

Search history

Search CPC=(B62M11/04 or B62K3/005 or B62K5/05 or B62M11/06) (Results 2381)

1:

Search FT=(Overrunning 1w transmission) (Results 49)

2:

Search FT=(switching) (Results 1000000)

3:

Search FT=(groove) (Results 1000000)

4:

Search shaft or axis (Results 1000000)

5:

Search 1 and 2 (Results 1)

6:

Search [SP]: 1. an overrunning transmission device convenient for switching, characterized in that, comprises a transmission gear and a transmission shaft which is arranged to penetrate a shaft hole of the transmission gear, wherein at least one clamping groove is formed at an edge of the shaft hole of the transmission gear a chamber is formed in the transmission shaft which extends in the axial direction of the transmission shaft, a clamping plate is provided in the chamber and an end of the clamping plate can move in the chamber back and forth along the radial direction of the transmission gear, so that the end of the clamping plate can be inserted into or removed outside from the clamping groove, thereby the transmission shaft and the transmission gear can be engaged and separated with each other. 2. the overrunning transmission device convenient for switching of claim 1, characterized in that, the clamping plate placed in the chamber is arranged in the axial direction of the transmission shaft, a elastic component is provided in the chamber, the elastic component is arranged between the bottom surface of clamping plate and the bottom surface of chamber, the elastic component can drive the end of clamping plate to move in the radial direction of the transmission gear, the top of clamping plate is provided with a step-shaped position-limiting surface, a slide unit is sleeved on the transmission shaft, the inner edge of the shaft hole of slide unit abuts against or contacts with the position-limiting surface of clamping plate and can move back and forth on the step-shaped position-limiting surface, thus making the end of clamping plate move restrictively back and forth in the radial direction of the transmission gear. 3. the overrunning transmission device convenient for switching of claim 2, characterized in that, one end of the clamping plate is pivotally connected to a sidewall of the chamber, and the other end of clamping plate is movably disposed in the shaft hole of the transmission gear, the elastic component is arranged in the axial direction of the transmission shaft, an end of elastic component contacts with the bottom of the end of clamping plate, and the end of elastic component can drive the end of clamping plate to move along the radial direction of the transmission gear, thus driving the end of clamping plate to insert into the clamping groove. 4. the overrunning transmission device convenient for switching of claim 3, characterized in that, the elastic component comprises a spring, the spring is placed in the chamber and arranged in the axial direction of the transmission shaft, a drum-shaped ball is connected to the end of the spring which is close to transmission gear, the spring contacts with the bottom of the end of clamping plate which is movably disposed in the shaft hole of the transmission gear via the drum-shaped ball. 5. the overrunning transmission device convenient for switching of claim 4, characterized in that, a pin is provided at the end of the spring away from the transmission gear, the pin comprises a round flat head and a stem portion, the diameter of round flat head is greater than that of the stem portion, the round flat head of pin abuts against the end side wall of the chamber, so as to make sure that the spring can stretch linearly. 6. the overrunning transmission device convenient for switching of claim 2, characterized in that, the shoulder portion of clamping plate is pivotally connected to a sidewall of the chamber, one end of the clamping plate is movably disposed in the shaft hole of transmission gear, the elastic component placed in the chamber is arranged in the radial direction of the transmission shaft, the end of elastic component, which is movably disposed in the shaft hole of transmission gear, contacts with the bottom of the end of clamping plate, and the end of elastic component can drive the end of clamping plate to move along the radial direction of transmission gear, thus driving the end of clamping plate to insert into the clamping groove. 7. the overrunning transmission device convenient for switching of claim 6, characterized in that, the elastic component comprises a spring, the spring is placed in the chamber and arranged in the radial direction of the transmission shaft, a semi-spherical pin is provided at an end of spring, the semi-spherical pin comprises a head portion and a stem portion, the diameter of the head portion is greater than the stem portion, the spring contacts with the bottom of the end of clamping plate via the semi-spherical pin. 8. the overrunning transmission device convenient for switching of claim 2, characterized in that, the clamping plate is freely arranged in the chamber, one end of clamping plate is movably disposed in the shaft hole of the transmission gear, the elastic component placed in the chamber is arranged in the radial direction of the transmission shaft, the end of elastic component, which is movably disposed in the shaft hole of transmission gear, contacts with the bottom of the end of clamping plate, and the end of elastic component can drive the end of clamping plate to move along the radial direction of transmission gear, thus driving the end of clamping plate to insert into the clamping groove. 9. the overrunning transmission device convenient for switching of claim 8, characterized in that, the elastic component comprises a spring, the spring is placed in the chamber and arranged in the radial direction of the transmission shaft, there are at least two springs, the at least two springs are arranged separately, so as to maintain the balance of the clamping plate. 10. the overrunning transmission device convenient for switching of claim 2, characterized in that, the step-shaped position-limiting surface on top of the clamping plate comprises a non-overrunning coupling gear surface and a separated gear surface, when the inner edge of the shaft hole of slide unit abuts against or contacts with the non-overrunning coupling gear surface, the end of clamping plate is completely inserted into clamping groove, transmission shaft is engaged with transmission gear in the mode of "non-overrunning" when the inner edge of the shaft hole of slide unit abuts against or contacts with the separated gear surface, the end of clamping plate is removed outside from clamping groove, and the transmission shaft is separated from transmission gear. 11. the overrunning transmission device convenient for switching of claim 10, characterized in that, the step-shaped position-limiting surface on top of the clamping plate further comprises an overrunning coupling gear surface, when the inner edge of the shaft hole of slide unit abuts against or contacts with the overrunning coupling gear surface, the end of clamping plate is partially inserted into clamping groove, and the transmission shaft is engaged with transmission gear in the mode of "overrunning". 12. the overrunning transmission device convenient for switching of claim 11, characterized in that, the opening of the clamping groove faces toward the transmission shaft, the bottom wall of clamping groove is an inclined plane in the rotational direction of transmission shaft, the depth of the forepart of clamping groove is greater than that of the rear part, the end of clamping plate, which is movably disposed in the shaft hole of transmission gear, has a similar shape with clamping groove, whose top surface is also an inclined plane, the shape and inclined direction of the inclined plane are consistent with the bottom wall of clamping groove. 13. the overrunning transmission device convenient for switching of claim 12, characterized in that, the edge of the shaft hole of transmission gear is provided with a number of clamping grooves, the clamping grooves are evenly arranged, and a buffer groove is arranged between each two adjacent clamping grooves. 14. an overrunning transmission device convenient for rotation direction switching, for driving the output gear to rotate forward and reversely, characterized in that, comprises: a driving shaft, used for providing power for the output gear to rotate forward gear, engaged with a output gear, the driving shaft can be engaged with the forward gear so as to drive the output gear to rotate forward a reverse gear, engaged with a output gear, the driving shaft can be engaged with the reverse gear so as to drive the output gear to rotate reversely wherein the driving shaft passes through the shaft hole of the forward gear, at least one clamping groove is arranged on the edge of the shaft hole of forward gear, a chamber is provided on the driving shaft, a clamping plate is arranged in the chamber, wherein the end of clamping plate can move back and forth within the chamber in radial direction of the forward gear, thus the end of clamping plate can be inserted into or removed outside from the clamping groove, so that the driving shaft are capable of engaging with and separating from the forward gear. 15. the overrunning transmission device convenient for rotation direction switching of claim 14, characterized in that, the clamping plate placed in the chamber is arranged in the axial direction of the driving shaft, a elastic component is provided in the chamber, the elastic component is arranged between the bottom surface of clamping plate and the bottom surface of chamber, elastic component can drive the end of clamping plate to move in the radial direction of the forward gear, the top of clampi (Results 16)

Search (1 or 2) and gear (Results 1050)

8:

Search 8 and 4 (Results 229)

9:

Search 9 and 3 (Results 93)

10:

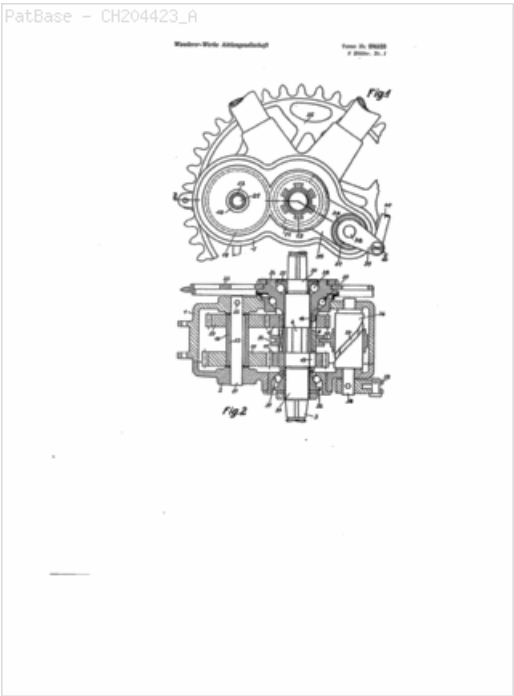
Search 10 and chamber (Results 12)

11:

Title: GESCHWINDIGKEITSWECHSELGETRIEBE. SPEED GEARBOX. (Machine translation)

Abstract: Source: CH204423A [DE] 1. Geschwindigkeitswechselgetriebe nach Pa tentanspruch, dadurch gekennzeichnet, dass das Schalten der Getriebegaenge durch eine im Innern der Antriebwelle (3) verschieb bar angeordnete Schaltstange (46) erfolgt.
Machine translation: . 1 Speed change device as Pa tentanspruch, characterized in that the **switching** of Getriebegaenge by inside the drive shaft (3) Move bar arranged shift rod (46) is carried out.

