

Diego Gonzalez

1) Family number: 41825595 (US2008236316A)

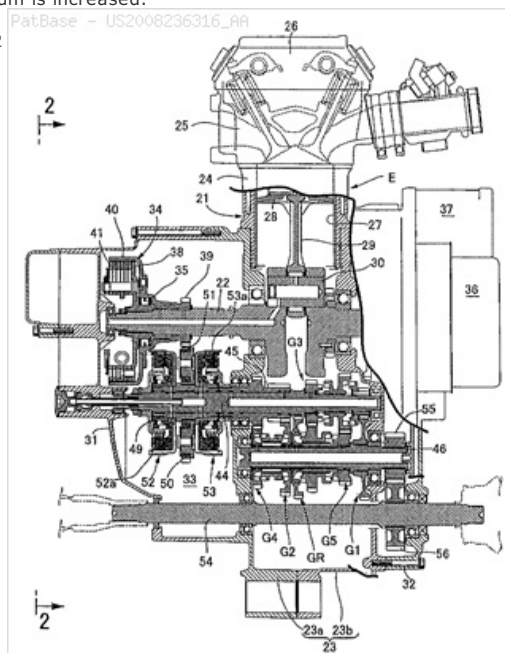
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Title: VEHICLE TRANSMISSION

Abstract: An outer circumference of a shift drum of a vehicle transmission is provided with at least one particular lead groove among multiple lead grooves which continuously extends beyond one circle of the shift drum. Two ends of the particular lead groove are arranged so as to be out of alignment with each other in the axial direction of the shift drum. A common shift position adapted to establish gear trains with two shift stages different from each other is set at one position corresponding to the two ends of the particular lead groove along the circumferential direction of the shift drum. The resulting configuration prevents an increase in the diameter of a shift drum and eliminates the significant change of the shape of a lead groove, even as the number of shift positions set on the shift drum is increased.

Classifications:

International (IPC 8-9): F16H3/083 F16H59/00 F16H61/28 F16H61/32 F16H63/18 F16H63/30 F16H63/38 (Advanced/Invention); F16H3/08 F16H59/00 F16H61/28 F16H63/08 F16H63/30 (Core/Invention)
CPC: Y10T74/19251 Y10T74/19279 F16H63/18 F16H61/32
European: F16H61/32 F16H63/18 R16H61/32
US: 74/335 74/335P 74/337.5



Family:

Publication number	Publication date	Application number	Application date
AU2008200455 AA	20081016	AU20080200455	20080130
AU2008200455 BB	20100204	AU20080200455	20080130
CA2621613 AA	20080928	CA20082621613	20080213
CA2621613 C	20100914	CA20082621613	20080213
GB200805431 A0	20080430	GB20080005431	20080325
GB2448060 A1	20081001	GB20080005431	20080325
GB2448060 B2	20090513	GB20080005431	20080325
JP2008240923 A2	20081009	JP20070083263	20070328
JP4897534 B2	20120314	JP20070083263	20070328
US2008236316 AA	20081002	US20080055020	20080325
US8042419 BB	20111025	US20080055020	20080325

Priority:

JP20070083263 20070328 CA20082621613 20080213

Probable Assignee: HONDA MOTOR CO LTD

Assignee(s): (std): HONDA MOTOR CO LTD ; KITAKA EIJI ; KOBAYASHI MASAKI ; MIZUNO KINYA ; SUMI HIROMI ; TAKAHASHI MASAKO

Assignee(s): HONDA MOTOR CO

Inventor(s): (std): KOBAYASHI MASAKI ; TAKAHASHI MASAKO ; SUMI HIROMI ; MIZUNO KINYA ; KITAKA EIJI ; KIKKO EIJI

Inventor(s): EIJI KITAKA ; MASAKO TAKAHASHI ; MASAKI KOBAYASHI ; KINYA MIZUNO ; HIROMI SUMI

Agent(s): SPRUSON AND FERGUSON; DENNISON ASSOCIATES; BIRCH STEWART KOLASCH AND BIRCH; BIRCH STEWART KOLASCH AND BIRCH LLP

2) Family number: 41658102 (US2008184844A)

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Title: TRANSMISSION FOR VEHICLE

Abstract: A transmission for a vehicle in which changing a shift position is achieved by sliding a shifter. In sliding the shifter

to change the established condition of gear trains respectively corresponding to a plurality of shift positions, the transmission of power from an engine to a main shaft is cut off. A feed mechanism for sliding the shifter is configured to reduce the sliding speed of the shifter or to once stop the sliding operation of the shifter in a neutral condition during the sliding operation of the shifter in changing the established condition of the gear trains. The resulting configuration reduces the engagement noise when changing the shift position.

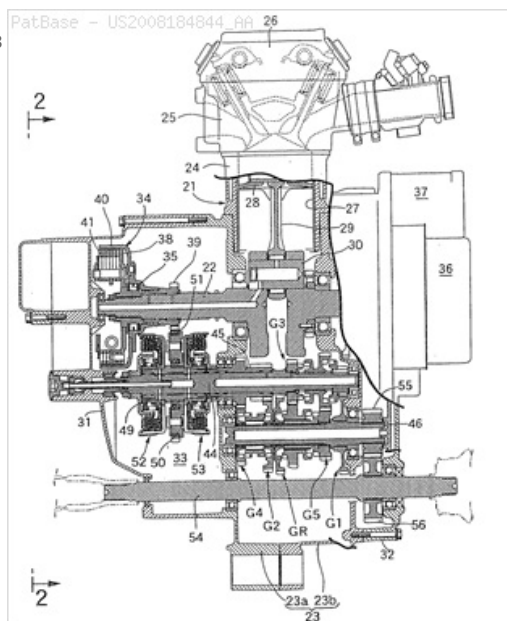
Classifications:

International (IPC 8-9): F16H3/091 F16H57/02 F16H59/68 F16H61/28 F16H63/08 F16H63/18 F16H63/30 F16H63/32 F16H63/38 (Advanced/Invention)

CPC: Y10T74/19019 Y10T74/19251 F16H63/18 F16H3/006 F16H61/32 F16H61/688

European: F16H61/32 F16H63/18 R16H3/00F R16H344/04 R16H61/688

US: 74/335 74/335S 74/664 74/664P



Family:

Publication number	Publication date	Application number	Application date
AU2007205769 AA	20080417	AU20070205769	20070810
AU2007205769 BB	20100603	AU20070205769	20070810
CA2604587 AA	20080329	CA20072604587	20070927
CA2604587 C	20101123	CA20072604587	20070927
DE602007017472 D1	20111201	DE200760017472T	20070726
EP1906065 A1	20080402	EP20070113230	20070726
EP1906065 B1	20110928	EP20070113230	20070726
JP2008089059 A2	20080417	JP20060270043	20060929
JP4979327 B2	20120718	JP20060270043	20060929
US2008184844 AA	20080807	US20070902892	20070926
US8051733 BB	20111108	US20070902892	20070926

Priority:

JP20060270043 20060929 EP20070113230 20070726 CA20072604587 20070927

Probable Assignee: HONDA MOTOR CO LTD

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

Assignee(s): KITTAKE EIJI ; SAKAGUCHI KAZUHIKO ; MIZUNO KINYA ; HAMAOKA SEIJI ; HONDA MOTOR CO

Inventor(s): (std): HAMAOKA SEIJI ; MIZUNO KINYA ; SAKAGUCHI KAZUHIKO ; KITTAKE EIJI ; KIKKO EIJI

Inventor(s): MIZUNO KINYA C O HONDA R AND D CO LTD ; SAKAGUCHI KAZUHIKO C O HONDA R AND D CO LTD ; HAMAOKA SEIJI C O HONDA R AND D CO LTD ; KITTAKE EIJI C O HONDA R AND D CO LTD ; KITTAKE EIJI C O HONDA R AND D CO LTD ; SAKAGUCHI KAZUHIKO C O HONDA R AND D CO LTD ; HAMAOKA SEIJI C O HONDA R AND D CO LTD ; MIZUNO KINYAC O HONDA R AND D CO LTD ; EIJI KITTAKE ; KINYA MIZUNO ; SEIJI HAMAOKA ; KAZUHIKO SAKAGUCHI

Agent(s): SPRUSON AND FERGUSON; DENNISON ASSOCIATES; MITSCHERLICH PATENT U RECHTSANWAELTE PARTMBB; RUPP CHRISTIAN; BIRCH STEWART KOLASCH AND BIRCH; BIRCH STEWART KOLASCH AND BIRCH LLP

Designated states: AL BA DE FR HR IT MK YU

3) Family number: 62457933 (US2016146334A)

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Title: ELECTRONIC SHIFTING OF A TRANSMISSION

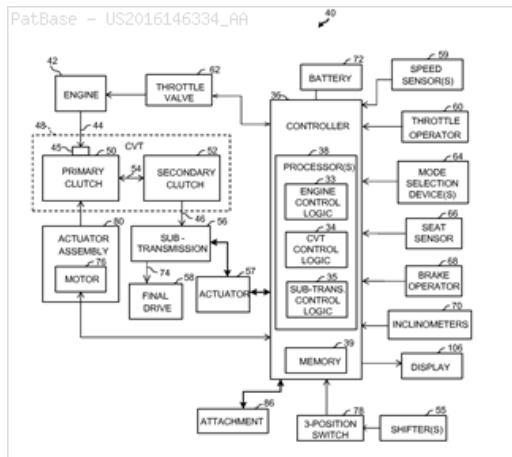
Abstract: A recreational vehicle is provided including a power source, such as an engine or an electric motor, and a transmission having a variable gear ratio. A sub-transmission coupled to an output of the transmission includes a plurality of selectable gear configurations including at least one of a forward gear, a neutral gear, a reverse gear, and a park gear. An electronic controller is operative to electronically control the gear configuration of the sub-transmission.

