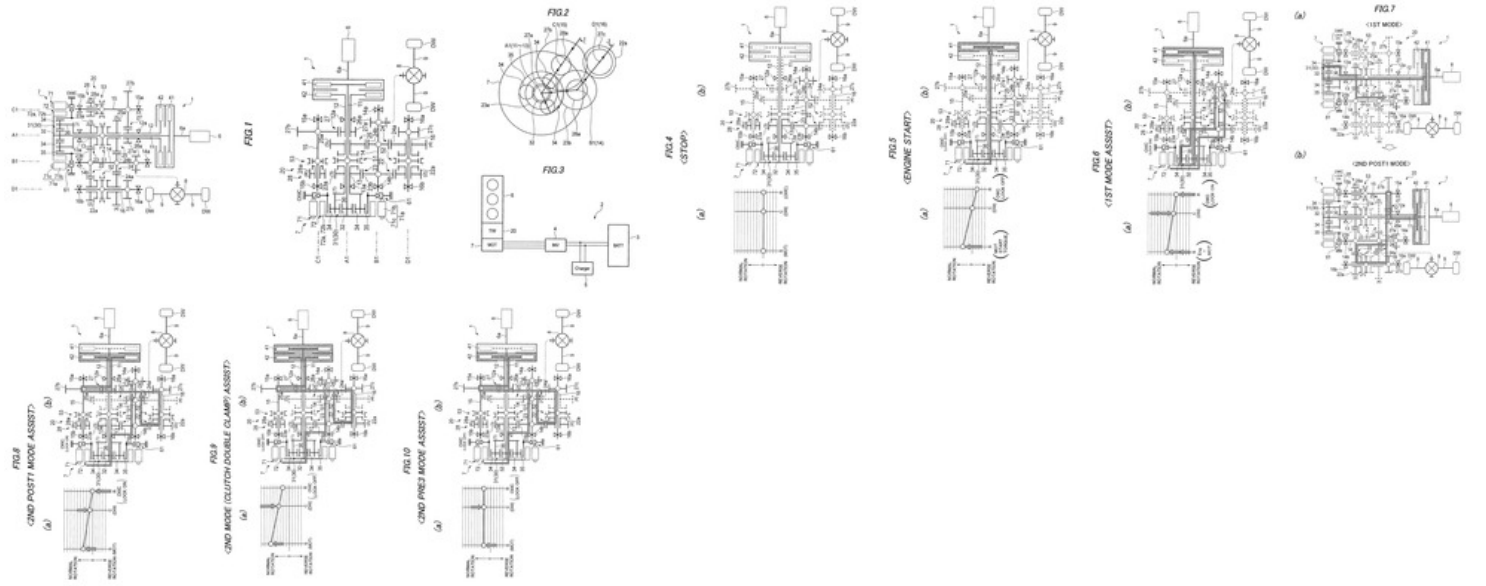
The utility model relates to a box type **folding** electric and foot double function bicycle, pertaining to traffic tool. The utility model is characterized in that a hinge(21) is arranged between the triangle rack(4) and the front wheel bracket(5) on the structure base of the original electric and foot double function bicycle so as to make the front wheel(19) just can bend backwards; the rear wheel bracket is divided into an upper bracket(24) and a lower bracket(11), and a hinge(25) is arranged between the upper and the lower brackets; the two ends of the rear wheel bracket shaft(23) and the lower bracket(11) are provided with inverse L-shaped blocking heads so as to make the rear wheel just can bend frontward; the middle part of the bicycle is provided with a case(6), the bottom of the case has an opening for containing the triangle rack(4), the front wheel bracket(5), the front wheel(19), the main frame(22), the upper bracket(24) and the lower bracket(11) of the rear wheel, the rear wheel(20), the chain wheel(18) and the storage **battery**(8); the bottom of the case(6) is still provided with a movable baffle; and the two sides of the rear part at the bottom of the case(6) are provided with road wheels(13). The two wheels of the bicycle both can be **folded** to placed in the case; the utility model has advantages of convenient storing and small occupying area as well as preventing from being stolen.



108. Power transmission apparatus for hybrid **vehicle** WO2010101296 2010-03-02 HONDA **MOTOR*** 2010-09-10 2010-09-10

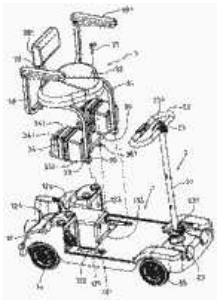


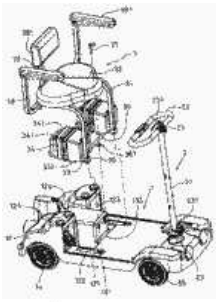
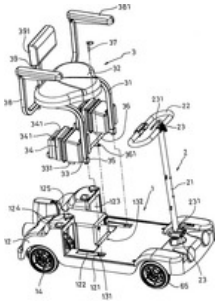
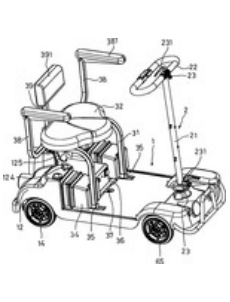
A power transmission apparatus 1 for a hybrid **vehicle** having an engine 6 and a **motor** 7 is provided with a planetary gear mechanism 31 configured to differentially rotate a sun gear 32, a carrier 36, and a ring gear 35. The sun gear 32 is connected to one of a first input shaft and a second input shaft and to the **motor** 7. The ring gear 35 is connected to a lock mechanism capable of stopping a rotation state. The carrier 36 is configured to transmit power to a counter shaft 14. The other of the first input shaft and the second input shaft is configured to transmit power to the counter shaft 14 without passing through the planetary gear mechanism 31.

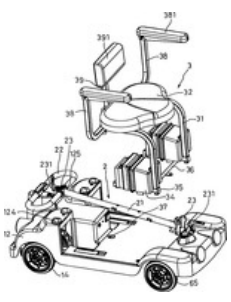
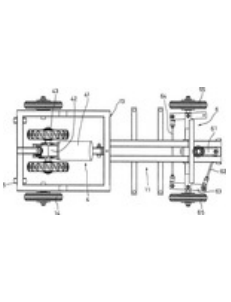
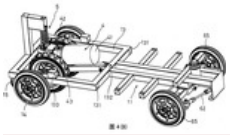


109. Combined portable **motor**-driven bicycle CN2552798 2002-04-22 LIN ZHENGJIAN;XIE ZHIQIN;ZHU WENQING 2003-05-28 2003-05-28

The utility model relates to a combined type portable electric **motor car**, which is characterized in that a chasis and a cover form the **car** body, a plurality of guided grooves are arranged on both sides of the **car** body, a plurality of combined parts are separately arranged in the guided grooves, the rear covers of the guided grooves can be formed respectively into a chamber; a seat cushion is arranged on two seat frame tops which are corresponding to the distance of two guided grooves of the seat part, a cross bar is separately connected with the bottom for the location of storage **battery** and a buckle part is arranged on the end; the cross bar is arranged in the guided groove to make the buckle part inserting in combined part for location, the storage **battery** is arranged in the chamber and connected with the circuit, thus,, the seat part can be rapidly combined with or disconnected from the **car** body.