Classifications:
International (IPC 8-9): B62M11/06 (Advanced/Invention);
B62M11/00 (Core/Invention)
International (IPC 1-7): B62M11/06
CPC: B62M11/06 F16H3/0915
European: B62M11/06 F16H3/091B



Family:

Publication number	Publication date	Application number	Application date
CH204423 A	19390430		19380611

Probable Assignee: WANDERER WERKE AKTIENGESELLSCH
Assignee(s): (std): WANDERER WERKE AKTIENGESELLSCH
Assignee(s): WANDERER WERKE AKTIENGESELLSCHAFT ; WANDERER WERKE AG
Inventor(s): (std): WANDERER WERKE AKTIENGESELLSCH
Inventor(s): AKTIENGESELLSCHAFT WANDERER WERKE ; WANDERER WERKE AG

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CH204423 A	19390430	LSGT	+	granted / extensions (spc, cpc, pte)	
CH204423 A	19580611	PEXP		Calculated Patent Term Expiry	

Title: POWER PLANT FOR PRIME MOVER-EQUIPPED BICYCLES

Abstract: Source: US4140195A [EN] A power plant for prime mover-equipped bicycles wherein a bicycle running and engine running can be changed over to each other. The running speed can be changed over to a low speed and high speed. The power transmitting system, including the speed changing mechanism, can be made simple and compact in structure, and a jointless change having no neutral position in the speed changing operation is possible. It is further possible to feed and interrupt the fuel and to **switch** the current source on and off with the jointless change.

Classifications:

International (IPC 8-9): B62M11/06 B62M25/02 B62M25/04 B62M25/06 B62M6/20 B62M7/00 F02B61/02 F02B75/16 F02N3/04 F16D41/24 F16H3/10 F16H61/26 F16H63/00 F16H63/04 F16H63/26 F16H63/30 G05G7/00 (Advanced/Invention); F02B75/02 (Advanced/Non-invention); B62M11/00 B62M7/00 F02B61/00 F02B75/00 F02N3/00 F16D41/00 (Core/Invention); F02B75/02 (Core/Non-invention)

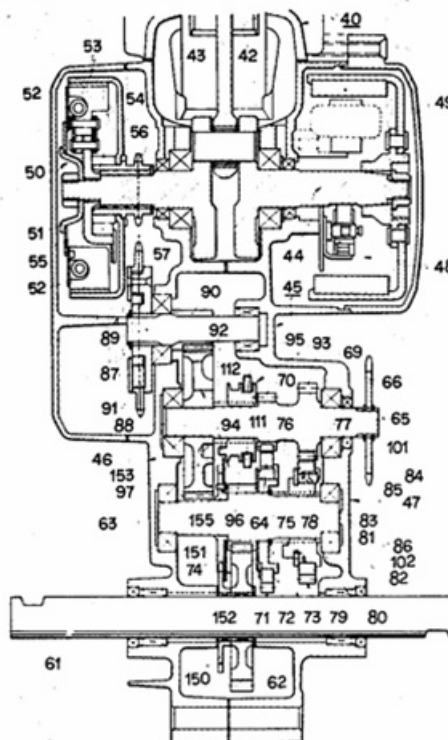
International (IPC 1-7): B62K11/00 B62M11/06 B62M23/02 B62M25/02 B62M25/04 B62M25/06 B62M7/00 F02B61/02 F02N3/04 F16D41/24 F16H3/10 F16H5/04

CPC: Y10T74/1914 Y10T74/19219 F02B75/16 B62M11/06 F02B61/02 F02B2075/025

European: B62M11/06 B62M7/00 F02B61/02 F02B75/16 R02B75/02S2

US: 180/205 180/205.3 180/33C 74/325 74/665.00Q 74/665Q

PatBase - US4140195_A



Family:

Publication number	Publication date	Application number	Application date
DE2739908 A1	19780309	DE19772739908	19770905
DE2739908 C2	19860116	DE19772739908	19770905
FR2364333 A1	19780407	FR19770027083	19770907
FR2364333 B1	19830311	FR19770027083	19770907
GB1591734 A	19810624	GB19770036836	19770902
JP53038749 U1	19780405	JP19760120751U	19760908
JP53038750 U1	19780405	JP19760120752U	19760908
JP53038751 U1	19780405	JP19760121762U	19760909
JP53038752 U1	19780405	JP19760121763U	19760909
JP54036432 Y2	19791102	JP19760120751U	19760908
JP54041485 Y2	19791204	JP19760120752U	19760908
JP55023020 Y2	19800531	JP19760121762U	19760909
US4140195 A	19790220	US19770829628	19770901

Priority:

JP19760120751U 19760908 JP19760120752U 19760908 JP19760121762U 19760909
JP19760121763U 19760909

Probable Assignee: HONDA MOTOR CO LTD

Assignee(s): (std): HONDA GIKEN KOGYO KK ; HONDA MOTOR CO LTD

Assignee(s): HONDA GIKEN KOGYO K K ; HONDA GIKEN KOGYO K K TOKIO TOKYO JP ; HONDA GIKEN KOGYO KABUSHIKI KAISHA

Inventor(s): (std): HIRANO TAKEHISA ; MIURA SEISHI ; WATANABE MASAKI ; YAMAMOTO SADASHI

Inventor(s): YAMAMOTO SADASHI WAKO SAITAMA JP ; WATANABE MASAKI NIIZA SAITAMA JP ; MIURA SEISHI ASAKA SAITAMA JP ; HIRANO TAKEHISA TOKIO TOKYO JP ; MASAKI WATANABE SEISHI MIURA TAKEHISA HIRANO ; MASAKI WATANABE SEISHI MIURA TAKEHISA HIRANO ET SA ; MASAKI WATANABE SEISHI MIURA TAKEHISA HIRANO ET SADASHI YAMAMOTO

Legal status (INPADOC)

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DE2739908 A1	19780309	LSPB	+	published / reissued
DE2739908 A1	19780309	LSSES	+OAP	REQUEST FOR EXAMINATION FILED
DE2739908 A1	19780420	LSSES	+OD	REQUEST FOR EXAMINATION
DE2739908 C2	19860116	LSGT	+	granted / extensions (spc, cpc, pte)
DE2739908 C2	19860116	LSGT	+D2	GRANT AFTER EXAMINATION
DE2739908 C2	19860717	LSGT	+8364	NO OPPOSITION DURING TERM OF OPPOSITION
DE2739908 C2	19900906	LSLE	-8339	CEASED/NON-PAYMENT OF THE ANNUAL FEE
FR2364333 A1	19780407	LSPB	+	published / reissued
FR2364333 B1	19830311	LSGT	+	granted / extensions (spc, cpc, pte)
FR2364333 B1	19920731	LSLE	-ST	NOTIFICATION OF LAPSE
FR2364333 B1	19970907	PEXP		Calculated Patent Term Expiry
GB1591734 A	19810624	LSGT	+	granted / extensions (spc, cpc, pte)
GB1591734 A	19811021	LSGT	+PS	PATENT SEALED
GB1591734 A	19900502	LSLE	-PCNP	PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE
GB1591734 A	19970902	PEXP		Calculated Patent Term Expiry
JP53038749 U1	19780405	LSPB	+	published / reissued
JP53038750 U1	19780405	LSPB	+	published / reissued
JP53038751 U1	19780405	LSPB	+	published / reissued
JP53038752 U1	19780405	LSPB	+	published / reissued
JP54036432 Y2	19791102	LSPB	+	published / reissued
JP54041485 Y2	19791204	LSPB	+	published / reissued
JP55023020 Y2	19800531	LSPB	+	published / reissued
US4140195 A	19790220	LSGT	+	granted / extensions (spc, cpc, pte)

Title: Vehicles

Abstract: Source: US4574902A [EN] A vehicle in which a pair of driving wheels are disposed on both left and right sides of a vehicle body frame, the vehicle comprising a power unit composed of an engine and a pair of transmission devices extended from both ends of the engine to individually transmit power of the engine to the driving wheels, and a casing for the power unit supports the driving wheels and is supported on the body frame inserted between both the transmission devices.