Classifications:

International (IPC 8-9): B60L15/20 F16H59/02 F16H59/10 F16H59/38 F16H59/40 F16H59/44 F16H59/70 F16H59/74 F16H61/02 F16H61/04 F16H61/16 F16H61/66 F16H61/662 F16H61/70 F16H63/02 F16H63/18 F16H63/30 F16H63/44 F16H63/48 F16H9/04 G06F17/00 G06F19/00 G06F7/00 (Advanced/Invention); F16H59/36 (Advanced/Non-invention)

CPC: B60L15/2054 F16H61/0248 F16H61/16 F16H61/702 F16H61/0204 F16H2059/366 Y02T10/7258 F16H59/105 F16H59/36 F16H61/662 F16H63/18 F16H63/44 F16H63/48 F16H2059/746 F16H9/04 F16H61/0003 F16H61/0437 F16H63/02 F16H63/30 F16H2063/025 F16H2710/04 F16H59/02 F16H59/0217 F16H2059/0221 F16H2061/161

US: 701/22 701/51

**Family:**

Publication number	Publication date	Application number	Application date
AU2015353903 AA	20170608	AU20150353903	20151118
AU2016355478 AA	20180531	AU20160355478	20161121
BR112017009957 A2	20180214	BR20171109957	20151118
CA2968368 AA	20170518	CA20152968368	20151118
CA3003485 AA	20180426	CA20163003485	20161121
CN107002834 A	20170801	CN201580063923	20151118
CN108291638 A	20180717	CN201680067811	20161121
EP3224501 A1	20171004	EP20150801644	20151118
EP3377789 A2	20180926	EP20160819719	20161121
MX2017006117 A1	20170719	MX20170006117	20151118
MX2018005824 A1	20180801	MX20180005824	20161121
US2016146334 AA	20160526	US20140554648	20141126
US2016146335 AA	20160526	US20150947737	20151120
US2017328465 AA	20171116	US20170666965	20170802
US9702455 BB	20170711	US20140554648	20141126
US9746070 BB	20170829	US20150947737	20151120
US9759313 BB	20170912	US20140554648	20141126
WO16085728 A1	20160602	WO2015US61274	20151118
WO17087935 A2	20170526	WO2016US63030	20161121
WO17087935 A3	20170727	WO2016US63030	20161121
WO19028480 A1	20190207	WO2018US47782	20180823

Priority:

US20140554648 20141126 WO2015US61274 20151118 US20150947737 20151120
 WO2016US63030 20161121 US20170666965 20170802

Probable Assignee: POLARIS IND INC**Assignee(s):** (std): POLARIS IND INC ; POLARIS INC ; MCGUIRE MATTHEW P ; SYTSMA COLE A ; KROSSCHELL BRIAN D**Assignee(s):** NELSON STEPHEN L ; CARLSON RYAN D ; DECKARD AARON D ; FREDRICKSON DONOVAN L ; KOENIG DAVID J**Inventor(s):** (std): CARLSON RYAN D ; NELSON STEPHEN L ; FREDRICKSON DONOVAN L ; KOENIG DAVID J ; DECKARD AARON D ; SYTSMA COLE A ; KROSSCHELL BRIAN D ; MCGUIRE MATTHEW P ; RYAN D CARLSON ; DONOVAN L FREDRICKSON ; DAVID J KOENIG ; STEPHEN L NELSON ; AARON D DECKARD ; COLE A SYTSMA ; MATTHEW P MCGUIRE ; BRIAN D KROSSCHELL**Agent(s):** WATERMARK INTELLECTUAL PROPERTY PTY LTD; SIM AND MCBURNEY; MARKS AND CLERK; REUTELER AND CIE SA; FAEGRE BAKER DANIELS LLP; GROEN ERIC J**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 DJ 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 JO JP KE KG KH KM KN KP KR KW 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**4) Family number: 43073385 (US2009084208A)**

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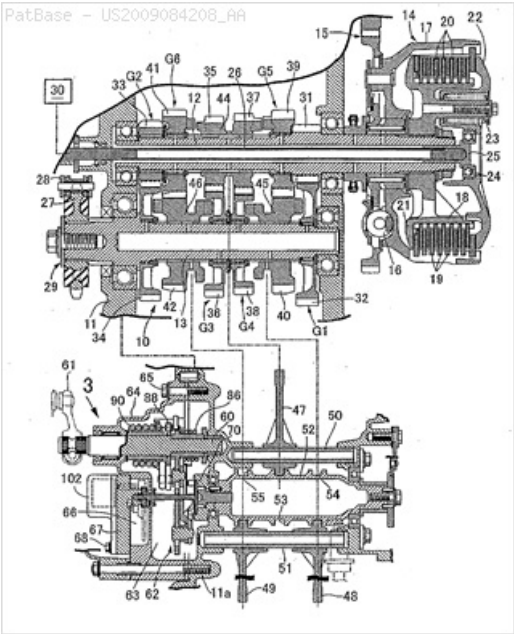
Title: TRANSMISSION FOR VEHICLES

Abstract: A shift position changing drive member for a transmission includes an arm member capable of turning around the axis of a shift spindle for drivingly turning a shift drum in response to the turning of the shift spindle wherein the shift drum is prevented from coming into a neutral position even if the shifting speed is stopped in midstream. A lost motion spring includes gripping portions gripping a pressing portion from both sides of a coil portion surrounding the shift spindle. An arm member of shift position changing drive member is provided with a pressure-receiving member which is gripped by both gripping portions in such a manner that when the turning member is turned, if, in response to the turning direction, the pressing portion abuts against one of the gripping portions for turning, the other of the gripping portions abuts against the pressure-receiving member.

Classifications:

International (IPC 8-9): B60K17/06 B60K20/00 F16H3/08 F16H59/00
 F16H59/68 F16H59/70 F16H63/14 F16H63/18 F16H63/30
 G01B21/22 (Advanced/Invention);
 B60K17/06 (Advanced/Non-invention);
 B60K17/06 B60K20/00 F16H3/08 F16H59/70 F16H63/08 F16H63/30
 G01B21/22 (Core/Invention);
 B60K17/06 (Core/Non-invention)

CPC: Y10T74/19219 Y10T74/19279 F16H59/68 F16H63/14 F16H63/18
European: F16H59/68 F16H63/14 R16H63/18
US: 74/325 74/325P 74/337.5



Family:

Publication number	Publication date	Application number	Application date
CN101396964 A	20090401	CN200810146370	20080827
CN101396964 B	20120516	CN200810146370	20080827
DE602008011524 D1	20120126	DE200860011524T	20080806
DE602008016620 D1	20120816	DE200860016620T	20080806
EP2042782 A1	20090401	EP20080161915	20080806
EP2042782 B1	20111123	EP20080161915	20080806
EP2333382 A1	20110615	EP20110156744	20080806
EP2333382 B1	20120620	EP20110156744	20080806
ES2374409 T3	20120216	ES20080161915T	20080806
ES2387757 T3	20121001	ES20110156744T	20080806
JP2009085348 A2	20090423	JP20070256536	20070928
JP2009085349 A2	20090423	JP20070256537	20070928
JP4954007 B2	20120613	JP20070256536	20070928
JP4954008 B2	20120613	JP20070256537	20070928
US2009084208 AA	20090402	US20080176847	20080721
US7891262 BB	20110222	US20080176847	20080721

Priority:

JP20070256537 20070928 JP20070256536 20070928 EP20080161915 20080806
EP20110156744 20080806

Probable Assignee: HONDA MOTOR CO LTD

Assignee(s): (std): HONDA MOTOR CO LTD ; IEDA YOSHIHISA ; IWASHITA KANAU ; TOMODA AKIHIKO ; SAHODA KATSUMI ; HAYAKAWA KOSHI

Assignee(s): HONDA GIKEN KOGYO K K ; HONDA MOTOR CO

Inventor(s): (std): HAYAKAWA KOSHI ; TOMODA AKIHIKO ; IWASHITA KANAU ; IEDA YOSHIHISA ; SAHODA KATSUMI ; TOMODA AKIHIKO ; SAHODA KATSUZO ; HAYAKAWA HIROSHI ; IWASHITA MITSUGI ; AKIHIKO TOMODA ; KOSHI HAYAKAWA ; KATSUMI SAHODA ; KANAU IWASHITA ; YOSHIHISA IEDA

Agent(s): MITSCHERLICH PATENT U RECHTSANWAELTE PARTMBB; RUPP CHRISTIAN ET AL; RUPP CHRISTIAN; BEDER JENS; BIRCH STEWART KOLASCH AND BIRCH; BIRCH STEWART KOLASCH AND BIRCH LLP