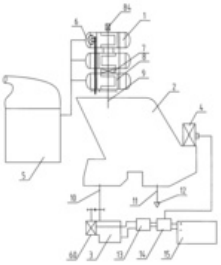


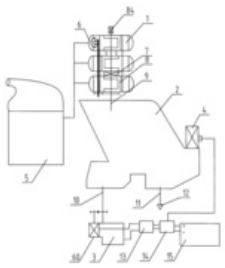
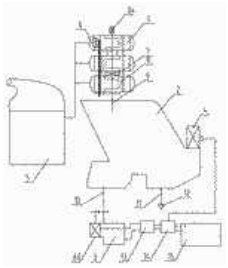
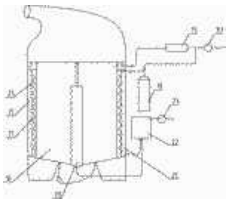
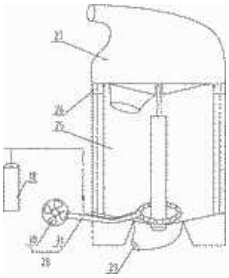
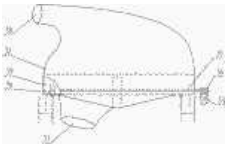
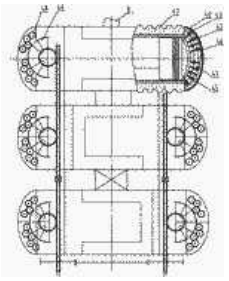
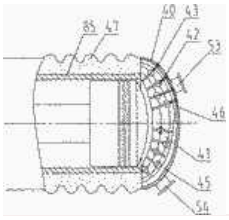
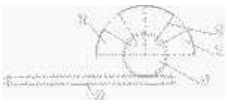
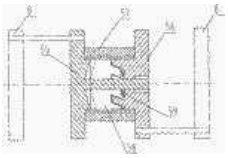
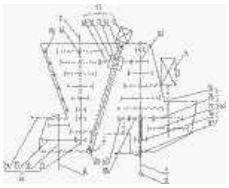




110. Oil-gas blended fuel hybrid power system CN201721311 2010-05-07 TIAN XIAOHONG 2011-01-26 2011-01-26

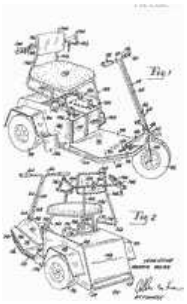
The utility model relates to an oil-gas blended fuel hybrid power system, which comprises an engine, a speed changing box, an electric generator and a **motor**, and is characterized in that an oil-gas mixing device is arranged in front of the engine; the oil-gas mixing device is connected with an engine piston cylinder provided with a gas distribution mechanism; a crank shaft provided with a rest cylinder clutch is connected with an input shaft of the speed changing box; an output shaft I of the speed changing box is connected with the electric generator, and an output shaft II of the speed changing box is connected with an automobile transmission system; one side of the speed changing box is provided with the **motor**; and the output of the electric generator is respectively connected with the **motor** and a storage **battery** by a voltage regulator and an electric power switching controller. The utility model has the beneficial effects that green oil-gas blended fuel is used for providing power for the engine, the engine and the **motor** are used for driving the automobile transmission system at the same time, the **motor** also can independently provide torque for the automobile transmission system, and the hybrid power system is provided with an electrolytic cell which can generate hydrogen taken as the fuel of the engine, so that the combustion speed of a combustion point is accelerated, the pollution of the tail gas of automobiles for the environment can be reduced, and the energy utilization rate is improved.

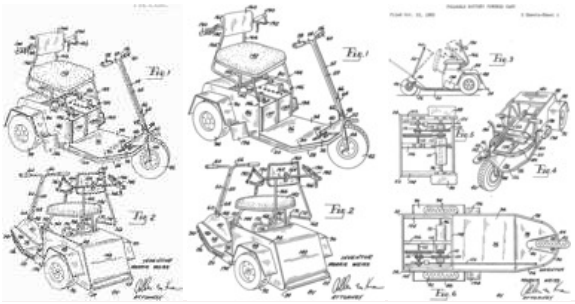


111. **Foldable battery** powered cart US3369629 1965-10-23 FORE **MOTOR** CART* 1968-02-20 1968-02-20

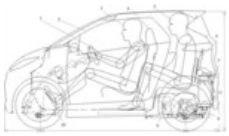
No abstract available

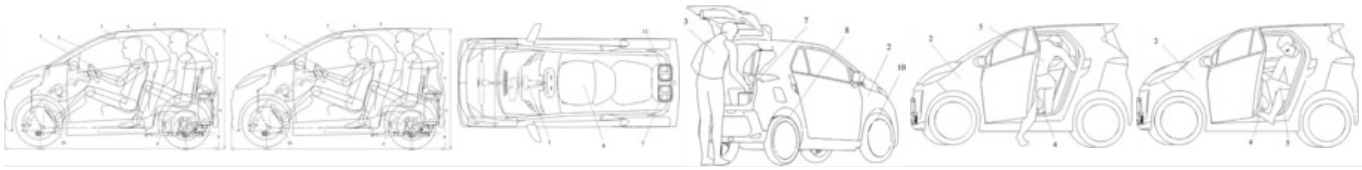




112. Electric **vehicle** CN206277931 2016-11-16 BEIJING CHEHEJIA INFORMATION TECHNOLOGY* 2017-06-27 2017-06-27

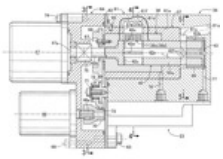
The utility model relates to a **vehicle** field particularly, relates to an electric **vehicle**, include: the automobile body is provided with a front seat and a back row seat on, the portable **battery** combination, detachably sets up at tail portion of the **vehicle** body, the utility model provides an electric **vehicle**, each seat around being provided with on the automobile body makes inside at most only can hold two people, simultaneously, through adopting the portable **battery** combination conduct energy, avoided the installation design position of engine, through the design that reduces the trunk, it lands to show has reduced the length of wagon, greatly reduces electric **vehicle**'s volume, and the electric **vehicle** of being convenient for shuttles back and forth in the congested road in city, and simultaneously small and exquisite volume makes the parking become more convenient, can park four these products on a mark accurate halt parking stall, has reduced the demand of parking position greatly, has improved the competitiveness of product.