Classifications:

International (IPC 8-9): B60G1/00 B60G1/04 B60G3/28 B60K11/00 B60K13/02 B60K17/04 B60K17/30 B60K17/32 B60K5/04 B60K5/12 B62D61/08 B62K5/04 F16H9/00 (Advanced/Invention); B60G1/00 B60G3/18 B60K11/00 B60K13/00 B60K17/00 B60K17/04 B60K5/00 B60K5/12 B62D61/00 B62K5/00 F16H9/00 (Core/Invention)

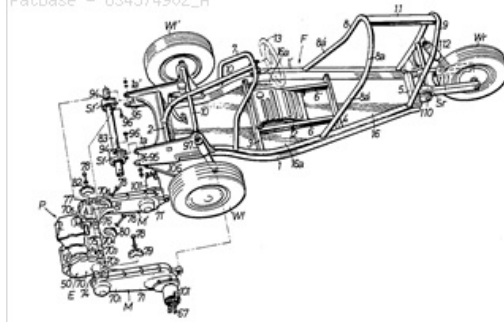
International (IPC 1-7): B60G1/02 B60G3/28 B60K11/00 B60K13/00 B60K17/04 B60K17/30 B60K5/04 B60K5/12 F16H9/00

CPC: B60K17/306 B62D61/065 B62K5/027 B62K5/05 B60K5/04 B60K17/32 B62K5/06 B60G2300/122 B60K5/12

European: B60K17/32 B60K5/04 B60K5/12 B62K5/06 L60G300/122

US: 180/312 180/350 180/357 180/365 180/366 180/72

PatBase - US4574902_A



Family:

Publication number	Publication date	Application number	Application date
JP1727520 C3	19930119	JP19820230294	19821229
JP4011410 B4	19920228	JP19820230294	19821229
JP59124417 A2	19840718	JP19830069420	19830420
JP59124433 A2	19840718	JP19830088797	19830520
JP59124435 A2	19840718	JP19820230294	19821229
JP59195420 A2	19841106	JP19830069419	19830420
US4574902 A	19860311	US19830566148	19831228

Priority:

JP19820230294 19821229 JP19830069419 19830420 JP19830069420 19830420
JP19830088797 19830520

Probable Assignee: HONDA MOTOR CO LTD

Assignee(s): (std): HONDA MOTOR CO LTD

Assignee(s): HONDA GIKEN KOGYO KABUSHIKI KAISHA ; HONDA GIKEN KOGYO KK

Inventor(s): (std): IRIKOU SHIYOUICHIROU ; IRIMAJIRI SHOICHIRO

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
JP1727520 C3	19930119	LSGT	+	granted / extensions (spc, cpc, pte)	
JP1727520 C3	20021229	PEXP		Calculated Patent Term Expiry	
JP4011410 B4	19920228	LSPB	+	published / reissued	
JP59124417 A2	19840718	LSPB	+	published / reissued	
JP59124433 A2	19840718	LSPB	+	published / reissued	
JP59124435 A2	19840718	LSPB	+	published / reissued	
JP59195420 A2	19841106	LSPB	+	published / reissued	
US4574902 A	19860311	LSGT	+	granted / extensions (spc, cpc, pte)	
US4574902 A	19831228	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : HONDA GIKEN KOGYO KABUSHIKI KAISHA, NO. 27-8, 6-CH OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST.; ASSIGNOR:SHOICHIRO, IRIMAJIRI; REEL/FRAME:004214/0501 EFFECTIVE DATE : 19831215
US4574902 A	19900311	LSRE	+REIN	REINSTATEMENT AFTER MAINTENANCE FEE PAYMENT CONFIRMED	
US4574902 A	19900522	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 19900311

US4574902 A	19910311	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US4574902 A	19910429	LSGT	PAT1	Patented Case	
US4574902 A	19910604	LSFE	+DP	NOTIFICATION OF ACCEPTANCE OF DELAYED PAYMENT OF MAINTENANCE FEE	
US4574902 A	19930818	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 8

Title: **GEARING** AND CLUTCH UNIT FOR A TWO-WHEELED MOTOR VEHICLE.

Abstract: The **gearing** and clutch unit for a two-wheeled motor vehicle comprises a housing (11) in which an input shaft (13), an output shaft (27) and a countershaft (43) are mounted in such a way that they can rotate relative to one another. Connected to the input shaft (13) is a starting clutch (19) designed, in particular, as a centrifugal clutch, which, in turn, is connected to the output shaft (27) via two **gearing** transmission paths with different transmission ratios. The first **gearing** transmission path leads to the output shaft (27) via the countershaft (43) and an overrunning clutch (47). The second **gearing** transmission path contains a **gear**-change clutch (61) designed as a friction clutch and having two clutch members (67, 71) arranged coaxially on the output shaft (27). The first (71) of these clutch members, which can be displaced manually by means of an actuating device, is spring-loaded into its disengaged position. The first clutch member (71) is connected to the output shaft (27) via a coarse-pitch thread (69) and is screwed towards the second clutch member (67) by the friction torque transmitted in the engaged position. The **gear**-change clutch (61) can thus only be disengaged when the internal combustion engine (1) is relieved of torque, an unwanted increase in the speed of the internal combustion engine when changing down from second to first **gear** thereby being avoided.

Classifications:

International (IPC 8-9): B62M11/06 F02B61/02 (Advanced/Invention);

F02B75/02 (Advanced/Non-invention);

B62M11/00 F02B61/00 (Core/Invention);

F02B75/02 (Core/Non-invention)

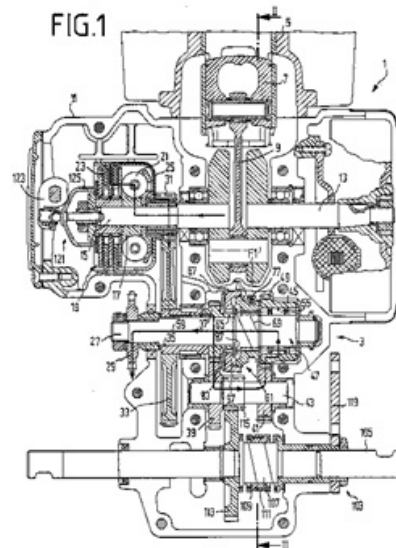
International (IPC 1-7): B62M11/06 F02B61/02

CPC: B62M11/06 F02B61/02 F02B2075/025

European: B62M11/06 F02B61/02 R02B75/02S2

PatBase - EP0302409_A2

EP 0 306 409 A2



Family:

Publication number	Publication date	Application number	Application date
DE3725643 A1	19890223	DE19873725643	19870803
EP0302409 A2	19890208	EP19880112343	19880729
EP0302409 A3	19900718	EP19880112343	19880729

Priority:

DE19873725643 19870803

Probable Assignee: FICHEL AND SACHS AG

Assignee(s): (std): FICHEL AND SACHS AG

Assignee(s): FICHEL AND SACHS AG 8720 SCHWEINFURT DE

Inventor(s): (std): KURZ WALTER DR ING ; KURZ WALTER PROF DR ; SEIBT HANS ; TROCH GUENTER DIPL ING ; TROCH GUNTER

Inventor(s): TROCH GUENTER DIPL ING FH 8721 SCHWEBHEIM DE ; SEIBT HANS 8726 GOCHSHEIM DE ; KURZ WALTER DR ING 8721 DITTELBRUNN DE

Designated states: BE CH DE ES FR LI

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE3725643 A1	19890223	LSPB	+	published / reissued	
DE3725643 A1	19930805	LSLE	-8139	DISPOSAL/NON-PAYMENT OF THE ANNUAL FEE	
EP0302409 A2	19890208	LSPB	+	published / reissued	
EP0302409 A3	19901227	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 19901026
EP0302409 A3	19920513	LSSES	+17Q	FIRST EXAMINATION REPORT	EFFECTIVE DATE :

19920330

EP0302409 A3 19930210

LSRV

-18R

REFUSED

EFFECTIVE DATE :
19920925

Title: Flugdrachen-Fahr-Mobil Kite-drivingmobilely (Machine translation)

Abstract: Source: DE9208000U1 [DE] (Claim 1) 1. Mehrfach Spezifiziertes Kombinations Flugdrachen (fahr)-mobil, mit siebenfach effktiertem Hebeltriebwerk und oder anderen eigenen Triebwerken bzw. Antrieben, welche da sind aus DE OS 36 40 335 Al (beginnend) S. 18 Abs. 4 oder DE OS 34 03 955 Al S. 1-39 G 86 01 570.2 S. 1-14 und im Heck vom Boden oder ueberlagertem Systeme-halte-boden mit Systeme-halte-platten, einer Keilriementransmission oder Winkelgetriebe n mit sich selbst anpassender Wellenlaenge n, die Verbindung en zur axialen Antriebswelle herstell (t) en, was teilweise die Grundausrstung fuer ein vierraederiges Aufbau-modell ist,