Designated states: AL BA DE ES FR IT MK RS

5) Family number: 43782205 (US2009241716A)

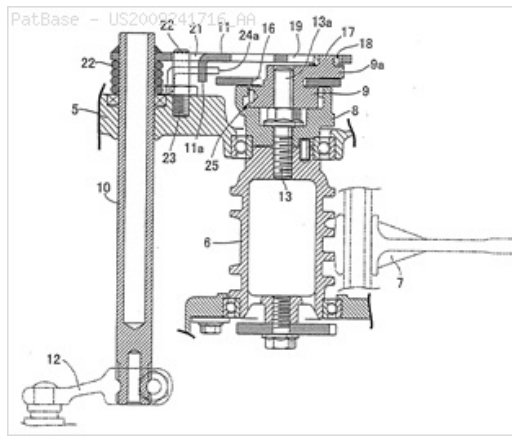
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Title: SHIFT DRIVE DEVICE

Abstract: A shift drive device with a shift arm having one end secured to a shift spindle with a guide hole for receiving a pin, provide to project therefrom, inserted therethrough and engaged therewith. A turn-restriction hole receives a restriction pin provided on a transmission case. A space that is needed for turning the shift arm is reduced. A turn-restriction hole is provided in a shift arm so as to be disposed on a straight line connecting an axial line of a shift spindle with the center of a guide hole.

Classifications:

International (IPC 8-9): B60K20/00 F16H59/04 F16H63/16 F16H63/18 F16H63/30 G05G9/00 (Advanced/Invention); F16H59/04 F16H63/08 F16H63/30 (Core/Invention)
CPC: Y10T74/20018 Y10T74/20177 F16H63/14 F16H63/18
European: F16H63/14 R16H63/18
US: 74/473.1 74/473.36 74/473.360P



Family:

Publication number	Publication date	Application number	Application date
IT1393768 B1	20120508	IT2009T000081	20090206
ITTO20090081 A1	20091001	IT2009T000081	20090206
JP2009243627 A2	20091022	JP20080092877	20080331
JP5014228 B2	20120829	JP20080092877	20080331
US2009241716 AA	20091001	US20090395010	20090227
US8141451 BB	20120327	US20090395010	20090227

Priority:

JP20080092877 20080331

Probable Assignee: HONDA MOTOR CO LTD

Assignee(s): (std): HONDA MOTOR CO LTD ; SENDA AKIO ; TOKITO AKIRA ; TSUBAKINO YUKIHIRO

Assignee(s): HONDA MOTOR CO

Inventor(s): (std): TOKITO AKIRA ; TSUBAKINO YUKIHIRO ; SENDA AKIO

Agent(s): BIRCH STEWART KOLASCH AND BIRCH; BIRCH STEWART KOLASCH AND BIRCH LLP

6) Family number: 64915226 (US2018119749A)

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Title: TRANSMISSION AND VEHICLE

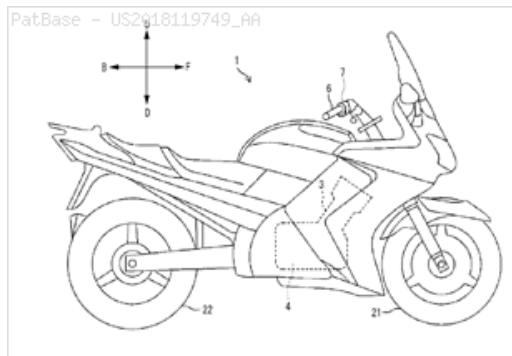
Abstract: Incongruity sense of a driver due to dog clunking noise can be reduced with reduction of dog clunking noise. A fifth-speed driving gear (425) and a sixth-speed driving gear (426) are arranged on a driving shaft (41) along an axial direction. A first slider (451) is disposed to be movable in the axial direction between the fifth-speed driving gear (425) and the sixth-speed driving gear (426). The first slider (451) is not rotatable on the driving shaft (41). In the axial direction, the sum of the widths of the fifth-speed driving gear (425) and the sixth-speed driving gear (426) is smaller than the maximum width of the first slider (451).

Classifications:

International (ipc 8-9): B62M11/06 F16D11/10 F16D11/14 F16D23/12 F16H3/083 F16H3/089 F16H3/091 F16H37/02 F16H61/32 F16H63/18 F16H63/30 F16H63/32 (Advanced/Invention); F16H61/04 F16H61/28 F16H61/32 F16H63/32 (Advanced/Non-invention)

International (ipc 1-7): F16D11/10 F16H3/083 F16H3/091 F16H63/18 F16H63/30

CPC: F16H3/083 F16H3/091 F16H63/18 F16H63/30 F16H2061/0474 F16H37/02 F16H61/32 F16H2061/2869 B62M11/06 F16H2200/0052 F16H2200/0013 F16H63/304 F16D23/12 F16D11/14 F16D2023/123 F16H2063/3056 F16H2063/3093 F16H3/089 F16D11/10 F16H63/32 F16D23/14 B60Y2200/12 F16D21/04



Family:

Publication number	Publication date	Application number	Application date
BR112018000667 A2	20180918	BR20181100667	20160810
CN107923528 A	20180417	CN201680046487	20160810
CN107923529 A	20180417	CN201680046491	20160810
EP3336391 A1	20180620	EP20160835232	20160810
EP3336391 A4	20180926	EP20160835232	20160810
EP3336392 A1	20180620	EP20160835233	20160810
EP3336392 A4	20180725	EP20160835233	20160810
EP3336393 A1	20180620	EP20160835234	20160810
EP3336393 A4	20180725	EP20160835234	20160810
ID201807298 A	20180720	ID2018P0000355	20160810
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ID201809892 A	20180907	ID2018PID00972	20160810
IN201827004398 A	20180511	IN201827004398	20180206
IN201827004687 A	20180511	IN201827004687	20180207
IN201827004688 A	20180511	IN201827004688	20180207
JP2017026534 A1	20180426	JP20170534498T	20160810
JP2017026536 A1	20180531	JP20170534500T	20160810

JP2017026537 A1	20180531	JP20170534501T	20160810
JP6426291 B1	20181121	JP20170534501T	20160810
US2018119749 AA	20180503	US20170858184	20171229
US2018187755 AA	20180705	US20180893620	20180210
US2018187756 AA	20180705	US20180893622	20180210
WO17026534 A1	20170216	WO2016JP73679	20160810
WO17026535 A1	20170216	WO2016JP73680	20160810
WO17026536 A1	20170216	WO2016JP73681	20160810
WO17026537 A1	20170216	WO2016JP73682	20160810

Priority:

JP20150158324	20150810	JP20150158325	20150810	JP20150158326	20150810
JP20150158327	20150810	WO2016JP73680	20160810	WO2016JP73679	20160810
WO2016JP73682	20160810	WO2016JP73681	20160810		

Probable Assignee: YAMAHA HATSUDOKI KK

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

Assignee(s): YAMAHA HATSUDOKI KK ; YAMAHA MOTOR CO

Inventor(s): (std): TAKEUCHI YOSHIHIKO ; YOSHIHIKO TAKEUCHI

Agent(s): STOECKELER FERDINAND; INSAN BUDI MAULANA SH; DIPL ING ROHALDY MULUK; SUZUKI KAZUAKI; TORII HIROSHI; NAKATSUKA MASAYA; BRIGHTAS IP ATTORNEYS

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

7) Family number: 43999400 (US2009287386A)

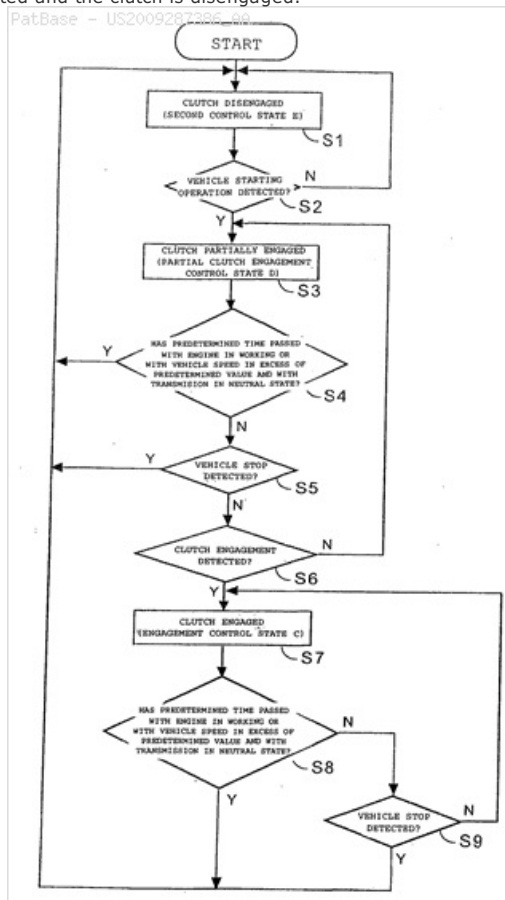
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Title: CLUTCH CONTROL SYSTEM

Abstract: The clutch control system includes a motor in a liquid pressure modulator for engagement/disengagement of a clutch, a clutch control unit for controlling the operation of the motor, vehicle condition detection means which detects at least that an engine is in working and which detects the running speed of the vehicle, and neutral detection means for detecting the neutral state of a transmission. As controlled states of the clutch, there are set a first control state in which the clutch is in a partially engaged state or an engaged state, and a second control state in which the clutch is disengaged. When the engine being working and the vehicle speed being in excess of a predetermined value is detected and the neutral state is detected, in the first control state, transition to the second control state is effected and the clutch is disengaged.