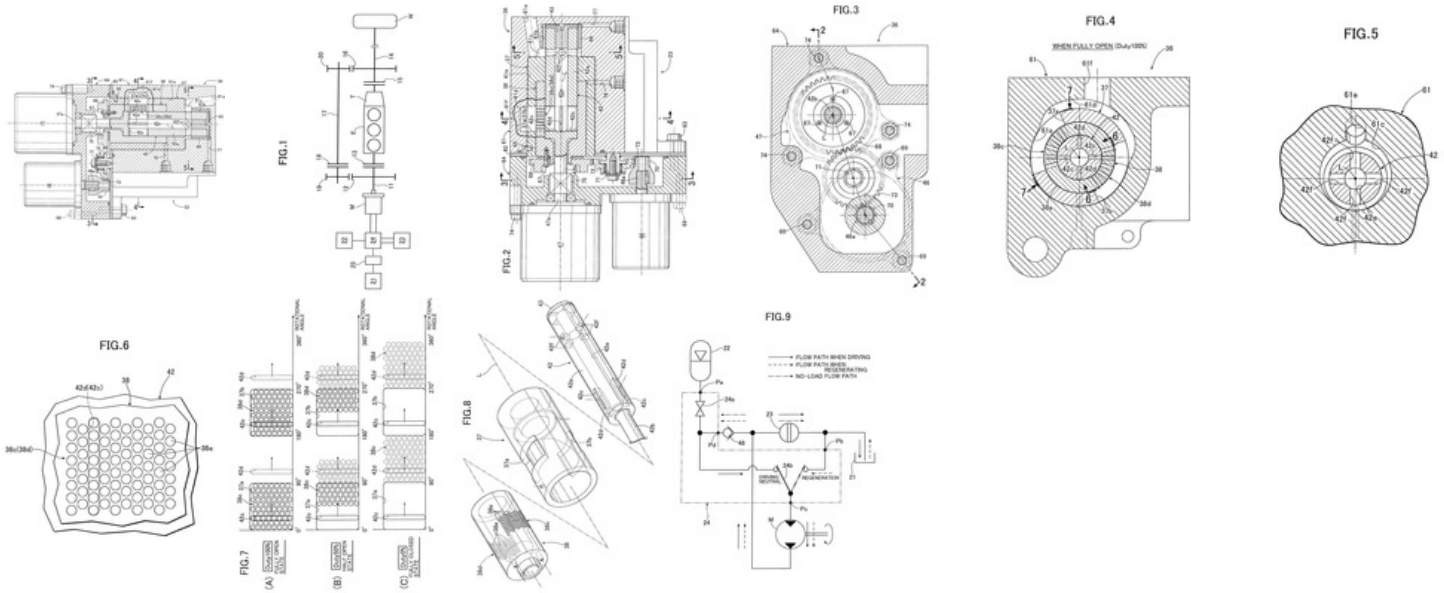




113. Liquid pressure circuit WO2011040550 2010-09-30 HONDA **MOTOR*** 2011-04-07 2011-04-07

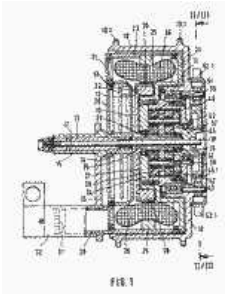
If a shutoff valve (24a) is opened, resulting in an accumulator (22) being connected to a high pressure liquid path (Lh), and if a sucked liquid path (Li) is connected to the high pressure liquid path (Lh) by means of a selector valve (24b), then a pump **motor** (M) can be operated as a **motor** by means of liquid accumulated in the accumulator (22). If the shutoff valve (24a) is opened, resulting in the accumulator (22) being connected to the high pressure liquid path (Lh), and if the sucked liquid path (Li) is connected to a low pressure liquid path (Ll) by means of the selector valve (24b), then the pump **motor** (M) can be operated as a pump, with the result that liquid in a tank (21) can be accumulated in the accumulator (22). If the shutoff valve (24a) is closed, and if the low pressure liquid path (Ll) is connected to the high pressure liquid path (Lh) by means of the selector valve (24b), then a pump **motor** (M) can be rotated under no load. Consequently, under a simple configuration with a small number of parts, it is possible to make changeovers among three circuits, namely, a drive circuit (for **motor** operation), a regeneration circuit (for pump operation), and a neutral circuit (for no-load operation).

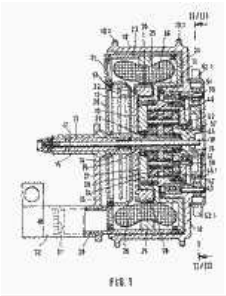


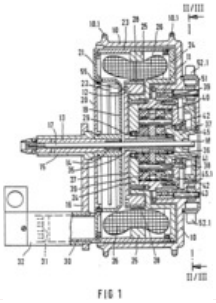


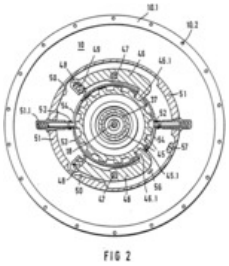
114.	Small-sized **vehicle**, in particular wheel chair with **foldable** chair frame.	BRPI9203133	1991-08-17	ALBER HAUSTECHNIK APPARATEBAU HAAS HAAS & ALBER HAUSTECHNIK & A HAAS & ALBER HAUSTECHNIK & APPARATEBAU 7470 ALBSTADT HAAS & ALBERT HAUSTECHNIK ULRICH ALBER*	1992-09-15	1992-09-15

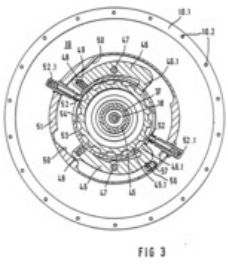
In the small-sized **vehicle**, in particular wheel chair, fitted with motors in the wheel hub, the entire drive part comprising a D.C. **motor** and a planet wheel gear is housed without any projecting end within the wheel hub (10). This permits the driven wheels to be designed as removable plug-on wheels. Between the hub and the planet wheel gear there is formed a coupling (45, 46) which can be easily operated by a wheel chair driver and which also permits free, manually operated movement of the running wheels. The invention permits wheel chairs which have a **foldable** chair frame and can be dismantled for transportation to be provided even subsequently with an electric **motor** drive. …<IMAGE>…