Machine translation: (Claim 1) 1. Several times specifying combination kites (drive) - mobilely, with seven effktiertem levering rubbing work and or other own engines and/or drives, which are from DE OS 36 40 335 aluminium (beginning) there P. 18 exp. 4 or DE OS 34 03 955 aluminium P. 1-39 G 86 01 570,2 P. 1-14 and in the tail system retaining soil with system retaining plates, a drive belt transmission or Winkelgetriebe n with adapting wavelength n, overlaid by the soil or, which connection EN to the axial drive shaft manufacture (t) EN, which the basic equipment is partial for a four-wheeled structure model,

Classifications:

International (IPC 8-9): B62K17/00 B62K3/00 B62M1/24 B63H16/18

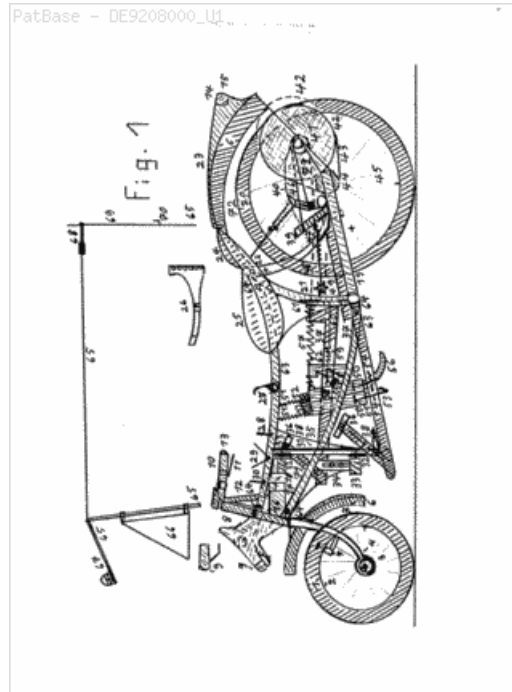
B64C31/04 B64C37/00 (Advanced/Invention);

B62K17/00 (Core/Invention)

International (IPC 1-7): B62K17/00 B63H16/18 B64C31/04

CPC: B62M1/28 B62K3/005 B63H16/12 B64C31/04 B64C37/00

European: B62K3/00C B62M1/28 B63H16/12 B64C31/04 B64C37/00



Family:

Publication number	Publication date	Application number	Application date
DE9208000 U1	19930819	DE19920008000U	19920615

Priority:

DE19920008000U 19920615

Probable Assignee: WESTERWELLER KURT WILHELM FRAN

Assignee(s): (std): WESTERWELLER KURT WILHELM FRAN

Assignee(s): WESTERWELLER KURT WILHELM FRANZ 56305 PUDERBACH DE

Legal status (INPADOC)

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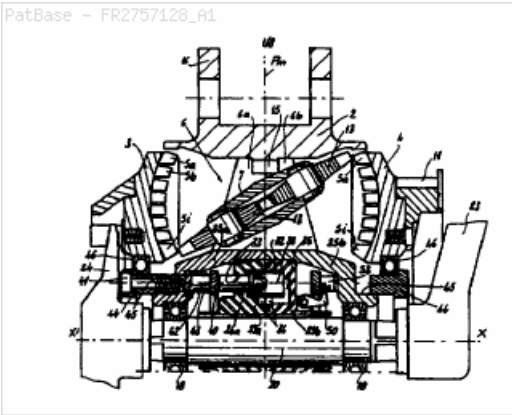
Patent	Date recorded	Event group	Code	Event	Details
DE9208000 U1	19930819	LSGT	+	granted / extensions (spc, cpc, pte)	
DE9208000 U1	20020615	PEXP		Calculated Patent Term Expiry	

Title: Drive gearbox for bicycles

Abstract: Source: FR2757128A [EN] The bicycle gearbox, located inside the bottom bracket crank spindle **chamber**, consists of driving and driven plates (3, 4) which rotate relative to the **chamber** and have coaxial circular toothed rings (5a - 5i) projecting from their facing toroid surfaces. It has transmission assemblies between the plates, each comprising a cradle (7) pivoted in a central support (6) and containing two freely-rotating pinions (13) which mesh with one another and the toothed rings. A clutch housing (27a, 27b) is situated in the **chamber** (2) between the plates (3, 4) and containing spacer pistons (26a, 26b) in **chambers** (30). The pistons have axles perpendicular to those of the plates and apply a pressure to a component (40) which ensures the axial displacement of at least one of the plates. They are fed by a first hydraulic circuit with a master cylinder situated inside the clutch housing.

Classifications:

International (IPC 8-9): B62M11/04 B62M11/14 B62M23/00 F16H3/34 F16H3/42 (Advanced/Invention); B62M11/00 B62M23/00 F16H3/02 (Core/Invention)
International (IPC 1-7): B62M11/04 B62M25/04 B62M9/08 F16H49/00
CPC: B62M11/04 B62M11/145 B62M23/00 F16H3/34 F16H3/42
European: B62M11/04 B62M11/14B B62M23/00 F16H3/34 F16H3/42



Family:

Publication number	Publication date	Application number	Application date
FR2757128 A1	19980619	FR19960015805	19961217

Priority:

FR19960015805 19961217

Probable Assignee: GUYETAND LOUIS MARIE
Assignee(s): (std): GUYETAND LOUIS MARIE
Inventor(s): (std): GUYETAND LOUIS MARIE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
FR2757128 A1	19980619	LSPB	+	published / reissued	

Title: HELICAL DRIVE BICYCLE

Abstract: Source: US6199884B [EN] A bicycle with a drive mechanism using reciprocal rectilinear pedal motion to propel a pinion **gear** against a crown **gear** face associated with a rear bicycle wheel, rotating the rear wheel. The pinion **gear** receives motion from a helical member surrounded by a slider. Each pedal is united with the slider which moves linearly along a guide or track, forcing rotation of the helical member as the slider is pushed rearwardly by a pedal. A freewheel or overrunning clutch permits power transfer only when the pedal moves rearwardly and allows freewheeling when the pedal is reset. Reciprocal, linear pedal strokes power the bicycle.

Classifications:

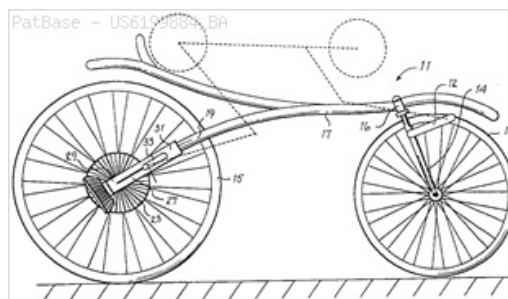
International (IPC 8-9): A01K87/00 A01K89/015 A61G5/02 A63B21/00 A63B21/005 A63B21/015 A63B22/00 A63B23/035 A63B23/04 A63B24/00 B62K3/00 B62K3/10 B62M1/00 B62M1/04 B62M1/14 B62M1/16 B62M1/24 B62M17/00 B62M9/00 B63H16/18 B63H20/14 F16H25/08 F16H25/12 F16H27/02 (Advanced/Invention); A63B21/00 A63B23/035 A63B23/04 A63B24/00 (Advanced/Non-invention); A61G5/00 A63B21/005 A63B21/012 A63B22/00 B63H20/00 F16H25/00 F16H27/00 (Core/Invention); A63B21/00 A63B23/035 A63B23/04 A63B24/00 (Core/Non-invention)

International (IPC 1-7): A61G5/02 B62H1/24 B62M1/00 B62M1/04 B62M1/16 B62M23/00 B62M9/00 B63H16/00 B63H20/14 F16H25/08 F16H27/02

CPC: A63B22/0076 B63H16/14 A63B21/00069 A63B69/06 A63B21/005 A63B21/015 A63B21/072 A63B21/078 A63B23/03533 A63B23/0417 A63B2022/0652 A63B2208/0233 A63B2208/0295 B62K3/005 Y10T74/1556 A63B22/0005 A61G5/042 A61G5/045 A63B22/0002 A63B2022/0041 A63B2071/0018 B62M9/00 A61G5/02 A63B21/0056 A63B21/15 A63B21/157 A63B22/005 A63B22/0038 A63B2024/0009 A63B2220/13 A63B2220/12 A63B2225/30 A63B2230/06 A63B2230/42 B62M1/30 B62M17/00 F16H25/12 B62K3/10 B62M1/14 A01K87/00 B62M1/24 A01K89/0183 A63B24/0006