Classifications:

International (IPC 8-9): B60W10/02 B60W30/00 F16D48/06
G06F17/00 G06F19/00 G06F7/00 (Advanced/Invention);
B60W10/02 B60W30/00 F16D48/00 G06F17/00 (Core/Invention)
CPC: F16D48/06 F16D2500/10412 F16D2500/3067 F16D2500/30808
F16D2500/3108 F16D2500/5048 F16D2500/506 F16D2500/70424
Y10T477/75
European: F16D48/06 R16D500/104P1 R16D500/306V
R16D500/308R2 R16D500/310V R16D500/506 R16D500/704C1
US: 477/174 477/174S 701/51 701/67 701/67P 701/68



Family:

Publication number	Publication date	Application number	Application date
DE602009020621 D1	20140206	DE200960020621T	20090430
EP2119933 A2	20091118	EP20090159231	20090430
EP2119933 A3	20121024	EP20090159231	20090430
EP2119933 B1	20131211	EP20090159231	20090430
ES2452490 T3	20140401	ES20090159231T	20090430

JP2009275762 A2	20091126	JP20080126023	20080513
JP5011573 B2	20120829	JP20080126023	20080513
US2009287386 AA	20091119	US20090428974	20090423
US9020719 BB	20150428	US20090428974	20090423

Priority:

JP20080126023 20080513 EP20090159231 20090430

Probable Assignee: HONDA MOTOR CO LTD

Assignee(s): (std): HONDA MOTOR CO LTD ; TOMODA AKIHIKO

Assignee(s): HONDA MOTOR CO

Inventor(s): (std): TOMODA AKIHIKO ; TOMOTA AKIHIKO

Agent(s): ILGART JEAN CHRISTOPHE; PEREZ ELIANA; WESTERMAN HATTORI DANIELS AND ADRIAN LLP

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

8) Family number: 34607279 (US2007144292A)

© PatBase

Title: TRANSMISSION DEVICE

Abstract: To provide a transmission device in which assembly of a shift spindle is improved. In the transmission device, a groove is formed on a shift spindle into an annular shape along the peripheral portion of the shift spindle. A positioning pin is mounted so as to be inserted through a through hole of a rear cover from the outside. The distal end of the positioning pin projecting inwardly of the rear cover is locked with the groove. A rib with which a spindle plate can come into abutment is formed on the inner side of the rear cover. The groove is arranged on the extension of the through hole in a state in which the spindle plate comes into abutment with the rib.

Classifications:

International (IPC 8-9): F16H59/00 F16H61/00 F16H63/00

F16H63/18 (Advanced/Invention);

F16H59/00 F16H63/08 (Core/Invention)

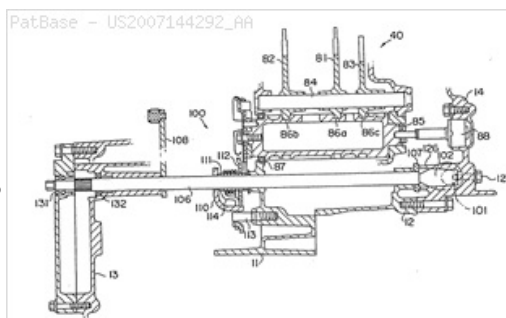
CPC: F16H61/26 F16H63/18 F16H2057/0062 Y10T74/13

Y10T74/19251 Y10T74/19279 Y10T74/20055 Y10T74/20177

Y10T74/2186

European: F16H61/26 R16H57/00Q R16H63/18

US: 74/335 74/337.5 74/337.500S 74/473.16 74/473.160P 74/473.36 74/6 74/606R



Family:

Publication number	Publication date	Application number	Application date
JP2007177874 A2	20070712	JP20050376521	20051227
JP4773201 B2	20110914	JP20050376521	20051227
US2007144292 AA	20070628	US20060642679	20061221
US8307730 BB	20121113	US20060642679	20061221

Priority:

JP20050376521 20051227

Probable Assignee: HONDA MOTOR CO LTD

Assignee(s): (std): HONDA MOTOR CO LTD ; KOYAMA SHINYA ; TOKOTANI HITOSHI ; EGASHIRA HIROAKI

Assignee(s): HONDA MOTOR CO

Inventor(s): (std): EGASHIRA HIROAKI ; KOYAMA SHINYA ; TOKOTANI HITOSHI ; YOKOYA HITOSHI

Agent(s): BIRCH STEWART KOLASCH AND BIRCH; BIRCH STEWART KOLASCH AND BIRCH LLP

9) Family number: 50658691 (IN02281CH2007A)

© PatBase

Title: A TRANSMISSION SYSTEM

Abstract: A transmission system comprising: a) an input shaft (11); b) an output shaft (12); c) a plurality of gears (12a-f, 13a-f) mounted on said input and output shafts, (11, 12) said gears (12a-f, 13a-f) being rotatable and forming pairs of input and output gears (12a, 13a...12f, 13f), said pairs of gears (12a, 13a...12f, 13f) being selectively operable to establish a plurality of transmission ratios between said input and output shafts; (11, 12) and d) a drum shifter (19) for control of transmission ratio selection wherein, on transmission ratio selection, meshing of required gears (12f, 13f) for the selected transmission ratio occurs when speed of rotation of the required gears (12f, 13f) is matched. The drum shift transmission system improves driveability of a vehicle employing it by reducing shock loadings on gear change.

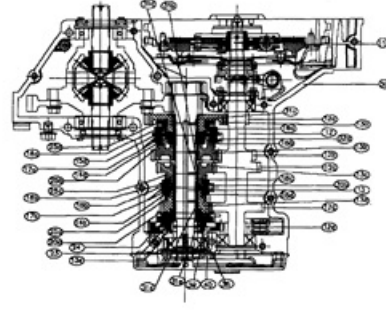
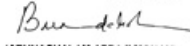
Classifications:

International (IPC 8-9): F16H F16H3/00 (Advanced/Invention)

Applicant's Name : Bajaj Auto Limited

Total no. of sheets: 4
Sheet no. : 1

FIGURE 1

For Bajaj Auto Limited,
By its Attorney,

(ARUNACHALAM APPAJI MOHAN)
(BRINDA MOHAN)
Family:

Publication number	Publication date	Application number	Application date
IN02281CH2007 A	20120217	IN2007CH02281	20071010
IN288079 B	20171013	IN2007CH02281	20071010

Priority:

IN2007CH02281 20071010

Probable Assignee: BAJAJ AUTO LTD**Assignee(s):** BAJAJ AUTO LTD**Inventor(s):** ABRAHAM JOSEPH ; ASHISH MOHANIRAJ JOSHI**10) Family number: 66434876 (TR201620075A)**

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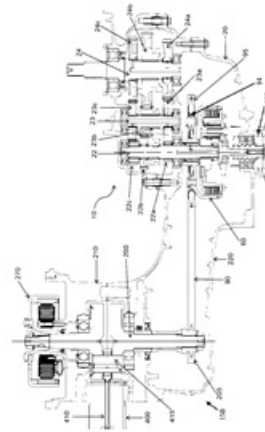
Title: BİR TRANSMİSYON SİSTEMİ

Abstract: Source: TR201620075A [TR] Bir aktarma organi mahfazasına (20) ve yani sıra soez konusu aktarma organi mahfazası (20) içine monte edilmiş olan; ve kendi ekseni etrafında kontrollü acısal hareket için monte edilmiş, en azından soez konusu acısal hareketine bağlı olarak seçilen bir vites oranını oluşturmak için ilgili kaydırıcıları (47a-47c) kavrayabilen çok sayıda kumanda kanalıyla (40A) oluşturulmuş bir dış çevresel yüzeye (40B) sahip bir vites tamburuna (40); ve soez konusu vites tamburunu (40) isteye göre, seçilen bir acısal hareketle seçilen bir vites tamburu konumuna döndürmek için bir vites kumandasına (120) sahip olan ve soez konusu vites tamburunu (40) döndürmek için soez konusu vites kumandasının (120) soez konusu vites tamburunu (40) bir başka vites tamburu konumu seçilene kadar soez konusu konumda tuttuğu bir vites tahrik sistemi (35) içeren bir transmisyon sistemi (10).