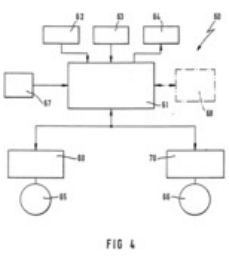


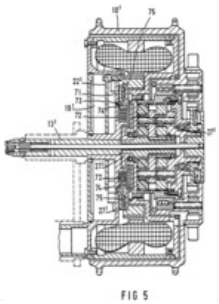






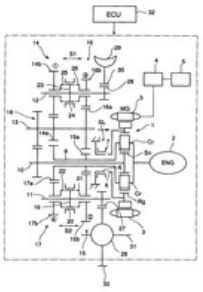


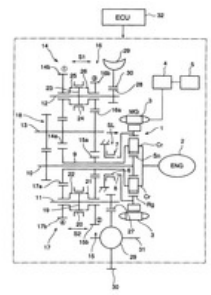


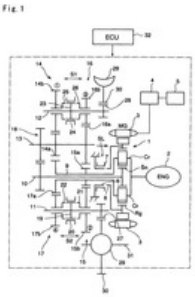


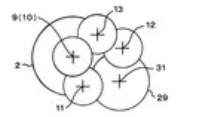
115.	Vehicular power transmission system	WO2008156193	2007-06-19	TOYOTA **MOTOR***	2008-12-24	2008-12-24

To provide a power transmission unit, which is capable of reducing a power loss, and which is downsized to be mounted on a **vehicle** easily. A power transmission unit according to the present invention comprising: a first prime mover 2; speed change gear pairs 14 to 17; output members 11 and 12; a differential mechanism 1, which has a first rotary element Cr connected with the first prime mover 2, a second rotary element Rg, and a third rotary element Sn selectively outputting the power to the output member, and which is adapted to perform a differential action among those three rotary elements; and a second prime mover 3 connected with the second rotary element; wherein the speed change gear pair includes at lease one pair of first speed change gear pair, which is arranged between the first rotary element and the output member and which is allowed to transmit the torque selectively, and at least one pair of second speed change gear pair which is arranged between the third rotary element and the output member and which is allowed to transmit the torque selectively; and a locking mechanism SL for locking the second prime mover selectively to halt a rotation of the second prime mover.

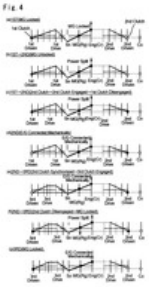


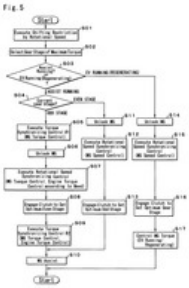


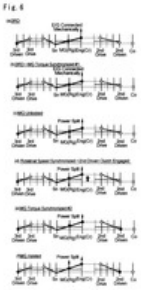


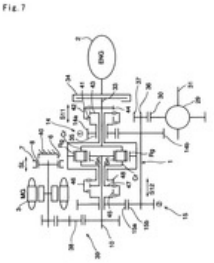


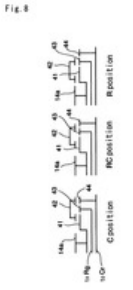
	S1	S2	SL
1st	①	×	×→○
2nd	×	②	×
3rd	③	×	○
4th	×	④	×

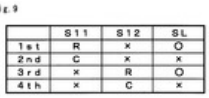




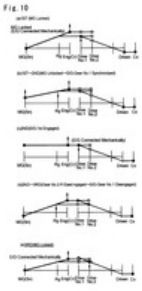






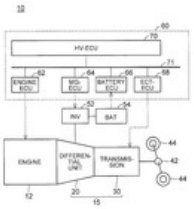


	S11	S12	SL
1st	R	×	○
2nd	C	×	×
3rd	×	R	○
4th	×	C	×



116. **Vehicle** BR102016018845 2015-08-18 TOYOTA **MOTOR*** 2016-08-30 2016-08-30

A **vehicle** includes an engine (12), a first **motor** generator (MG1), a second **motor** generator (MG2), a transmission (30), a differential device (20), and an electronic control unit (64, 68, 70). The transmission includes an input shaft, an output shaft, and a clutch. The electronic control unit is configured to detect a rotation speed difference between the input shaft and the output shaft when the clutch is controlled so as to be brought into a power transmission shut-off state. The electronic control unit is configured to, when the rotation speed difference detected by the electronic control unit is smaller than a predetermined rotation speed difference (±) between the input shaft and the output shaft in a case where the power transmission shut-off state of the clutch is established, inhibit the cranking of the engine using the first **motor** generator (MG1) and to, when the power transmission shut-off state is established, provoke the cranking of the engine using the first **motor** generator (MG1).



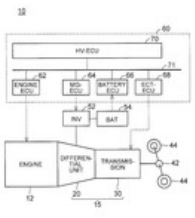


FIG. 1

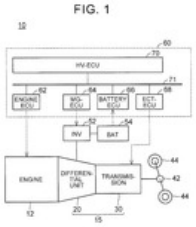


FIG. 2

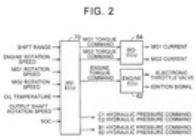


FIG. 3

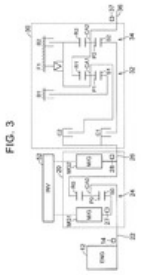


FIG. 4

	C1	C2	B1	B2	F1
1st, R, N	○			○	△
2nd	○		○		
3rd	○	○			
4th		○	○		

FIG. 5

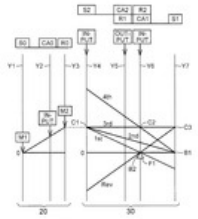


FIG. 6

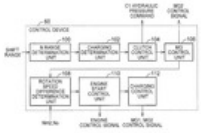


FIG. 7

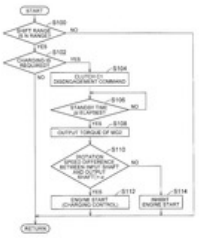


FIG. 8

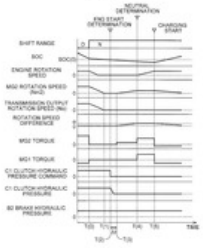
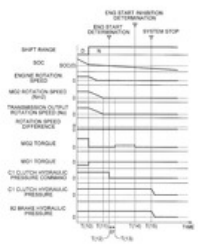
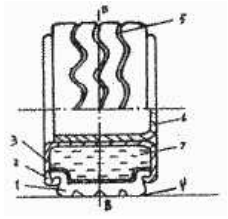