European: A01K89/015 A61G5/02 A63B21/005D A63B21/015 A63B21/15G A63B22/20T4 A63B23/035C4 A63B24/00A1 A63B69/06 B62K3/00 B62K3/10 B62M1/14 B62M1/24 B62M1/30 B62M17/00 B62M9/00 B63H16/14 F16H25/12 K61G5/04A2 K61G5/04A6 K63B208/02E2 K63B208/02M K63B21/005 K63B21/005D K63B21/072 K63B21/078 K63B22/00A K63B22/00A2 K63B22/00C10 K63B22/00C8 K63B22/00R K63B22/06C4R K63B22/20T4 K63B22/12 K63B220/13 K63B225/30 K63B23/04B2 K63B230/06 K63B230/42 K63B24/00A1A K63B69/06 K63B71/00H2 R16H25/12

US: 280/250.1 280/252 280/253 280/288.1 440/21 440/25 74/143



Family:

Publication number	Publication date	Application number	Application date
AU199857755 A1	19980717	AU19980057755	19971222
AU199867427 A1	19981030	AU19980067427	19980406
AU199867428 A1	19981030	AU19980067428	19980406
AU199867430 A1	19981030	AU19980067430	19980406
AU199867431 A1	19981030	AU19980067431	19980406
AU199867433 A1	19981030	AU19980067433	19980406
AU199868493 A1	19981030	AU19980068493	19980406
AU199868494 A1	19981030	AU19980068494	19980406
AU199868495 A1	19981030	AU19980068495	19980406
CA2286029 A	19991007	CA19982286029	19980406
CA2286029 C	20061024	CA19982286029	19980406
GB2339177 A1	20000119	GB19990023677	19980406
GB2339177 B2	20011003	GB19990023677	19980406
GB9923677 A0	19991208	GB19990023677	19980406
US6199884 BA	20010313	US19960771982	19961223
US6213487 BA	20010410	US19970897618	19970721
US6241565 BA	20010605	US19970922330	19970903
WO9828182 A2	19980702	WO1997IB01655	19971222
WO9828182 A3	19980903	WO1997IB01655	19971222
WO9844783 A2	19981015	WO1998IB00628	19980406
WO9844783 A3	19981230	WO1998IB00628	19980406
WO9845163 A2	19981015	WO1998IB00627	19980406
WO9845163 A3	19981217	WO1998IB00627	19980406
WO9845164 A2	19981015	WO1998IB00629	19980406
WO9845164 A3	19981217	WO1998IB00629	19980406
WO9845165 A1	19981015	WO1998IB00597	19980406
WO9845166 A1	19981015	WO1998IB00605	19980406
WO9845167 A1	19981015	WO1998IB00603	19980406
WO9845170 A1	19981015	WO1998IB00602	19980406
WO9845621 A1	19981015	WO1998IB00598	19980406

Priority:

US19960771982	19961223	US19970041924P	19970407	US19970042963P	19970407
US19970042964P	19970407	US19970043762P	19970408	US19970043762P	19970408
US19970044137P	19970416	US19970044462P	19970417	US19970044462P	19970417
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US19970048693P	19970606	US19970049506P	19970609	US19970049507P	19970609
US19970049509P	19970609	US19970049102P	19970609	US19970049101P	19970609
US19970050275P	19970620	US19970883341	19970626	US19970896416	19970718
US19970898039	19970718	US19970897155	19970718	US19970897619	19970721
US19970897618	19970721	US19970897620	19970721	US19970922330	19970903
WO1997IB01655	19971222	WO1998IB00628	19980406	WO1998IB00603	19980406
WO1998IB00605	19980406	WO1998IB00597	19980406	WO1998IB00602	19980406
WO1998IB00598	19980406	WO1998IB00629	19980406	WO1998IB00627	19980406

Probable Assignee: 744353 ALBERTA LTD

Assignee(s): (std): 744353 ALBERTA LTD ; 7444353 ALBERTA LTD ; DOROFTEI ; DOROFTEI MIGHEL ; HELIXSPHERE TECHNOLOGIES INC ; HELICAL DYNAMICS INT INC ; HELICAL DYNAMICS INTERNAT INC

Assignee(s): HELICAL DYNAMICS INT ; HELICAL DYNAMICS INT INC DOROFTEI MIGHEL ; PILLSBURY MADISON AND SUTRO LLP ; HELICAL DYNAMICS INTERNATIONAL INC

Inventor(s): (std): DOROFTEI MIGHEL ; DOROFTEL MIGHEL

Inventor(s): MIGHEL DOROFTEI

Agent(s): BORDEN LADNER GERVAIS LLP

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HU ID IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
AU199857755 A1	19980717	LSPB	+	published / reissued	
AU199867427 A1	19981030	LSPB	+	published / reissued	
AU199867428 A1	19981030	LSPB	+	published / reissued	
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AU199867431 A1	19981030	LSPB	+	published / reissued	
AU199867433 A1	19981030	LSPB	+	published / reissued	
AU199868493 A1	19981030	LSPB	+	published / reissued	
AU199868494 A1	19981030	LSPB	+	published / reissued	
AU199868495 A1	19981030	LSPB	+	published / reissued	
CA2286029 AA	19991007	LSPB	+	published / reissued	
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CA2286029 C	20061024	LSGT	+	granted / extensions (spc, cpc, pte)	
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CA2286029 C	20180406	PEXP		Calculated Patent Term Expiry	
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GB2339177 B2	20011003	LSGT	+	granted / extensions (spc, cpc, pte)	
GB2339177 B2	20091223	LSLE	-PCNP	PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE	EFFECTIVE DATE : 20090406
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US6199884 BA	20010313	LSGT	+	granted / extensions (spc, cpc, pte)	
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US6199884 BA	19990909	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : 744353 ALBERTA LTD., CANADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HELICAL DYNAMICS

					INTERNATIONAL, INC.; REEL/FRAME:010221/0031 EFFECTIVE DATE : 19990826
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US6199884 BA	20000424	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : 744353 ALBERTA LTD, ALBERTA OLDPARTY : RELEASE OF LIEN AND SECURITY INTEREST; ASSIGNORS:PILLSBURY MADISON & SUTRO LLP; GLAZIER, STEPHEN; REEL/FRAME:010759/0959 EFFECTIVE DATE : 20000414
US6199884 BA	20050314	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6199884 BA	20050413	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6199884 BA	20050510	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20050313
US6199884 BA	20161223	PEXP		Calculated Patent Term Expiry	
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US6213487 BA	20050512	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6213487 BA	20050607	LSLE	-FP	EXPIRED DUE TO	EFFECTIVE DATE : 20050410

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US6213487 BA	20170721	PEXP		Calculated Patent Term Expiry	
US6241565 BA	20010605	LSGT	+	granted / extensions (spc, cpc, pte)	
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US6241565 BA	19990909	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : 744353 ALBERTA LTD., CANADA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HELICAL DYNAMICS INTERNATIONAL, INC.; REEL/FRAME:010221/0031 EFFECTIVE DATE : 19990826
US6241565 BA	19991117	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PILLSBURY MADISON & SUTRO LLP, DISTRICT OF COLUMBI OLDPARTY : MEMORANDUM OF LIEN & SECURITY INTEREST EXHIBIT A; ASSIGNOR:HELICAL DYNAMICS INTERNATIONAL INC; REEL/FRAME:010418/0949 EFFECTIVE DATE : 19970927
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US6241565 BA	20050606	LSLE	-LAPS	LAPSE FOR FAILURE TO PAY MAINTENANCE FEES	
US6241565 BA	20050706	LSLE	-PEX1	Patent Expired Due to NonPayment of Maintenance Fees Under 37 CFR 1.362	
US6241565 BA	20050802	LSLE	-FP	EXPIRED DUE TO FAILURE TO PAY MAINTENANCE FEE	EFFECTIVE DATE : 20050605
US6241565 BA	20170903	PEXP		Calculated Patent Term Expiry	
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WO9828182 A3	19991110	LSNE	-122	EP: PCT APPLICATION NON- ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
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WO9844783 A3	20000210	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
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WO9844783 A3	20000809	LSNE	-122	EP: PCT APPLICATION NON- ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO9844783 A3	20001007	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : CA

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WO9845163 A3	20000210	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
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WO9845164 A3	20001007	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : CA
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WO9845165 A1	20001007	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : CA
WO9845166 A1	19981015	LSPB	+	published / reissued	
WO9845166 A1	20000210	LSWD	REG	REFERENCE TO NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : 8642
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WO9845166 A1	20000726	LSNE	-122	EP: PCT APPLICATION NON- ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
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WO9845621 A1	20000726	LSNE	-122	EP: PCT APPLICATION NON-ENTRY IN EUROPEAN PHASE	REF COUNTRY CODE : WO
WO9845621 A1	20001007	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : CA

Title: 8 or 12 speed gearbox installed in ordinary bicycle

Abstract: Source: FR2776613A [EN] The gearbox comprises an auxiliary shaft (33) held parallel to the pedal **gear** axle by two arms (7,8) articulated on either side the pedal casing (9). The chain carrier plate (29) has side by side toothed wheels (30,31,32) each meshing with a wheel (50,51,52) carried by the auxiliary shaft. There are two other wheels (40,41) carried by the same shaft on the opposite side meshing with one wheel of a two wheel set (20,21). The left crank (3) carries a toothed satellite wheel (22) meshing with the crown wheel and a lever (25) which automatically engages the crown wheel so that the crank rotates faster than the crown wheel carrier. A planet toothed wheel (12) meshes externally with the wheel carried by the crank and can be rotated freely or immobilized.