Classifications:

International (IPC 8-9): B60K20/00 B62M11/00 B62M11/14
B62M9/00 F16D23/00 H04N7/173 (Advanced/Invention);
B62M11/00 (Core/Invention)

1 / 12



SEKİL 1

Family:

Publication number	Publication date	Application number	Application date
CO20160005922 A1	20180710	CO20160005922	20161227
GT201600270 A	20180928	GT20160000270	20161227
ID201801564 A	20180216	ID2016P0008957	20161223
IN04942MU2015 A	20171117	IN2015MU04942	20151230
MX2017000129 A1	20180703	MX20170000129	20170104
TR201620075 A2	20170721	TR20160020075	20161229

Priority:

IN2015MU04942 20151230 IN2015MU04942 20161230

Probable Assignee: BAJAJ AUTO LTD

Assignee(s): (std): BAJAJ AUTO LTD

Inventor(s): (std): MOHANIRAJ JOSHI ASHISH ; JOSHI ASHISH MOHANIRAJ ; JOSEPH ABRAHAM ; GUPTA AVIJIT GHANSHYAM DAS ; GHANSHYAM DAS GUPTA AVIJIT ; ASHISH MOHANIRAJ JOSHI ; ABRAHAM JOSEPH

Inventor(s): 1 JOSEPH ABRAHAM ; 2 JOSHI ASHISH MOHANIRAJ ; 3 GUPTA AVIJIT GHANSHYAM DAS

Agent(s): HELENA CAMARGO WILLIAMSON; DR BELINDA ROSALINA SHLLM; ELISAVET YAKOVIDIS CINLEMEZ

11) Family number: 70306973 (PH2016000486A)

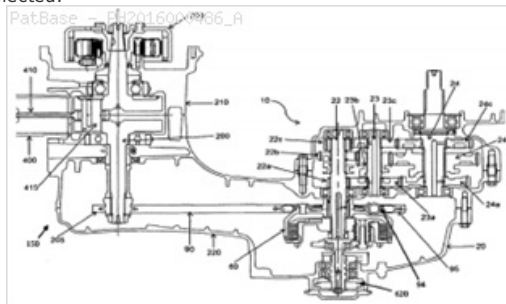
© PatBase

Title: A TRANSMISSION SYSTEM

Abstract: A transmission system (1 0) comprising: a powertrain housing (20); and a gear shift drive system (35) mounted within said powertrain housing (20) including: a shift drum (40) mounted for controlled angular movement about an axis thereof, said shift drum (40) having an outer peripheral surface (408) formed with a plurality of actuator grooves (40A) engageable with respective shifters (47a-c) to establish at least a selected gear ratio dependent on said angular movement of said shift drum (40); and a gear shift actuator (120) for turning said shift drum (40), on demand, through a selected angular movement to a selected shift drum position wherein said shift actuator (120) for turning said shift drum holds said shift drum (40) in said position until a further shift drum position is selected.

Classifications:

International (IPC 8-9): F16H3/087 F16H3/097 (Advanced/Invention)

**Family:**

Publication number	Publication date	Application number	Application date
PH2016000486 A	20180702	PH20160000486	20161223

Priority:

IN2015MU49421 20151230 PH20160000486 20161223

Probable Assignee: BAJAJ AUTO LTD

Assignee(s): (std): BAJAJ AUTO LTD

Inventor(s): (std): ABRAHAM JOSEPH ; DAS GUPTA AVIJIT GHANSHYAM ; MOHANIRAJ JOSHI ASHISH

Agent(s): AQ ANCHETA AND PARTNERS

12) Family number: 52598751 (WO13111153A2)

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Title: GEAR SHIFT ACTUATOR FOR AN INTERNAL COMBUSTION ENGINE

Abstract: The present subject matter discloses an electrically operated gear shift actuator system for an internal combustion engine for automatic actuation of the gear shifting operation for transmission of power generated by the engine. The actuator system includes a gear shift motor, a reduction gear box connected to the said gear shift motor, a power transmission mechanism for transmitting rotational driving force of the said gear shift motor to a shift drum, a shift control unit and a shift position detector. The present subject matter removes the need for manual gear shifting and makes the ride easy and less toilsome for the operator of the vehicle.

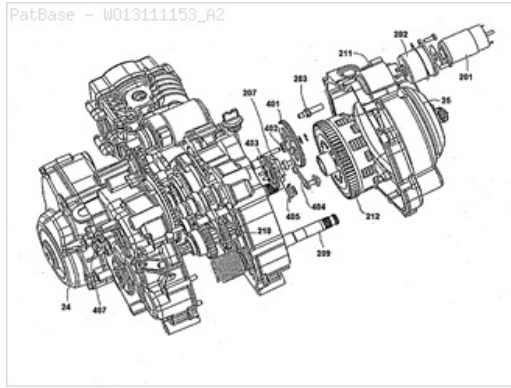
Classifications:

International (IPC 8-9): B62M25/06 F16H

F16H63/18 (Advanced/Invention);

B62M25/06 (Core/Invention)

CPC: B62M25/06 F16H63/18 F16H63/14 F16H2063/3059

**Family:**

Publication number	Publication date	Application number	Application date
AP201407787 A0	20140731	AP20140007787	20121226
AU2012367783 AA	20130801	AU20120367783	20121226
BR112014016057 A2	20170613	BR20141116057	20121226
BR112014016057 A8	20170613	BR20141116057	20121226
BR112014016057 A8	20170704	BR20141116057	20121226
BR112014016057 A8	20170704	BR20141116057	20121226
CN104136316 A	20141105	CN201280070731	20121226
CN104136316 B	20180102	CN201280070731	20121226
EP2797809 A2	20141105	EP20120846790	20121226
IN04589CH2011 A	20121221	IN2011CH04589	20111227
PH2014501507 A	20141008	PH20140501507	20140627
TH148019 A	20160321	TH20141003783	20121226
WO13111153 A2	20130801	WO2012IN00851	20121226
WO13111153 A3	20130919	WO2012IN00851	20121226

Priority:

IN2011CH04589 20111227 WO2012IN00851 20121226

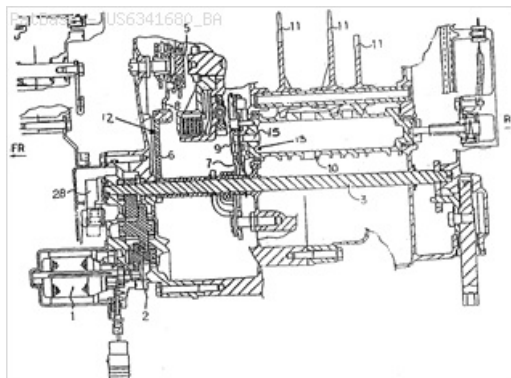
Probable Assignee: TVS MOTOR CO LTD**Assignee(s):** (std): BABU YALAMURU RAMACHANDRA ; NAGARAJA KRISHNABHATTA ; RAO KANDREGULA SRINIVASA ; TVS MOTOR CO LTD**Inventor(s):** (std): RAO KANDREGULA SRINIVASA ; NAGARAJA KRISHNABHATTA ; BABU YALAMURU RAMACHANDRA ; SRINIVASA RAO KANDREGULA ; RAMACHANDRA BABU YALAMURU ; KANDREGULA SRINIVASA RAO ; YALAMURU RAMACHANDRA BABU ; KRISHNABHATTA NAGARAJA**Agent(s):** GRIFFITH HACK; PATENTANWALTSKANZLEI MATSCHNIG AND FORSTHUBER OG**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 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 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**13) Family number: 29438104 (US6341680B)**

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Title: ELECTRIC-POWER-ASSIST TRANSMISSION AND ITS CONTROL METHOD**Abstract:** It is an object of the present invention to provide a shift control method for an electric-power-assist transmission having excellent operability. In the shift control method, a main clutch is put in an engaged or disengaged state in a manner interlocked with the rotation of a shift spindle, and the main clutch is put back in an engaged state after being released from an engaged state by the rotation of the shift spindle with a rotational speed thereof changed from a high speed to a low speed with predetermined timing.**Classifications:****International (IPC 8-9):** B60W30/18 F16H61/02 F16H61/32 F16H63/18 (Advanced/Invention);

F16H59/68 F16H63/18 (Advanced/Non-invention);

F16H61/02 F16H63/08 (Core/Invention)

International (IPC 1-7): B60K41/22 F16D48/06 F16H61/02 F16H63/18 F16H63/46**CPC:** B60W30/18 B60W10/02 B60W10/10 B60W30/1819 B60W2510/0638 B60W2510/1005 B60W2520/10 F16H61/32 F16H63/18 F16H63/46 F16H2059/6807 F16H2061/2823**European:** B60W30/18 F16H61/32 L60K741/22E L60W510/06D L60W510/10A L60W520/10 R16H59/68B R16H61/28G R16H63/18 R16H63/46**US:** 192/3.55**Family:**

Publication number	Publication date	Application number	Application date
CA2240229 AA	19990313	CA19982240229	19980610
CA2240229 C	20050809	CA19982240229	19980610
CN1188613 C	20050209	CN19981016017	19980713
CN1211693 A	19990324	CN19981016017	19980713
JP11082709 A2	19990326	JP19970268193	19970913