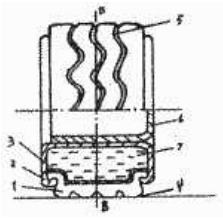
FIG. 9

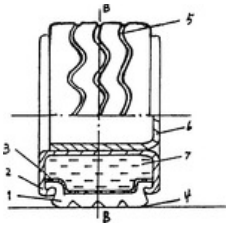


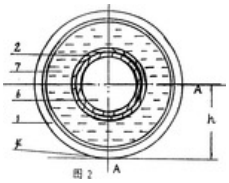
117. **Vehicle** CN2734543 2004-04-10 REN WENLIN 2005-10-19 2005-10-19

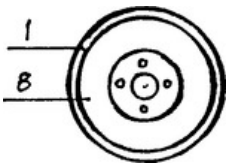
The utility model provides a **vehicle**, belonging to the field of transportation facilities. The utility model comprises an electric **vehicle**, a magnet **car** and an internal combustion **vehicle**. The utility model is characterized in that the power of an engine acts on the wheel flange finally. The wheel flange refers to the edge of the wheel, namely, the position which is larger than the length of 1/3 radius of the wheel and 1/3 diameter of the landing position of the wheel or the space which is outside the circumference of the wheel. Or, the wheels are divided into big wheels and small wheels. The big wheels touch ground and small wheels position below the inside of the big wheels. The power of the engine rotates the big wheels and the big wheels drive the small wheels which drive the **vehicle** body. The small wheels can be replaced by carriages or sliding blocks. Or, the magnetomotive area of the electric **vehicle** is positioned at the edge; the big wheels are used as rotors and the small wheels or the **vehicle** body are used as stators. The transmission method is changed into the wheel flange transmission and the big wheel transmission from the shaft drive which is known by public. The wheel flange transmission can be more labour-saving and more energy-saving than the known technology.

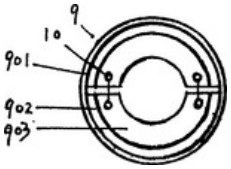


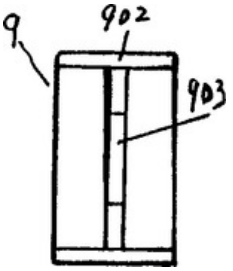


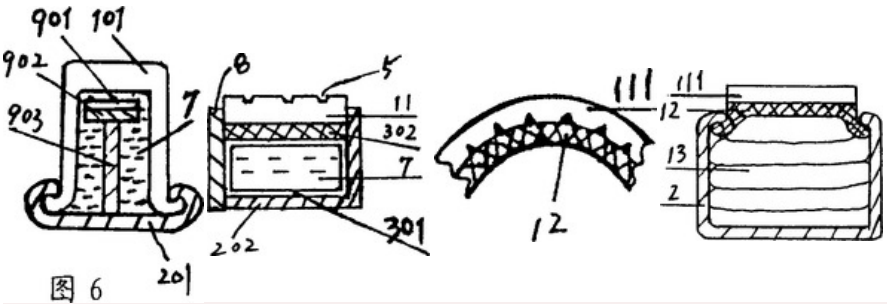






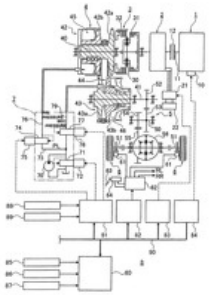


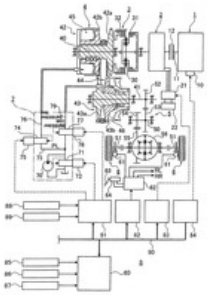


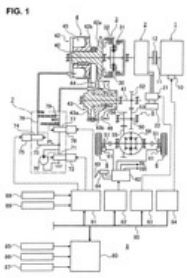


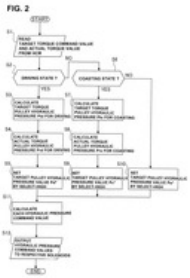
118.	Control device for belt-type continuously variable transmission	WO2014148124	2014-02-03	INTEL* JATCO* NISSAN **MOTOR***	2014-09-25	2014-09-25

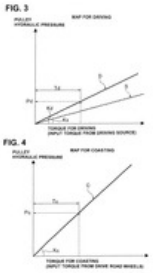
A belt-type continuously variable transmission CVT is equipped with a belt 44 wrapped around across a primary **pulley** 42 and a secondary **pulley** 43, and a CVT control unit 81 for controlling **pulley** hydraulic pressures to the primary **pulley** 42 and the secondary **pulley** 43. The CVT control unit 81 determines whether an operating state is a driving state where the direction of an input torque inputted to the belt-type continuously variable transmission CVT is from a driving source (engine 1, **motor** generator 2) or a coasting state where the input torque direction is from front-left and front-right road wheels 6, 6. The **pulley** hydraulic pressure for the input torque for when it is determined that the operating state is the coasting state is set higher than the **pulley** hydraulic pressure for the input torque for when it is determined that the operating state is the driving state, thereby suppressing a slippage of the belt.

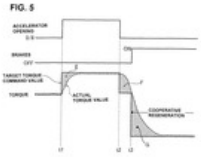






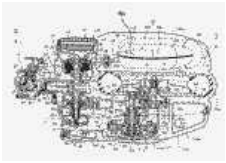


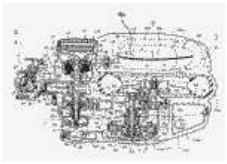




119.	Noise reduction structure for hybrid **vehicle**	TH73791	2004-08-17	HONDA **MOTOR***	2005-12-20	2005-12-20

In noise reduction structure for a hybrid **vehicle** in which a cover covers at least part of an air intake system connected to an engine capable of giving power to a driving wheel, an exhaust muffler constituting part of an exhaust system connected to the engine, and an electric **motor** capable of giving power to the driving wheel, when at least part of the air intake system, the exhaust muffler constituting part of an exhaust system, and the electric **motor** is covered with the common cover, heat generated by the exhaust muffler is prevented from affecting the electric **motor**. The rotational axis of an electric **motor** 20 extending in the longitudinal direction of a body frame is disposed forwardly of the central position C of an exhaust muffler extending in the longitudinal direction.