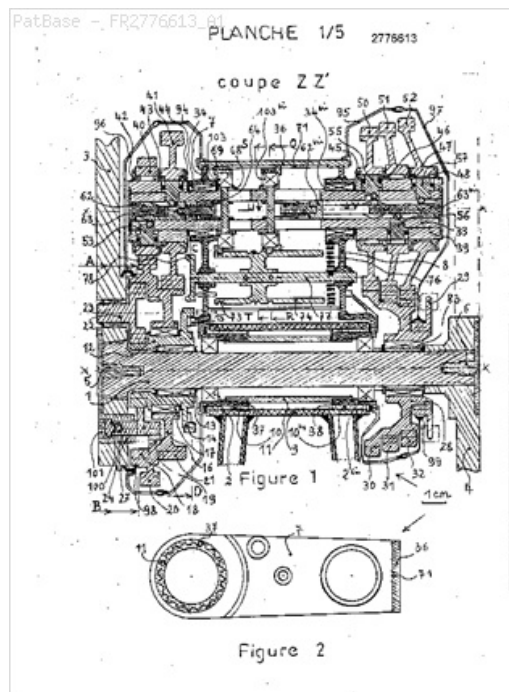
Classifications:

International (IPC 8-9): B62M11/06 B62M11/14 (Advanced/Invention); B62M11/00 (Core/Invention)

International (IPC 1-7): B62M11/06 B62M25/04

CPC: B62M11/06 B62M11/145

European: B62M11/06 B62M11/14B



Family:

Publication number	Publication date	Application number	Application date
FR2776613 A1	19991001	FR19980003798	19980325
FR2776613 B1	20000512	FR19980003798	19980325

Priority:

FR19980003798 19980325

Probable Assignee: PORTALIER PIERRE LOUIS MARIE

Assignee(s): (std): PORTALIER PIERRE LOUIS MARIE

Inventor(s): (std): PORTALIER PIERRE LOUIS MARIE

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
FR2776613 A1	19991001	LSPB	+	published / reissued	
FR2776613 B1	20000512	LSGT	+	granted / extensions (spc, cpc, pte)	
FR2776613 B1	20070126	LSLE	-ST	NOTIFICATION OF LAPSE	EFFECTIVE DATE : 20061130
FR2776613 B1	20180325	PEXP		Calculated Patent Term Expiry	

Title: TRANSMISSION UNIT

Abstract: Source: US2011251008A [EN] The present invention relates to a transmission unit for a vehicle driven by muscle force, comprising an input shaft which can be connected to cranks on opposite sides for driving the vehicle, comprising a first partial transmission. The first partial transmission comprises a countershaft, wherein a plurality of driving gear wheels is mounted on the input shaft, and wherein a corresponding plurality of driven gear wheels of the first partial transmission is mounted on the partial transmission shaft. The driven gear wheels of the first partial transmission are designed as idler gears that can be connected to the countershaft by means of shifting means in a rotationally rigid manner. The countershaft forms an input shaft of a second partial transmission. A plurality of second drive wheels are mounted on the output shaft, wherein the second partial transmission comprises an output shaft, on which a corresponding plurality of second driven gear wheels are mounted.

Classifications:

International (IPC 8-9): B62M11/06 B62M11/14 F16H3/44 F16H37/02

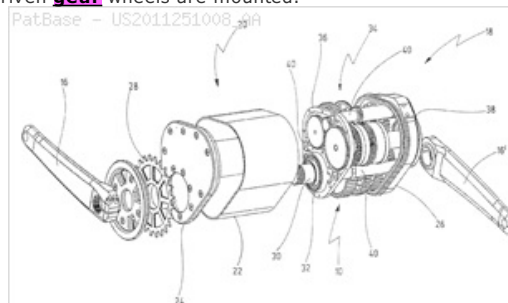
F16H63/20 (Advanced/Invention);

B62M11/00 F16H63/08 (Core/Invention)

CPC: B62M11/06 B62M11/145

European: B62M11/06 B62M11/14B

US: 475/149 475/149S 475/207 475/269 475/269S 475/31 475/31P 74/351 74/361



Family:

Publication number	Publication date	Application number	Application date
DE102008064514 A1	20100701	DE200810064514	20081222
DE502009005698 D1	20130207	DE200950005698T	20091221
EP2379402 A1	20111026	EP20090796326	20091221
EP2379402 B1	20121212	EP20090796326	20091221
EP2379402 B2	20170823	EP20090796326	20091221
ES2399180 T3	20130326	ES20090796326T	20091221
ES2399180 T5	20171030	ES20090796326T	20091221
US2011251008 AA	20111013	US20110164877	20110621
US8608610 BB	20131217	US20110164877	20110621
WO10072397 A1	20100701	WO2009EP09193	20091221

Priority:

DE200810064514 20081222 EP20090796326 20091221 WO2009EP09193 20091221

Probable Assignee: PINION GMBH

Assignee(s): (std): FINESCHNITT GMBH ; LERMEN CHRISTOPH ; PINION GMBH ; SCHMITZ MICHAEL

Inventor(s): (std): LERMEN CHRISTOPH ; SCHMITZ MICHAEL

Agent(s): WITTE WELLER AND PARTNER PATENTANWALTE MBH; WITTE WELLER AND PARTNER; UNGRIA JAVIER; REISING ETHINGTON PC; STEIL CHRISTIAN ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
DE102008064514 A1	20100701	LSPB	+	published / reissued	
DE102008064514 A1	20100701	LSSES	+OP8	REQUEST FOR EXAMINATION AS TO PARAGRAPH 44 PATENT LAW	
DE102008064514 A1	20141204	LSAS	R081	CHANGE OF APPLICANT/PATENTEE	PARTYTYPE : OWNER OWNER : PINION GMBH, DE OLDPARTY : FORMER OWNER: FINESCHNITT GMBH, 70469 STUTTGART, DE EFFECTIVE DATE : 20141024
DE102008064514 A1	20180312	LSRV	-R002	REFUSAL DECISION IN EXAMINATION/REGISTRATION PROCEEDINGS	
EP2379402 A1	20111026	LSPB	+	published / reissued	
EP2379402 A1	20111026	LSSES	+17P	REQUEST FOR EXAMINATION	EFFECTIVE DATE :

FILED				20110722	
EP2379402 A1	20121121	LSAS	RAP1	TRANSFER OF RIGHTS OF AN APPLICATION	PARTYTYPE : OWNER OWNER : PINION GMBH
EP2379402 A1	20160129	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20151221 YEAR OF FEE PAYMENT : 7
EP2379402 A1	20160129	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20151221 YEAR OF FEE PAYMENT : 7
EP2379402 A1	20160229	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20151221 YEAR OF FEE PAYMENT : 7
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EP2379402 A1	20160229	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : NL PAYMENT DATE : 20151221 YEAR OF FEE PAYMENT : 7
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EP2379402 B1	20121212	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2379402 B1	20121212	LSGT	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : GB REF LEGAL EVENT CODE : FG4D TEXT : NOT ENGLISH
EP2379402 B1	20121214	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : CH REF LEGAL EVENT CODE : EP
EP2379402 B1	20121215	LSNP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : AT REF LEGAL EVENT CODE : REF REF DOCUMENT NUMBER : 588187 COUNTRY OF REF DOCUMENT : AT KIND CODE OF REF DOCUMENT : T DESIGNATED STATE(S) : EFFECTIVE DATE : 20121215
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EP2379402 B1	20130207	LSPB	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R096 REF DOCUMENT NUMBER :