MASAMI KKHONDA GIJUTSU KENKYUSHO WAKO SHI SAITAMA KEN JP ; TAKANO MASAMI K K HONDA GIJUTSU KENKYUSHO WAKO SHI ; OHHASHI AKIHITO KKHONDA GIJUTSU KENKYUSHO WAKO SHI SAITAMA KEN JP ; OHHASHI AKIHITO K K HONDA GIJUTSU KENKYUSHO WAKO SHI ; YASUDA TOYOSHI K K HONDA GIJUTSU KENKYUSHO WAKO... ; YASUDA TOYOSHI KKHONDA GIJUTSU KENKYUSHO WAKO SHI SAITAMA KEN JP ; YASUDA TOYOSHI KKHONDA GIJUTSU KENKYUSHO ; YASUDA TOYOSHI K K HONDA GIJUTSU KENKYUSHO WAKO SHI ; OHHASHI AKIHITO K K HONDA GIJUTSU KENKYUSHO... ; OHHASHI AKIHITO KKHONDA GIJUTSU KENKYUSHO ; ASHIKAWA NOBORU KKHONDA GIJUTSU KENKYUSHO

Designated states: DE FR GB IT

15) Family number: 18255620 (DE2311319A1)

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Title: FUSSBETAETIGTE SCHALTVORRICHTUNG FUER EIN MEHRGAENGIGES SCHALTGETRIEBE, INSBESONDERE FUER ZWEIRADFABRZEUGE Foot-switching device for a MEHRGAENGIGES TRANSMISSION, ESPECIALLY FOR BICYCLE VEHICLE (Machine translation)

Abstract: Source: DE2311319A1 [DE] (Claim1) PatentanspruecheUe Fussbetaetigte Schaltvorrichtung fuer ein mehrgaengiges Schaltgetriebe, insbesondere fur Zweiradfahrzeuge, bei dem einer Anzahl auf einer vom Motor angetriebenen Welle angeordneter Ritzel ueber axial verschiebbare Kupplungsringe wahlweise mit der Getriebeausgangswelle kuppelbare Schaltraeder gegentiberliegen und wobei die diesen zugeordneten Kupplungsringe Umfangsnuten aufweisen und mittels in diese eingreifender, radial gerichteter Stellstege einer durch den Fusshebel um eine zur Getriebeausgangswelle parallele Achse stufenweise drehbaren Schaltwalze zwischen einer Kupplungs- und einer Leerlaufstellung hin- und herbewegbar sind, dadurch gekennzeichnet, dass mit einer durch einen drehfest mit dem Fusschalthebel verbundenen Hebelarm (7) betaetigbaren, in einer am Getriebegehause (1) befestigten geradlinigen Kulissenfuehrung (11) gefuehrten Stossstange (9) eine tangential zur Schaltwalze (5) gerichtete Schubstange (13) gekoppelt ist, die mit stirnseitig an der Schaltwalze (5) angeordneten Rastmittel (15) im formschluessigen Eingriff steht, wobei die Schubstange (13) jeweils einen in Schaltendstellung angeordneten Nocken (22, 23) aufweist, die mit einem am Hebelarm (7) angeordneten Sperrstift (24) waehrend eines Schalt 0 vorganges zusammenwirken.

Machine translation: (Claim1) PatentanspruecheUe Foot-switching device for a mehrgaengiges manual transmission, particularly for two-wheeled vehicles in which a number on one of the motor driven shaft arranged pinion over axially movable clutch ring against tibet lie either with the transmission output shaft detachable switching wheels and wherein the apparatus comprising coupling rings have circumferential grooves and means in This engaging, radially directed adjusting bars of a are reciprocated by the foot lever to one to the transmission output shaft axis parallel stepwise rotating drum controller between a clutch and a neutral position, wherein a through a rotation with the foot lever attached lever arm (7) operable in of the GEAR (1) fixed straight Kulissenfuehrung (11) guided bumper (9), is tangent to the shift drum (5) directional push rod (13) coupled with the end face of the shift drum (5) arranged locking means (15) is in positive engagement, where the push rod (13) arranged in each one Schaltendstellung cams (22, 23) has to interact with a lever arm (7) arranged locking pin (24) during a switching process 0.

Classifications:

International (IPC 8-9): B62M11/04 B62M11/14 B62M25/06

F16H63/14 (Advanced/Invention);

F16H63/18 (Advanced/Non-invention);

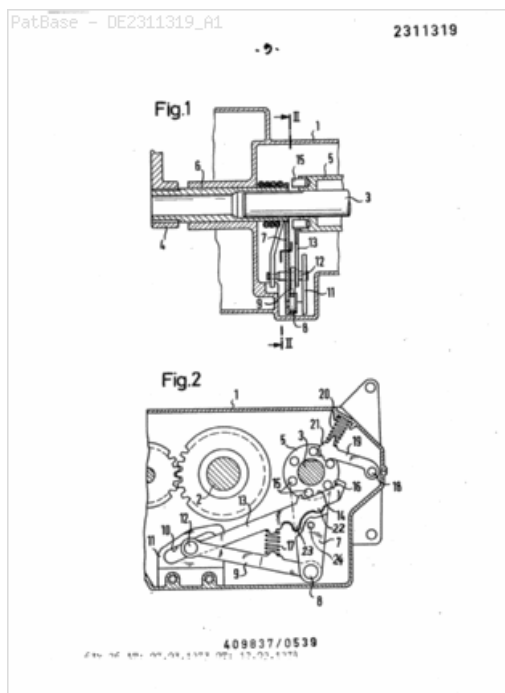
B62M11/00 B62M25/00 F16H63/08 (Core/Invention)

International (IPC 1-7): B62M11/04 B62M25/00 F16H5/04

CPC: B62M11/04 B62M11/14 B62M25/06 F16H63/14 F16H63/18

European: B62M11/04 B62M11/14 B62M25/06 F16H63/14

R16H63/18



Family:

Publication number	Publication date	Application number	Application date
DE2311319 A1	19740912	DE19732311319	19730307

Priority:

DE19732311319 19730307

Probable Assignee:

PORSCHE SE

Assignee(s): (std):

PORSCHE AG ; PORSCHE SE

Assignee(s):

DR ING H C F PORSCHE AG

Inventor(s): (std):

SZODFRIDT IMRE DIPL ING

16) Family number: 73730484 (US2019093766A)

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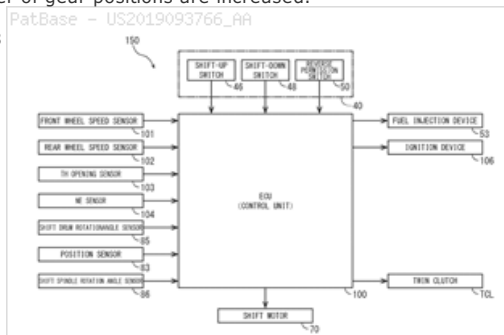
Title: GEAR POSITION DETECTING DEVICE

Abstract: A gear position detecting device includes a rotation angle sensor for detecting a turn position of a shift drum and a position sensor for detecting that the shift drum is at a neutral position. The rotation angle sensor is a volume sensor that linearly increases or decreases an output voltage according to a turning motion of the shift drum. The neutral position is set in such a way as not to overlap a dead zone. It is determined according to an output signal of the rotation angle sensor and an output signal of the position sensor whether the shift drum is at a reverse gear position located between the neutral position and the dead zone or a fifth gear position turned by 360 degrees from the reverse gear position. Such detecting device detects a gear position with a high accuracy even if the number of gear positions are increased.

Classifications:

International (IPC 8-9): F16H59/02 F16H61/00 F16H61/12 F16H61/28 F16H61/32 F16H63/18 F16H63/42 (Advanced/Invention)

CPC: F16H63/42 F16H61/28 F16H2061/1284 F16H2061/2869 F16H61/32 F16H61/12 F16H59/68



Family:

Publication number	Publication date	Application number	Application date
JP2019065875 A2	20190425	JP20170188581	20170928
US2019093766 AA	20190328	US20180142248	20180926

Priority:

JP20170188581 20170928

Probable Assignee: HONDA MOTOR CO LTD

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

Assignee(s): HONDA MOTOR CO

Inventor(s): (std): NOZAKI YASUHIRO ; YAMAZAKI MASAKI ; KOBAYASHI NAOKI ; YOSHIDA HAYATO ; SAKAMOTO NAOKI ; ARAI DAI ; ARAI MASARU

17) Family number: 73727901 (WO19063227A1)

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Title: MOTOR VEHICLE TRANSMISSION, IN PARTICULAR FOR A MOTOR VEHICLE

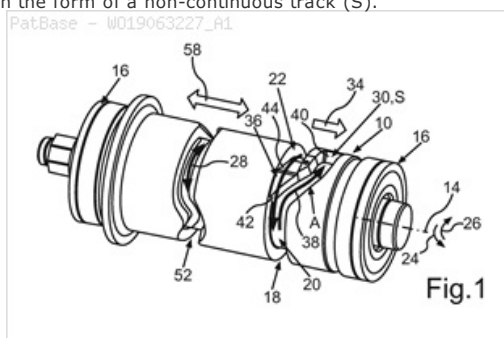
Abstract: The invention relates to a motor vehicle transmission (12) comprising a shift drum (10) which can rotate about a rotational axis (14) and which has a groove track (18) that has a front track section (20), a rear track section (22), and a lateral track section (30) that branches off from at least one of the track sections (20, 22) between the front and rear track sections (20, 22), a groove follower (32) which engages into the groove track (18) and is thereby movably guided in the groove track (18) and which can be moved relative to the shift drum (10) in the axial direction thereof by means of the groove track (18) when the shift drum (10) rotates, and a pressure piece (36) which is arranged in the groove track (18) between the track sections (20, 22), can be moved relative to the shift drum (10) in the radial direction thereof between at least one radially inner position and a radially outer position, and in the radially outer position blocks the front track section (20) from the rear track section (22) for a track follower (32) movement from the front track section into the rear track section (20, 22), wherein the movement is carried out relative to the groove track (18) and results from a relative rotation between the shift drum (10) and the track follower (32), said relative rotation being carried out in a first rotational direction, and guides the track follower (32) from the front track section (20) into the lateral section (30) during the relative rotation carried out in the first rotational direction. The lateral section (30) is in the form of a non-continuous track (S).