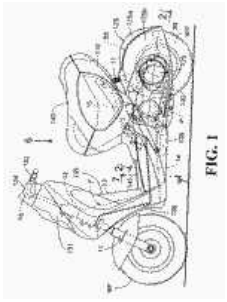


FIG. 1

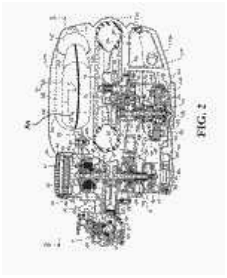


FIG. 2

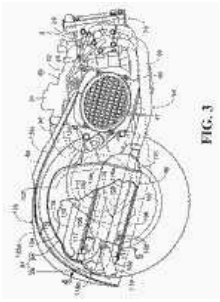


FIG. 3

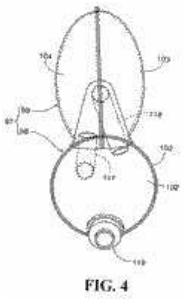


FIG. 4

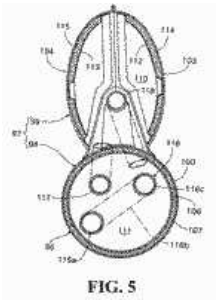


FIG. 5

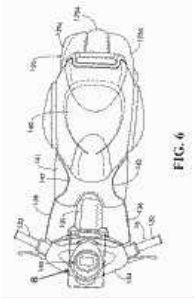


FIG. 6

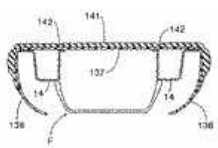


FIG. 7

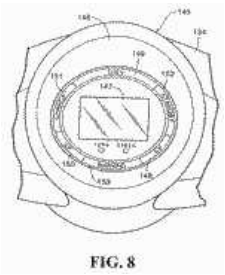
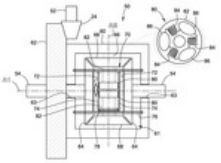
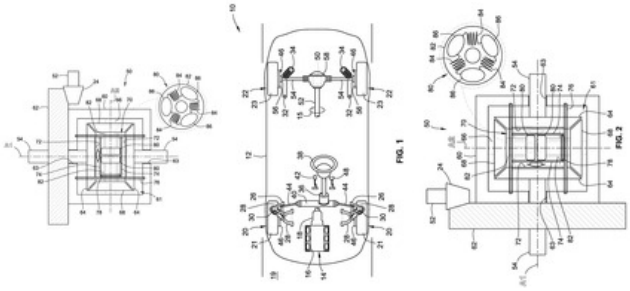


FIG. 8

120. Limited slip differentials with centrifugal spring mass actuator for **vehicle** powertrains | US20180187762 | 2017-01-05 | GM GLOBAL TECHNOLOGY OPERATIONS* | 2018-07-05 | 2018-07-05

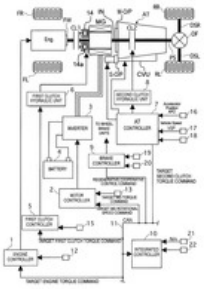
Disclosed are limited slip differentials (LSD), methods for making and methods for using such LSDs, and **motor** vehicles employing an LSD. An LSD for a **motor vehicle** is disclosed that includes a differential casing that drivingly connects to the driveshaft, and two side gears rotatably mounted inside the casing. Each side gear drivingly connects to a respective axle shaft. One or both side gears includes a respective friction surface. One or more pinion gears are mounted inside the casing and meshingly engaged with the side gears. One or more friction plates are movably mounted inside the casing to selectively engage with and disengage from a friction surface. A centrifugal spring mass, which is mounted to one of the pinion gears, includes circumferentially spaced springs that expand responsive to a predetermined disparity in rotational speed between the side gears and thereby urge the friction plate(s) into engagement with the friction surface(s).

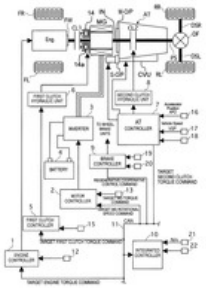




121. Hybrid **vehicle** control device | WO2012102369 | 2012-01-27 | JATCO* NISSAN **MOTOR** | 2012-08-02 | 2012-08-02

When engine startup and downshifting are processed in parallel while a **vehicle** is traveling, not only can the time required from the start of downshifting to the end of downshifting be shortened, but downshifting control that prevents draw shock can be easily performed. A control device of an FR hybrid **vehicle** comprises an engine (Eng), a **motor**/generator (MG), a first clutch (CL1), an automatic transmission (AT), a second clutch (CL2), and startup/shifting simultaneous processing means (FIG. 6). When engine speed increase control for increasing the engine speed by the **motor**/generator (MG) in order to start up the engine during travel and downshifting control of the automatic transmission (AT) are processed in parallel, the startup/shifting simultaneous processing means (FIG. 6) uses the **motor** torque of the **motor**/generator (MG) to increase the increase of input speed by the downshifting control to a target input speed while engine speed increase control is being performed by the **motor**/generator (MG).





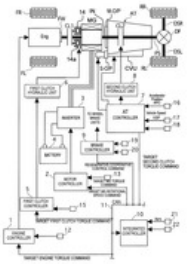


FIG. 1

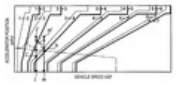


FIG. 2

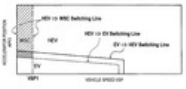


FIG. 3

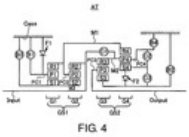


FIG. 4

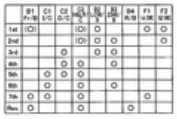


FIG. 5

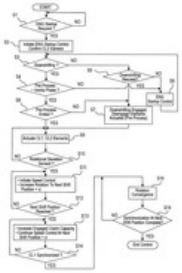


FIG. 6

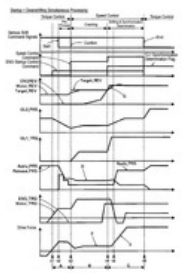


FIG. 7

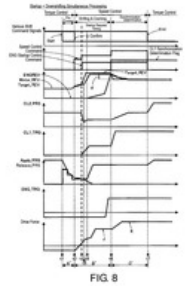
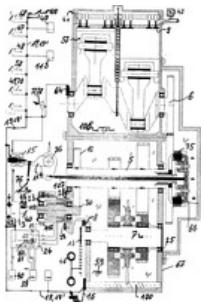
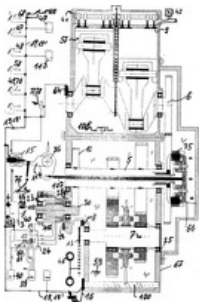


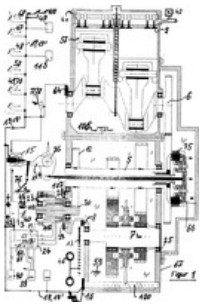
FIG. 8

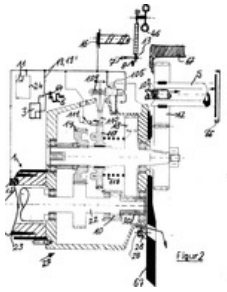
122. Hybrid drive gear change gear **motor** with a multiplate clutch plate and a selective vertical crankshaft to drive the shaft where the electric **motor** in for electrical driving. DE102014009293 2014-06-11 HILBERER EDUARD 2015-12-17 2015-12-17

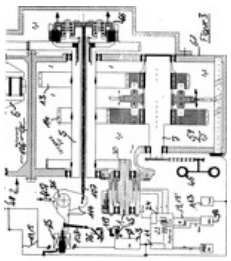
A hybrid drive mode uses an appropriate for easy to traverse the small distance are coupled and **vehicle battery** 39, 67 that can change gear **motor** based on a ring. 5 transmission System 66 is driven by means of the hollow multidisc plate clutch able to open, vertical crankshaft 6 at, the transmission power in all electrically-t gene **vehicle**. Electric power as well as combustion-engine powered drive and hybridized lightweight **vehicle** designed for this. This allows for an unlimited range with low weight and low consumption.