					502009005698 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130207
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					DESCRIPTION OR TO PAY THE FEE WITHIN THE PRESCRIBED TIME-LIMIT LAPSED DATE : 20121212
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EP2379402 B1	20130925	LSLE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : IE REF LEGAL EVENT CODE : MM4A
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EP2379402 B1	20131017	LSOP	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R026 REF DOCUMENT NUMBER : 502009005698 COUNTRY OF REF DOCUMENT : DE EFFECTIVE DATE : 20130717
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EP2379402 B1	20140530	LSLE	-PG25	LAPSED IN A CONTRACTING STATE ANNOUNCED VIA POSTGRANT INFORM. FROM NAT. OFFICE TO EPO	COUNTRY OF REF DOCUMENT : LU NOTIFICATION OF LAPSE : LAPSE BECAUSE OF NON-PAYMENT OF DUE FEES LAPSED DATE : 20121221
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EP2379402 B1	20151221	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 7
EP2379402 B1	20161222	LSFE	REG	REFERENCE TO A NATIONAL CODE	COUNTRY OF REF DOCUMENT : FR REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 8
EP2379402 B1	20170131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20161221 YEAR OF FEE PAYMENT : 8
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EP2379402 B1	20170228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20161222 YEAR OF FEE PAYMENT : 8
EP2379402 B1	20170228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20161222 YEAR OF FEE PAYMENT : 8
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EP2379402 B1	20170428	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : DE PAYMENT DATE : 20170128 YEAR OF FEE PAYMENT : 8
EP2379402 B1	20170630	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : IT PAYMENT DATE : 20161223 YEAR OF FEE PAYMENT : 8
EP2379402 B1	20291221	PEXP		Calculated Patent Term Expiry	
EP2379402 B2	20170823	LSGT	+	granted / extensions (spc, cpc, pte)	
EP2379402 B2	20170823	LSRE	27A	MAINTAINED AS AMENDED	EFFECTIVE DATE : 20170823
EP2379402 B2	20170823	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : DE REF LEGAL EVENT CODE : R102 REF DOCUMENT NUMBER : 502009005698 COUNTRY OF REF DOCUMENT : DE
EP2379402 B2	20171030	LSRE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : ES REF LEGAL EVENT CODE : DC2A REF DOCUMENT NUMBER : 2399180 COUNTRY OF REF DOCUMENT : ES KIND CODE OF REF DOCUMENT : T5 DESIGNATED STATE(S) : EFFECTIVE DATE : 20171030
EP2379402 B2	20171221	LSFE	REG	REFERENCE TO A NATIONAL CODE	REF COUNTRY CODE : FR REF LEGAL EVENT CODE : PLFP YEAR OF FEE PAYMENT : 9
EP2379402 B2	20180131	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : FR PAYMENT DATE : 20171221 YEAR OF FEE PAYMENT : 9
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EP2379402 B2	20180228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : GB PAYMENT DATE : 20171221 YEAR OF FEE PAYMENT : 9
EP2379402 B2	20180228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : CH PAYMENT DATE : 20171220 YEAR OF FEE PAYMENT : 9

EP2379402 B2	20180228	LSFE	+PGFP	POSTGRANT: ANNUAL FEES PAID TO NATIONAL OFFICE	COUNTRY OF REF DOCUMENT : AT PAYMENT DATE : 20171221 YEAR OF FEE PAYMENT : 9
EP2379402 B2	20291221	PEXP		Calculated Patent Term Expiry	
ES2399180 T3	20130326	LSGT	+	granted / extensions (spc, cpc, pte)	
ES2399180 T3	20291221	PEXP		Calculated Patent Term Expiry	
US2011251008 AA	20111013	LSPB	+	published / reissued	
US8608610 BB	20131217	LSGT	+	granted / extensions (spc, cpc, pte)	
US8608610 BB	20131102	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : PINION GMBH, GERMANY OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS: SCHMITZ, MICHAEL; LERMEN, CHRISTOPH; REEL/FRAME: 031532/0966 EFFECTIVE DATE : 20110815
US8608610 BB	20131126	LSGT	PAT1	Patented Case	
US8608610 BB	20170606	LSFE	+FPAY	FEE PAYMENT	YEAR OF FEE PAYMENT : 4
US8608610 BB	20310621	PEXP		Calculated Patent Term Expiry	
WO10072397 A1	20100701	LSPB	+	published / reissued	
WO10072397 A1	20110622	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE

Title: AN **OVERRUNNING TRANSMISSION** DEVICE CONVENIENT FOR **SWITCHING**

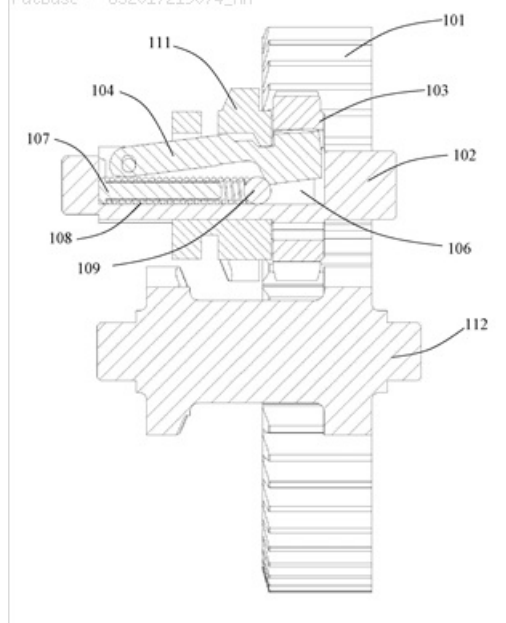
Abstract: Source: US2017219074A [EN] The present invention discloses an **overrunning transmission** device convenient for **switching**. The transmission device comprises a transmission **gear** and a transmission shaft (102) which is arranged to penetrate a shaft hole of the transmission **gear**, wherein at least one clamping **groove** (105) is formed at an edge of the shaft hole of the transmission **gear**; a **chamber** is formed in transmission shaft (102) which extends in the axial direction of the transmission shaft (102), and a clamping plate (104) is provided in the **chamber**; and an end of the clamping plate (104) can move in the **chamber** back and forth along the radial direction of the transmission **gear** so that the end of the clamping plate (104) can be inserted into or removed from the clamping **groove** (105), thereby the transmission shaft (102) and the transmission **gear** can be engaged and separated with each other. The **overrunning transmission** device convenient for **switching** can make the **switching** smooth and save energy effectively.

Classifications:

International (IPC 8-9): B60K17/04 B60K17/08 B62M11/04 F16D7/04 F16H3/083 F16H3/089 F16H35/10 F16H63/30 (Advanced/Invention)

CPC: F16H35/10 F16H3/089 F16D7/048 F16H2003/0822 B62M11/04 F16H63/30 F16H2063/3093

PatBase - US2017219074_AA



Family:

Publication number	Publication date	Application number	Application date
AP201709789 A0	20170228	AP20170009789	20150803
CN104097505 A	20141015	CN201410377428	20140801
CN105059109 A	20151118	CN201510481229	20150803
CN105059109 B	20171114	CN201510481229	20150803
CN205086678 U	20160316	CN201520592535U	20150803
CO20170002077 A2	20170531	CO20170002077	20170301
EA201700092 A1	20171130	EA20170000092	20150803
EP3176067 A1	20170607	EP20150826636	20150803
EP3176067 A4	20180425	EP20150826636	20150803
MX2017001443 A1	20180112	MX20170001443	20150803
PE14942017 A1	20171018	PE20170000154	20150803
PH2017500187 A	20170628	PH20170500187	20170131
US2017219074 AA	20170803	US20150329687	20150803
WO16015682 A1	20160204	WO2015CN085969	20150803

Priority:

CN201410377428 20140801 CN201510481229 20150803 WO2015CN085969 20150803

Probable Assignee: CHONGQING HIJOY IND GROUP CO LTD

Assignee(s): (std): CHONGQING HIJOY IND GROUP CO LTD ; CHONGQING SHUANGQING IND GROUP CO LTD ; CHONGQING HIJOY IND CO LTD

Assignee(s): CHONGQING HIJOY IND GROUP CO ; CHONGQING HIJOY IND CO ; CHONGQING SHUANGQING IND GROUP CO ; LTD CHONGQING HIJOY IND GROUP CO