Classifications:

International (IPC 8-9): F16H63/16 F16H63/18 F16H63/38 (Advanced/Invention);

F16H63/34 (Advanced/Non-invention)

CPC: F16H63/18 F16H63/3425



Family:

Publication number	Publication date	Application number	Application date
DE102017009029 A1	20190328	DE201710009029	20170927
WO19063227 A1	20190404	WO2018EP73164	20180829

Priority:

DE201710009029 20170927

Probable Assignee: DAIMLER AG

Assignee(s): (std): DAIMLER AG

Inventor(s): (std): HAERTER TOBIAS ; ROMANIAK JAKUB ; SCHWEITZER JUERGEN ; KOLB ANDREAS ; DROPE NIKLAS ; SPERRFECHTER STEFAN ; BOU ROMANO JOSEF MARIA ; HAHN PETER ; BOU ROMANO JOSEF

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 DJ 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 JO JP KE KG KH KM KN KP KR KW KZ LA LC 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

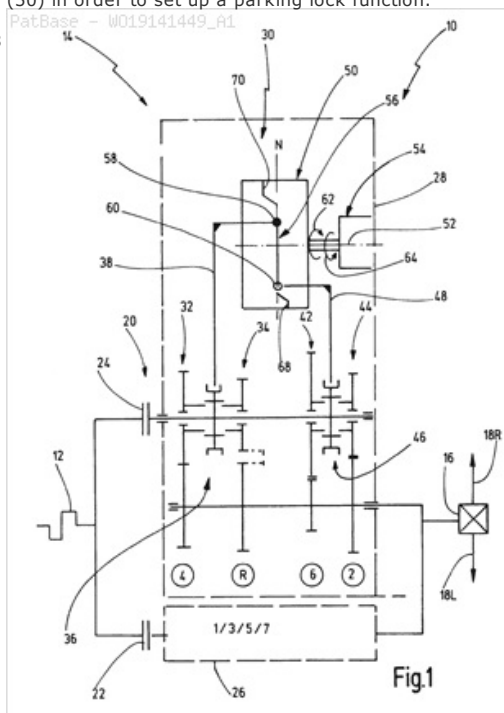
Title: GEAR SELECTION ARRANGEMENT FOR A MOTOR VEHICLE TRANSMISSION

Abstract: Gear selection arrangement (30) for a motor vehicle transmission (14, 28), having a gear-selecting drum (50) which can be driven in a first rotational direction (62) or in a second rotational direction (64) by means of a gear-selecting drum drive (54), wherein the gear-selecting drum (50) has a control cam (56) which extends in a circumferential direction over a control cam angular range (α_K), having a first control cam follower (58) which is guided on the control cam (56) and which is coupled to a first gear-selecting clutch pack (36) for selecting at least one first gear stage (R), having a second control cam follower (60) which is guided on the control cam (56) and which is coupled to a second gear-selecting clutch pack (46) for selecting at least one second gear stage (6), wherein the first control cam follower (58) and the second control cam follower (60) are spaced apart from one another by a spacing angle (α_D) in the circumferential direction, wherein the first gear stage (R) is selected and the second gear stage (6) is not selected in a first rotary position (DSR) of the gear-selecting drum (50), wherein the second gear stage (6) is selected and the first gear stage (R) is not selected in a second rotary position (DS6) of the gear-selecting drum (50), and wherein the first gear stage (R) is selected and the second gear stage (6) is selected in a third rotary position (DSP) of the gear-selecting drum (50) in order to set up a parking lock function.

Classifications:

International (IPC 8-9): F16H61/00 F16H61/22 F16H63/16 F16H63/18 F16H63/34 (Advanced/Invention)

CPC: F16H61/0059 F16H63/18 F16H63/3416

**Family:**

Publication number	Publication date	Application number	Application date
DE102018101098 A1	20190718	DE201810101098	20180118
WO19141449 A1	20190725	WO2018EP84843	20181213

Priority:

DE201810101098 20180118

Probable Assignee: MAGNA PT AND CO BV KG

Assignee(s): (std): MAGNA PT AND CO BV KG

Inventor(s): (std): KESKIN DENIZ ; SCHAETZLE EBERHARD

Agent(s): RAUSCH GABRIELE

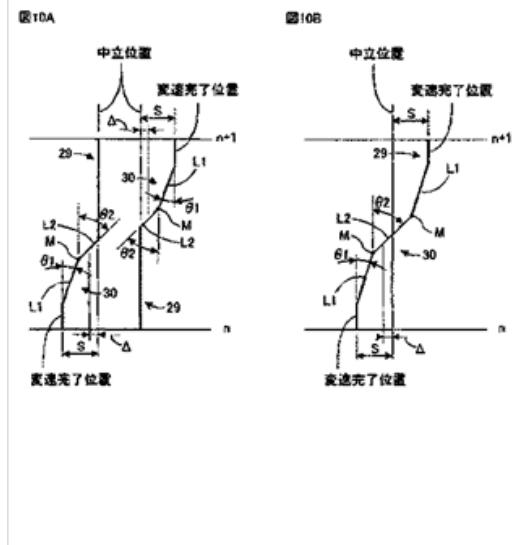
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN 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

Title: TRANSMISSION AND MOTORCYCLE INCLUDING THE SAME

Abstract: PROBLEM TO BE SOLVED: To suppress influence on operational feeling to a shift lever. SOLUTION: A transmission is configured such that a transmission gear having a dog on its side surface is moved in an axial direction through a shift fork engaged to a lead groove 29 of a shift drum. The lead groove has an inclination part 30 inclined to a circumferential direction of the shift drum, between a neutral position and a transmission completion position. At the inclination part, two inclination angles γ_1 , γ_2 are formed. Out of the two inclination angles γ_1 , γ_2 , the inclination angle γ_2 on the neutral position side is made larger than the inclination angle γ_1 on the transmission completion position side. SELECTED DRAWING: Figure 10

Classifications:

International (IPC 8-9): F16H63/18 (Advanced/Invention)

**Family:**

Publication number	Publication date	Application number	Application date
JP2017145927 A2	20170824	JP20160029535	20160219

Priority:

JP20160029535 20160219

Probable Assignee: SUZUKI MOTOR CORP**Assignee(s):** (std): SUZUKI MOTOR CO ; SUZUKI MOTOR CORP**Assignee(s):** SUZUKI KK**Inventor(s):** (std): YANAGIDA YOSHIYUKI**20) Family number: 73336463** (JP2019039497A)

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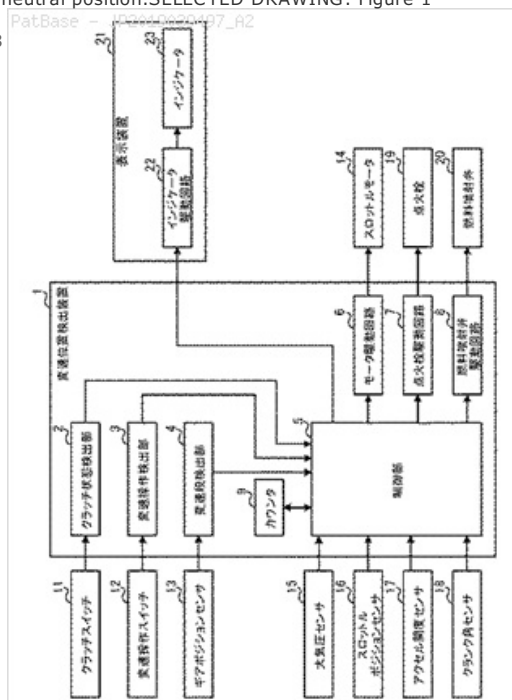
Title: GEAR CHANGE POSITION DETECTION DEVICE

Abstract: To provide a gear change position detection device which can prevent a determination that a transmission is in a neutral position contrary to an intention of a driver, and can properly perform prescribed control, in a vehicle mounted with an internal combustion engine having the transmission having a constitution in which the neutral position exists between two gear change positions. SOLUTION: A gear change position detection device 1 has a control part 5 for determining that a transmission is in a first speed when detecting a first rotation angle, determining that the transmission is in a second speed when detecting a second rotation angle, determining that the transmission is in a neutral position when a state that a neutral rotation angle between the first rotation angle and the second rotation angle is detected continues for a prescribed time, and making the execution of prescribed control differ with respect to a vehicle between the case of the determination of the first speed or the second speed, and the case of the determination of the neutral position. SELECTED DRAWING: Figure 1