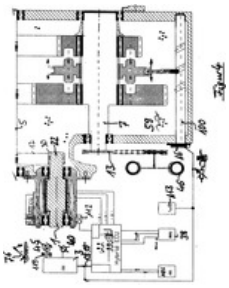


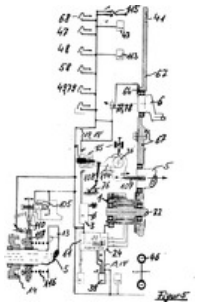


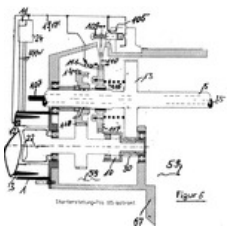


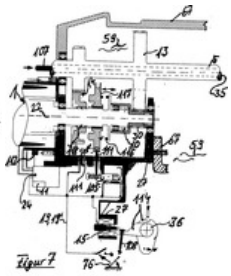


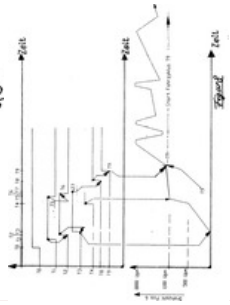






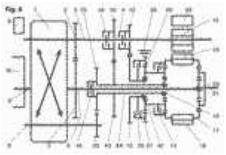


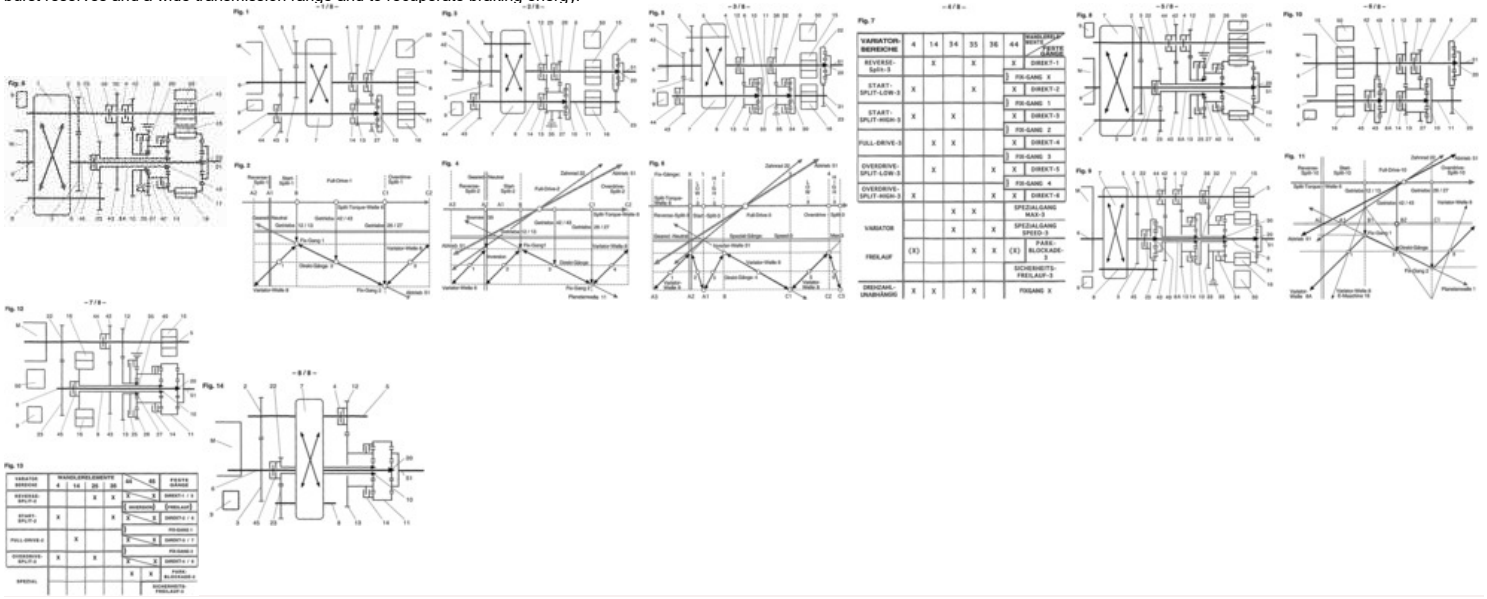




123. Hybrid-capable starting and driving transmission DE202009007972 2008-12-12 PITORQA* 2010-05-12 2010-05-12

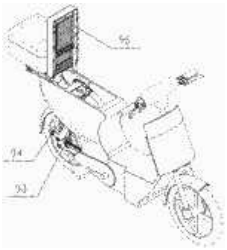
By way of a drive controller (9), a hybrid-capable power split transmission comprising geared neutral converts driving power from the **motor** (M) and **battery** (50) into four continuous, infinitely variable transmission ranges with integrated starting forward and reverse, and up to ten gears with variator bypass means. The converter power of electric machines (15, 16), a mechanical variator (7) and controllable clutches are linked by way of converter elements (4, 14, 25, 35), a split torque transmission (10), a combination geared transmission (40), intermediate shaft (5) and split torque shaft (6) into an infinitely variable multi-range drive. A power multiplication transmission (20) sums variable and direct driving powers of a planetary shaft (11) and of the split torque shaft (6) to the output shaft (51) and increases the converter power for the infinitely variable transmission of high **motor** powers without interruption of torque flow. The drive controller (9) switches and secures the two fixed gear steps integrated in the overall transmission and eight direct gears of a direct transmission (42/43) by way of the converter elements (44, 45). The **battery** (50) and an electric converter having two electric machines (15, 16) form an unrestricted hybrid drive having an integrated start-stop automatic system. In forward and reverse, in a purely electrically torque-amplified manner, and, in the geared neutral method, combined mechanically-electrically, the transmission makes it possible to start with high torque, to drive efficiently with electric burst reserves and a wide transmission range and to recuperate braking energy.