Inventor(s): (std): GENGSU RAN ; RAN GENGSU

Inventor(s): INVENTOR HAS WAIVED RIGHT TO BE MENTIONED

Agent(s): LUIS FELIPE CASTILLO GIBSON; HOEIBERG P S; HYLANDS LAW FIRM

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
CN104097505 A	20141015	LSPB	+	published / reissued	
CN104097505 A	20141015	LSPB	+C06	PUBLICATION	
CN104097505 A	20150923	LSDW	-C05	DEEMED WITHDRAWAL (PATENT LAW BEFORE 1993)	
CN105059109 A	20151118	LSPB	+	published / reissued	
CN105059109 A	20151118	LSPB	+C06	PUBLICATION	
CN105059109 B	20171114	LSGT	+	granted / extensions (spc, cpc, pte)	
CN105059109 B	20171114	LSGT	+GR01	PATENT GRANT	
CN105059109 B	20350803	PEXP		Calculated Patent Term Expiry	
CN205086678 U	20160316	LSGT	+	granted / extensions (spc, cpc, pte)	
CN205086678 U	20160316	LSGT	+C14	GRANT OF PATENT OR UTILITY MODEL	
CN205086678 U	20171114	LSWD	-AV01	PATENT RIGHT ACTIVELY ABANDONED	
CN205086678 U	20250803	PEXP		Calculated Patent Term Expiry	
CO20170002077 A2	20170531	LSPB	+	published / reissued	
EA201700092 A1	20171130	LSPB	+	published / reissued	
EP3176067 A1	20170607	LSPB	+	published / reissued	
EP3176067 A1	20170607	LSSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20170301
MX2017001443 A1	20180112	LSPB	+	published / reissued	
PE14942017 A1	20171018	LSPB	+	published / reissued	
PH2017500187 A	20170628	LSPB	+	published / reissued	
US2017219074 AA	20170803	LSPB	+	published / reissued	
US2017219074 AA	20170508	LSAS	AS	ASSIGNMENT	PARTYTYPE : OWNER OWNER : CHONGQING HIJOY INDUSTRY GROUP CO., LTD., CHINA OLDPARTY : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:RAN, GENGSHU; REEL/FRAME:042280/0857 EFFECTIVE DATE : 20170418
WO16015682 A1	20160204	LSPB	+	published / reissued	
WO16015682 A1	20170201	LSNE	NENP	NON-ENTRY INTO THE NATIONAL PHASE IN:	REF COUNTRY CODE : DE
WO16015682 A1	20170301	LSNP	+WWE	WIPO INFORMATION: ENTRY INTO NATIONAL PHASE	REF DOCUMENT NUMBER : 201700092 COUNTRY OF REF DOCUMENT : EA

Title: TOROIDAL CONTINUOUSLY VARIABLE TRANSMISSION AND BICYCLE INTERIOR TRANSMISSION HUB USING THE SAME

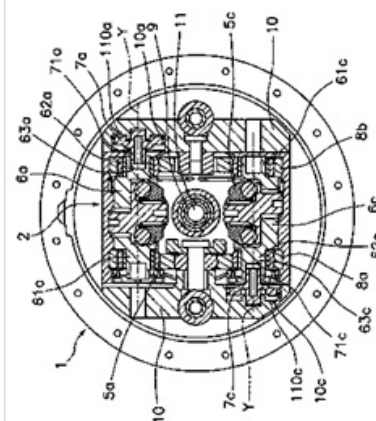
Abstract: Source: JP2015183835A [EN] PROBLEM TO BE SOLVED: To provide a toroidal continuously variable transmission capable of dispensing with a complicated control circuit even with a configuration of tilting a power roller by a fluid pressure, and a bicycle interior transmission hub using the same. SOLUTION: A first piston 7a can move a first trunnion 6a in a direction along a tilt axis Y direction using a hydraulic pressure. A male screw portion 71a of the first piston 7a is screwed with a female screw portion 63a of the first trunnion 6a. Owing to this, the first trunnion 6a moves in a second direction opposite to the first direction by tilting the first trunnion 6a in a first tilt direction to follow the movement of the first trunnion 6a in the first direction.

Classifications:

International (IPC 8-9): B62M11/04 B62M19/00 B62M9/04 B62M9/08 F16D41/24 F16H15/38 F16H61/664 F16H63/06 (Advanced/Invention)

CPC: B62M11/04 F16H15/38 F16H61/664 F16H2015/383

PatBase - JP2015183835_H2



JP5795400 B1	20150728	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP5795400 B1	20150805	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20150804
JP5795400 B1	20150820	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20150812
JP5795400 B1	20150821	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 5795400 COUNTRY OF REF DOCUMENT : JP
JP5795400 B1	20340326	PEXP		Calculated Patent Term Expiry	
TW201536628 A	20151001	LSPB	+	published / reissued	
TWI592332 B	20170721	LSGT	+	granted / extensions (spc, cpc, pte)	
TWI592332 B	20350129	PEXP		Calculated Patent Term Expiry	

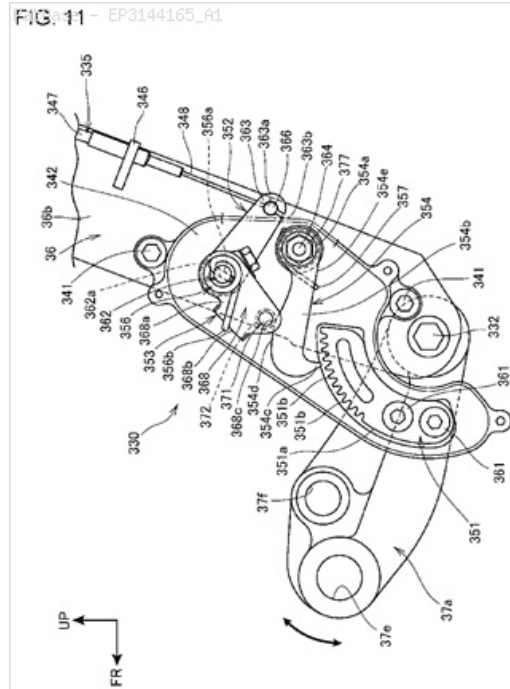
Title: AUFHAENGUNGSSPERRMECHANISMUS FUER EIN FAHRZEUG SUSPENSION LOCK MECHANISM OF VEHICLE

Abstract: Source: EP3144165A1 [EN] To provide a suspension lock mechanism that can stop a stroke of a suspension of a vehicle. In a suspension lock mechanism (330) of a rocking vehicle where a pivot arm (37a) is rockably supported by a support arm (36b) provided on the vehicle body side, a front wheel is supported by an end of the pivot arm (37a) via an axle and a stroke of a link type suspension mechanism in which a shock absorber is extended/contracted by a rocking of the pivot arm (37a) is stopped, a locking **gear** (351) interlocked with the rocking of the pivot arm (37a) is provided and a locking lever (354) engaged with the locking **gear** (351) is provided.

Classifications:

International (IPC 8-9): B60G17/005 B60G3/14 B60G7/02 B62K25/04 B62K25/08 B62K25/16 B62K5/00 B62K5/027 B62K5/05 B62K5/08 B62K5/10 (Advanced/Invention)

CPC: B60G3/145 B60G7/02 B60G17/005 B60G2202/43 B60G2204/143 B60G2204/419 B60G2204/4604 B60G2300/122 B60G2300/45 B62K5/027 B62K5/08 B62K5/10 B62K2005/001 B62K2025/047 B62J2099/0046 B62K5/05



Family:

Publication number	Publication date	Application number	Application date
EP3144165 A1	20170322	EP20160186817	20160901
JP2017056907 A2	20170323	JP20150185605	20150918
JP6134362 B2	20170524	JP20150185605	20150918

Priority:

JP20150185605 20150918

Probable Assignee: HONDA MOTOR CO LTD

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Assignee(s): HONDA MOTOR CO

Inventor(s): (std): SHIMIZU KENZO ; YAMAGUCHI MASAHIRO

Agent(s): KIWIT BENEDIKT

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Legal status (INPADOC)

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Patent	Date recorded	Event group	Code	Event	Details
EP3144165 A1	20170322	LSPB	+	published / reissued	
EP3144165 A1	20170322	LSES	+17P	REQUEST FOR EXAMINATION FILED	EFFECTIVE DATE : 20160901
EP3144165 A1	20180214	LSGT	+INTG	ANNOUNCEMENT OF INTENTION TO GRANT	EFFECTIVE DATE : 20180115
JP2017056907 A2	20170323	LSPB	+	published / reissued	
JP2017056907 A2	20170126	LSRE	A521	WRITTEN AMENDMENT	TEXT : JAPANESE INTERMEDIATE CODE: A523 EFFECTIVE DATE : 20170126

JP2017056907 A2	20170331	LSGT	+TRDD	DECISION OF GRANT OR REJECTION WRITTEN	
JP2017056907 A2	20170404	LSGT	+A01	WRITTEN DECISION TO GRANT A PATENT OR TO GRANT A REGISTRATION (UTILITY MODEL)	TEXT : JAPANESE INTERMEDIATE CODE: A01 EFFECTIVE DATE : 20170404
JP2017056907 A2	20170427	LSFE	+A61	FIRST PAYMENT OF ANNUAL FEES (DURING GRANT PROCEDURE)	TEXT : JAPANESE INTERMEDIATE CODE: A61 EFFECTIVE DATE : 20170421
JP2017056907 A2	20170428	LSGT	+R150	CERTIFICATE OF PATENT OR REGISTRATION OF UTILITY MODEL	TEXT : JAPANESE INTERMEDIATE CODE: R150 REF DOCUMENT NUMBER : 6134362 COUNTRY OF REF DOCUMENT : JP
JP6134362 B2	20170524	LSGT	+	granted / extensions (spc, cpc, pte)	
JP6134362 B2	20170406	LSGT	+A01	特許査定書 Decision of patent grant	
JP6134362 B2	20170425	LSFE	R100	特許料納付書 Patent fee payment form	
JP6134362 B2	20170428	LSGT	+R150	特許証 Patent certificate	
JP6134362 B2	20350918	PEXP		Calculated Patent Term Expiry	