Classifications:

International (IPC 8-9): F16H59/04 F16H61/02 F16H63/16 F16H63/18 F16H63/42 F16H63/50 (Advanced/Invention)

CPC: F16H63/16 F16H59/68 F16H2059/6823



Family:

Publication number	Publication date	Application number	Application date
DE102018119685 A1	20190228	DE201810119685	20180814
JP2019039497 A2	20190314	JP20170161923	20170825
JP6563989 B2	20190802	JP20170161923	20170825

Priority:

JP20170161923 20170825

Probable Assignee: KEIHIN CORP**Assignee(s):** (std): KEIHIN CORP**Inventor(s):** (std): YOSHIHIKO AMANO ; AMANO YOSHIHIKO**Agent(s):** KITAYAMA MIKIO**21) Family number: 43569699** (US2009193918A)

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Title: TWIN CLUTCH TRANSMISSION

Abstract: A twin clutch transmission for reducing the frequency of hit noise occurring in a dog clutch when shifting from neutral to a first speed. The twin clutch transmission includes a plurality of pairs of gears according to the number of speed stages between dual-structured main shafts and a countershaft. A twin clutch is disposed on the main shafts wherein a rotational drive force of an engine is transferred or blocked. A transmission between adjacent speed change gears on each shaft by a dog clutch occurs with a shift drum for switching between an engagement condition of the dog clutch by driving a shift fork. The patterns of guide grooves in the shift drum are formed wherein the dog clutches for a first speed gear and a second speed gear engage simultaneously when the shift drum is rotated by predetermined angles to shift from neutral to the first speed.

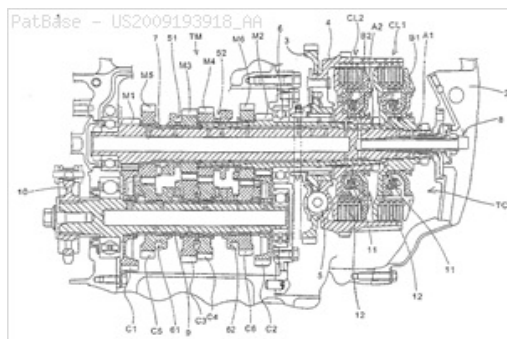
Classifications:**International (IPC 8-9):** F16H3/08 F16H3/089 F16H61/28 F16H63/08

F16H63/18 F16H63/32 (Advanced/Invention);

F16H3/08 F16H61/28 F16H63/08 F16H63/30 (Core/Invention)

CPC: Y10T74/19233 Y10T74/19251 F16H61/688 F16H61/32

F16H63/18

European: F16H61/688 F16H63/18 R16H61/32**US:** 74/331 74/335 74/335P**Family:**

Publication number	Publication date	Application number	Application date
DE602008017972 D1	20121011	DE200860017972T	20081016
EP2085665 A1	20090805	EP20080166785	20081016
EP2085665 B1	20120815	EP20080166785	20081016
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JP2009180341 A2	20090813	JP20080021576	20080131
JP4977904 B2	20120718	JP20080021576	20080131
US2009193918 AA	20090806	US20090351968	20090112
US8127635 BB	20120306	US20090351968	20090112

Priority:

JP20080021576 20080131 EP20080166785 20081016

Probable Assignee: HONDA MOTOR CO LTD**Assignee(s):** (std): HONDA MOTOR CO LTD ; KOJIMA HIROYUKI ; NEDACHI YOSHIKI ; OZEKI TAKASHI ; TSUKADA YOSHIKI**Assignee(s):** HONDA MOTOR CO**Inventor(s):** (std): TSUKADA YOSHIKI ; KOJIMA HIROYUKI ; NEDACHI YOSHIKI ; OZEKI TAKASHI ; NEDACHI KEIJUN ; KOJIMA HIROTAKA**Agent(s):** MITSCHERLICH PATENT U RECHTSANWALTE PARTMBB; RUPP CHRISTIAN; BIRCH STEWART KOLASCH AND BIRCH; BIRCH STEWART KOLASCH AND BIRCH LLP**Designated states:** AL BA DE ES IT MK RS**22) Family number: 32472712** (WO05111395A2)

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Title: MOTORCYCLE

Abstract: The invention relates to a motorcycle (2), comprising an internal combustion engine (4), in particular, a diesel internal combustion engine. According to the invention, a power output as high as possible with low weight and small size may be achieved, whereby the internal combustion engine (4) is provided with an exhaust gas turbocharger (16).

Classifications:**International (IPC 8-9):** B60K13/02 B62K11/04 B62M7/00 F02B1/12

F02B29/04 F02B37/00 F02B37/02 F02B41/10 F02B61/02 F02B67/10

F02M25/07 F28D7/10 F28D7/16 F28F1/08 F28F1/36

F28F9/02 (Advanced/Invention);

F16H3/089 (Advanced/Non-invention);

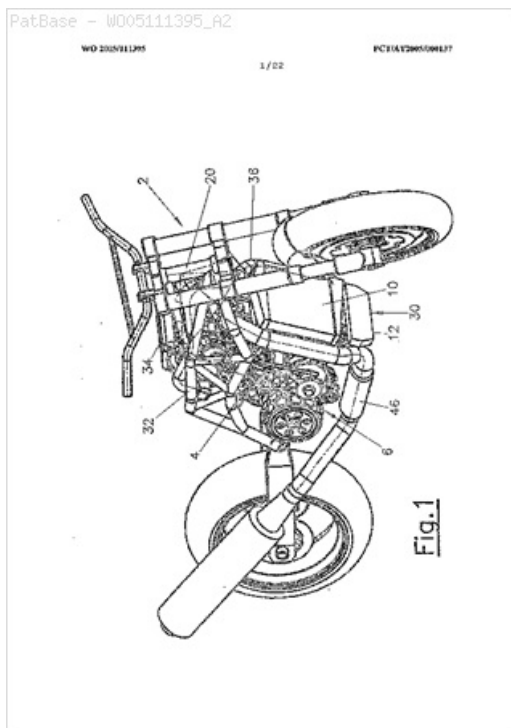
B60K13/00 B62K11/00 B62M7/00 F02B1/00 F02B29/00 F02B37/00

F02B37/02 F02B41/00 F02B61/00 F02B67/00 F02M25/07 F28D7/00

F28D7/10 F28F1/08 F28F1/12 F28F9/02 (Core/Invention);

F16H3/08 (Core/Non-invention)

International (IPC 1-7): B60K13/02 B60K41/22 B60K41/28
B62M7/00 F01L13/08 F02B37/00 F02B61/02 F28D7/10
CPC: F28D7/106 F28F1/08 F02M26/32 F02B61/02 B62K11/04
B62K19/06 F01L1/047 F01L1/26 F01L13/08 F01L2001/0537 F02B1/12
F02B29/0462 F02B29/0475 F02B37/00 F02B37/02 F02B41/10
F02B67/10 F16H3/089 F16H2200/0052 F28D7/103 F28D7/16
F28F1/36 F28F9/0241 Y02T10/144 Y02T10/146 Y02T10/163
F01L13/085 F01L2820/033 C09J7/10 F01N3/20 F01N13/00
F01N2340/04 F01N2340/06 F01N2590/04
European: B62K11/04 B62K19/06 F01L1/047 F01L1/26 F01L13/08
F02B1/12 F02B29/04D4 F02B29/04D8 F02B37/00 F02B37/02
F02B41/10 F02B61/02 F02B67/10 F02M25/07P6D6 F28D7/10E
F28D7/10F F28D7/16 F28F1/08 F28F1/36 F28F9/02F4 R01L1/053D
R16H200/00W6 R16H3/089



Family:

Publication number	Publication date	Application number	Application date
AT10622004 A	20051115	AT20040001062	20040622
AT413442 B	20060215	AT20040000964	20040603
AT414015 B	20060815	AT20040001062	20040622
AT500535 A1	20060115	AT20040001104	20040629
AT500535 B1	20060715	AT20040001104	20040629
AT500535 B8	20070215	AT20040001104	20040629
AT501030 A1	20060515	AT20040000962	20040603
AT501030 B1	20061015	AT20040000962	20040603
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DE112005001100 A5	20070524	DE200511001100T	20050421
WO05111395 A2	20051124	WO2005AT00137	20050421
WO05111395 A3	20060511	WO2005AT00137	20050421

Priority:

AT20040000866 20040517	US20040571526P 20040517	AT20040000962 20040603
AT20040000964 20040603	AT20040001064 20040622	AT20040001063 20040622
AT20040001062 20040622	AT20040001104 20040629	WO2005AT00137 20050421

Probable Assignee: AVL LIST GMBH

Assignee(s): (std): AVL LIST GMBH ; GRAF BERNHARD ; LAIMBOECK FRANZ ; ROITHINGER ROBERT

Inventor(s): (std): GRAF BERNHARD DIPL ING FH ; GRAF BERNHARD DIPLING ; LAIMBOECK FRANZ ; LAIMBOECK FRANZ DR ; ROITHINGER ROBERT ; GRAF BERNHARD

Inventor(s): GRAF BERNHARD DIPL ING

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