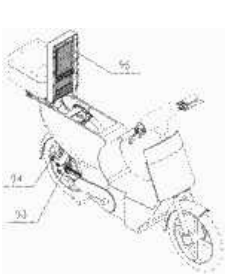


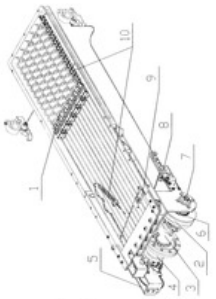


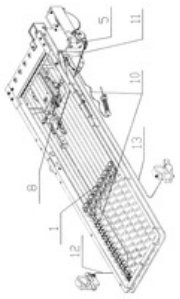
124.	Spring force storage method and force storage booster for **pulley** spring sets	CN102975618	2012-12-06	Wang Lei	2013-03-20	2013-03-20

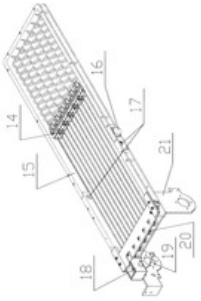
The invention provides a spring force storage method and a force storage booster for **pulley** spring sets, and relates to an assistance force storage booster capable of storing and releasing the collected kinetic energy when a **vehicle** slows down. The force storage booster is driven by **pulley** sets through a plurality of **pulley** spring sets, is sequentially linked by a force storage winding wire set by set, and is linked with a storage-stop and resistance-remaining linkage device to be taken as a force storage mechanism, a formed **pulley** spring set force storage box can be overlapped, expended and bended, and a saddle and a schoolbag rack can be replaced after the configuration on a two-wheel **vehicle**, so that parts can be saved. An independently arranged force withdrawing and assisting input/output system is coaxially distributed by through functional components, and is compact in structure, thereby being flexible and convenient to install due to the characteristic of the flexible extension of the force storage winding wire. The invention is convenient and fast to operate and control, and the aim can be achieved only by pulling or releasing a force withdrawing pull wire or a fore releasing pull wire. The invention is less in force withdrawing resistance and force releasing resistance fluctuation, and the power performance when an electromobile starts and accelerates can be effectively improved, so that the starting and accelerating electric current can be reduced, and the service life of a **battery** can be prolonged.

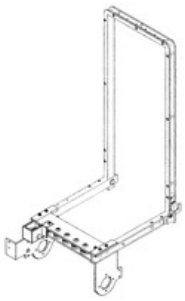


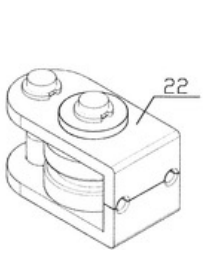


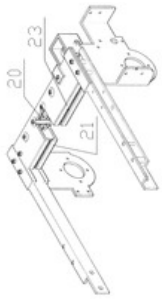


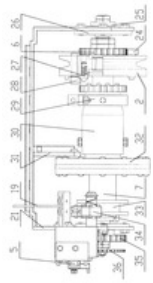


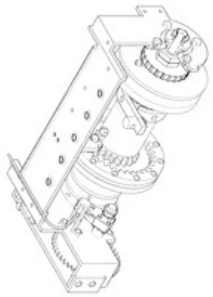


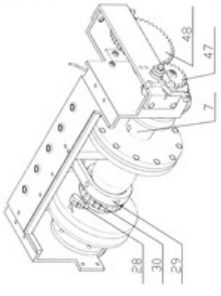






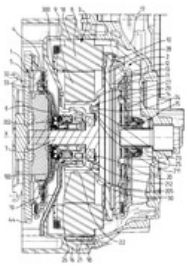


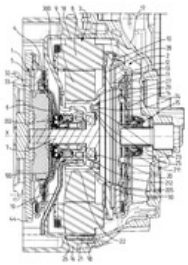




125.	Device for a hybrid **vehicle** including improved attachment of a clutch-release bearing to an element for supporting the stator of an electric machine	WO2014049242	2013-09-20	VALEO EMBRAYAGES VALEO EQUIPEMENTS ELECTRIQUES MOTEUR* VALEO EQUIPMAN ELECTRICLE **MOTOR**	2014-04-03	2014-04-03

The invention relates to a device for a transmission assembly of a **motor vehicle**, including an element (16) for supporting a stator (9) of an electric machine (3) and a clutch-release bearing (15) controlled by fluid, which are coaxial about an axis X, in which: the stator supporting element has a recess defined by an axial skirt (205) and a base (212) provided with a bore (202) allowing a shaft to pass therethrough, coaxial with the axis X, said recess (201) comprising at least one locking cavity; and the clutch-release bearing extends at least partially into said recess, the clutch-release bearing comprising an opening for a shaft (7) to pass therethrough, coaxial with the axis X, and a body including at least one resilient locking tab (106) provided with a projection (107) engaging with the locking cavity (207) in order to attach the clutch-release bearing to the stator supporting element.





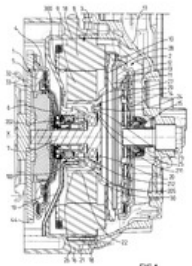


FIG1

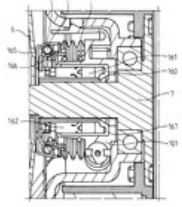


FIG.2

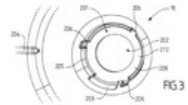


FIG.3

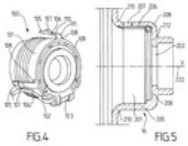


FIG.4
FIG.5

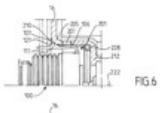


FIG.6

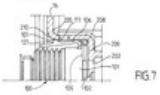


FIG.7

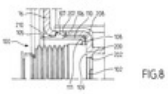


FIG.8

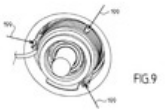


FIG.9

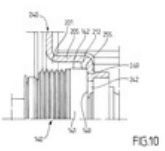


FIG.10

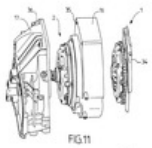


FIG.11

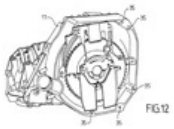


FIG.12

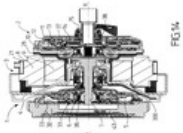


FIG.14

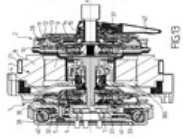


FIG.13

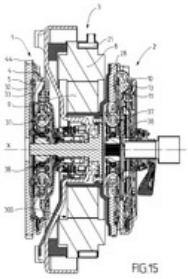


FIG.15

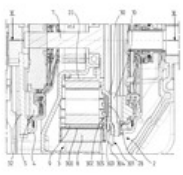


FIG.16